

ENANTA PHARMACEUTICALS INC

Form 10-K

December 11, 2014

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**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**Form 10-K**

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

**For the fiscal year ended September 30, 2014**

**OR**

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

**Commission File Number 001-35839**

**ENANTA PHARMACEUTICALS, INC.**

**(Exact name of registrant as specified in its charter)**

<b>DELAWARE</b> (State or other jurisdiction of incorporation or organization)	<b>2834</b> (Primary Standard Industrial Classification Code Number) <b>500 Arsenal Street</b>	<b>04-3205099</b> (I.R.S. Employer Identification Number)
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**Watertown, Massachusetts 02472**

**(617) 607-0800**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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

**Title of each class:**

**Name of each exchange on which registered:**

Common Stock, \$0.01 Par Value

The NASDAQ Stock Market LLC (NASDAQ Global Select Market)

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

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

Indicate by check mark if 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.

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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:

Large accelerated filer  Accelerated filer

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

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

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant as of the last business day of the registrant's most recently completed second fiscal quarter, March 31, 2014, based on the last reported sale price of the registrant's common stock of \$39.99 per share was \$601,630,755. The number of shares of the registrant's Common Stock, \$0.01 par value, outstanding as of December 1, 2014, was 18,604,085 shares.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's Definitive Proxy Statement for its 2015 Annual Meeting of Stockholders scheduled to be held on February 19, 2015, which Definitive Proxy will be filed with the Securities and Exchange Commission not later than 120 days after the registrant's fiscal year end of September 30, 2014, are incorporated by reference into Part III of this Form 10-K.

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As used in this Form 10-K, Enanta, the Company, we, our, and us refer to Enanta Pharmaceuticals, Inc., except the context otherwise requires or as otherwise indicated.

**NOTE REGARDING FORWARD LOOKING STATEMENTS**

This Annual Report on Form 10-K contains forward-looking statements concerning our business, operations and financial performance and condition, as well as our plans, objectives and expectations for our business operations and financial performance and condition. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as aim, anticipate, assume, believe, contemplate, continue, could, due, estimate, may, objective, plan, predict, potential, positioned, seek, should, target, will, would, and other are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

the continued commitment of AbbVie, our collaborator, with respect to the development of product candidates incorporating paritaprevir (also known as ABT-450) or ABT-493;

the completion, success and timing of preclinical studies and clinical trials conducted by us or any collaborator of ours;

AbbVie's abilities to obtain and maintain regulatory approval of paritaprevir-containing therapies, or our or any collaborator's abilities to do the same for therapies involving any of our other product candidates;

the receipt and timing of any milestone payments or royalties from AbbVie;

our ability to obtain and maintain collaborators for our development programs or to obtain additional funding otherwise for development;

the success of competing HCV drugs that are available now or later become available or other developments or projections relating to our competitors and our industry;

changes in our or any collaborator's plans to develop and commercialize our product candidates;

the rate and degree of market acceptance of any of our product candidates and any combination therapies developed by AbbVie or us;

the size and growth of the potential markets for our product candidates and our collaborator's and our abilities to serve those markets, including our belief that substantial opportunities exist for improved

treatments in HCV and bacterial infections;

our ability to obtain and maintain intellectual property protection for our product candidates and operate our business without infringing on the intellectual property rights of others;

the loss of any of our key scientific or management personnel;

regulatory developments in the United States and foreign countries affecting disease indications for our product candidates or anti-infective drugs generally;

the performance of third-party manufacturers of our product candidates, including any collaborators;

the accuracy of our estimates regarding our expenses, future revenue, capital requirements and needs for additional financing;

our expectations regarding the time during which we will be an emerging growth company under the JOBS Act; and

our financial performance.

These forward-looking statements are based on our management's current expectations, estimates, forecasts and projections about our business and the industry in which we operate and our management's beliefs and assumptions. These forward-looking statements are not guarantees of future performance or development and

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involve known and unknown risks, uncertainties and other factors that are in some cases beyond our control. As a result, any or all of our forward-looking statements in this Annual Report on Form 10-K may turn out to be inaccurate. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under **Risk Factors** and discussed elsewhere in this Annual Report on Form 10-K. These forward-looking statements speak only as of the date of this Annual Report on Form 10-K. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future. You should, however, review the factors and risks we describe in the reports we will file from time to time with the SEC after the date of this Annual Report on Form 10-K.

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**ENANTA PHARMACEUTICALS, INC.**

**ANNUAL REPORT ON FORM 10-K**

**For the year ended September 30, 2014**

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**PART I**

**ITEM 1. BUSINESS**

**BUSINESS**

**Overview**

We are a research and development-focused biotechnology company that uses its robust chemistry-driven approach and drug discovery capabilities to create small molecule drugs primarily for the treatment of infectious diseases. We are discovering and developing inhibitors designed for use against the hepatitis C virus, referred to as HCV. We believe that a successful approach to a complete cure for HCV in most patients will likely require treatment with a combination of drugs that attack different mechanisms necessary for replication and survival of HCV. Our development of different inhibitors for validated HCV target mechanisms, as well as our collaboration with AbbVie (which name refers to Abbott Laboratories for all periods before January 1, 2013), should allow us to participate in multiple drug combinations as we and our collaborators seek competitive combination therapies for HCV in its various forms. The reported worldwide sales of the two newest therapies for HCV (sofosbuvir and simeprevir) in the first nine months of 2014 totaled approximately \$10.5 billion. We believe that annual worldwide sales of these therapies and future approved therapies could increase sales in this market to as high as \$15 billion to \$20 billion during the next few years. In addition to our HCV programs, we are using our internal research capabilities to advance several early stage programs to discover new chemical entities for other diseases with significant unmet medical need. We have utilized our internal chemistry and drug discovery capabilities and our collaborations to generate all of our development-stage programs, and we have active research efforts to broaden our drug pipeline.

Our HCV portfolio includes inhibitors of four fundamental, validated HCV targets:

***NS3 Protease Inhibitors: Paritaprevir and ABT-493.*** Our lead product candidate, paritaprevir, also known as ABT-450, is an inhibitor of NS3 protease, which is a key protein in HCV viral replication. Paritaprevir is being developed as part of our AbbVie collaboration that has yielded paritaprevir and our next-generation protease inhibitor, ABT-493. Paritaprevir, co-administered with ritonavir, which we refer to together as paritaprevir/r, in combination with ombitasvir (one of AbbVie's NS5A inhibitors) and dasabuvir (one of AbbVie's non-nucleoside polymerase inhibitors), plus ribavirin, has been submitted for regulatory approvals for the treatment of HCV in genotype 1-infected patients. AbbVie's applications for approval of the paritaprevir-containing regimen in the U.S. and European Union have been accepted for review. Approval in the U.S. is expected by late December 2014 and in the E.U. in early 2015. We believe that we, together with AbbVie, will obtain patent exclusivity for paritaprevir in the United States and other major market jurisdictions based on pending composition and use patent claims for paritaprevir, which we expect will continue at least into 2029, assuming all such patents issue.

Our Enanta-AbbVie collaboration has also produced ABT-493, a next-generation protease inhibitor for HCV. In September 2014 AbbVie initiated a Phase 2b combination study of ABT-493 with ABT-530 (AbbVie's next-generation NS5A inhibitor) with or without ribavirin, in patients with genotype 2 or 3 HCV, and is running an additional trial in genotype 1 HCV.



***NS5A Inhibitor: EDP-239.*** We have a drug discovery and development effort directed at the NS5A protein, which plays a key role in HCV viral replication. In late 2013, Novartis, which had been our collaboration partner in NS5A development since 2012, initiated testing of EDP-239 in HCV patients. In September 2014 we entered into an agreement for us to regain full rights to EDP-239 from Novartis, commensurate with its corporate decision that HCV research would no longer be an area of strategic focus for Novartis. This amendment allows us to develop EDP-239 and other proprietary, next-generation NS5A inhibitors in combination with other HCV-directed agents, including those from our

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other proprietary programs. We believe that we have exclusivity to EDP-239 in the United States based on issued patent composition and use claims, which we expect will continue at least into 2030.

***Cyclophilin Inhibitors.*** Our research activities have also focused on a more recently validated target against HCV, cyclophilin, which is a protein in the human body that has been shown to be involved in HCV replication. By focusing on this human, or host, target rather than a viral target, we have selected a mechanism shown to be less susceptible to the HCV resistance that can occur due to viral mutation in response to therapy. Using our extensive chemistry expertise with small molecules, we have identified a series of active cyclophilin binders designed to disrupt the interactions of HCV with cyclophilin. We are currently advancing lead cyclophilin inhibitors in preclinical studies.

***Nucleotide Polymerase Inhibitor.*** We have a small-molecule drug discovery effort underway for inhibitors of nucleotide polymerase in a clinically validated mechanism that is less susceptible to HCV resistance. Our researchers are seeking to identify novel candidates that have the requisite characteristics to make them viable contenders for further development in combination therapies for HCV, either with our other proprietary compounds or with compounds developed by others.

In connection with our collaboration efforts, AbbVie has funded all research and development of our protease inhibitors since we entered into the collaboration in November 2006, and is responsible for obtaining regulatory approvals for regimens containing either paritaprevir (ABT-450) or ABT-493 and then commercializing them worldwide. Since 2006, we have received a total of approximately \$160 million from AbbVie in the form of an upfront fee, a sale of preferred stock, and development milestone payments. Assuming AbbVie's successful development of the first paritaprevir-containing regimen, we will also be eligible to receive from AbbVie up to \$155 million of additional pre-commercialization milestone payments and \$80 million of additional milestone payments for any product containing paritaprevir or ABT-493, respectively, developed by AbbVie, as well as annually tiered royalties per product ranging from the low double digits up to twenty percent, or up to the high teens on a blended basis, on AbbVie's annual worldwide net sales, if any, allocable to our collaboration's protease inhibitors. The percentages of any annual worldwide net sales of paritaprevir-containing regimens used to calculate royalties payable to Enanta will be 30% of total net sales for the regimen containing paritaprevir/r and two other direct-acting antivirals, or DAAs (e.g. with ombitasvir and dasabuvir), known as a 3-DAA regimen, and 45% of total net sales of any 2-DAA regimen containing paritaprevir/r (e.g. with ombitasvir).

Under our collaboration with Novartis that is now concluding, we received a total of \$45.4 million in upfront and milestone payments and Novartis funded all costs associated with development of this program. In September 2014 we entered into an agreement with Novartis to transfer the NS5A program to us, including transition of the on-going, proof-of-concept clinical study for EDP-239, with such transition expected to be completed in December 2014.

## **Our Strategy**

Our primary objective is to become a leader in the infectious disease field, with a focus on antiviral targets such as HCV. Our strategy includes the following key elements:

*Develop compounds against four fundamental, validated HCV targets to give us multiple opportunities to participate in one or more of the potentially successful combination therapies for HCV. We believe that a successful approach to a complete cure for HCV in most patients will likely require treatment with a*

combination of drugs that attack different mechanisms necessary for replication and survival of HCV. As there are many variants of HCV, we continue to develop inhibitors that may be used in different combination therapies, each to be designed and tested for effectiveness against one or more of those variants, or genotypes. Our HCV portfolio includes programs for inhibitors of four fundamental, validated HCV targets. In addition to our protease inhibitor program licensed to AbbVie, we plan to continue clinical development of EDP-239 and to research compounds in the two other fundamental inhibitor classes, with the goal of placing one or more of our currently unpartnered compounds into

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combinations that will ultimately be approved and accepted as preferred treatments for one or more genotypes of HCV.

*Develop independently our own next generation HCV compounds and combination therapies with lower susceptibility to viral resistance.* We are seeking to identify novel candidates that have the requisite characteristics to make them viable contenders for further development in combination therapies for HCV, either with our other proprietary compounds or with compounds developed by others. We are considering potential development of a combination of our NS5A inhibitor EDP-239 with one or more other classes of inhibitors.

*Collaborate, where appropriate, with large pharmaceutical partners to accelerate the development and commercialization of our proprietary HCV compounds.* Strategic partnerships allow us to join forces with collaborators with substantially greater resources and late-stage development and commercialization expertise as we seek the right combination for a next-generation cure for one or more genotypes of HCV. Any such collaboration might be similar to our one with AbbVie, where our protease inhibitor paritaprevir is being combined with one of AbbVie's NS5A inhibitors and one of its non-nucleoside polymerase inhibitors. For example, our own lead NS5A product candidate, EDP-239, could become part of a combination therapy developed internally by us or with another collaborator. We will ultimately decide which to do based on our evaluation of our best chance to participate in one or more commercially successful next-generation combination therapies for HCV.

*Invest in research and early-stage development of product candidates.* We intend to continue to invest significant resources in research programs and early-stage development of product candidates in an effort to identify and advance additional compounds that have the potential to address significant unmet medical needs in infectious disease and related fields. In addition, we may seek to augment our pipeline through the acquisition of external assets and/or technologies.

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**Our Research and Development Pipeline**

The following table summarizes our product development pipeline in HCV antivirals:

As detailed above, our only product candidate that has advanced beyond Phase 2 clinical trials is paritaprevir (ABT-450).

**Our HCV Programs**

***Background and Overview of HCV Market***

HCV is a virus that is a common cause of viral hepatitis, an inflammation of the liver. HCV is typically contracted by contact with the blood or other body fluids of another individual infected with HCV. HCV is a leading cause of chronic liver disease, including cirrhosis, organ failure and cancer, and the leading cause of death from liver disease in the United States. HCV disease progression occurs over a period of 20 to 30 years, with the majority of HCV-infected individuals generally exhibiting no major symptoms in the early stages of the disease. Therefore, until a major symptom is diagnosed, many individuals are unaware they are infected and live undiagnosed without seeking treatment. For that reason, new guidelines issued by the United States Centers for Disease Control and Prevention, or CDC, in 2013 recommend screening for all Americans born between the years 1945 and 1965 so that HCV-infected individuals will be aware of their condition and can consider treatment options.

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An estimated 150 million people worldwide are chronically infected with HCV and have an increased risk of eventually developing liver cirrhosis or liver cancer. More than 350,000 people die every year from HCV-related liver diseases. As of August 2012, the CDC estimated that approximately 2.7-3.9 million people in the United States are chronically infected with HCV, with an estimated 17,000 new infections each year. We believe that the chronically infected population remains largely untreated, even with the introduction of new regimens in 2013 and 2014. The reported worldwide sales of the two newest therapies for HCV (sofosbuvir and simeprevir) in the first nine months of 2014 totaled approximately \$10.5 billion. We believe that annual worldwide sales of these therapies and future approved therapies could increase sales in this market to as high as \$15 billion to \$20 billion within the next few years.

HCV is a small, single-stranded RNA virus. The specific genetic makeup, or genotype, of the virus can vary and at least six genotypes have been characterized in HCV-infected patients, with over 50 sub-types identified. Genotypes are designated with numbers (genotypes 1-6) and subtypes with letters (*e.g.* genotype 1a). HCV genotypes 1, 2, 3 and 4 are found worldwide, but their prevalence varies among geographic regions. Genotype 1, including its subtypes 1a and 1b, is the most common genotype globally, accounting for approximately 74% of all HCV infections. It is estimated that patients with genotype 2 or 3 represent approximately 12% of the worldwide chronically infected HCV population, with approximately 6% comprised of genotypes 4 through 6 and the remaining 8% of patients in other undesignated categories. The specific genotype and subtype of HCV in a patient appears to play a significant role in the degree of efficacy of standard of care therapy. Genotype 1 is the most difficult genotype to treat and the most common in North America and Europe.

Since the discovery of the virus in the late 1980s, considerable progress has been made in the treatment of HCV-infected individuals. The standard of care for HCV traditionally has consisted of weekly injections of interferon, a protein that interferes with viral replication, with twice-daily dosing of ribavirin for 24 to 48 weeks. Ribavirin is a broad-spectrum drug that prevents the replication of a number of DNA and RNA-based viruses. This regimen has been moderately effective in many patients, resulting in a cure in only about 50% of genotype 1-infected patients. Medical practice defines a cure as the point at which there is no quantifiable virus in a patient's blood for a sustained period of time after cessation of therapy, which is often referred to as a sustained virologic response, or SVR.

Recently introduced treatment regimens contain direct acting antivirals, or DAAs, with initial approval coming for protease inhibitors. The first two protease inhibitors approved, telaprevir (Incivek<sup>®</sup>, Vertex Pharmaceuticals) and boceprevir (Victrelis<sup>®</sup>, Merck), showed cure rates of approximately 70% in genotype 1-infected patients, when co-administered with an interferon-based regimen. Telaprevir and boceprevir were approved in 2011 for use in combination with interferon and ribavirin in patients infected with genotype 1 virus, and combination therapy incorporating a protease inhibitor emerged as a new standard of care for a segment of HCV patients. In November 2013 the FDA approved a new protease inhibitor from Janssen Therapeutics, simeprevir (Olysio<sup>®</sup>), for the treatment of genotype 1 chronic hepatitis C in adult patients with compensated liver disease. Simeprevir has shown cure rates of up to 80% in genotype 1-infected patients. However, the once-daily treatment must still be combined with pegylated interferon and ribavirin or (as of November 2014) with the nucleotide polymerase inhibitor sofosbuvir. In December 2013, the FDA approved Gilead's sofosbuvir (Sovaldi<sup>®</sup>), a nucleotide analogue inhibitor of the HCV NS5B polymerase enzyme. Sofosbuvir is a once-a-day treatment given in combination with ribavirin for the treatment of chronic hepatitis C in adult patients with genotype 2 or 3 infection. Sofosbuvir may also be given in combination with pegylated interferon and ribavirin for the treatment of chronic hepatitis C in treatment-naïve adult patients with genotype 1 (the predominant genotype in the major world markets) and genotype 4 infection. In October 2014, the FDA approved Gilead's Harvoni<sup>®</sup> therapy, an interferon-free combination therapy containing sofosbuvir and an NS5A inhibitor, therapy, as a once-a-day treatment for genotype 1 infection. Lastly, in November 2014, the FDA approved the combination therapy of sofosbuvir and simeprevir for use in genotype 1 patients.



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While the recently approved treatments for HCV have provided significant benefit to HCV patients, we believe there is significant opportunity for new combination therapies that may address one or more of the following shortcomings in the newest approved treatments:

Current treatments have lower cure rates in some genotypes, in particular genotype 3, than in others

Current treatments have lower cure rates in some patient sub-populations, including but not limited to decompensated cirrhotics and patients with severe renal impairment, than in others

Current treatments do not provide 100% cure rates for all HCV patients, which will result in a new population of patients who have failed existing treatments

Accordingly, we believe there remains a significant unmet medical need in the HCV field.

## ***Scientific Background***

Many of the new approaches under development targeting HCV focus directly on the viral life cycle and proteins that are critical to HCV replication. Replication of the HCV genome occurs on intracellular membranes and requires the participation of multiple viral proteins, some of which have enzymatic activities. Agents, often referred to as inhibitors, that target viral proteins directly are generally referred to as direct acting antivirals, or DAAs. Current DAA development efforts typically focus on the NS3 protease, the NS5A protein, and the NS5B polymerase. In addition to targets in HCV itself, there are human host proteins that are critical to viral replication. Inhibitors that interfere with host targets resulting in antiviral activity are referred to as host-targeted antivirals, or HTAs. One of the most promising HTA approaches to HCV treatment focuses on the human host protein known as cyclophilin A, or cyclophilin.

### ***Key Proteins in the HCV Replication Complex***

*NS3 Protease.* As HCV replicates, it generates long strands of protein that must be processed into many individual active functional proteins that are referred to as non-structural proteins with the designated abbreviation NS, including NS3 and NS5A. The NS3 protease is responsible for most of this protein processing of the newly translated HCV protein, and plays an essential role in the viral life cycle. Inhibition of the protease prevents these new critical proteins from forming and therefore prevents replication and survival of the virus.



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*NS5A.* The NS5A protein has key roles in both the RNA replication of HCV and modulation of the physiology of its host cell in the body. Research has shown that targeting NS5A gives rise to profound antiviral activity, and as a result, this protein has emerged as an additional important DAA target for anti-HCV drug development.

*NS5B Polymerase.* HCV is a single-stranded RNA virus, and NS5B is an HCV RNA polymerase responsible for synthesis of new HCV RNA, allowing the HCV genome to be copied and the virus to survive and replicate. Two separate classes of DAA inhibitors of NS5B polymerase are in development as treatments for HCV.

Nucleoside/nucleotide inhibitors of NS5B directly inhibit the active site of that enzyme and prevent further elongation of the RNA, and thus are equally active against all HCV genotypes. A second class, known as non-nucleoside inhibitors, affects replication of the RNA by altering the shape of the enzyme at remote sites on the enzyme surface so that any given inhibitor is usually only active against certain HCV genotypes.

*Cyclophilin.* Viral function requires an interaction of the viral protein NS5A with the human host protein known as cyclophilin. Inhibitors that interfere with this NS5A-cyclophilin interaction would essentially provide a treatment that protects the human host cells from infection by the virus. Several studies using the immunosuppressive drug cyclosporine A, a known cyclophilin inhibitor, support the clinical validation of cyclophilin as an HTA for treatment of HCV infection. However, the immunosuppressive activity of cyclosporine A and associated side effects limit its clinical use and thus efforts are now focused on new agents devoid of immunosuppressive activity. Alisporivir, a nonimmunosuppressive cyclosporine A derivative under development by Novartis, has demonstrated effectiveness against many HCV genotypes, a high barrier to HCV resistance and no cross-resistance with several DAAs.

The ultimate goal in HCV treatment is complete cure with total eradication of the virus, measured by SVR. We believe that combination therapy will improve overall cure rates and will reduce the probability of resistance arising to any single antiviral agent. In particular, a combination of target mechanisms that includes those with a high barrier to resistance (cyclophilin, polymerase) may prove to be the most effective combination against multiple genotypes of HCV. Unlike treatment for certain viruses, such as HIV, complete clearance of the HCV virus is possible with effective therapy. This exciting prospect suggests that the ultimate goal of a complete cure with total eradication of the virus is within reach.

### ***Our Approach to the Treatment of HCV***

We are pursuing four fundamental, validated targets within the HCV field that represent a broad approach to the disease and specifically address the urgent unmet medical needs in current HCV therapies. Our approach incorporates the main targets for future HCV therapy. Our DAA approach directly targets three critical proteins of HCV, incorporating inhibitors of NS3 protease, NS5A protein, and NS5B polymerase. Inhibitors in our HTA approach protect the human host protein cyclophilin from being co-opted into the viral replication machinery of HCV. We believe a combination of inhibitors from our programs may provide a truly effective all-oral interferon-free or interferon/ribavirin-free therapeutic approach to HCV, with complete eradication of virus, low resistance rates, convenient dosing and acceptable side effect profiles.

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Our protease inhibitor, paritaprevir, also known as ABT-450, was discovered through our collaboration with AbbVie. It is a potent DAA that has demonstrated *in vitro* potency against known resistant HCV mutants. Co-administration of paritaprevir with ritonavir, which we refer to together as paritaprevir/r, combines paritaprevir with a commonly used boosting agent that increases the blood concentrations of many protease inhibitors and has enabled once-daily dosing of paritaprevir. As detailed further in the table below, Phase 3 trials of paritaprevir/r in combination with AbbVie's non-nucleoside polymerase and NS5A inhibitors, with or without ribavirin, in genotype 1a and 1b HCV patients have shown SVR rates of 90-100% depending on the patient and group.

<b>Study Name</b>	<b>Genotype/(Number of) Patients</b>	<b>Treatment Regimen</b>	<b>Treatment Duration</b>	<b>SVR<sub>12</sub><sup>d</sup></b>
SAPPHIRE-I	GT1, treatment-naïve (631)	paritaprevir/r (ABT-450/r) <sup>a</sup> +ombitasvir <sup>b</sup>	12 weeks	96%
		dasabuvir <sup>c</sup>		
		ribavirin		
SAPPHIRE-II	GT1, treatment-experienced (394)	paritaprevir/r <sup>a</sup> +ombitasvir <sup>b</sup>	12 weeks, then active treatment for 12 weeks	96%
		dasabuvir <sup>c</sup>	12 weeks	
		ribavirin		
PEARL-II	GT1b, treatment-experienced (179)	paritaprevir/r <sup>a</sup> +ombitasvir <sup>b</sup>	12 weeks, then active treatment for 12 weeks	97%
		dasabuvir <sup>c</sup>	12 weeks	
		ribavirin		
			12 weeks	100%

		paritaprevir/r <sup>a</sup> +ombitasvir <sup>b</sup>		
PEARL-III	GT1b, treatment-naïve (419)	dasabuvir <sup>c</sup> paritaprevir/r <sup>a</sup> +ombitasvir <sup>b</sup>	12 weeks	99%
		dasabuvir <sup>c</sup>		
		ribavirin		
		paritaprevir/r <sup>a</sup> +ombitasvir <sup>b</sup>	12 weeks	99%
		dasabuvir <sup>c</sup>		
		placebo		
PEARL-IV	GT1a, treatment-naïve (305)	paritaprevir/r <sup>a</sup> +ombitasvir <sup>b</sup>	12 weeks	97%
		dasabuvir <sup>c</sup>		
		ribavirin		
		paritaprevir/r <sup>a</sup> +ombitasvir <sup>b</sup>	12 weeks	90%
		dasabuvir <sup>c</sup>		
		placebo		
TURQUOISE-II	GT1, treatment-naïve and treatment-experienced  (with compensated cirrhosis) (380)	paritaprevir/r <sup>a</sup> +ombitasvir <sup>b</sup>	12 weeks	92%
		dasabuvir <sup>c</sup>		
		ribavirin		
		paritaprevir/r <sup>a</sup> +ombitasvir <sup>b</sup>	24 weeks	96%
		dasabuvir <sup>c</sup>		
		ribavirin		

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<sup>a</sup> paritaprevir/ritonavir, formerly referred to as ABT-450/r or ABT-450/ritonavir

<sup>b</sup> ombitasvir (formerly ABT-267) is co-formulated with paritaprevir/r, administered as two pills once daily

<sup>c</sup> formerly ABT-333

<sup>d</sup> SVR<sub>12</sub> (Sustained Virological Response at 12 weeks after treatment completion): HCV virus RNA below lower limit of measurable quantitation (LLOQ) 12 weeks after end of treatment (EOT)

Additional information about AbbVie's Phase 3 studies can be found on [www.clinicaltrials.gov](http://www.clinicaltrials.gov).

Under our AbbVie collaboration, we have granted AbbVie an exclusive worldwide royalty-bearing license, including a right to grant sublicenses, to our intellectual property position for NS3 protease inhibitors. We also granted AbbVie access to our drug discovery capabilities in the NS3 protease inhibitor field. AbbVie is responsible for and funds all costs associated with the development, manufacturing and commercialization of paritaprevir and other compounds under this collaboration agreement. We will be eligible to receive milestone payments and royalties with respect to these compounds if such products are successfully commercialized by AbbVie.

AbbVie has announced its regulatory filings in the U.S. and the European Union were accepted for review in the second calendar quarter of 2014 for paritaprevir-containing treatment regimens. The 3-DAA regimen was designated as a breakthrough therapy by the U.S. Food and Drug Administration, or FDA. According to the FDA, breakthrough therapy designation is intended to expedite the development and review of drugs for serious or life-threatening conditions.

AbbVie has also announced that its development plan would support a target commercial launch of such a combination therapy in the U.S. by the end of calendar 2014. While AbbVie has not disclosed its plans for pricing the paritaprevir-containing HCV therapy, including in the U.S. or any major European country, or any current projections of its anticipated share of the HCV worldwide market, we expect that annual worldwide sales of all HCV therapies could increase to \$15 billion to \$20 billion in the next few years. This projection is subject to risks and uncertainties. The actual market opportunity may vary and there is no guarantee what portion, if any, of the resulting market opportunity will be captured by a paritaprevir-containing regimen, assuming that AbbVie obtains approval of such a regimen.

***Next-Generation HCV Protease Inhibitor***

AbbVie is also developing a next-generation protease inhibitor, ABT-493, discovered within the Enanta-AbbVie collaboration. AbbVie has announced that this protease inhibitor has demonstrated activity in preclinical *in vitro* testing against a broad range of HCV genotypes, including variants that have shown strong resistance to first generation protease inhibitors. AbbVie has also announced that this next-generation protease inhibitor was designed to enable once-daily dosing without ritonavir and to be co-formulated with AbbVie's next-generation NS5A inhibitor, ABT-530. AbbVie initiated a Phase 1 clinical trial of this next-generation protease inhibitor in November 2012, a Phase 1b clinical trial in HCV patients late in 2013, and a Phase 2a clinical trial in early 2014. Two Phase 2b trials were initiated in September 2014. One trial is treating subjects with HCV genotype 2 and 3, utilizing ABT 493/ABT-530 with or without ribavirin for 12 weeks. In a second trial, ABT-493/ABT/530 is under evaluation for up

to 16 weeks without ribavirin in subjects with HCV genotype 1. AbbVie has indicated that it plans to start Phase 3 trials in 2015.

***EDP-239, an NS5A Inhibitor for HCV Infection***

EDP-239, another DAA, is our lead NS5A inhibitor. The EDP-239 compound has demonstrated potent activity against major genotypes in the replicon assay, which is a common *in vitro* test for determining potency of an active compound in reducing HCV replication.

In addition, EDP-239 has additive to synergistic antiviral activity when used in combination with other anti-HCV therapeutics (DAA and HTA) in reducing HCV replication. Preclinical studies support excellent permeability and absorption potentials in humans. The compound has preferential penetration to the liver, which is the target site

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of infection, across all preclinical models tested. Human pharmacokinetic and pharmacodynamic modeling suggests a low, once-daily clinical dose for future testing. Novartis has completed a Phase 1a trial with EDP-239 and a proof-of-concept study in HCV patients is ongoing.

We discovered EDP-239 internally at Enanta and entered into a collaboration with Novartis in February 2012. Novartis funded all costs associated with the development, manufacture and commercialization of EDP-239 and related NS5A products, as well as our drug discovery efforts on additional selected compounds targeting NS5A, through August 2013. Under the agreement, we received a total of \$48.2 million in upfront fees, research funding and a milestone payment from Novartis. As a result of a corporate decision that HCV would no longer be a strategic focus for Novartis, on September 30, 2014, we entered into an agreement with Novartis to return to us full rights to this program, including transitioning the proof-of-concept study to us, which we expect to have substantially transitioned by the end of calendar 2014.

In addition to EDP-239, we have identified other NS5A inhibitors, which may become candidates to be follow-on NS5A inhibitors.

### ***Cyclophilin (Cyp) Inhibitors for HCV Infection***

In anticipation of resistance arising to DAA HCV therapy that targets viral proteins, we have been developing an alternative HTA approach that targets the human host protein, cyclophilin, which is essential for replication of HCV.

#### ***Interruption of Viral Replication of HCV RNA by Cyclophilin Inhibitor***

**Abbreviation:** CypA refers to cyclophilin A

We have demonstrated in replicon assays that multiple lead cyclophilin targeting inhibitors are potent inhibitors of HCV replication and are more potent than the clinical stage cyclophilin inhibitor alisporivir. Typically, cyclophilin inhibitors are based on the structures of cyclosporine A, which is known to be immunosuppressant with associated side effects that limit its clinical use. Based on our understanding of the structural elements of cyclosporine A that contribute to immunosuppressive activity, we have designed those elements out of our cyclophilin inhibitors and have confirmed a lack of *in vitro* immunosuppressive activity. We are advancing our lead candidates in preclinical studies and are continuing to generate and characterize a number of additional cyclophilin inhibitors in the discovery phase.

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### ***Nucleotide Polymerase Inhibitor Program for HCV Infection***

We have a small-molecule drug discovery effort underway for inhibitors of nucleotide polymerase in a clinically validated mechanism that is less susceptible to HCV resistance. We are seeking to advance novel candidates that have the requisite characteristics to make them viable contenders for further development in combination therapies for HCV, either with our other proprietary compounds or with compounds developed by others.

### **Drug Discovery and Chemical Development**

We have internally developed all of the initial compounds in our research programs, and have participated in the early development of these programs with our collaborators using our own internal research capabilities. Our scientists have expertise in the areas of medicinal chemistry, molecular virology and pharmacology, with highly developed sets of skills in compound generation, target selection, screening and pharmacology, preclinical development and lead optimization. We are utilizing these skills and capabilities in our discovery and development of antiviral and other product candidates.

We focus on infectious diseases and other disease indications representing large and growing market opportunities with significant unmet medical needs. Our selection of a particular therapeutic target within those disease indications takes into consideration the experience and expertise of our scientific team. The final selection is based on the possibility of being able to generate robust medicinal chemistry structure-activity relationships to assist lead optimization and secure relevant intellectual property rights. Once we have identified lead compounds, they are tested using *in vitro* and *in vivo* pharmacology studies and *in vivo* research models of antiviral or antibacterial efficacy.

### ***Bicyclolide Antibiotics***

Through our internal chemistry efforts, we created a new family of antibiotics called Bicyclolides to overcome resistance associated with existing macrolide antibiotics. The main focus of our antibiotic work had been on new mechanisms targeting resistant, Gram-positive pathogens, including bacteria resistant to currently marketed macrolides. In September 2011, NIAID contracted for us to undertake the initial clinical development of our lead product candidate, which NIAID has been investigating as a medical biodefense countermeasure against several pathogens. To date NIAID has funded our preclinical and early clinical development of this candidate. Based primarily on the competitive landscape for antibiotics for Gram-positive bacterial infections, in December 2014 we decided not to continue commercial development of our antibiotic program. Given that we have informed NIAID that we are no longer pursuing a commercial indication for our lead antibiotic candidate, we expect that NIAID will likely terminate our contract for convenience in accordance with its terms.

### **Collaboration and License Agreements**

#### ***AbbVie***

We entered into a Collaborative Development and License Agreement with Abbott Laboratories in November 2006 to develop and commercialize HCV NS3 and NS3/4A protease inhibitors. The agreement, which was amended in January and December 2009, was assigned to AbbVie Inc. on January 1, 2013 in connection with Abbott's transfer of its research-based pharmaceuticals business to AbbVie. Under the agreement, we have granted AbbVie an exclusive, worldwide, royalty-bearing license, including a right to grant sublicenses, to specified intellectual property, including several issued U.S. patents, relating to protease inhibitors. We also granted AbbVie access to our drug discovery capabilities in the HCV NS3 and NS3/4A protease inhibitor field. AbbVie granted us a co-exclusive (together with AbbVie), royalty-free, fully paid license, without the right to grant sublicenses, to certain of AbbVie's intellectual

property, AbbVie's interest in joint intellectual property and improvements discovered by AbbVie, for the purpose of allowing us to conduct certain development and commercialization activities in the United States relating to protease inhibitors. AbbVie is responsible for and funds all costs associated with the development, manufacturing and commercialization of ABT-450 and other



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compounds under this agreement. We are eligible to receive milestone payments and royalties with respect to these compounds. So long as a product candidate is being developed or commercialized under the agreement, we undertake not to conduct any activity, or grant licenses to a third party, relating to protease inhibitors.

A joint steering committee was established under the agreement with review and oversight responsibilities for all research, development and commercialization activities. The joint steering committee is comprised of three of our senior personnel and three senior personnel from AbbVie; however, AbbVie has final authority to make all decisions regarding development and commercialization activities.

The research program and the evaluation period, which was performed by both parties, ended in June 2011. The lead compound is paritaprevir, also known as ABT-450, and additional compounds are under development. The first clinical milestone for paritaprevir was achieved in 2010. To date, we have received from AbbVie a total of \$160 million consisting of an upfront license payment, research funding, milestone payments and an initial preferred stock financing.

We are eligible to receive future milestone payments totaling up to \$155 million upon AbbVie's achievement of commercial regulatory approval milestones in selected world markets for the first protease inhibitor product resulting from our collaboration. We are also eligible to receive additional milestone payments totaling up to \$80 million upon AbbVie's achievement of similar commercial regulatory approval milestones for each additional product containing a protease inhibitor, for which we have not exercised our co-development option, as described below.

We are eligible to receive annually tiered royalties ranging from the low double digits up to twenty percent, or up to the high teens on a blended basis, based on the annual net sales of each product developed under the agreement. However, if a product is determined to be a combination product, as will be the case for paritaprevir and ABT-493, the net sales of the combination product will be adjusted on a country-by-country and product-by-product basis to reflect a good faith determination of the relative value of each pharmaceutically active ingredient, based on estimated fair market value. This means that AbbVie's worldwide annual net sales of a combination product will first be allocated to determine the royalty-bearing portion, and then multiplied by the annually tiered royalty rates to determine Enanta's actual royalty for a given year. In October 2014 we entered into an amendment to our agreement with AbbVie to finalize the net sales allocations for regimens containing paritaprevir, as well as for any regimen containing ABT-493. Under the terms of this agreement, 30% of net sales of a 3-DAA regimen containing paritaprevir will be allocated to paritaprevir and 45% of net sales of a 2-DAA regimen containing paritaprevir will be allocated to paritaprevir. For ABT-493, 50% of net sales will be allocated for a 2-DAA regimen and 33 1/3% for a 3-DAA regimen. If there is any active ingredient other than DAA's in any ABT-493-containing regimen sold by AbbVie, there will be a further adjustment to net sales based on the relative value of the non-DAA ingredient.

Royalties owed to us under the agreement can be reduced by AbbVie in certain circumstances, including (i) if AbbVie exercises its right to license or otherwise acquire rights to intellectual property controlled by a third party where a product could not be legally developed or commercialized in a country without the third-party intellectual property right, (ii) where a product developed under the collaboration agreement is sold in a country and not covered by a valid patent claim in such country, or (iii) where sales of a generic product are equal to at least a specified percentage of AbbVie's market share of a product in a country.

AbbVie's obligation to pay royalties on a product developed under the agreement expires on a country-by-country basis upon the later of (i) the date of expiration of the last of the licensed patents with a valid claim covering the product in the applicable country, and (ii) ten years after the first commercial sale of the product in the applicable country.

Under the agreement, we also have an option to fund 40% of U.S. development costs and U.S. commercialization efforts (sales and promotion costs), in exchange for 40% of any U.S. profits, allocable to any product candidate

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that ultimately achieves regulatory approval and commercialization. We did not exercise our option right with respect to paritaprevir or ABT-493, but we retain our option right for any additional product developed under the agreement, which must be exercised within a specified period after the successful completion of a Phase 2a trial of the additional product. If we exercise our co-development option right, we would be eligible for a different schedule of milestones and milestone payments than those described above, but would not be eligible to receive royalties on U.S. sales. If any additional collaboration product containing a protease inhibitor is co-developed, we would be eligible to receive future milestone payments totaling up to \$40 million for similar regulatory and reimbursement approval milestones. There are no additional protease inhibitors currently being developed in our collaboration with AbbVie.

Our intellectual property existing as of the effective date of the agreement remains our property. Any intellectual property jointly developed will be jointly owned. We will have unilateral right to enforce Enanta patent rights on any covered product following the first commercial sale of such product, as will AbbVie. In the event of infringement related to any Enanta patents, we will have the first right and option to initiate legal proceedings or take other actions. In the event of infringement related to any AbbVie patents, AbbVie will have the first right and option to initiate legal proceedings or take other actions. In the event of infringement of a joint patent right, we will discuss with AbbVie whether to initiate legal proceedings or take other actions. AbbVie will have the obligation to defend at its sole expense any actions brought against either party alleging infringement of third-party rights by reason of the activities conducted under the agreement and we will have the right to obtain separate counsel at our own expense. Additionally, AbbVie, at its sole expense, will be responsible for all trademark prosecution.

Subject to the exceptions described above, a party's rights and obligations under the agreement continue until: (i) such time as AbbVie is no longer developing a product candidate or (ii) if, as of the time AbbVie is no longer developing any product candidates, AbbVie is commercializing any other protease inhibitor product, such time as all royalty terms for all covered products and all co-development terms for all co-developed products have ended. Accordingly, the final expiration date of the agreement is currently indeterminable.

Either party may terminate the agreement for cause in the event of a material breach, subject to prior notice and the opportunity to cure, or in the event of the other party's bankruptcy. Additionally, AbbVie may terminate the agreement for any reason upon specified prior notice.

If we terminate the agreement for cause or AbbVie terminates without cause, any licenses and other rights granted to AbbVie will terminate and AbbVie will be deemed to have granted us (i) a non-exclusive, perpetual, fully paid, worldwide, royalty-free license, with the right to sublicense, under AbbVie's intellectual property used in any product candidate and (ii) an exclusive (even as to AbbVie), perpetual, fully paid, worldwide, royalty-free license, with the right to sublicense, under AbbVie's interest in joint intellectual property rights to develop product candidates resulting from covered compounds and to commercialize any products derived from such compounds. Upon our request, AbbVie will also transfer to us all right, title and interest in any related product trademarks, regulatory filings and clinical trials.

If AbbVie terminates the agreement for our uncured breach, the milestone and royalty payments payable by AbbVie may be reduced, the licenses granted to AbbVie will remain in place, we will be deemed to have granted AbbVie an exclusive license under our interest in joint intellectual property, AbbVie will continue to have the right to commercialize any covered products, and all rights and licenses granted to us by AbbVie will terminate.

## ***NIAID Contract***

In September 2011, we were awarded a contract from NIAID to fund preclinical and early clinical development of our lead candidate in a new class of bridged bicyclic antibiotics known as Bicyclolides. The lead candidate has been under

development by NIAID for use by the U.S. government as medical biodefense countermeasures against multiple bacteria found in anthrax, plague and tularemia.

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Under the terms of the NIAID contract, NIAID has paid us research and development funding of up to \$14.3 million over an initial period of 30 months. The contract contains six option periods, which in aggregate could extend the contract, at the option of NIAID, up to an additional 30 months and provide us additional funding of up to \$28.4 million. In August 2013 NIAID exercised two such options and agreed to provide additional funding of \$9.2 million, increasing total funding from NIAID to approximately \$23.5 million. NIAID has the right to terminate this contract at any time for convenience, which we expect NIAID will do now that we have notified them that we have made a strategic decision not to pursue further development of our antibiotic program for non-biodefense indications.

Under the contract, all intellectual property rights held by us and any inventions, know-how or other intellectual property rights derived as a result of this contract will be our property, subject to certain rights of the United States federal government. See **Risk Factors** We could be unsuccessful in obtaining or maintaining adequate patent and other intellectual property protection for one or more of our product candidates.

## ***Other Collaboration***

In September 2014, we entered into an amendment to our 2012 Collaboration and License Agreement with Novartis to return to us full rights to our NS5A inhibitor program, including EDP-239. This agreement followed Novartis corporate decision that HCV would no longer be a strategic focus for Novartis. This agreement provides for the return of full rights to the NS5A program to us, including the transition of an ongoing proof-of-concept study.

## **Competition**

We are engaged in segments of the pharmaceutical industry that are highly competitive and rapidly changing. Many large pharmaceutical and biotechnology companies, academic institutions, governmental agencies and other public and private research organizations are commercializing or pursuing the development of products that target viral diseases, including the same diseases we are targeting.

We expect our licensed product candidates and our future product candidates to face intense and increasing competition as new products enter the HCV and antibacterial markets and advanced technologies become available, particularly in the case of HCV therapies in combinations with existing products and other new products. Two drug products, Incivek (telaprevir) of Vertex and Victrelis (boceprevir) of Merck, were approved in 2011 by the FDA for the treatment of HCV in combination with the previous standard of care consisting of interferon in combination with ribavirin. By mid-2014 Vertex informed health care providers that it would discontinue the sale and distribution of Incivek in the U.S. by October 16<sup>th</sup>, 2014, noting competing treatments and diminishing market demand. A third protease inhibitor, simeprevir (Olysio) from Janssen Therapeutics was approved by the FDA in November 2013 for use in genotype 1 HCV patients only when used in combination with pegylated interferon and ribavirin. In December 2013, the FDA approved Gilead's sofosbuvir (Sovaldi), a nucleotide analogue inhibitor of the HCV NS5B polymerase enzyme from Gilead for patients with genotype 2 or 3 HCV or in patients with genotypes 1 or 4 when combined with pegylated interferon and ribavirin. In October 2014 the FDA approved an add-on, fixed-dose combination marketed as Harvoni (sofosbuvir plus an NS5A inhibitor) in patients with genotype 1 infection. In November 2014 the FDA approved a combination therapy of simeprevir and sofosbuvir for genotype 1 HCV patients. The evolving standard of care treatment regimens and the cure rates of patients using one of these approved drugs and future approved combinations of DAAs other than ones we have developed and are developing may be such that our development and discovery efforts in the area of HCV may be rendered noncompetitive.

We believe that a significant number of product candidates that are currently under development may become commercially available in the future for the treatment of HCV. We are aware that many competitors other than AbbVie have product candidates in Phase 2 or later stage clinical trials, including Achillion, Bristol-Myers



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Squibb, Gilead, Johnson & Johnson, Merck (which acquired Idenix). Our competitors' products and other product candidate in earlier stage of development, may be more effective, have fewer side effects, have lower costs or be better marketed and sold than any product candidate that includes paritaprevir, ABT-493 or EDP-239 or any of our future product candidates. In addition to Sovaldi, Harvoni and Olysio, there may be other products that our competitors successfully develop and commercialize for the treatment of HCV before any HCV product containing ABT-493 that AbbVie may successfully develop, or any other HCV product that we may develop, is approved for sale.

AbbVie has the right to market and sell products that compete with the product candidates that we have licensed to it and any competition by AbbVie could also have a material adverse effect on our future business.

Competitive products may render our product candidates licensed to others, as well as any future product candidates we may develop ourselves for HCV treatment, obsolete or noncompetitive. All of these product candidates will face competition based on their safety and effectiveness, the timing and scope of regulatory approvals, the availability and cost of supply, marketing and sales capabilities, reimbursement coverage, price, patent position and other factors. Our competitors may succeed in developing competing products before we do, obtaining regulatory approval for products or gaining acceptance for the same markets that we are targeting. If we or our collaborators are not first to market with one of our product candidates for a given disease indication or a given product profile, our competitive position could be compromised because it may be more difficult for us to obtain marketing approval for that product candidate and/or successfully market that product candidate as a second competitor.

Many of our competitors have substantially greater commercial infrastructures and financial, technical and personnel resources than we have. We will not be able to compete successfully unless we are able to:

design and develop products that are superior to other products in the market;

attract qualified scientific, medical, sales and marketing and commercial personnel;

obtain patent and/or other proprietary protection for our processes and product candidates;

obtain required regulatory approvals; and

collaborate with others in the development and commercialization of new products.

Established competitors may invest heavily to quickly discover and develop novel compounds that could make our product candidates obsolete. In addition, any new product that competes with an approved product must demonstrate compelling advantages in efficacy, convenience, tolerability and safety in order to overcome price competition and to be commercially successful. If we and our collaborators are not able to compete effectively against current and future competitors for our product candidates, our business will not grow and our financial condition will be adversely affected.

## **Intellectual Property**

As part of our business strategy, we actively seek patent protection for our product candidates in the United States and certain major foreign jurisdictions and file additional patent applications, when appropriate, to cover improvements to our compounds. We also rely on trade secrets, internal know-how, technological innovations and agreements with third parties to develop, maintain and protect our competitive position. Our ability to be competitive will depend on the success of this strategy.

Each of our major programs typically has several issued patents and pending patent claims in the program area containing claims to compounds, methods of use and processes for synthesis, but only a few of the issued patents and/or pending patent applications cover the lead product candidate in the program.



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*HCV NS3 Protease Inhibitor Program.* The patent portfolio directed to the HCV protease inhibitor program with AbbVie included as of September 30, 2014, 43 issued U.S. patents, with 11 U.S. non-provisional applications, one U.S. provisional application, over 80 issued foreign patents and approximately 340 foreign non-provisional applications. The issued United States patents and the applications, if granted, will expire between 2023 and 2034 before taking into account any extensions that may be obtained through patent term extension or adjustment, or term reduction due to filing of terminal disclaimers. AbbVie is a joint owner of a number of these patent applications. AbbVie also has rights to some or all of these patents and patent applications pursuant to its collaboration agreement with us.

*HCV NS5A Inhibitor Program.* Our patent portfolio directed to our HCV NS5A inhibitor program included as of September 30, 2014, 19 issued U.S. patents, 11 U.S. non-provisional applications, one U.S. provisional application, six issued foreign patents, over 50 foreign non-provisional applications and two PCT applications. The issued United States patents and the applications, if granted, will expire between 2030 and 2032 before taking into account any extensions that may be obtained through patent term extension or adjustment, or term reduction due to filing of terminal disclaimers.

*Cyclophilin Inhibitor Program.* Our ongoing research activities include identifying compounds that inhibit cyclophilin, a protein in the human body that has been shown to be involved in HCV replication. Our current portfolio directed to cyclophilin binders for the treatment of HCV included as of September 30, 2014, seven issued U.S. patents, three U.S. non-provisional applications, two PCT applications, five granted foreign patents and 13 foreign non-provisional applications. The issued United States patents and patent applications, if granted, will expire between 2030 and 2034 before taking into account any extensions that may be obtained through patent term extension or adjustment, or term reduction due to filing of terminal disclaimers.

*HCV Nucleotide Polymerase Inhibitor Program.* Our patent portfolio directed to our HCV nucleotide polymerase inhibitor program, which is in the early stages of development, includes three issued patents, two pending U.S. non-provisional applications, one provisional application, and one pending PCT application.

*Antibacterial Program.* Our patent portfolio directed to antibacterials included as of September 30, 2014, approximately 30 issued U.S. patents, four U.S. non-provisional applications, two U.S. provisional applications, over 50 foreign patents and more than a dozen non-provisional foreign applications. These patents and patent applications, if granted, will expire between 2020 and 2032 before taking into account any extension that may be obtained through patent term extension or adjustment, or term reduction due to filing of terminal disclaimers.

We may obtain patents for certain compounds many years before we obtain marketing approval for products containing such compounds. Because patents have a limited life, which may begin to run prior to the commercial sale of the related product, the commercial value of the patent may be limited. However, we may be able to apply for patent term extensions in the United States and in a number of European countries, compensating in part for delays in obtaining marketing approval, but we cannot be certain we will obtain such extensions.

It is also very important that we do not infringe patents or other proprietary rights of others. If we do infringe such patents or other proprietary rights, we could be prevented from developing or selling products or from using the processes covered by those patents, could be required to pay substantial damages, or could be required to obtain a license from the third party to allow us to use their technology, which may not be available on commercially reasonable terms or at all. If we were not able to obtain a required license or develop alternative technologies, we may be unable to develop or commercialize some or all of our products, and our business could be adversely affected.

In addition, we jointly own patent applications, together with AbbVie, that claim paritaprevir as a chemical entity. However, there is no guaranty that such applications will issue. We also own one issued patent that claims EDP-239 as a chemical entity. Further, the existence of issued patents does not guarantee our right to practice the patented technology or commercialize the patented product. Third parties may have or obtain rights to patents

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that could be used to prevent or attempt to prevent us from commercializing our product candidates. If these other parties are successful in obtaining valid and enforceable patents, and establishing our infringement of those patents, we could be prevented from commercializing our product candidates unless we were able to obtain a license under such patents, which may not be available on commercially reasonable terms or at all.

Much of our scientific capabilities depend upon the knowledge, experience and skills of key scientific and technical personnel. To protect our rights to our proprietary know-how and technology, we endeavor to require all employees, as well as our consultants and advisors when feasible, to enter into confidentiality agreements that require disclosure and assignment to us of ideas, developments, discoveries and inventions made by these employees, consultants and advisors in the course of their service to us.

We may be unable to obtain, maintain and protect the intellectual property rights necessary to conduct our business, and we may be subject to claims that we infringe or otherwise violate the intellectual property rights of others, which could materially harm our business. For more information, see **Risk Factors** **Risks Related to Our Intellectual Property Rights**.

## **Government Regulation**

Government authorities in the United States, at the federal, state and local level, and in other countries extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of products such as those we are developing. Any pharmaceutical candidate that we develop must be approved by the FDA before it may be legally marketed in the United States and by the appropriate foreign regulatory agency before it may be legally marketed in foreign countries.

### ***United States Drug Development Process***

In the United States, the FDA regulates drugs under the Federal Food, Drug and Cosmetic Act, or FDCA, and implementing regulations. Drugs are also subject to other federal, state and local statutes and regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable United States requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. FDA sanctions could include refusal to approve pending applications, withdrawal of an approval, a clinical hold, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us.

The process required by the FDA before a drug may be marketed in the United States generally involves the following:

Completion of preclinical laboratory tests, animal studies and formulation studies according to GLPs or other applicable regulations;

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Submission to the FDA of an Investigational New Drug Application, or an IND, which must become effective before human clinical trials may begin;

Performance of adequate and well-controlled human clinical trials according to the FDA's current Good Clinical Practices, or GCPs, to establish the safety and efficacy of the proposed drug for its intended use;

Submission to the FDA of a New Drug Application, or an NDA, for a new drug product;

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Satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the drug is to be produced to assess compliance with the FDA's current Good Manufacturing Practice standards, or cGMP, to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;

Potential FDA audit of the nonclinical and clinical trial sites that generated the data in support of the NDA; and

FDA review and approval of the NDA.

The lengthy process of seeking required approvals, which can often take anywhere from six months from the time the NDA is filed if there is a priority review for a breakthrough therapy to twelve months for a standard review, and the continuing need for compliance with applicable statutes and regulations require the expenditure of substantial resources. There can be no certainty that approvals will be granted.

Before testing any compounds with potential therapeutic value in humans, the product candidate enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies to assess the potential safety and activity of the product candidate. The conduct of the preclinical tests must comply with GLP and other federal regulations and requirements. The sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA places the clinical trial on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. The FDA may also impose clinical holds on a drug at any time before or during clinical trials due to safety concerns or non-compliance. Accordingly, we cannot assure that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such trial.

Clinical trials involve the administration of the product candidate to healthy volunteers or patients having the disease being studied under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety. Each protocol must be submitted to the FDA as part of the IND. Clinical trials must be conducted in accordance with the FDA's GCP requirements. Further, each clinical trial must be reviewed and approved by an independent institutional review board, or IRB, at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the welfare and rights of trial participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the informed consent form that must be provided to each clinical trial subject or his or her legal representative and must monitor the clinical trial until it is completed.

Human clinical trials prior to approval are typically conducted in three sequential phases that may overlap or be combined:

*Phase 1.* The drug is initially introduced into healthy humans and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to

healthy volunteers, the initial human testing is often conducted only in patients having the specific disease.

*Phase 2.* The drug is evaluated in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance, optimal dosage and dosing schedule for patients having the specific disease.

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*Phase 3.* Clinical trials are undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population at geographically dispersed clinical trial sites. These clinical trials, which usually involve more patients than earlier trials, are intended to establish the overall risk/benefit ratio of the product and provide an adequate basis for product labeling. Generally, at least two adequate and well-controlled Phase 3 clinical trials are required by the FDA for approval of an NDA.

Post-approval studies, or Phase 4 clinical trials, may be conducted after initial marketing approval. These studies are used to gain additional experience from the treatment of patients in the intended therapeutic indication and may be required by the FDA as part of the approval process.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and written IND safety reports must be submitted to the FDA by the investigators for serious and unexpected AEs or any finding from tests in laboratory animals that suggests a significant risk for human patients. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, if at all. The FDA, or the sponsor or its data safety monitoring board, may suspend a clinical trial at any time on various grounds, including a finding that the research patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients.

Concurrent with clinical trials, companies usually complete additional animal studies and develop additional information about the chemistry and physical characteristics of the drug as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, must include methods for testing the identity, strength, quality and purity of the final drug. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

### ***U.S. Review and Approval Processes***

The results of product development, preclinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, proposed labeling and other relevant information are submitted to the FDA as part of an NDA requesting approval to market the product. The submission of an NDA is subject to the payment of substantial user fees by the applicant; a waiver of such fees may be obtained under certain limited circumstances.

In addition, under the Pediatric Research Equity Act, or PREA, an NDA or supplement to an NDA must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of pediatric data or full or partial waivers.

The FDA reviews all NDAs submitted before it accepts them for filing and may request additional information rather than accepting an NDA for filing. Once the submission is accepted for filing, the FDA begins an in-depth review of the NDA. Under the goals and policies agreed to by the FDA under the Prescription Drug User Fee Act, or PDUFA, the FDA has twelve months in which to complete its initial review of a standard NDA and respond to the applicant, and six months for a priority NDA. The FDA does not always meet its PDUFA goal dates for standard and priority NDAs.

After the NDA submission is accepted for filing, the FDA reviews the NDA to determine, among other things, whether the proposed product is safe and effective for its intended use, and whether the product is being manufactured

in accordance with cGMP to assure and preserve the product's identity, strength, quality and purity. In addition to its own review, the FDA may refer applications for novel drug products or drug products



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that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. During the approval process, the FDA also will determine whether a Risk Evaluation and Mitigation Strategy, or REMS, is necessary to assure the safe use of the drug. If the FDA concludes that a REMS is needed, the sponsor of the NDA must submit a proposed REMS; the FDA will not approve the NDA without a REMS, if required.

Before approving an NDA, the FDA will inspect the facilities at which the product is to be manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable it will outline the deficiencies in the submission and often will request additional testing or information.

The NDA review and approval process is lengthy and difficult, and the FDA may refuse to approve an NDA if the applicable regulatory criteria are not satisfied or may require additional clinical data or other data and information. Even if such data and information is submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. The FDA will issue a complete response letter if the agency decides not to approve the NDA. The complete response letter usually describes all of the specific deficiencies in the NDA identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the NDA, addressing all of the deficiencies identified in the letter, or withdraw the application.

If a product receives regulatory approval, the approval may be limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. In addition, the FDA may require Phase 4 testing, which involves clinical trials designed to further assess a product's safety and effectiveness and may require testing and surveillance programs to monitor the safety of approved products that have been commercialized.

### ***Expedited Development and Review Programs***

The FDA has four programs intended to expedite the development and review of new drugs addressing unmet medical needs or treating serious or life-threatening conditions: fast track, breakthrough therapy, priority review, and accelerated approval.

The FDA fast track program is intended to expedite or facilitate the process for reviewing new products to treat serious or life-threatening conditions and address unmet medical needs. Fast track designation applies to the combination of the product and the specific indication for which it is being studied. Under the fast track program, the sponsor will have more frequent interactions with the FDA during drug development, and may also submit sections of the NDA on a rolling basis to the FDA for review before submitting the complete application. Fast track does not guarantee that a product will be reviewed more quickly or receive FDA approval.

The FDA breakthrough therapy program is intended to expedite the development and review of drugs for serious or life-threatening conditions. Preliminary clinical evidence must show that the drug may have substantial improvement over existing therapies on one or more clinically significant endpoints. Although the drug does not have to address an unmet medical need, designation of breakthrough therapy status carries all the fast track

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program features. Additionally, the breakthrough therapy program entitles the sponsor to earlier and more frequent interaction with the FDA review team regarding development of nonclinical and clinical data, and allows the FDA to offer product development and regulatory advice necessary to shorten the time for product approval. The breakthrough therapy status does not guarantee a quicker development or review of the product, and does not ensure FDA approval.

The FDA also has a priority review program for products offering significant improvement in the treatment, diagnosis or prevention of a disease. The goal of the priority review program is to shorten the review period to six months from the ten months required for standard review. Any drug with breakthrough therapy, accelerated approval designation, or fast track can be granted priority review if it meets the necessary criteria.

The FDA accelerated approval program is intended to expedite the development and review of products with the potential to treat serious or life-threatening illnesses and provide meaningful therapeutic benefit over existing treatments. The program allows approval of a product on the basis of adequate and well-controlled clinical studies establishing that the product has an effect on a surrogate endpoint that is reasonably likely to predict a clinical benefit, or on the basis of an effect on a clinical endpoint that can be measured earlier than survival or irreversible morbidity. As a condition of approval, the FDA generally requires that a sponsor of the product perform adequate and well-controlled post-marketing clinical studies to establish safety and efficacy for the approved indication. Failure to conduct such studies or failure of the studies to establish required safety and efficacy may result in revocation of approval. The FDA also requires, as a condition for accelerated approval, pre-approval of promotional materials, which could adversely impact the timing of the commercial launch or subsequent marketing of the product.

### ***Post-Approval Requirements***

Any drug products for which we receive FDA approvals are subject to continuing regulation by the FDA. Certain requirements include, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information on an annual basis or more frequently for specific events, product sampling and distribution requirements, complying with certain electronic records and signature requirements and complying with FDA promotion and advertising requirements. These promotion and advertising requirements include, among others, standards for direct-to-consumer advertising, prohibitions against promoting drugs for uses or in patient populations that are not described in the drug's approved labeling (known as off-label use), rules for conducting industry-sponsored scientific and educational activities and promotional activities involving the internet. Failure to comply with FDA requirements can have negative consequences, including the immediate discontinuation of noncomplying materials, adverse publicity, enforcement letters from the FDA, mandated corrective advertising or communications with doctors, and civil or criminal penalties. Although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such off-label uses.

We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our product candidates. Manufacturers of our product candidates are required to comply with applicable FDA manufacturing requirements contained in the FDA's cGMP regulations. These regulations require, among other things, quality control and quality assurance as well as the corresponding maintenance of comprehensive records and documentation. Drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are also required to register their establishments and list any products they make with the FDA and to comply with related requirements in certain states. These entities are further subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance. Discovery of problems with a product after approval may result in serious and extensive restrictions on a product, manufacturer or holder of an approved NDA. These restrictions may include suspension of a product until the FDA is assured that quality standards can be met, continuing oversight of manufacturing by the FDA under a consent decree,

which frequently includes the imposition of costs and

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continuing inspections over a period of many years, as well as possible withdrawal of the product from the market. In addition, changes to the manufacturing process generally require prior FDA approval before being implemented. Other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

The FDA also may require post-marketing testing, known as Phase 4 testing, as well as risk minimization action plans and surveillance to monitor the effects of an approved product or place conditions on an approval that could otherwise restrict the distribution or use of the product.

### ***U.S. Patent Term Restoration and Marketing Exclusivity***

#### ***Drug Price Competition and Patent Term Restoration Act of 1984***

Depending upon the timing, duration and specifics of the FDA approval of the use of our product candidates, some of our United States patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during federal regulatory review preceding the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of an NDA plus the time between the submission date of an NDA and the approval of that application. Only one patent applicable to an approved drug is eligible for the extension and the application for the extension must be submitted within 60 days of approval, prior to the expiration of the patent. The United States Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may apply for restoration of patent term for one of our currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant NDA. However, there is no guarantee that any such application will be approved.

#### ***Federal Food, Drug and Cosmetic Act ( FDCA )***

Market exclusivity provisions under the FDCA, which are independent of patent status and any patent related extensions, can also delay the submission or the approval of certain applications of other companies seeking to reference another company's NDA. If the new drug is a new chemical entity subject to an NDA, the FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or functional group of a molecule responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application, or ANDA, or a so-called Section 505(b)(2) NDA, submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, such an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator NDA holder. The FDCA also provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the conditions associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and

adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

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### ***Other U.S. Healthcare Laws and Compliance Requirements***

In the United States, our activities are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including the Centers for Medicare and Medicaid Services (formerly the Health Care Financing Administration), other divisions of the United States Department of Health and Human Services (*e.g.*, the Office of Inspector General), the United States Department of Justice and individual United States Attorney offices within the Department of Justice, state attorney generals and state and local governments. For example, sales, marketing and scientific/educational grant programs must comply with the anti-fraud and abuse provisions of the Social Security Act, the False Claims Act, the privacy and security provisions of the Health Insurance Portability and Accountability Act, or HIPAA, and similar state laws, each as amended. Pricing and rebate programs must comply with the Medicaid rebate requirements of the Omnibus Budget Reconciliation Act of 1990 and the Veterans Health Care Act of 1992, each as amended. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. Under the Veterans Health Care Act, or VHCA, drug companies are required to offer certain pharmaceutical products at a reduced price to a number of federal agencies including the United States Department of Veterans Affairs and United States Department of Defense, the Public Health Service and certain private Public Health Service designated entities in order to participate in other federal funding programs including Medicare and Medicaid. Recent legislative changes purport to require that discounted prices be offered for certain United States Department of Defense purchases for its TRICARE program via a rebate system. Participation under the VHCA requires submission of pricing data and calculation of discounts and rebates pursuant to complex statutory formulas, as well as the entry into government procurement contracts governed by the Federal Acquisition Regulations.

In order to distribute products commercially, we must comply with state laws that require the registration of manufacturers and wholesale distributors of pharmaceutical products in a state, including, in certain states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Several states have enacted legislation requiring pharmaceutical companies to establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities, and/or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical companies for use in sales and marketing, and to prohibit certain other sales and marketing practices. All of our activities are potentially subject to federal and state consumer protection and unfair competition laws.

### ***Europe / Rest of World Government Regulation***

In addition to regulations in the United States, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products.

Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. Certain countries outside of the United States have a similar process that requires the submission of a clinical trial application much like the IND prior to the commencement of human clinical trials. In the European Union, for example, a clinical trial application, or CTA, must be submitted to each country's national health authority and an independent ethics committee, much like the FDA and IRB, respectively. Once the CTA is approved in accordance with a country's requirements, clinical trials may proceed.

The requirements and process governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, the clinical trials are conducted in accordance with International Conference on Harmonisation (ICH) / WHO Good Clinical Practice standards and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.



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To obtain regulatory approval of an investigational drug under European Union regulatory systems, we must submit a marketing authorization application to the European Medicines Agency, or the EMA. The application used to file an NDA in the United States is similar to that required in the European Union, with the exception of, among other things, country-specific document requirements.

For other countries outside of the European Union, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical trials are conducted in accordance with GCPs and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

### ***Pharmaceutical Coverage, Pricing and Reimbursement***

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we obtain regulatory approval. In the United States and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend in part on the availability of reimbursement from third-party payors. Third-party payors include government health administrative authorities, managed care providers, private health insurers and other organizations. The process for determining whether a payor will provide coverage for a drug product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the drug product. Third-party payors may limit coverage to specific drug products on an approved list, or formulary, which might not include all of the FDA-approved drug products for a particular indication. Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain the FDA approvals. Our product candidates may not be considered medically necessary or cost-effective. A payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

In 2003, the United States government enacted legislation providing a partial prescription drug benefit for Medicare recipients, which became effective at the beginning of 2006. Government payment for some of the costs of prescription drugs may increase demand for any products for which we receive marketing approval. However, to obtain payments under this program, we would be required to sell products to Medicare recipients through prescription drug plans operating pursuant to this legislation. These plans will likely negotiate discounted prices for our products. Federal, state and local governments in the United States continue to consider legislation to limit the growth of healthcare costs, including the cost of prescription drugs. Future legislation could limit payments for pharmaceuticals such as the product candidates that we are developing.

In March 2010, the President signed one of the most significant healthcare reform measures in decades. The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively known as the Affordable Care Act, substantially changes the way healthcare will be financed by both governmental and private insurers, and significantly impacts the pharmaceutical industry. The comprehensive \$940 billion dollar overhaul is expected to extend coverage to approximately 32 million previously uninsured Americans. The Affordable Care Act contains a number of provisions, including those governing enrollment in federal healthcare programs, reimbursement changes and fraud and abuse, which will impact existing government healthcare programs and will

result in the development of new programs, including Medicare

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payment for performance initiatives and improvements to the physician quality reporting system and feedback program. Additionally, the Affordable Care Act, as limited by the United States Supreme Court's decision in June 2012:

increases the minimum level of Medicaid rebates payable by manufacturers of brand-name drugs from 15.1% to 23.1%;

requires collection of rebates for drugs paid by Medicaid managed care organizations;

requires manufacturers to participate in a coverage gap discount program, under which they must agree to offer 50 percent point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D, beginning January 2011; and

imposes a non-deductible annual fee on pharmaceutical manufacturers or importers who sell branded prescription drugs to specified federal government programs.

There have been proposed in Congress a number of legislative initiatives regarding healthcare, including possible repeal of the Affordable Care Act. At this time, it remains unclear whether there will be any changes made to the Affordable Care Act, whether to certain provisions or its entirety. The full impact that the Affordable Care Act and other new laws will have on our business is uncertain. Nor is it clear whether other legislative changes will be adopted, if any, or how such changes would affect the demand for our product candidates once commercialized.

Different pricing and reimbursement schemes exist in other countries. In the European Community, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national healthcare systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on healthcare costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

The marketability of any drug candidates for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, emphasis on managed care in the United States has increased and we expect will continue to increase the pressure on pharmaceutical pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

## **Manufacturing**

We do not have our own manufacturing capabilities, except with respect to limited amounts of active pharmaceutical ingredients needed for preclinical development. In the past we have relied on third-party manufacturers for supply of active pharmaceutical ingredients, and we expect that in the future we will rely on such manufacturers for supply of ingredients that will be used in clinical trials of our product candidates that we are developing ourselves.

Manufacturing for each of our two lead product candidates, namely paritaprevir and ABT-493 are being conducted by AbbVie. We do not expect to establish our own manufacturing facilities and we will continue to rely on third-party manufacturers to produce commercial quantities of any product candidates that we commercialize ourselves. We believe that all of the materials required for the manufacture of those product candidates could be obtained from more than one source.

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### **Sales and Marketing**

We currently do not have any commercialization or sales and marketing capabilities, and currently have no fixed plans to invest in or build such capabilities internally. We have partnered our lead product candidate with AbbVie. We may also partner or collaborate with, or license commercial rights to, other larger pharmaceutical or biopharmaceutical companies to support the development of our NS5A cyclophilin and nucleotide polymerase inhibitor product candidates, or any combination of them, through late-stage clinical development and, if successful, commercialization. However, we still retain all commercial rights to our independent programs and we will continue to evaluate our alternatives for commercializing them once they are more advanced in their clinical development.

### **Employees**

As of September 30, 2014, we had 52 full-time employees, 23 of whom hold Ph.D. degrees. None of our employees is subject to a collective bargaining agreement or represented by a trade or labor union. We consider our relations with our employees to be good.

## **ITEM 1A. RISK FACTORS**

### **RISK FACTORS**

*Our business faces significant risks and uncertainties. Certain factors may have a material adverse effect on our business prospects, financial condition and results of operations, and you should carefully consider them. Accordingly, in evaluating our business, we encourage you to consider the following discussion of risk factors, in its entirety, in addition to other information contained in or incorporated by reference into this Annual Report on Form 10-K and our other public filings with the SEC. Other events that we do not currently anticipate or that we currently deem immaterial may also affect our business, prospects, financial condition and results of operations.*

### **Risks Related to Our Business**

*Our financial prospects for the next several years are substantially dependent upon the development and commercialization efforts of AbbVie for combination therapies incorporating paritaprevir (ABT-450) or ABT-493 for the treatment of HCV. AbbVie may act in its best interest rather than in our best interest, which could adversely affect our business.*

We rely on AbbVie to fund and conduct the clinical development and commercialization of paritaprevir, ABT-493 (a next-generation protease inhibitor in clinical development) and any other protease inhibitors we develop, over which AbbVie has complete control. Our ability to generate significant revenue in the near term will depend primarily on the successful development, regulatory approval, marketing and commercialization by AbbVie of combination therapies incorporating paritaprevir or ABT-493. Such success is subject to significant uncertainty, and we have limited control over the resources, time and effort that AbbVie may devote to paritaprevir or ABT-493. Any of several events or factors could have a material adverse effect on our ability to generate revenue from AbbVie's potential commercialization of paritaprevir or ABT-493 in combination therapies. For example, AbbVie:

may have to comply with additional requests and recommendations from the FDA, including additional clinical trials;

may not make all regulatory filings and obtain all necessary approvals from the FDA and similar foreign regulatory agencies and reimbursement approvals;

may not achieve satisfactory levels of market acceptance and reimbursement of combination therapies incorporating our product candidate by physicians, patients and third-party payors;

may not compete successfully with any such combination therapies against alternative products and therapies for HCV;

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may be unable to successfully complete the clinical development of an ABT-493-containing regimen;

may not commit sufficient resources to the development, regulatory approval, marketing and distribution of a regimen containing paritaprevir or ABT-493, whether for competitive or strategic reasons or otherwise due to a change in business priorities;

may cease to perform its obligations under the terms of our collaboration agreement;

may unilaterally terminate our collaboration agreement on specified prior notice without any reason and without any further commitment to continue development of any of our product candidates;

may not be able to manufacture our product candidate in compliance with requirements of the FDA and similar foreign regulatory agencies and in commercial quantities sufficient to meet market demand; and

may independently develop products that compete with our product candidate in the treatment of HCV. We do not have access to all information regarding the products being developed and potentially commercialized by AbbVie, including information about clinical trial design and execution, safety reports from clinical trials, spontaneous safety reports if the product is later approved and marketed, regulatory affairs, process development, manufacturing, marketing and other areas known by AbbVie. Thus, our ability to keep our stockholders informed about the status of product candidates under our collaboration will be limited by the degree to which AbbVie keeps us informed. If AbbVie does not perform in the manner we expect or fulfill its responsibilities in a timely manner, or at all, the clinical development, regulatory approval and commercialization efforts related to paritaprevir or ABT-493 could be delayed or terminated or be commercially unsuccessful. In addition, AbbVie has the right to make decisions regarding the development and commercialization of product candidates without consulting us, and may make decisions with which we do not agree. Conflicts between us and AbbVie may arise if there is a dispute about the progress of the clinical development of a product candidate, the achievement and payment of a milestone amount, the relative values allocated to the pharmaceutically active ingredients, or the ownership of intellectual property developed during the course of our collaboration agreement. If AbbVie acts in a manner that is not in our best interest, then it could adversely affect our business and prospects.

***We and AbbVie face substantial competition in the market for HCV drugs and for anti-infectives generally, which may result in others discovering, developing or commercializing products before us or doing so more successfully than we and our collaborators.***

The pharmaceutical and biotechnology industries are intensely competitive and rapidly changing. Many large pharmaceutical and biotechnology companies, academic institutions, governmental agencies and other public and private research organizations are commercializing or pursuing the development of products that target HCV, MRSA and other infectious diseases that we may target in the future.

We expect our current and future product candidates to face intense and increasing competition as new products enter the HCV and antibacterial markets and advanced technologies become available, particularly in the case of HCV in combinations with existing products and other new products. First generation protease inhibitors, Incivek (telaprevir) of Vertex and Victrelis (boceprevir) of Merck, were approved in 2011 by the FDA for the treatment of HCV in

combination with interferon and ribavirin, which in combination were the previous standard of care. However, by mid-2014 Vertex informed health care providers that it would discontinue the sale and distribution of Incivek in the U.S. by October 16, 2014, noting competing treatments and diminishing market demand. A third protease inhibitor, simeprevir (Olysio ) from Janssen Therapeutics was approved by the FDA in November 2013 for use in genotype 1 HCV patients only when used in combination with pegylated interferon and ribavirin. The evolving competitive landscape in HCV intensified in December 2013, when the FDA approved sofosbuvir (Sovaldi ), a nucleotide analogue inhibitor of the HCV NS5B polymerase enzyme from Gilead for patients with genotype 2 or 3 HCV and no requirement for interferon (also approved for patients with genotypes 1 or 4 when combined with pegylated interferon and ribavirin). In October 2014 the FDA approved Gilead's interferon-free Harvoni , a ledipasvir/sofosbuvir combination for patients with genotype 1. Also in November 2014 the FDA approved an interferon-free combination therapy of simeprevir and sofosbuvir for



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genotype 1 HCV patients. Other all-oral treatment regimens, including additional regimens with Sovaldi, are under development and may obtain regulatory approvals for other forms of HCV before any combination including one of our compounds is approved. These other potential new treatment regimens may render our HCV product candidates noncompetitive. In particular, regimens containing our HCV product candidates may not be able to compete successfully with other products and regimens in development involving multiple classes of inhibitors of HCV, including protease inhibitors, polymerase inhibitors (nucleoside and non-nucleoside), NS5A inhibitors and cyclophilin inhibitors, under development by companies such as Achillion, Bristol-Myers Squibb, Gilead, Johnson & Johnson, Medivir, Merck, Presidio and Roche, as well as by our collaborator AbbVie.

Many of our competitors have substantially greater commercial infrastructure and greater financial, technical and personnel resources than we have, as well as drug candidates in late-stage clinical development.

Our competitors may succeed in developing competing products and obtaining regulatory approval before we or our collaborators do with our product candidates, or they may gain acceptance for the same markets that we are targeting. If we are not first to market with one of our product candidates in one or more disease indications, our competitive position could be compromised because it may be more difficult for us to obtain marketing approval for that product candidate and successfully market that product candidate as a second competitor. In addition, any new product that competes with an approved product must demonstrate compelling advantages in efficacy, convenience, tolerability and safety in order to overcome price competition and to be commercially successful.

Competitive products in the form of other treatment methods or a vaccine for HCV or MRSA may render our product candidates licensed to others, as well as any future product candidates we may develop ourselves, obsolete or noncompetitive. Even if successfully developed and subsequently approved by the FDA, our product candidates will face competition based on their safety and effectiveness, the timing and scope of the regulatory approvals, the availability and cost of supply, marketing and sales capabilities, reimbursement coverage, price, patent position and other factors. If the product candidates developed under our collaboration agreement with AbbVie face competition from generic products, the collaboration agreement provides that the royalty rate applicable to such product candidates is reduced significantly by a specified percentage on a product-by-product, country-by-country basis. If we and our collaborators are not able to compete effectively against our current and future competitors, our business will not grow and our financial condition, operations and stock price will suffer.

***We have no approved products and limited clinical development experience, which makes it difficult to assess our ability to develop and commercialize our future product candidates.***

To date, AbbVie has been and will continue to be responsible for all of the clinical development of our paritaprevir and ABT-493 protease inhibitor product candidates. We have not yet demonstrated an ability to successfully address many of the risks and uncertainties associated with late stage clinical development, regulatory approval and commercialization of therapeutic products such as the ones we plan to develop independently. For example, to execute our business plan for development of our independent programs for cyclophilin inhibitors and nucleotide polymerase inhibitors for HCV, we will need to successfully:

execute clinical development of our future product candidates;

obtain required regulatory approvals for the development and commercialization of our future product candidates;

develop and maintain any future collaborations we may enter into for any of these programs;

build and maintain robust sales, distribution and marketing capabilities, either independently or in collaboration with future collaborators;

gain market acceptance for our future product candidates; and

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manage our spending as costs and expenses increase due to clinical trials, regulatory approvals and commercialization.

If we are unsuccessful in accomplishing these objectives, we may not be able to successfully develop and commercialize our future product candidates and expand our business or continue our operations.

***We may require substantial additional financing to achieve our goals if the development and commercialization of paritaprevir or ABT-493 is delayed or terminated. A failure to obtain this necessary capital when needed could force us to delay, limit, reduce or terminate our product development efforts.***

Since our inception, most of our resources have been dedicated to the discovery and preclinical development of our product candidates. In particular, we have expended, and believe that we will continue to expend for the foreseeable future, substantial resources discovering and developing our proprietary preclinical product candidates. These expenditures will include costs associated with research and development, preclinical manufacturing of product candidates, conducting preclinical experiments and clinical trials and obtaining regulatory approvals, as well as commercializing any products later approved for sale. For the foreseeable future, we expect to incur substantial additional costs associated with research and development for our internally developed programs, exclusive of costs incurred by our collaborator in developing our licensed product candidates paritaprevir and ABT-493. In addition, we may seek opportunities to in-license or otherwise acquire new therapeutic candidates and therapies.

Because the outcome of planned and anticipated clinical trials of our product candidates by any collaborator of ours is highly uncertain, we cannot reasonably estimate the timing or amounts, if any, of future milestone payments we will receive from a collaborator. If we do not continue to receive substantial milestone payments from the continued development of our product candidates, we may require substantial additional financing.

Our future capital requirements depend on many factors, including:

whether any collaboration of ours continues to generate substantial milestone payments, and ultimately royalties, to us;

the number and characteristics of the future product candidates we pursue;

the scope, progress, results and costs of researching and developing any of our future product candidates on our own, including conducting preclinical research and clinical trials;

the timing of, and the costs involved in, obtaining regulatory approvals for any future product candidates we develop independently;

the cost of commercialization activities, if any, of any future product candidates we develop independently that are approved for sale, including marketing, sales and distribution costs;

the cost of manufacturing our future product candidates and any products we successfully commercialize independently, including manufacturing for clinical development;

our ability to maintain any collaboration of ours and to establish new collaborations, licensing or other arrangements and the financial terms of such agreements;

the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patents, including litigation costs and the outcome of such litigation;

the portion of net sales of any combination regimen that is allocable to a compound developed by us or in one of our collaborations; and

the timing, receipt and amount of sales of, or royalties on, paritaprevir, ABT-493 and our future product candidates, if any.

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Additional funds may not be available when we need them, on terms that are acceptable to us, or at all. Our ability to raise funds will depend on financial, economic and market conditions and other factors, many of which are beyond our control. If adequate funds are not available to us on a timely basis, we may be required to delay, limit, reduce or terminate preclinical studies, clinical trials or other research and development activities for one or more of our product candidates.

***If we are not successful in discovering further product candidates in addition to paritaprevir (ABT-450), ABT-493 and EDP-239 our ability to expand our business and achieve our strategic objectives may be impaired.***

Research programs designed to identify product candidates require substantial technical, financial and human resources, whether or not any product candidates are ultimately identified. Our research programs may initially show promise in identifying additional potential product candidates, yet fail to yield product candidates for clinical development or commercialization for many reasons, including the following:

the research methodology used may not be successful in identifying additional potential product candidates;

competitors may develop alternatives that render our future product candidates obsolete;

competitors may obtain intellectual property protection that effectively prevents us from developing a potential product candidate;

a future product candidate may, on further study, be shown to have harmful side effects or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria; and

a future product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all.

If we are unable to identify additional compounds suitable for preclinical and clinical development, we may not be able to obtain sufficient product revenue in future periods, which likely would result in significant harm to our financial position and adversely impact our stock price.

***If we fail to attract and keep senior management and key scientific personnel, we may be unable to successfully develop our product candidates, conduct our clinical trials and commercialize our product candidates.***

Our success depends in part on our continued ability to attract, retain and motivate highly qualified management, clinical and scientific personnel. We are highly dependent upon our senior management, particularly Jay R. Luly, Ph.D., our Chief Executive Officer and President, and Yat Sun Or, Ph.D., our Senior Vice President, Research and Development and Chief Scientific Officer, as well as other employees and consultants. Although none of these individuals has informed us to date that he intends to retire or resign in the near future, the loss of services of any of these individuals or one or more of our other members of senior management could delay or prevent the successful development of our future product candidates.

Although we have not historically experienced unique difficulties attracting and retaining qualified employees, we could experience such problems in the future. For example, competition for qualified personnel in the biotechnology and pharmaceutical fields is intense. In addition, we will need to hire additional personnel as we expand our clinical development and commercial activities. We may not be able to attract and retain quality personnel on acceptable terms.

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***We may encounter difficulties in managing our growth and expanding our operations successfully.***

As we seek to advance our product candidates through clinical trials, we will need to expand our development, regulatory, manufacturing, marketing and sales capabilities or contract with third parties to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with various strategic partners, suppliers and other third parties. Future growth will impose significant added responsibilities on members of management. Our future financial performance and our ability to commercialize our product candidates and to compete effectively will depend, in part, on our ability to manage any future growth effectively. To that end, we must be able to manage our development efforts and clinical trials effectively and hire, train and integrate additional management, administrative and sales and marketing personnel. We may not be able to accomplish these tasks, and our failure to accomplish any of them could prevent us from successfully growing our company.

***Our government funded contract for our antibiotic program is subject to termination for convenience of the government given our strategic decision not to pursue further commercial development of the program.***

Under our agreement with the National Institute of Allergy and Infectious Diseases, or NIAID, a division of the National Institutes of Health, an agency of the United States Department of Health and Human Services, to support our antibiotic program, we have no control over the resources and funding NIAID may devote to our agreement. If we fail to satisfy our contractual obligations under the agreement, the applicable Federal Acquisition Regulations allow the government to terminate the agreement in whole or in part, and we may be required to perform corrective actions, including but not limited to delivering to the government any incomplete work. In addition, our agreement may be terminated for convenience by NIAID at any time if it determines that termination is in the best interest of the government, which is likely to occur now that we have decided not to advance our antibiotic program for non-biodefense purposes.

In addition, our contract related costs and fees, including allocated indirect costs, are subject to audits and adjustments by negotiation between us and the U.S. government. As part of the audit process, the government audit agency verifies that all charges made by a contractor against a contract are legitimate and appropriate. Audits may result in recalculation of contract revenues and non-reimbursement of some contract costs and fees. Any audits of our contract related costs and fees could result in material adjustments to our revenue. In addition, U.S. government contracts are conditioned upon the continuing availability of Congressional appropriations. Congress usually appropriates funds on a fiscal year basis even though contract performance may take several years. Consequently, at the outset of a major program, the contract is usually incrementally funded and additional funds are normally committed to the contract by the procuring agency as appropriations are made by Congress for future fiscal years. Any failure of NIAID to continue to fund our contract could have a material adverse effect on our business, results of operations and financial condition.

***We have incurred a substantial cumulative net loss since our inception and it is possible that we may incur substantial operating losses in one or more years in the future. To date, our principal sources of revenue have been our collaboration agreements, including our current agreements with AbbVie and our prior agreement with Novartis, and future payments under the AbbVie agreement are uncertain. We have had no products approved for commercial sale. As a result, our ability to achieve sustained profitability is unproven.***

We have incurred cumulative net losses since our inception, and as of September 30, 2014, we had an accumulated deficit of \$73.0 million. In the fiscal year ended September 30, 2012, our net income resulted primarily from a substantial upfront license payment from Novartis. In the fiscal year ended September 30, 2013, our net income resulted primarily from milestone payments we earned from AbbVie and Novartis of \$15.0 million and \$11.0 million, respectively. In our fiscal year ending September 30, 2014, our net income resulted primarily from a total of \$40.0 million in milestone payments as a result of the U.S. regulatory filing with the FDA and the European Medicines

Agency, or EMA, for the regimen containing the first protease inhibitor product resulting from our collaboration with AbbVie. There is no assurance, however, that we will report net income in subsequent years. To date, we have not commercialized any products or generated any revenue from product sales, directly or through any collaborator.



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Our principal source of revenue has been our collaboration agreements, including our current agreement with AbbVie and our previous agreement with Novartis. Future milestone payments are uncertain because our collaborators may choose not to continue research or development activities for one or more potential product candidates. For example, under a prior collaboration for the development of an antibiotic product candidate in Japan, our collaborator decided in 2010 not to pursue further development of the licensed product candidate due to its limited potency against *Haemophilus influenzae* in clinical trials of community-acquired pneumonia, which then resulted in our collaboration being terminated. In addition, we may not achieve the specified milestones, our product candidates may not be approved by the FDA or other regulatory authorities or, if they are approved, may not be accepted in the market. If we are unable to develop and commercialize one or more of our product candidates, either alone or with our collaborators, or if any such product candidate does not achieve market acceptance, we may never generate sufficient product royalties or product sales. For example, for any of our product candidates included in a treatment regimen with more than one active compound, it would be uncertain what portion of net sales of the regimen would be allocated to our product candidate. The existence of multiple active compounds in the regimen or an unfavorable allocation to our product candidate could adversely affect our royalty revenue. Even if we do generate product royalties or product sales, we may never achieve or sustain profitability on a quarterly or annual basis. Our failure to sustain profitability would depress the market price of our common stock and could impair our ability to raise capital, expand our business, diversify our product offerings or continue our operations. A decline in the market price of our common stock also could cause you to lose all or a part of your investment.

### **Risks Related to Development, Clinical Testing and Regulatory Approval of Our Product Candidates**

*Clinical drug development involves a lengthy and expensive process with uncertain timelines and uncertain outcomes. If clinical trials are prolonged or delayed, we or our collaborators may be unable to commercialize our product candidates on a timely basis.*

Clinical testing is expensive and, depending on the stage of development, can take a substantial time period to complete. Its outcome is inherently uncertain, and failure can occur at any time during clinical development. The top-line results of the six Phase 3 registrational trials of ABT-450 in combination therapy were reported earlier this year, which were then followed by regulatory filings for approval of that therapy, but none of the other product candidates in our pipeline has yet advanced beyond Phase 2 clinical trials. Any future clinical trials of our other product candidates may fail to demonstrate sufficient safety and efficacy. Moreover, regulatory and administrative delays may adversely affect our or our collaborators' clinical development plans and jeopardize our or our collaborators' ability to attain product approval, commence product sales, compete successfully against other HCV therapies and generate revenues.

Clinical trials can be delayed for a variety of reasons, including delays related to:

reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;

failure of third-party contractors, such as CROs, or investigators to comply with regulatory requirements;

delay or failure in obtaining the necessary approvals from regulators or institutional review boards, or IRBs, in order to commence a clinical trial at a prospective trial site, or their suspension or termination of a clinical trial once commenced;

difficulty in recruiting suitable patients to participate in a trial;

difficulty in having patients complete a trial or return for post-treatment follow-up;

clinical sites deviating from trial protocol or dropping out of a trial;

problems with drug product or drug substance storage and distribution;

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adding new clinical trial sites;

our inability to manufacture, or obtain from third parties, adequate supply of drug product sufficient to complete our preclinical studies and clinical trials;

governmental or regulatory delays and changes in regulatory requirements, policy and guidelines; or

varying interpretations of data by the FDA, the EMA and similar foreign regulatory agencies.

The results of any Phase 3 clinical trial may not be adequate to support marketing approval. These clinical trials are lengthy and usually involve from many hundreds to thousands of patients. In addition, if the FDA or the EMA disagrees with our or our collaborator's choice of the key testing criteria, or primary endpoint, or the results for the primary endpoint are not robust or significant relative to the control group of patients not receiving the experimental therapy or are subject to confounding factors, or are not adequately supported by other study endpoints, the FDA or the EMA, or both, may refuse to approve our or our collaborator's product candidate. The FDA or the EMA also may require additional clinical trials as a condition for approving any of these product candidates. We estimate that it will likely be our fiscal 2018 before an NDA for one of our or a collaborator's product candidates other than paritaprevir could be approved by the FDA or the EMA.

We could also encounter delays if a clinical trial is suspended or terminated by us, by the IRBs of the institutions in which such trial is being conducted, by any Data Safety Monitoring Board, or DSMB, for such trial, or by the FDA, the EMA or other regulatory authorities. Such authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. In addition, delays can occur due to safety concerns arising from trials or other clinical data regarding another company's product candidate in the same compound class as one of ours. If we or our collaborators experience delays in the completion of, or termination of, any clinical trial of one of our product candidates, the commercial prospects of the product candidate will be harmed, and our or our collaborators' ability to commence product sales and generate product revenues from the product candidate will be delayed. In addition, any delays in completing our clinical trials will increase our costs and slow down our product candidate development and approval process. Any of these occurrences may harm our business, financial condition and prospects significantly. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

***If we or AbbVie are required to suspend or discontinue clinical trials due to side effects or other safety risks associated with our product candidates, or if we or AbbVie are required to conduct studies on the long-term effects associated with the use of our product candidates, efforts to commercialize our product candidates could be delayed or halted.***

Clinical trials involving our product candidates may be suspended or terminated at any time for a number of safety-related reasons. For example, we or AbbVie may voluntarily suspend or terminate clinical trials if at any time one of our product candidates, or a combination therapy including any of them, presents an unacceptable safety risk to the clinical trial patients. In addition, IRBs or regulatory agencies may order the temporary discontinuation or termination of clinical trials at any time if they believe that the clinical trials are not being conducted in accordance

with applicable regulatory requirements, including if they present an unacceptable safety risk to patients. Administering any product candidate to humans may produce undesirable side effects. The existence of undesirable side effects resulting from any of our product candidates, or a combination therapy including any of them, could cause us, AbbVie or regulatory authorities, such as the FDA or EMA, to interrupt, delay or halt clinical trials of our product candidates and could result in the FDA or EMA or other regulatory agencies denying further development or approval of our product candidates for any or all targeted indications. This, in turn, could prevent us or AbbVie from commercializing our product candidates.

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### ***Results of earlier clinical trials may not be predictive of the results of later-stage clinical trials.***

The results of preclinical studies and early clinical trials of our product candidates, whether ABT-493, EDP-239 or any of our future product candidates, may not be predictive of the results of later-stage clinical trials. In addition, results of Phase 3 clinical trials in one or more ethnic groups are not necessarily indicative of results in other ethnic groups. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy results despite having progressed through preclinical studies and initial clinical trials. Many companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to adverse safety profiles or lack of efficacy, notwithstanding promising results in earlier studies. Similarly, future clinical trial results may not be successful for these or other reasons.

This product candidate development risk is heightened by any changes in the planned clinical trials compared to the completed clinical trials. As product candidates are developed through preclinical early and late stage clinical trials towards approval and commercialization, it is customary that various aspects of the development program, such as manufacturing and formulation, are altered along the way in an effort to optimize processes and results. Such changes carry the risk that they will not achieve these intended objectives. Any of these changes could make the results of planned clinical trials or other future clinical trials we or our collaborators may initiate less predictable and could cause our product candidates to perform differently, which could delay completion of clinical trials, delay approval of our product candidates and/or jeopardize our or our collaborators' ability to commence product sales and generate revenues.

### ***The regulatory approval processes of the FDA, the EMA and other comparable foreign authorities are lengthy, time-consuming and inherently unpredictable, and if we or our collaborators are ultimately unable to obtain timely regulatory approval for our product candidates, our business will be substantially harmed.***

The regulatory approval process is expensive and, while the time required to gain FDA and foreign regulatory approval is uncertain, it may take years. Regulatory approvals are unpredictable and depend upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of preclinical and clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. We or our collaborators may be required to undertake and complete certain additional preclinical studies to generate toxicity and other data required to support the submission of a New Drug Application, or NDA, to the FDA or comparable application to other regulatory authorities. Neither we nor our collaborator have obtained regulatory approval for any of our product candidates and it is possible that none of our existing product candidates or any of our future product candidates will ever obtain regulatory approval. Furthermore, approval in the United States by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or by the FDA.

Our product candidates could fail to receive regulatory approval for many reasons, including the following:

the FDA, the EMA or other comparable foreign regulatory authorities may disagree with the design or implementation of our or our collaborators' clinical trials;

we or our collaborators may be unable to demonstrate to the satisfaction of the FDA, the EMA or other comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed

indication;

the results of clinical trials may not meet the level of statistical significance required by the FDA, the EMA or other comparable foreign regulatory authorities for approval;

we or our collaborators may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;

the FDA, the EMA or other comparable foreign regulatory authorities may disagree with our or our collaborators' interpretation of data from preclinical studies or clinical trials;

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the data collected from clinical trials of our product candidates may not be sufficient to support the submission of an NDA or other submissions or to obtain regulatory approval in the United States or elsewhere;

the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we or our collaborators contract for clinical and commercial supplies of any of our product candidate; and

the approval policies or regulations of the FDA, the EMA or other comparable foreign regulatory authorities may significantly change in a manner rendering our or our collaborators' clinical data insufficient for approval.

We and our collaborators cannot be assured that after spending substantial time and resources, we or our collaborators will obtain regulatory approvals in any desired jurisdiction. Even if we or our collaborators were to obtain approval, regulatory authorities may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Significant clinical trial delays could allow our competitors to obtain marketing approval before we or our collaborators do or could shorten the patent protection period during which we may have the exclusive right to commercialize our product candidates. In addition, we or our collaborators may not be able to ultimately achieve the prices intended for our products. In many foreign countries, including those in the European union, a product candidate must be approved for reimbursement before it can be approved for sale in that country. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates.

***Even if we receive regulatory approval for any of our product candidates we develop independently, we will be subject to ongoing FDA obligations and continued regulatory review in other jurisdictions, which may result in significant additional expense. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and we may be subject to penalties if we or our collaborators fail to comply with regulatory requirements or experience unanticipated problems with our products.***

Any regulatory approvals that we receive for our product candidates we develop independently may be subject to limitations on the approved indicated uses for which the product may be marketed or subject to certain conditions of approval, or may contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials, and surveillance to monitor the safety and efficacy of the product candidate.

In addition, if the FDA approves any of our product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, as well as continued compliance with current good manufacturing practices, or cGMP, and good clinical practices, or GCP, for any clinical trials that we or our collaborators conduct post-approval. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market or voluntary or mandatory product recalls;

finances, warning letters or holds on any post-approval clinical trials;

refusal by the FDA to approve pending applications or supplements to approved applications filed by us or our collaborators, or suspension or revocation of product license approvals;

product seizure or detention, or refusal to permit the import or export of products; and

injunctions or the imposition of civil or criminal penalties.



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We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we or our collaborators are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or our collaborators are not able to maintain regulatory compliance, our product candidates may lose any marketing approval that may have been obtained and we may not achieve or sustain profitability, which would adversely affect our business.

***We or AbbVie may delay or terminate the development of a product candidate at any time if we or AbbVie believe the perceived market or commercial opportunity does not justify further investment, which could materially harm our business.***

Even though the results of preclinical studies and clinical trials that we or AbbVie have conducted or may conduct in the future may support further development of one or more of our product candidates, we, or AbbVie in the case of our partnered product candidates, may delay, suspend or terminate the future development of a product candidate at any time for strategic, business, financial or other reasons, including the determination or belief that the emerging profile of the product candidate is such that it may not receive regulatory approvals in key markets, gain meaningful market acceptance, otherwise provide any competitive advantages in its intended indication or market or generate a significant return to stockholders. Such a delay, suspension or termination could materially harm our business, results of operations or financial condition. In addition, AbbVie may have the right to make decisions regarding the development and commercialization of product candidates without consulting us, and may make decisions with which we do not agree.

***Our internal computer systems, or those of our collaborators, CROs or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of development programs for our product candidates.***

Despite the implementation of security measures, our internal computer systems and those of our collaborators, CROs, and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we have not experienced any such system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our independent drug development programs or those of our collaborators. For example, the loss of clinical trial data from ongoing or future clinical trials for any of our product candidates could result in delays in regulatory approval efforts and significantly increase costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of or damage to data or applications, or inappropriate disclosure of confidential or proprietary information, we or our collaborators could incur liability and the further development of our product candidates could be delayed.

## **Risks Related to Commercialization of Our Product Candidates**

***If, in the future, we are unable to establish our own sales, marketing and distribution capabilities or enter into licensing or collaboration agreements for these purposes, we may not be successful in commercializing any future product candidates.***

We do not have a sales or marketing infrastructure and have no sales, marketing or distribution experience. We will seek to either build our own commercial infrastructure to commercialize any future products if and when they are approved, or enter into licensing or collaboration agreements where our collaborator is responsible for commercialization, like in the case of our collaboration with AbbVie, or where we have the right to assist in the future development and commercialization of such products.

To develop internal sales, distribution and marketing capabilities, we will have to invest significant amounts of financial and management resources, some of which will be committed prior to any confirmation that any of our

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proprietary product candidates will be approved. For product candidates for which we decide to perform sales, marketing and distribution functions ourselves, we could face a number of additional risks, including:

our inability to recruit and retain adequate numbers of effective sales and marketing personnel;

the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future products;

the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and

unforeseen costs and expenses associated with creating an independent sales and marketing organization.

Where and when appropriate, we may elect to utilize contract sales forces or distribution partners to assist in the commercialization of our product candidates. If we enter into arrangements with third parties to perform sales, marketing and distribution services for our products, the resulting revenues or the profitability from these revenues to us are likely to be lower than if we had sold, marketed and distributed our products ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell, market and distribute our product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties, and any of these third parties may fail to devote the necessary resources and attention to sell, market and distribute our products effectively.

If we do not establish sales, marketing and distribution capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates.

***Our commercial success depends upon significant market acceptance among physicians, patients and healthcare payors of our paritaprevir or any other product candidates licensed to AbbVie, if approved, as well as of any future product candidates we plan to develop independently or in collaboration with others.***

Even if paritaprevir, ABT-493 or EDP-239 or any other product candidate that we may develop in the future obtains regulatory approval, whether as part of a combination therapy or as a monotherapy, the product may not gain market acceptance among physicians, healthcare payors, patients and the medical community. For example, the standard of care in HCV is likely to evolve rapidly as many new product candidates are being developed and tested. The degree of market acceptance of any products for which we receive approval for commercial sale depends on a number of factors, including:

the efficacy and safety of treatment regimens containing one of our partnered product candidates, as demonstrated in clinical trials, and the degree to which these regimens represent a clinically meaningful improvement in care as compared with other available therapies;

the clinical indications for which any treatment regimen containing one of our product candidates become approved;

acceptance among physicians, major operators of clinics and patients of any treatment regimen containing one of our product candidates as safe, effective and preferred treatments;

the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;

the potential and perceived advantages of treatment regimens containing one of our product candidates over alternative treatments;

the cost of treatment in relation to alternative treatments;

the availability of adequate reimbursement and pricing by third parties and government authorities;

the continued projected growth of the HCV drug market;

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the relative convenience and ease of administration of any treatment regimen containing one of our product candidates;

the prevalence and severity of adverse side effects, whether involving the use of our products candidates or similar, competitive products; and

the effectiveness of our or our collaborators' sales and marketing efforts.

If treatment regimens containing one of our product candidates are approved and then fail to achieve market acceptance, we would not be able to generate significant revenue. Further, if new, more favorably received therapies are introduced after any such regimen achieve market acceptance, then we may not be able to maintain that market acceptance over time.

***Even if we or AbbVie are able to commercialize any treatment regimen containing one of our product candidates, the resulting products may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives in the United States, which would harm our business.***

The regulations that govern marketing approvals, pricing and reimbursement for new drug products vary widely from country to country. In the United States, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act of 2010, collectively referred to as the ACA, may significantly change the way healthcare is financed by both governmental and private insurers. While we cannot predict what impact on federal reimbursement policies this law will have in general or specifically on any product or regimen that we or any of our collaborators commercializes, the ACA may result in downward pressure on pharmaceutical reimbursement, which could negatively affect market acceptance of new products. In addition, although the United States Supreme Court has upheld the constitutionality of most of the ACA, some states have indicated that they intend not to implement certain sections of the ACA, and some members of the U.S. Congress are still working to repeal the ACA. We cannot predict whether these challenges will continue or other proposals will be made or adopted, or what impact these efforts may have on us or AbbVie. AbbVie or any collaborators' ability to commercialize any products successfully also will depend in part on the extent to which reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. A primary trend in the U.S. healthcare industry is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that reimbursement will be available for any product that we or any collaborator commercialize and, if reimbursement is available, the level of reimbursement. In addition, reimbursement may impact the demand for, or the price of, any product candidate for which we or a collaborator obtains marketing approval. If reimbursement is not available or is available only to limited levels, we or AbbVie may not be able to successfully commercialize any product candidate for which marketing approval is obtained.

There may be significant delays in obtaining reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or comparable authorities in other jurisdictions. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also be insufficient to cover our and any collaborator's costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used,

may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations

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in setting their own reimbursement policies. Our or any collaborator's inability to promptly obtain coverage and profitable payment rates from both government-funded and private payors for any approved products that we or our collaborators develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

### ***Foreign governments tend to impose strict price controls, which may adversely affect our future profitability.***

In most foreign countries, particularly in the European Union, prescription drug pricing and/or reimbursement is subject to governmental control. In those countries that impose price controls, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we or our collaborators may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies.

Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we or our collaborators might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenues that are generated from the sale of the product in that country. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, or if there is competition from lower priced cross-border sales, our profitability will be negatively affected.

### **Risks Related to Our Dependence on Third Parties**

***We may not be successful in establishing new product collaborations, which could adversely affect our ability to develop and commercialize one or more of our future product candidates. If we are unsuccessful in maintaining or forming alliances on favorable terms, our business may not succeed.***

We may seek to enter into additional product collaborations in the future, including alliances with other biotechnology or pharmaceutical companies, to enhance and accelerate the development and commercialization of one or more of our future product candidates. We face significant competition in seeking appropriate collaborators and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish other product collaborations or other alternative arrangements for any future product candidates and programs because our research and development pipeline may be insufficient, our product candidates and programs may be deemed to be at too early of a stage of development for collaborative effort and/or third parties may not view our product candidates and programs as having the requisite potential to demonstrate safety and efficacy. Even if we are successful in our efforts to establish product collaborations, the terms that we agree upon may not be favorable to us and we may not be able to maintain such product collaborations if, for example, development or approval of a product candidate is delayed or sales of an approved product are disappointing.

If either of our existing collaboration agreements is terminated, or if we determine that entering into other product collaborations is in our best interest but we either fail to enter into, delay in entering into or fail to maintain such collaborations:

the development of certain of our current or future product candidates may be terminated or delayed;

our cash expenditures related to development of certain of our future product candidates would increase significantly and we may need to seek additional financing;

we may be required to hire additional employees or otherwise develop expertise, such as clinical, regulatory, sales and marketing expertise, which we do not currently have;



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we will bear all of the risk related to the development of any such product candidates; and

the competitiveness of any product candidate that is commercialized could be reduced.

***We intend to rely on third-party manufacturers to produce our clinical product candidate supplies and any commercial supplies of any approved future product candidates. Any failure by a third-party manufacturer to produce acceptable supplies for us may delay or impair our ability to initiate or complete our clinical trials or sell any resulting product.***

We do not currently own or operate any manufacturing facilities. We plan to work with third-party contract manufacturers to produce sufficient quantities of any future product candidates for preclinical testing, clinical trials and commercialization. If we are unable to arrange for such a third-party manufacturing source, or fail to do so on commercially reasonable terms, we may not be able to successfully produce, develop and market our future product candidates, or we may be delayed in doing so.

Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured product candidates ourselves, including reliance on the third party for regulatory compliance and quality control and assurance, volume production, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control (including a failure to synthesize and manufacture our product candidates in accordance with our product specifications) and the possibility of termination or nonrenewal of the agreement by the third party at a time that is costly or damaging to us. In addition, the FDA and other regulatory authorities require that our product candidates be manufactured according to cGMP and similar foreign standards. Pharmaceutical manufacturers and their subcontractors are required to register their facilities and/or products manufactured at the time of submission of the marketing application and then annually thereafter with the FDA and certain state and foreign agencies. They are also subject to periodic unannounced inspections by the FDA, state and other foreign authorities. Any subsequent discovery of problems with a product, or a manufacturing or laboratory facility used by us or our collaborators, may result in restrictions on the product or on the manufacturing or laboratory facility, including marketed product recall, suspension of manufacturing, product seizure, or a voluntary withdrawal of the drug from the market. Any failure by our third-party manufacturers to comply with cGMP or failure to scale up manufacturing processes, including any failure to deliver sufficient quantities of product candidates in a timely manner, could lead to a delay in, or failure to obtain, regulatory approval of any of our product candidates.

We plan to rely on third-party manufacturers to purchase from third-party suppliers the materials necessary to produce our future product candidates for our clinical studies. There are a small number of suppliers for certain capital equipment and materials that we plan to use to manufacture our drugs. Such suppliers may not sell these materials to our manufacturers at the times we need them or on commercially reasonable terms. Moreover, we currently do not have any agreements for the production of these materials. Although we do not intend to begin a clinical trial unless we believe we have a sufficient supply of a product candidate to complete the clinical trial, any significant delay in the supply of a product candidate or the material components thereof for an ongoing clinical trial due to the need to replace a third-party manufacturer could considerably delay completion of our clinical studies, product testing and potential regulatory approval of our product candidates. If our manufacturers or we are unable to purchase these materials after regulatory approval has been obtained for our product candidates, the commercial launch of our product candidates would be delayed or there would be a shortage in supply, which would impair our ability to generate revenue from the sale of our product candidates.

Contract manufacturers may not be able to manufacture our product candidates at a cost or in quantities or in a timely manner necessary to develop and commercialize them. If we successfully commercialize any of our product candidates, to meet our projected needs we may need to find third parties that will increase their scale of production,

or we may have to establish or access large-scale commercial manufacturing capabilities. We may require additional funds, personnel and other resources to build, lease or operate any manufacturing facility.

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***Because a portion of our manufacturing of certain key intermediates used in the manufacture of the active pharmaceutical ingredients for our future product candidates is expected to take place in China through third-party manufacturers, a significant disruption in the operation of those manufacturers or political unrest in China could materially adversely affect our business, financial condition and results of operations.***

Although manufacturing for our lead product candidates paritaprevir and ABT-493 is being conducted by AbbVie, we have relied on third parties located in China to manufacture and supply certain key intermediates used in the manufacture of our active pharmaceutical ingredients, or API, for our research product candidates, and we expect to continue to use such third party manufacturers for such intermediates for any future product candidates we develop independently. Any disruption in production or inability of our manufacturers in China to produce adequate quantities to meet our needs, whether as a result of a natural disaster or other causes, could impair our ability to operate our business on a day-to-day basis and to continue our research and development of our future product candidates. Furthermore, since these manufacturers are located in China, we are exposed to the possibility of product supply disruption and increased costs in the event of changes in the policies of the Chinese government, political unrest or unstable economic conditions in China. Any of these matters could materially and adversely affect our business and results of operations. Any recall of the manufacturing lots or similar action regarding our API used in clinical trials could delay the trials or detract from the integrity of the trial data and its potential use in future regulatory filings. In addition, manufacturing interruptions or failure to comply with regulatory requirements by any of these manufacturers could significantly delay clinical development of potential products and reduce third-party or clinical researcher interest and support of proposed trials. These interruptions or failures could also impede commercialization of our future product candidates and impair our competitive position. Further, we may be exposed to fluctuations in the value of the local currency in China. Future appreciation of the local currency could increase our costs. In addition, our labor costs could continue to rise as wage rates increase due to increased demand for skilled laborers and the availability of skilled labor declines in China.

***We will rely on third parties to monitor, support, conduct and/or oversee clinical trials of our future product candidates that we develop independently and, in some cases, to maintain regulatory files for those product candidates. If we are not able to maintain or secure agreements with such third parties on acceptable terms, if these third parties do not perform their services as required, or if these third parties fail to timely transfer any regulatory information held by them to us, we may not be able to obtain regulatory approval for, or commercialize, our product candidates.***

We will rely on academic institutions, CROs, hospitals, clinics and other third-party collaborators who are outside our control to monitor, support, conduct and/or oversee preclinical and clinical studies of our future product candidates. We will also rely on third parties to perform clinical trials on our future product candidates when they reach that stage. As a result, we have less control over the timing and cost of these studies and the ability to recruit trial subjects than if we conducted these trials wholly by ourselves. If we are unable to maintain or enter into agreements with these third parties on acceptable terms, or if any such engagement is terminated, we may be unable to enroll patients on a timely basis or otherwise conduct our trials in the manner we anticipate. In addition, there is no guarantee that these third parties will devote adequate time and resources to our studies or perform as required by a contract or in accordance with regulatory requirements, including maintenance of clinical trial information regarding our future product candidates. If these third parties fail to meet expected deadlines, fail to timely transfer to us any regulatory information, fail to adhere to protocols or fail to act in accordance with regulatory requirements or our agreements with them, or if they otherwise perform in a substandard manner or in a way that compromises the quality or accuracy of their activities or the data they obtain, then clinical trials of our future product candidates may be extended, delayed or terminated, or our data may be rejected by the FDA or regulatory agencies.



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*To the extent we elect to enter into additional licensing or collaboration agreements to partner our future product candidates, our dependence on such relationships may adversely affect our business.*

Our commercialization strategy for some of our future product candidates may depend on our ability to enter into collaboration agreements with other companies to obtain assistance and funding for the development and potential commercialization of these product candidates, similar to what we have done with AbbVie. Supporting diligence activities conducted by potential collaborators and negotiating the financial and other terms of a collaboration agreement are long and complex processes with uncertain results. Even if we are successful in entering into one or more additional collaboration agreements, collaborations can involve greater uncertainty for us, as we may have limited or no control over certain aspects of our collaborative programs. We may determine that continuing a collaboration under the terms provided is not in our best interest, and we may terminate the collaboration. Our collaborators could delay or terminate their agreements with us, and our product candidates subject to collaborative arrangements may never be successfully commercialized.

Further, our collaborators may develop alternative products or pursue alternative technologies either on their own or in collaboration with others, including our competitors, and the priorities or focus of our collaborators may shift such that our programs receive less attention or resources than we would like, or they may be terminated altogether. Any such actions by our collaborators may adversely affect our business prospects and ability to earn revenue. In addition, we could have disputes with our collaborators, such as the interpretation of terms in our agreements. Any such disagreements could lead to delays in the development or commercialization of any potential products or could result in time-consuming and expensive litigation or arbitration, which may not be resolved in our favor.

Even with respect to programs that we intend to commercialize ourselves, we may enter into agreements with collaborators to share in the burden of conducting clinical trials, manufacturing and marketing our product candidates or products. In addition, our ability to apply our proprietary technologies to develop proprietary compounds will depend on our ability to establish and maintain licensing arrangements or other collaborative arrangements with the holders of proprietary rights to such compounds. We may not be able to establish such arrangements on favorable terms or at all, and our collaborative arrangements may not be successful.

## **Risks Related to Our Intellectual Property Rights**

*We could be unsuccessful in obtaining or maintaining adequate patent protection for one or more of our product candidates.*

Our commercial success will depend, in large part, on our ability to obtain and maintain patent and other intellectual property protection with respect to our product candidates. We cannot be certain that patents will be issued or granted with respect to our patent applications that are currently pending, or that issued or granted patents will not later be found to be invalid and/or unenforceable, be interpreted in a manner that does not adequately protect our products, or otherwise provide us with any competitive advantage. The patent position of biotechnology and pharmaceutical companies is generally uncertain because it involves complex legal and factual considerations. The standards applied by the United States Patent and Trademark Office and foreign patent offices in granting patents are not always applied uniformly or predictably. For example, there is no uniform worldwide policy regarding patentable subject matter or the scope of claims allowable in biotechnology and pharmaceutical patents. Consequently, patents may not issue from our pending patent applications. As such, we do not know the degree of future protection that we will have on our proprietary products and technology, if any, and a failure to obtain adequate intellectual property protection with respect to our product candidates and proprietary technology could have a material adverse impact on our business.

In addition, certain of our activities have been funded, and may in the future be funded, by the United States federal government. For example, the preclinical and early clinical development of our lead antibiotic candidate, has been funded under a contract with NIAID, an entity of the United States federal government. When new technologies are developed with United States federal government funding, the government obtains certain

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rights in any resulting patents, including a nonexclusive license authorizing the government to use the invention for non-commercial purposes. These rights may permit the government to disclose our confidential information to third parties and to exercise march-in rights to use or allow third parties to use our patented technology. The government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the United States government-funded technology, or because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations or to give preference to United States industry. In addition, United States government-funded inventions must be reported to the government and United States government funding must be disclosed in any resulting patent applications. In addition, our rights in such inventions are subject to certain requirements to manufacture products in the United States.

### ***Issued patents covering one or more of our product candidates could be found invalid or unenforceable if challenged in court.***

Despite measures we take to obtain patent and other intellectual property protection with respect to our product candidates and proprietary technology, any of our intellectual property rights could be challenged or invalidated. For example, if we were to initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that our patent is invalid and/or unenforceable. In patent litigation in the United States and in some other jurisdictions, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, for example, lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the United States Patent and Trademark Office, or the applicable foreign counterpart, or made a misleading statement, during prosecution. Although we believe that we have conducted our patent prosecution in accordance with the duty of candor and in good faith, the outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on a product candidate. Even if a defendant does not prevail on a legal assertion of invalidity and/or unenforceability, our patent claims may be construed in a manner that would limit our ability to enforce such claims against the defendant and others. Any loss of patent protection could have a material adverse impact on one or more of our product candidates and our business.

Enforcing our intellectual property rights against third parties may also cause such third parties to file other counterclaims against us, which could be costly to defend and could require us to pay substantial damages, cease the sale of certain products or enter into a license agreement and pay royalties (which may not be possible on commercially reasonable terms or at all). Any efforts to enforce our intellectual property rights are also likely to be costly and may divert the efforts of our scientific and management personnel.

### ***Claims that our product candidates or the sale or use of our future products infringe the patent or other intellectual property rights of third parties could result in costly litigation or could require substantial time and money to resolve, even if litigation is avoided.***

Our commercial success depends upon our ability to develop, manufacture, market and sell our product candidates and use our proprietary technology without infringing the intellectual property rights of others. We cannot guarantee that our product candidates or any uses of our product candidates do not and will not in the future infringe third-party patents or other intellectual property rights. Third parties might allege that we or our collaborators are infringing their patent rights or that we have misappropriated their trade secrets, or that we are otherwise violating their intellectual property rights, whether with respect to the manner in which we have conducted our research or to the composition,

use or manufacture of the compounds we have developed or are developing with our collaborators. Such third parties might resort to litigation against us or other parties we have agreed to indemnify, which litigation could be based on either existing intellectual property or intellectual property that arises in the future.



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It is also possible that we failed to identify, or may in the future fail to identify, relevant patents or patent applications held by third parties that cover our product candidates. For example, applications filed before November 29, 2000 and certain applications filed after that date that will not be filed outside the United States remain confidential until patents issue. Other patent applications in the United States and several other jurisdictions are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Furthermore, publication of discoveries in the scientific or patent literature often lags behind actual discoveries. Therefore, we cannot be certain that we or our collaborators were the first to invent, or the first to file patent applications on, our product candidates or for their uses, or that our product candidates will not infringe patents that are currently issued or that are issued in the future. In the event that a third party has also filed a patent application covering one of our product candidates or a similar invention, we may have to participate in an adversarial proceeding, known as an interference, declared by the U.S. Patent and Trademark Office or its foreign counterpart to determine priority of invention. Additionally, pending patent applications which have been published can, subject to certain limitations, be later amended in a manner that could cover our products or their use.

In order to avoid or settle potential claims with respect to any patent or other intellectual property rights of third parties, we may choose or be required to seek a license from a third party and be required to pay license fees or royalties or both, which could be substantial. These licenses may not be available on acceptable terms, or at all. Even if we or any future collaborators were able to obtain a license, the rights may be nonexclusive, which could result in our competitors gaining access to the same intellectual property. Ultimately, we could be prevented from commercializing a product, or be forced, by court order or otherwise, to cease some or all aspects of our business operations, if, as a result of actual or threatened patent or other intellectual property claims, we are unable to enter into licenses on acceptable terms. Further, we could be found liable for significant monetary damages as a result of claims of intellectual property infringement. For example, we have received, and may in the future receive, offers to license and demands to license from third parties claiming that we are infringing their intellectual property or owe license fees and, even if such claims are without merit, there can be no assurance that we will successfully avoid or settle such claims.

In addition, if AbbVie licenses or otherwise acquires rights to intellectual property controlled by a third party in various circumstances, for example, where a product could not be legally developed or commercialized in a country without the third-party intellectual property right, it is entitled under our collaboration agreement to decrease payments payable to us on a product-by-product basis and, in certain cases, on a country-by-country basis. Any of the foregoing events could harm our business significantly.

Defending against claims of patent infringement, misappropriation of trade secrets or other violations of intellectual property rights could be costly and time consuming, regardless of the outcome. Thus, even if we were to ultimately prevail, or to settle at an early stage, such litigation could burden us with substantial unanticipated costs. In addition, litigation or threatened litigation could result in significant demands on the time and attention of our management team, distracting them from the pursuit of other company business. Claims that our product candidates or the sale or use of our future products infringe, misappropriate or otherwise violate third-party intellectual property rights could therefore have a material adverse impact on our business.

***Unfavorable outcomes in intellectual property litigation could limit our research and development activities and/or our ability to commercialize certain products.***

If third parties successfully assert their intellectual property rights against us, we might be barred from using certain aspects of our technology, or barred from developing and commercializing certain products. Prohibitions against using certain technologies, or prohibitions against commercializing certain products, could be imposed by a court or by a settlement agreement between us and a plaintiff. In addition, if we are unsuccessful in defending against allegations

that we have infringed, misappropriated or otherwise violated patent or other intellectual property rights of others, we may be forced to pay substantial damage awards to the plaintiff. There is inevitable uncertainty in any litigation, including intellectual property litigation. There can be no assurance that we would

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prevail in any intellectual property litigation, even if the case against us is weak or flawed. If litigation leads to an outcome unfavorable to us, we may be required to obtain a license from the intellectual property owner in order to continue our research and development programs or to market any resulting product. It is possible that the necessary license will not be available to us on commercially acceptable terms, or at all. Alternatively, we may be required to modify or redesign our products in order to avoid infringing or otherwise violating third-party intellectual property rights. This may not be technically or commercially feasible, may render our products less competitive, or may delay or prevent the entry of our products to the market. Any of the foregoing could limit our research and development activities, our ability to commercialize one or more product candidates, or both.

Most of our competitors are larger than we are and have substantially greater resources. They are, therefore, likely to be able to sustain the costs of complex intellectual property litigation longer than we could. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to conduct our clinical trials, continue our internal research programs, in-license needed technology, or enter into strategic partnerships that would help us bring our product candidates to market.

In addition, any future intellectual property litigation, interference or other administrative proceedings will result in additional expense and distraction of our personnel. An adverse outcome in such litigation or proceedings may expose us or any future strategic partners to loss of our proprietary position, expose us to significant liabilities, or require us to seek licenses that may not be available on commercially acceptable terms, if at all, each of which could have a material adverse effect on our business.

***Intellectual property litigation may lead to unfavorable publicity that harms our reputation and causes the market price of our common stock to decline.***

During the course of any intellectual property litigation, there could be public announcements of the results of hearings, rulings on motions, and other interim proceedings in the litigation. If securities analysts or investors regard these announcements as negative, the perceived value of our products, programs or intellectual property could be diminished. Accordingly, the market price of our common stock may decline. Such announcements could also harm our reputation or the market for our future products, which could have a material adverse effect on our business.

***Confidentiality agreements with employees and third parties may not prevent unauthorized disclosure of trade secrets and other proprietary information.***

In addition to patents, we rely on trade secrets, technical know-how and proprietary information concerning our business strategy and product candidates in order to protect our competitive position in the field of HCV and anti-infectives. In the course of our research and development activities and our business activities, we often rely on confidentiality agreements to protect our proprietary information. Such confidentiality agreements are used, for example, when we talk to vendors of laboratory or clinical development services or potential strategic partners. In addition, each of our employees is required to sign a confidentiality agreement and invention assignment agreement upon joining our company. We take steps to protect our proprietary information, and our confidentiality agreements and invention assignment agreements are carefully drafted to protect our proprietary interests. Nevertheless, there can be no guarantee that an employee or an outside party will not make an unauthorized disclosure of our proprietary confidential information. This might happen intentionally or inadvertently. It is possible that a competitor will make use of such information, and that our competitive position will be compromised, in spite of any legal action we might take against persons making such unauthorized disclosures. In addition, to the extent that our employees, consultants or contractors use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.



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Trade secrets are difficult to protect. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, business partners or outside scientific collaborators might intentionally or inadvertently disclose our trade secret information to competitors or our trade secrets may otherwise be misappropriated. Enforcing a claim that a third party illegally obtained and is using any of our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States sometimes are less willing than United States courts to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how.

Our collaborators may have rights to publish data and other information to which we have rights. In addition, we sometimes engage individuals or entities to conduct research relevant to our business. The ability of these individuals or entities to publish or otherwise publicly disclose data and other information generated during the course of their research is subject to certain contractual limitations. These contractual provisions may be insufficient or inadequate to protect our confidential information. If we do not apply for patent protection prior to such publication, or if we cannot otherwise maintain the confidentiality of our proprietary technology and other confidential information, then our ability to obtain patent protection or to protect our trade secret information may be jeopardized, which could adversely affect our business.

### ***Intellectual property rights do not necessarily protect us from all potential threats to our competitive advantage.***

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. The following examples are illustrative:

others may be able to make compounds that are similar to our product candidates but that are not covered by the claims of the patents that we or our collaborators own or have exclusively licensed;

we or our collaborators or any future collaborators might not have been the first to make the inventions covered by the issued patents or pending patent applications that we own or may in the future exclusively license, which could result in the patent applications not issuing or being invalidated after issuing;

we or our collaborators or any future collaborators might not have been the first to file patent applications covering certain of our inventions, which could result in the patent applications not issuing or being invalidated after issuing;

the ownership of the intellectual property arising out of our collaborations is subject to complex legal and factual issues, and in certain circumstances our collaborators may own or jointly own important intellectual property relating to our product candidates. Although we have rights to such intellectual property under our collaboration agreements, such rights could potentially be lost or diminished if the applicable collaboration agreement is terminated, which could affect our ability to commercialize our product candidates;

others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;

it is possible that our pending patent applications will not lead to issued patents;

issued patents that we own or have exclusively licensed may not provide us with any competitive advantages, or may be held invalid or unenforceable, as a result of legal challenges by our competitors; we may obtain patents for certain compounds many years before we obtain marketing approval for products containing such compounds, and because patents have a limited life, which may begin to run prior to the commercial sale of the related product, the commercial value of our patents may be limited;

our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;

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we may fail to develop additional proprietary technologies that are patentable;

the laws of certain foreign countries may not protect our intellectual property rights to the same extent as the laws of the United States, or we may fail to apply for or obtain adequate intellectual property protection in all the jurisdictions in which we operate; and

the patents of others may have an adverse effect on our business, for example by preventing us from marketing one or more of our product candidates for one or more indications.

Any of the aforementioned threats to our competitive advantage could have a material adverse effect on our business.

### ***Changes in patent law could diminish the value of patents in general, thereby impairing our ability to protect our products.***

As is the case with many other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining, maintaining and enforcing patents in the biopharmaceutical industry involves both technological complexity and legal complexity. Therefore, obtaining, maintaining and enforcing biopharmaceutical patents is costly, time-consuming and inherently uncertain. In addition, recent legislative and judicial developments in the United States and elsewhere have in some cases narrowed the protection afforded to patent owners, made patents more difficult to obtain, or increased the uncertainty regarding the ability to obtain, maintain and enforce patents. For example, Congress recently passed patent reform legislation, and may pass patent reform legislation in the future. The United States Supreme Court has ruled on several patent cases in recent years, and in certain circumstances has narrowed the scope of patent protection available or otherwise weakened the rights of patent owners. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions and actions by the United States Congress, the federal courts, the United States Patent and Trademark Office, and their respective foreign counterparts, the laws and regulations governing patents could change in unpredictable ways that could weaken our ability to obtain new patents or to maintain and enforce our existing patents and patents that we might obtain in the future.

## **Risks Related to Industry**

### ***Unstable market and economic conditions may have serious adverse consequences on our business, financial condition and stock price.***

As has been widely reported, global credit and financial markets have been experiencing extreme disruptions over the past several years, including severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates and uncertainty about economic stability. There can be no assurance that further deterioration in credit and financial markets and confidence in economic conditions will not occur. Our general business strategy may be adversely affected by the recent economic downturn and volatile business environment and continued unpredictable and unstable market conditions, particularly for securities of biotechnology companies such as our common stock. There is a possibility that our stock price may decline, due in part to the volatility of the stock market and any general economic downturn. If the current equity and credit markets become more volatile, deteriorate or do not improve, it may make any necessary debt or equity financing more difficult to secure, more costly and/or more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and stock price and could require us to delay or abandon our business and clinical development plans. In addition, there is a risk that one

or more of our current service providers, manufacturers and other partners may not survive these difficult economic times, which could directly affect our ability to attain our operating goals on schedule and on budget.



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*If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our product candidates.*

We face an inherent risk of product liability as a result of the clinical testing of our product candidates, and we will face an even greater risk if we commercialize any product candidates. For example, we may be sued if any of our product candidates, including any that are developed in combination therapies, allegedly causes injury or is found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability and a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even successful defense would require significant financial and management resources. There is also risk that third parties we have agreed to indemnify could incur liability.

Regardless of the merits or eventual outcome, liability claims may result in:

decreased demand for our product candidates or any resulting products;

injury to our reputation;

withdrawal of clinical trial participants;

costs to defend the related litigation;

a diversion of management's time and our resources;

substantial monetary awards to trial participants or patients;

product recalls, withdrawals or labeling, marketing or promotional restrictions;

loss of revenue;

the inability to commercialize our product candidates; and

a decline in our stock price.

Our inability to obtain and retain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of products we develop. We currently carry

product liability insurance covering our clinical studies in the amount of \$5.0 million in the aggregate. Although we maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We will have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts.

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***Our relationships with customers and third-party payors in the United States and elsewhere will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.***

Healthcare providers, physicians and third-party payors in the United States and elsewhere play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our products for which we obtain marketing approval. Restrictions under applicable federal, state and foreign healthcare laws and regulations include the following:

the federal healthcare anti-kickback statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal and state healthcare programs such as Medicare and Medicaid;

the federal False Claims Act imposes criminal and civil penalties, including civil whistleblower or *qui tam* actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;

the federal Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program and also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

the federal false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services;

the federal transparency requirements under the Patient Protection and Affordable Care Act of 2010 requires manufacturers of drugs, devices, biologics and medical supplies to report to the Department of Health and Human Services information related to physician payments and other transfers of value and physician ownership and investment interests;

analogous state laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, and some state laws require pharmaceutical companies to

comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other healthcare providers or marketing expenditures; and

analogous anti-kickback, fraud and abuse and healthcare laws and regulations in foreign countries.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations, which could have a material adverse effect on our business. If any of the physicians or other providers or entities with whom we

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expect to do business, including our collaborators, are found not to be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs, which could also materially affect our business.

***If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.***

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials or our or third parties' disposal of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

We may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

We maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials. This insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of hazardous or radioactive materials.

## **Risks Related to Our Common Stock**

***Provisions in our corporate charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.***

Provisions in our corporate charter and our bylaws may discourage, delay or prevent a merger, acquisition or other change in control of us that stockholders may consider favorable, including transactions in which they might otherwise receive a premium for their shares.

These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, 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. Among other things, these provisions:

establish a classified or staggered board of directors such that not all members of the board are elected at one time;

allow the authorized number of our directors to be changed only by resolution of our board of directors;

limit the manner in which stockholders can remove directors from the board;

establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our board of directors;

require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;

limit who may call stockholder meetings;

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provide our board of directors with the authority to designate the terms of and issue a new series of preferred stock without stockholder approval, which could be used to institute a poison pill that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors; and

require the approval of the holders of at least 66 2/3% of the votes that all our stockholders would be entitled to cast to amend or repeal certain provisions of our charter or bylaws.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibit a person who owns 15% or more of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. Any provision in our corporate charter or our bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

***Our employment agreements with our named executive officers may require us to pay severance benefits to any of those persons who are terminated in connection with a change of control of us, which could harm our financial condition or results.***

Our named executive officers are parties to employment agreements that provide for aggregate cash payments of up to approximately \$3.0 million for severance and other benefits and acceleration of vesting of stock options in the event of a termination of employment in connection with a change of control of our company. Based on the September 30, 2014 closing price of our common stock at \$39.57 per share, the aggregate intrinsic value of unvested stock options subject to accelerated vesting upon these events was \$7.0 million as of September 30, 2014. The accelerated vesting of options could result in dilution to our stockholders and harm the market price of our common stock. The payment of these severance benefits could harm our financial condition and results. In addition, these potential severance payments may discourage or prevent third parties from seeking a business combination with us.

***We are an emerging growth company, and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.***

We are an emerging growth company, as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. As an emerging growth company we are required to report periodic financial results and selected financial data related to two fiscal years compared to three and five years, respectively, for comparable data required to be reported by other public companies in selected SEC reports. We may take advantage of these exemptions until we are no longer an emerging growth company. We could be an emerging growth company for up to five years, although circumstances could cause us to lose that status earlier, including if the market value of our common stock held by non-affiliates exceeds \$700 million as of any March 31 (the end of our second fiscal quarter) before that time, in which case we would no longer be an emerging growth company as of the following September 30 (our fiscal year end). We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a

less active trading market for our common stock and our stock price may be more volatile.



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Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption to delay the adoption of new or revised accounting standards and, therefore, will be subject to adopting new or revised accounting standards at the same time as other public companies that are not emerging growth companies.

***If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.***

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404 of the Sarbanes-Oxley Act of 2002, or any subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock.

We will be required to disclose changes made in our internal controls and procedures on a quarterly basis and our management will be required to assess the effectiveness of these controls annually. However, for as long as we are an emerging growth company under the JOBS Act, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404. We could be an emerging growth company for up to five years from the year of our IPO in 2013. An independent assessment of the effectiveness of our internal controls could detect problems that our management's assessment might not. Undetected material weaknesses in our internal controls could lead to financial statement restatements and require us to incur the expense of remediation.

***Our stock price is likely to be volatile, and thus our stockholders could incur substantial losses.***

Our stock price is likely to be volatile. The stock market in general and the market for biopharmaceutical companies, and for those developing potential therapies for HCV in particular, have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your common stock at or above your purchase price, if at all. The market price for our common stock may be influenced by many factors, including:

actions by any of our collaborators regarding our product candidates they are developing, including announcements regarding clinical or regulatory developments or our collaboration;

results from or delays of clinical trials of our product candidates, as well as results of regulatory reviews relating to the approval of our product candidates;

new products, product candidates or new uses for existing products or technologies introduced or announced by our competitors and the timing of these introductions or announcements;

our or our collaborators' decision to initiate a clinical trial, not to initiate a clinical trial or to terminate an existing clinical trial;

the results of our efforts to discover or develop additional product candidates;

our dependence on third parties, including our collaborators, CROs, clinical trial sponsors and clinical investigators;

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regulatory or legal developments in the United States or other countries;

developments or disputes concerning patent applications, issued patents or other proprietary rights;

the recruitment or departure of key scientific or management personnel;

our ability to commercialize our future product candidates we develop independently, if approved;

the level of expenses related to any of our product candidates or clinical development programs;

actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;

variations in our financial results or those of companies that are perceived to be similar to us;

sales of common stock by us or our stockholders in the future, as well as the overall trading volume of our common stock;

changes in the structure of healthcare payment systems;

market conditions in the pharmaceutical and biotechnology sectors;

general economic, industry and market conditions and other factors that may be unrelated to our operating performance or the operating performance of our competitors, including changes in market valuations of similar companies; and

the other factors described in this "Risk Factors" section.

***We do not anticipate paying any cash dividends on our capital stock in the foreseeable future.***

We do not currently intend to pay any cash dividends on our common stock in the foreseeable future. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

***A sale of a substantial number of shares of our common stock in the public market could cause the market price of our common stock to drop significantly, even if our business is doing well.***

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. As of September 30, 2014, we had outstanding 18,594,574 shares of common stock. In addition, 1,802,380 shares of common stock that are either subject to outstanding options or reserved for future issuance under our equity plans are eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, and Rules 144 and 701 under the Securities Act. If these additional shares of common stock are sold, or it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

***If securities or industry analysts do not publish research, or publish inaccurate or unfavorable research, about our business, our stock price and trading volume could decline.***

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. If too few securities or industry analysts cover our company, the trading price for our stock would likely be negatively impacted. In the event that one or more of the analysts who cover us downgrade our stock or publish inaccurate or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price and trading volume to decline.

**Table of Contents****ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

**ITEM 2. PROPERTIES**

Our corporate headquarters is located in Watertown, Massachusetts, where we lease approximately 25,000 square feet of office and laboratory space. The term of our current lease expires on September 30, 2018, with an option to extend the term for an additional five years. When our lease expires, we may exercise our option to extend the term of the lease or we may look for additional or alternate space for our operations prior to the expiration of our lease. We currently expect to lease additional space in support of our plans to expand our research and development activities.

**ITEM 3. LEGAL PROCEEDINGS**

We are not a party to any material legal proceedings.

**ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable.

**PART II****ITEM 5. MARKET FOR THE COMPANY'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES****Market and Stockholder Information**

Our common stock has been listed on The NASDAQ Global Select Market under the symbol ENTA since March 21, 2013. The following table shows the high and low sales price for our common stock as reported by The NASDAQ Global Select Market for the quarterly periods indicated:

	2013	
	High	Low
Second Quarter (beginning March 21, 2013)	\$ 18.20	\$ 16.81
Third Quarter	\$ 21.69	\$ 16.49
Fourth Quarter	\$ 25.00	\$ 16.98
	2014	
	High	Low
First Quarter	\$ 38.14	\$ 18.94
Second Quarter	\$ 42.77	\$ 28.28
Third Quarter	\$ 46.14	\$ 33.13

Fourth Quarter

\$ 43.86

\$ 37.09

As of November 30, 2014, there were approximately 50 stockholders of record of our common stock.

We have never declared or paid cash dividends on our common stock, and we do not expect to declare or pay any cash dividends in the foreseeable future.

In March 2013, we completed our initial public offering of 4,600,000 shares of our common stock at a public offering price of \$14.00 per share. The offer and sale of the shares in the offering were registered pursuant to a registration statement on Form S-1 (File No. 333-184779), which was declared effective by the Securities and Exchange Commission on March 20, 2013.

As of September 30, 2014, we have used approximately \$18.9 million of the net proceeds from the initial public offering to fund our programs for the development of a cyclophilin inhibitor candidate and the development of a

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nucleotide polymerase inhibitor candidate and to fund new research and development activities. None of the net proceeds have been paid directly or indirectly to any of our directors or officers (or their associates) or persons owning ten percent or more of any class of our equity securities or to any other affiliates. The balance of the net proceeds from the offering has been invested in cash and cash equivalents and in short-term and long-term marketable securities, consisting of investment grade, interest bearing instruments and U.S. government securities, with maturities of no longer than 38 months. These investments are reflected in cash and cash equivalents, short-term marketable securities and long-term marketable securities on our balance sheet at September 30, 2014. There has been no material change in the expected use of the net proceeds from our IPO as described in our registration statement on Form S-1.

**Performance Graph<sup>(1)</sup>**

The following graph shows a comparison from March 21, 2013 through September 30, 2014 of cumulative total return on assumed investments of \$100.00 in cash in each of our common stock, the NASDAQ Composite Index and the NASDAQ Biotechnology Index. Such returns are based on historical results and are not intended to suggest future performance. Data for the NASDAQ Composite Index and the NASDAQ Biotechnology Index assume reinvestment of dividends.

**COMPARISON OF EIGHTEEN MONTH CUMULATIVE TOTAL RETURN**

**Among Enanta Pharmaceuticals, Inc., the NASDAQ Composite Index,**

**and the NASDAQ Biotechnology Index**

- (1) This performance graph shall not be deemed soliciting material or to be filed with the SEC for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, or otherwise subject to the liabilities under that Section, and shall not be deemed incorporated by reference into any filing of Enanta Pharmaceuticals, Inc. under the Securities Act of 1933, as amended.

**Table of Contents****ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA**

We have derived the consolidated statement of operations data for the years ended September 30, 2014, 2013 and 2012 and the consolidated balance sheet data as of September 30, 2014 and 2013 from our audited financial statements included elsewhere in this Annual Report on Form 10-K. The selected statement of operations data for the years ended September 30, 2011 and 2010 and the balance sheet data as of September 30, 2012 and 2011 are derived from our audited financial statements not included in this Annual Report on Form 10-K. Our historical results for any prior period are not necessarily indicative of any results to be expected for any future period.

	<b>Year Ended September 30,</b>				
	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>
	<b>(in thousands, except per share data)</b>				
<b>Consolidated Statement of Operations Data:</b>					
Revenue	\$ 47,741	\$ 32,053	\$ 41,706	\$ 41,882	\$ 22,763
Operating expenses:					
Research and development	18,740	16,841	15,115	11,547	9,716
General and administrative	10,016	6,183	5,302	5,036	6,105
Total operating expenses	28,756	23,024	20,417	16,583	15,821
Income from operations	18,985	9,029	21,289	25,299	6,942
Other income (expense):					
Interest income	467	248	118	83	14
Interest expense	(18)	(31)		(3,161)	
Change in fair value of warrant liability	(166)	381	(8)	(686)	482
Therapeutic tax credit				750	
Gain on embedded derivative				670	
Other income, net				355	309
Total other income (expense), net	283	598	110	(1,989)	805
Net income before income tax	19,268	9,627	21,399	23,310	7,747
Income tax benefit	15,170				157
Net income	34,438	9,627	21,399	23,310	7,904
Accretion of redeemable convertible preferred stock to redemption value		(2,526)	(5,367)	(5,454)	(5,452)
Net income attributable to participating securities		(13,670)	(14,663)	(16,291)	(2,236)
Net income (loss) attributable to common stockholders	\$ 34,438	\$ (6,569)	\$ 1,369	\$ 1,565	\$ 216
Net income (loss) per share attributable to common stockholders <sup>(1)</sup> :					
Basic	\$ 1.88	\$ (0.67)	\$ 1.26	\$ 1.40	\$ 0.19
Diluted	\$ 1.80	\$ (0.67)	\$ 1.13	\$ 1.32	\$ 0.18
Weighted average common shares outstanding <sup>(1)</sup> :					
Basic	18,355	9,788	1,089	1,119	1,131



Diluted	19,185	9,788	2,475	1,857	1,565
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	2014	As of September 30, 2013      2012		2011
		(in thousands)		
<b>Consolidated Balance Sheet Data:</b>				
Cash, cash equivalents and marketable securities	\$ 131,767	\$ 112,183	\$ 45,418	\$ 23,329
Working capital <sup>(2)</sup>	103,229	100,187	41,574	22,950
Total assets	155,415	116,973	52,162	26,096
Warrant liability	1,584	1,620	2,001	1,993
Series 1 nonconvertible preferred stock	202			
Redeemable convertible preferred stock			158,955	153,588
Convertible preferred stock			327	327
Total stockholders' equity (deficit)	148,654	110,468	(115,353)	(131,961)

(1) See Note 11 to our financial statements for further details on the calculation of basic and diluted net income per share attributable to common stockholders.

(2) We define working capital as current assets less current liabilities.

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**ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

*You should read the following discussion and analysis of financial condition and results of operations together with the section entitled "Selected Financial Data" and our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. This discussion and other parts of this prospectus contain forward-looking statements that involve risks and uncertainties, such as statements regarding our plans, objectives, expectations, intentions and projections. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the "Risk Factors" section of this Annual Report on Form 10-K.*

**Overview**

We are a research and development-focused biotechnology company that uses its robust chemistry-driven approach and drug discovery capabilities to create small molecule drugs primarily in the infectious disease field. We are discovering and developing inhibitors designed for use against the hepatitis C virus, referred to as HCV. We believe that a successful approach to a complete cure for HCV in most patients will likely require treatment with a combination of drugs that attack different mechanisms necessary for replication and survival of HCV. Further, as there are many variants of HCV, we are developing inhibitors that may be used in multiple combination therapies, each designed and tested for effectiveness against one or more of those variants. Our development of inhibitors for validated HCV target mechanisms, as well as our collaborations with AbbVie (which name refers to Abbott Laboratories for all periods before January 1, 2013), should allow us to participate in multiple drug combinations as we seek the best combination therapies for HCV in its various forms. The reported worldwide sales of the two newest therapies for HCV (sofosbuvir and simeprevir) in the first nine months of 2014 totaled approximately \$10.5 billion. We believe that annual worldwide sales of these therapies and future approved therapies could increase sales in this market to as high as \$15 billion to \$20 billion during the next few years. In addition to our HCV programs, we are using our internal research capabilities to advance several early stage programs to discover new chemical entities for other diseases with significant unmet medical need. We have utilized our internal chemistry and drug discovery capabilities and our collaborations to generate all of our development-stage programs, and we have active research efforts to broaden our drug pipeline.

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The following table summarizes our product development pipeline in HCV antivirals:

Our HCV portfolio includes inhibitors of four fundamental, validated HCV targets. Our lead product candidate, paritaprevir (also known as ABT-450), is a protease inhibitor being developed through our collaboration with AbbVie. In the third fiscal quarter of fiscal 2014, we received and recognized as revenue a total of \$40.0 million in milestone payments from AbbVie as a result of regulatory filings by AbbVie with the FDA and the European Medicines Agency, or EMA, for the first regimens containing a collaboration compound. To date AbbVie has funded all research and development of our protease inhibitors since we entered into the collaboration in November 2006, and is responsible for obtaining regulatory approvals and commercializing globally paritaprevir and ABT-493, our collaboration's next-generation protease inhibitor. Our lead NS5A product candidate, EDP-239, was being developed through our collaboration with Novartis. Under that collaboration, Novartis was responsible for all further development of our NS5A inhibitors. Novartis was also responsible for funding research that we conducted to discover additional NS5A compounds through August 2013. In September 2014, we entered into an agreement with Novartis for us to regain full rights to EDP-239 and our NS5A inhibitor program.

Our independent HCV research activities are focused on our lead cyclophilin inhibitor candidates, which are in preclinical development. We also have a small-molecule drug discovery effort underway for nucleotide polymerase inhibitors. We are currently funding all research and development for our cyclophilin inhibitor and nucleotide polymerase inhibitor programs. We expect to incur substantially greater expenses as we seek to advance these programs into clinical development and we expand our drug discovery efforts into other disease indications.

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In addition to our HCV programs, we have used our internal research capabilities to discover a new class of antibiotics called Bicyclolides, which we have been developing for the treatment of multi-drug resistant bacteria. For the periods included in this report this program has been funded under a September 2011 contract with the National Institute of Allergy and Infectious Diseases, or NIAID, a division of the National Institutes of Health, an agency of the United States Department of Health and Human Services, to develop our lead bicyclolide for biodefense purposes. In light of our strategic decision not to continue commercial development of this antibiotic candidate for non-biodefense indications, which we have recently communicated to NIAID, we expect that NIAID will likely exercise its right to terminate our contract for convenience in accordance with its terms. We expect that any termination for convenience would not trigger contractual penalties and would likely be followed by an agreement for the orderly conclusion of the NIAID-funded program.

Since commencing our operations in 1995, we have devoted substantially all of our resources to the discovery and development of novel inhibitors and antibiotics for the treatment of infectious diseases. We have historically funded our operations primarily through the sale of convertible preferred stock, payments received under our collaborations and a government contract and our IPO. As of September 30, 2014, we had \$131.8 million in cash and marketable securities.

Our revenue from our collaboration agreements has resulted in our reporting net income in each of our past six fiscal years. However, we had an accumulated deficit of \$73.0 million as of September 30, 2014 and have generated no royalties or other recurring revenue from product sales. We expect that our revenue in the near term will continue to be substantially dependent on our collaboration with AbbVie and its continued advancement of our collaboration's protease inhibitor candidates to regulatory approval and commercialization. Given the schedule of potential regulatory approval milestone payments and the uncertain nature and timing of clinical development and regulatory approval, we cannot be certain as to when or whether we will receive further milestone payments under our collaboration with AbbVie.

**Financial Operations Overview*****Revenue***

Since our inception, our revenue has been derived from two primary sources: collaboration agreements with pharmaceutical companies and one government research and development contract. We have not generated any revenue from product sales. We have entered into three significant collaboration agreements since 2006. In November 2006, we entered into a collaboration agreement with AbbVie and in February 2012 we entered into a collaboration agreement with Novartis, which is being concluded in the last calendar quarter of 2014. In September 2011, we entered into a contract with NIAID, which has funded the preclinical and early clinical development of our bicyclolide antibiotic product candidate since then. The following table is a summary of revenue recognized from our collaboration agreements and our government contract for the years ended September 30, 2014, 2013 and 2012:

	<b>Year Ended September 30,</b>		
	<b>2014</b>	<b>2013</b>	<b>2012</b>
	<b>(in thousands)</b>		
AbbVie agreement:			
Milestone payments	\$ 40,000	\$ 15,000	\$
Novartis agreement:			
Upfront license payment and research funding		1,675	35,567

Milestone payments		11,000	
NIAID contract	7,741	4,378	6,139
Total revenue	\$ 47,741	\$ 32,053	\$ 41,706

***AbbVie Agreement***

Since all of our research obligations under the AbbVie agreement were concluded by June 30, 2011, all milestone payments received since then, have been recognized as revenue upon achievement of the milestone by AbbVie.

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During the year ended September 30, 2013, we earned and recognized as revenue a \$15.0 million milestone payment based on AbbVie's initiation of dosing in a Phase 3 clinical trial that included paritaprevir. During the year ended September 30, 2014, we earned and recognized as revenue a total of \$40.0 million in milestone payments as a result of regulatory filings by AbbVie with the FDA and the EMA for the first protease inhibitor product resulting from our collaboration with AbbVie. Under the terms of the AbbVie agreement, we are eligible to receive additional future milestone payments totaling up to \$155 million related to the successful development by AbbVie of the first HCV treatment regimen incorporating one of our collaboration's protease inhibitors. We are also eligible to receive annually tiered, double-digit royalties per product on AbbVie's net sales, if any, allocable to any one of our collaboration's protease inhibitors. In October 2014 we entered into an amendment to our agreement with AbbVie to finalize the net sales allocations for regimens containing paritaprevir, as well as for any regimen containing ABT-493. Under the terms of this agreement, 30% of net sales of a 3-DAA regimen containing paritaprevir will be allocated to paritaprevir, and 45% of net sales of a 2-DAA regimen containing paritaprevir will be allocated to paritaprevir. For ABT-493, 50% of net sales of a 2-DAA regimen containing ABT-493 will be allocated to ABT-493 and for a 3-DAA regimen containing ABT-493, 33 1/3% of net sales will be allocated to ABT-493. If there is any active ingredient other than DAA's in any ABT-493-containing regimen sold by AbbVie, there will be a further adjustment to net sales based on the relative value of the non-DAA ingredient.

***Novartis Agreement***

Under the terms of the Novartis agreement, we received an upfront payment of \$34.4 million in February 2012 and a commitment to fund research at an agreed amount for one year. We recognized the upfront license payment upon receipt as we determined that the license to which the payment related and the research services were separable elements under the agreement that could be accounted for as each was delivered or provided. During the year ended September 30, 2012, revenue recognized under this agreement was \$35.6 million, which consisted of the upfront license payment and research funding earned during that period. In January 2013, we received an \$11.0 million milestone payment based on Novartis' November 2012 initiation of dosing in a Phase 1 clinical trial that included EDP-239. During the year ended September 30, 2013, we recognized \$12.7 million of revenue under the Novartis agreement, of which \$11.0 million was attributed to license fees and \$1.7 million was attributed to the performance of research services. No revenue was recognized under this agreement during the year ended September 30, 2014. In September 2014 we entered into an agreement with Novartis to return to us full rights to EDP-239 and our NS5A program. We will not be eligible to receive any future milestones or other payments from Novartis nor will we owe Novartis any future payments except for any unused drug product that we may choose to buy from them.

***NIAID Contract***

Under the terms of the NIAID contract and the initial authorization, NIAID paid us research and development funding of approximately \$14.0 million over an initial period of 30 months. The contract also contains six option periods, which in aggregate could extend the contract, at the option of NIAID, up to an additional 30 months and provide us additional funding of up to \$28.4 million. In August 2013 NIAID agreed to provide additional funding of \$9.2 million, thereby increasing total funding from NIAID to approximately \$23.5 million. We recognize revenue under this contract as the research and development services are performed. We recognized revenue of \$7.7 million, \$4.4 million and \$6.1 million under this agreement during the years ended September 30, 2014, 2013 and 2012, respectively.

***Internal Programs***

As our internal product candidates are currently in preclinical or early clinical development, we have not generated any revenue from product sales and do not expect to generate any revenue from product sales for at least the next several years. We expect that our revenue for the next several years will be derived primarily from payments under

our current collaboration agreement with AbbVie, payments under our NIAID contract, and any additional collaborations or government contracts that we may enter into in the future. We cannot provide assurance as to the timing of future milestone or royalty payments or government contract payments or that we will receive any of these payments at all.

**Table of Contents*****Operating Expenses***

The following table summarizes our operating expenses for the years ended September 30, 2014, 2013 and 2012:

	<b>Year Ended September 30,</b>		
	<b>2014</b>	<b>2013</b>	<b>2012</b>
	<b>(in thousands)</b>		
Research and development	\$ 18,740	\$ 16,841	\$ 15,115
General and administrative	10,016	6,183	5,302
<b>Total operating expenses</b>	<b>\$ 28,756</b>	<b>\$ 23,024</b>	<b>\$ 20,417</b>

***Research and Development Expenses***

Research and development expenses consist of costs incurred to conduct basic research, such as the discovery and development of novel small molecules as therapeutics. We expense all costs of research and development as incurred. These expenses consist primarily of:

personnel costs, including salaries, related benefits and stock-based compensation for employees engaged in scientific research and development functions;

third-party contract costs relating to research, formulation, manufacturing, preclinical study and clinical trial activities;

third-party license fees;

laboratory consumables; and

allocated facility-related costs.

Project-specific expenses reflect costs directly attributable to our clinical development candidates and preclinical candidates nominated and selected for further development. Remaining research and development expenses are reflected in research and drug discovery, which represents early-stage drug discovery programs. At any given time, we typically have several active early stage research and drug discovery projects. Our internal resources, employees and infrastructure are not directly tied to any individual research or drug discovery project and are typically deployed across multiple projects. As such, we do not maintain information regarding costs incurred for our early-stage research and drug discovery programs on a project-specific basis.

We expect that our research and development expenses will increase in the future as we advance our three independent HCV programs and our research and development efforts in other areas.



Our research and drug discovery programs are at an early stage; therefore, the successful development of our product candidates is highly uncertain and may not result in approved products. Completion dates and completion costs can vary significantly for each product candidate and are difficult to predict. Given the uncertainty associated with clinical trial enrollments and the risks inherent in the development process, we are unable to determine the duration and completion costs of the current or future clinical trials of our product candidates or if, or to what extent, we will generate revenue from the commercialization and sale of any of our product candidates. We anticipate that we will make determinations as to which development programs to pursue and how much funding to direct to each program on an ongoing basis in response to the preclinical and clinical success of each product candidate, as well as ongoing assessments of the commercial potential of each product candidate.

*General and Administrative Expenses*

General and administrative expenses consist primarily of personnel costs, consisting of salaries, related benefits and stock-based compensation, of our executive, finance, business and corporate development and other

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administrative functions. General and administrative expenses also include travel expenses, allocated facility-related costs not otherwise included in research and development expenses, directors and officers liability insurance premiums, and professional fees for auditing, tax and legal services, including legal expenses to pursue patent protection of our intellectual property.

We expect that general and administrative expenses will increase in the future primarily due to planned expansion of our operating activities as well as potential additional costs associated with our operating as a growing public company.

### ***Other Income (Expense)***

*Interest income.* Interest income consists of interest earned on our cash and investment balances.

*Interest expense.* Interest expense consists of non-cash interest expense which is being accreted to the value of accrued third-party license fees over the term of the obligation.

*Change in fair value of warrant liability and Series 1 nonconvertible preferred stock.* We have issued warrants for the purchase of our nonconvertible preferred stock and we have issued Series 1 nonconvertible preferred stock that we believe are financial instruments that may require a transfer of assets because of the liquidation features of the underlying stock. Therefore, we have classified these warrants and Series 1 nonconvertible preferred stock as liabilities that we remeasure to fair value at each reporting period and we record the changes in the fair value of the warrants and the Series 1 nonconvertible preferred stock as a component of other income (expense).

### ***Income Tax Benefit***

Income tax benefit resulted from a reversal of our valuation allowance related to our deferred tax assets consisting of research tax credits and net operating loss carryforwards.

### **Critical Accounting Policies**

Our financial statements are prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of our financial statements and related disclosures requires us to make estimates and assumptions that affect the reported amount of assets, liabilities, revenue, costs and expenses, and related disclosures. We believe that the estimates and assumptions involved in the accounting policies described below may have the greatest potential impact on our financial statements and, therefore, consider these to be our critical accounting policies. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions and conditions. See also Note 2 of our financial statements included elsewhere in this Annual Report on Form 10-K for information about these critical accounting policies as well as a description of our other significant accounting policies.

### ***JOBS Act***

On April 5, 2012, the JOBS Act was signed into law. The JOBS Act contains provisions that, among other things, reduce certain reporting requirements for an emerging growth company. As an emerging growth company, we are electing not to take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision not to take advantage of the extended transition period is irrevocable. Subject

to certain conditions set forth in the JOBS Act, as an emerging growth company, we are not required to, among other things, (i) provide an auditor's attestation report on our system of

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internal controls over financial reporting pursuant to Section 404, (ii) provide all of the compensation disclosure that may be required of non-emerging growth public companies under the Dodd-Frank Wall Street Reform and Consumer Protection Act, (iii) comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (auditor discussion and analysis), and (iv) disclose certain executive compensation-related items such as the correlation between executive compensation and performance and comparisons of the Chief Executive Officer's compensation to median employee compensation. These exemptions will apply until the fifth anniversary of the completion of our initial public offering in March 2013 or until we no longer meet the requirements for being an emerging growth company, whichever occurs first.

***Revenue Recognition***

Our revenue has been generated primarily through collaborative research and license agreements. The terms of these agreements contain multiple deliverables which may include (i) licenses, (ii) research and development activities, and (iii) participation in joint research and development steering committees. The terms of these agreements may include nonrefundable upfront license fees, payments for research and development activities, payments based upon the achievement of certain milestones, and royalty payments based on product sales derived from the collaboration. In all instances, revenue is recognized only when the price is fixed or determinable, persuasive evidence of an arrangement exists, delivery has occurred or the services have been rendered, collectibility of the resulting receivable is reasonably assured, and we have fulfilled our performance obligations under the contract.

We apply Accounting Standards Update No. 2009-13, *Multiple-Deliverable Revenue Arrangements*, or ASU 2009-13 for multiple element arrangements entered into or materially modified on or after October 1, 2011. The selling prices of deliverables under the arrangement may be derived using third-party evidence, or TPE, or a best estimate of selling price, or BESP, if vendor-specific objective evidence of fair value, or VSOE, is not available. The objective of BESP is to determine the price at which we would transact a sale if the element within the license agreement was sold on a standalone basis. Establishing BESP involves management's judgment and considers multiple factors, including market conditions and company-specific factors including those factors contemplated in negotiating the agreements as well as internally developed models that include assumptions related to market opportunity, discounted cash flows, estimated development costs, probability of success, and the time needed to commercialize a product candidate pursuant to the license. In validating our BESP, we consider whether changes in key assumptions used to determine the BESP will have a significant effect on the allocation of the arrangement consideration between the multiple deliverables. Deliverables under the arrangement are separate units of accounting if (i) the delivered item has value to the customer on a standalone basis and (ii) if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item is considered probable and substantially within our control. The arrangement consideration that is fixed or determinable at the inception of the arrangement is allocated to the separate units of accounting based on their relative selling prices. The appropriate revenue recognition model is applied to each element and revenue is accordingly recognized as each element is delivered. We may exercise significant judgment in determining whether a deliverable is a separate unit of accounting.

Royalty revenue, if any, is recognized based on contractual terms when reported sales are reliably measurable and collectibility is reasonably assured, provided that there are no performance obligations then remaining. To date, none of our products has been approved, and therefore we have not earned any royalty revenue from product sales.

During the years ended September 30, 2014 and 2013, we also generated revenue from a government contract under which we are reimbursed for certain allowable costs incurred for the funded project. Revenue from the government contract is recognized when the related service is performed. The related costs incurred by us under the government contract are included in research and development expense in the statements of operations.



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Amounts received prior to satisfying all revenue recognition criteria are recorded as deferred revenue in the accompanying balance sheets. Amounts not expected to be recognized as revenue within the next twelve months of the balance sheet date are classified as long-term deferred revenue.

In the event that a collaborative research and license agreement is terminated and we then have no further performance obligations, we recognize as revenue any portion of the upfront payment that had not previously been recorded as revenue but was classified as deferred revenue at the date of such termination.

***Stock-Based Compensation***

We measure stock options granted to employees and directors at fair value on the date of grant and recognize the corresponding compensation expense of those awards, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award. Generally, we issue stock options with only service-based vesting conditions and record the expense for these options using the straight-line method. We may also issue performance-based awards as we did in March 2013. We have historically granted stock options with exercise prices equivalent to the fair value of our common stock as of the date of grant.

The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option-pricing model. Prior to March 2013 we were a privately-held company and lacked company-specific historical and implied volatility information. Therefore, we estimated our expected volatility based on the historical volatility of our publicly traded peer companies. Since March 2013 we have estimated our expected volatility based on the historical volatility of our publicly traded peer companies, inclusive of our historical volatility post-IPO, and we expect to continue to do so until such time as we have adequate historical data regarding the volatility of our traded stock price following our March 2013 IPO. The expected term of our options has been determined utilizing the simplified method for awards that qualify as plain-vanilla options. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that we have never paid cash dividends and do not expect to pay any cash dividends in the foreseeable future. The assumptions we used to determine the fair value of stock options granted in each period were as follows, presented on a weighted average basis:

	<b>Year Ended September 30,</b>		
	<b>2014</b>	<b>2013</b>	<b>2012</b>
Risk-free interest rate	1.89%	1.05%	0.93%
Expected term (in years)	6.06	6.09	6.00
Expected volatility	75%	73%	78%
Expected dividends	0%	0%	0%

These assumptions represent our best estimates, but the estimates involve inherent uncertainties and the application of our judgment. As a result, if factors change and we use significantly different assumptions or estimates, our stock-based compensation expense could be materially different. We recognize compensation expense for only the portion of awards that are expected to vest. In developing a forfeiture rate estimate, we have considered our historical experience to estimate pre-vesting forfeitures. If our actual forfeiture rate is materially different from the estimate, our stock-based compensation expense could be different from what we have recorded in the current period. In the case of performance-based awards, we recognize compensation expense related to these awards when performance-based targets are deemed probable of being achieved.

***Valuation of Warrants to Purchase Series 1 Nonconvertible Preferred Stock and Series 1 Nonconvertible Preferred Stock***

In October and November 2010, the Company issued warrants to purchase up to a total of 1,999,989 shares of Series 1 nonconvertible preferred stock, which expire on October 4, 2017. As these warrants are free-standing financial instruments that may require the Company to transfer assets upon exercise, these warrants are classified

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as liabilities. The Company is required to remeasure the fair value of these preferred stock warrants at each reporting date, with any adjustments recorded within the change in fair value of warrant liability included in other income (expense) in the consolidated statement of operations. On February 5, 2014, 225,408 warrants were exercised resulting in the net issuance of 223,153 shares of Series 1 nonconvertible preferred stock. As of September 30, 2014, the total fair value of the Series 1 nonconvertible preferred stock was \$202. The warrants and Series 1 nonconvertible preferred stock were remeasured at each reporting period, resulting in expense of \$166, income of \$361 and \$3 for the years ended September 30, 2014, 2013 and 2012, respectively. As of September 30, 2014 and 2013, the total fair value of the Series 1 nonconvertible preferred stock warrants was \$1,584 and \$1,620, respectively.

**Income Taxes**

Income taxes are provided for tax effects of transactions reported in the financial statements and consist of income taxes currently due plus deferred income taxes related to timing differences between the basis of certain assets and liabilities for financial statement purposes and for income tax reporting purposes. Deferred taxes are determined based on the difference between the financial statement value and tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. A valuation allowance is provided if, based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. At each balance sheet date, we assess the likelihood that deferred tax assets will be realized, and recognize a valuation allowance if it is more likely than not that some portion of the deferred tax assets will not be realized. This assessment requires judgment as to the likelihood and amounts of future taxable income. As of September 30, 2013, December 31, 2013 and March 31, 2014, based on our analysis of both positive and negative factors, we had determined that it was more likely than not that we would not be able to realize our deferred tax assets, and therefore we had recorded a full valuation allowance against our deferred tax assets. Our analysis included an assessment of our past profitability and our future projections of forecasted revenue and expense levels.

However, during the third fiscal quarter of 2014, we earned and collected \$40.0 million in milestone payments as a result of U.S. and European Union regulatory approval filings by AbbVie with respect to our collaboration's lead product candidate. As a result, we reported net income and taxable income for the year ended September 30, 2014. We previously reported net income for the years ended September 30, 2013, 2012, 2011 and 2010. Further, we are eligible to receive from AbbVie additional pre-commercial milestone payments totaling up to \$155.0 million, most of which we expect to earn in fiscal 2015 upon AbbVie's receipt of regulatory approvals in the U.S. and European Union. We are also eligible to receive annually tiered, per product royalties on any net sales of AbbVie allocable to our collaboration's protease inhibitor, which are expected to begin in fiscal 2015 based on the anticipated approvals of AbbVie's allowed applications for HCV treatment regimens containing our lead product candidate. As a result, at June 30, 2014, we reassessed the need for a valuation allowance against our deferred tax assets and concluded that it was more likely than not that we would be able to realize our deferred tax assets primarily as a result of recent profitability and forecasted future profits resulting from future expected milestone payments and on-going royalty payments from AbbVie. Accordingly, we reversed our valuation allowance related to our deferred tax assets and recorded an income tax benefit of approximately \$15.3 million for the year ended September 30, 2014. The total amount of the valuation allowance released was approximately \$22.9 million.



**Table of Contents****Results of Operations****Comparison of Years Ended September 30, 2014, 2013 and 2012**

	<b>Year Ended September 30,</b>		
	<b>2014</b>	<b>2013</b>	<b>2012</b>
	<b>(in thousands)</b>		
Revenue	\$ 47,741	\$ 32,053	\$ 41,706
Research and development expenses	18,740	16,841	15,115
General and administrative expenses	10,016	6,183	5,302
Other income (expense):			
Interest income	467	248	118
Interest expense	(18)	(31)	
Change in fair value of warrant liability	(166)	381	(8)

**Revenue.** We recognized revenue of \$47.7 million in the year ended September 30, 2014, as compared to \$32.1 million in the year ended September 30, 2013. During fiscal 2014, we received and recognized as revenue a total of \$40.0 million in milestone payments from AbbVie as a result of its regulatory filings with the FDA and the EMA for the first regimen containing a collaboration compound. During fiscal 2013, we received and recognized as revenue a \$15.0 million milestone payment under our collaboration with AbbVie based on AbbVie's initiation of dosing in a Phase 3 clinical trial that included a collaboration compound. During the same period we also recognized revenue of \$12.7 million under our collaboration with Novartis, as a result of an \$11.0 million milestone payment we received in January 2013 based on Novartis' initiation of dosing in a Phase 1 clinical trial that included EDP-239, and \$1.7 million related to research services we provided. Government contract revenue was \$7.7 million and \$4.4 million during the years ended September 30, 2014 and 2013, respectively, related to our contract with NIAID for the antibiotic program.

We recognized revenue of \$32.1 million in the year ended September 30, 2013, as compared to \$41.7 million in the year ended September 30, 2012. During fiscal 2013, we received and recognized as revenue a \$15.0 million milestone payment under our collaboration with AbbVie based on AbbVie's initiation of dosing in a Phase 3 clinical trial that included a collaboration compound. We did not have any revenue related to the AbbVie collaboration during fiscal 2012. During the year ended September 30, 2013 we also recognized revenue of \$12.7 million under our collaboration with Novartis, as a result of an \$11.0 million milestone payment we received in January 2013 based on Novartis' initiation of dosing in a Phase 1 clinical trial that includes EDP-239, and \$1.7 million related to research services we provided. During the comparable period in 2012, Novartis paid us an upfront payment of \$34.4 million and \$1.1 million related to research services we provided, which we recognized as revenue during the period. Government contract revenue was \$4.4 million and \$6.1 million during the years ended September 30, 2013 and 2012, respectively, related to our contract with NIAID for the antibiotic program.

**Research and development expenses.**

	<b>Year Ended September 30,</b>		
	<b>2014</b>	<b>2013</b>	<b>2012</b>
	<b>(in thousands)</b>		
<b>Development programs:</b>			

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NS5A inhibitor	\$	\$ 1,717	\$ 2,993
Antibiotic	5,430	3,186	4,127
Research and drug discovery	13,310	11,938	7,995
<b>Total research and development expenses</b>	<b>\$ 18,740</b>	<b>\$ 16,841</b>	<b>\$ 15,115</b>

Research and development expenses were \$18.7 million in the year ended September 30, 2014, as compared to \$16.8 million for the same period in 2013. The increase of \$1.9 million year over year was due primarily to an increase of \$2.2 million in expenses for our antibiotic program and \$1.4 million for our early stage drug

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discovery programs, partially offset by a decrease of \$1.7 million in expenses related to our NS5A inhibitor program. We incurred preclinical and clinical expenses for the development of our lead antibiotic candidate as a result of the contract we entered into in September 2011 with NIAID, which has funded our preclinical and early clinical development of this candidate. In fiscal 2014 we incurred higher research expenses in our early stage drug discovery programs due to an increase in both the number of preclinical studies and the related costs. Our research costs related to our NS5A inhibitor program decreased as a result of our completing our research for Novartis in August 2013. We had incurred expense for NS5A research to identify additional compounds through August 2013, for which we had been receiving funding from Novartis.

Research and development expenses were \$16.8 million in the year ended September 30, 2013, as compared to \$15.1 million for the same period in 2012. The increase of \$1.7 million year over year was due primarily to an increase of \$3.9 million in preclinical expenses for our early stage drug discovery programs. This increase was partially offset by a decrease of \$1.3 million in expenses for our NS5A inhibitor program and a decrease of \$0.9 million in our expenses for our antibiotic program. In fiscal 2013 we incurred higher research expenses in our early stage drug discovery programs due to an increase in both the number of preclinical studies and the related costs. Our research costs related to our NS5A inhibitor program decreased as a result of our signing a collaboration agreement with Novartis in February 2012, at which time Novartis became responsible for further clinical trial costs. Prior to entering into the collaboration agreement with Novartis, we had been incurring costs for preclinical and clinical development of EDP-239. We continued to incur research expense for NS5A research to identify additional compounds through August 2013, for which we had been receiving funding from Novartis through August 2013. We incurred preclinical expense for the development of our lead antibiotic candidate as a result of the contract we entered into in September 2011 with NIAID, which has funded our research program for this candidate.

From inception of each development program through September 30, 2014, we incurred cumulative expenses of \$18.7 million for our protease inhibitor program, \$13.2 million for our NS5A inhibitor program, and \$12.7 million for our antibiotic program.

***General and administrative expenses.*** General and administrative expenses increased by \$3.8 million from \$6.2 million in fiscal 2013 to \$10.0 million in fiscal 2014. The increase was primarily due to increased stock-based compensation expense of \$1.6 million related to additional employee stock options and a higher value of our common stock, as well as additional expenses incurred as a result of operating as a publicly traded company.

General and administrative expenses increased by \$0.9 million from \$5.3 million in fiscal 2012 to \$6.2 million in fiscal 2013. The increase was primarily due to increased stock-based compensation expense of \$0.6 million related to additional employee stock options and a higher value of our common stock, as well as additional expenses incurred as a result of becoming a publicly traded company in March 2013.

***Other income (expense).*** Changes in components of other income (expense) were as follows:

***Interest income.*** The increase in interest income for the year ended September 30, 2014, as compared to the year ended September 30, 2013, was due to our higher cash and marketable securities balances due to the \$40.0 million of milestone payments from AbbVie in the third fiscal quarter of 2014.

The increase in interest income for the year ended September 30, 2013, as compared to the year ended September 30, 2012, was due to higher average cash and investment balances following the receipt of the \$15.0 million milestone payment received from AbbVie and the \$11.0 million milestone payment received from Novartis in fiscal 2013, as well as our receipt of \$59.9 million of cash proceeds, net of underwriting discounts and commissions, from our IPO in March 2013.

*Interest expense.* Interest expense consisted of non-cash interest expense which is being accreted to the value of accrued third-party license fees over the term of the obligation.

*Change in fair value of warrant liability and Series 1 nonconvertible preferred stock.* We account for our outstanding warrants and our Series 1 nonconvertible preferred stock as liabilities held at fair value, with changes

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in fair value recorded as a component of other income (expense). In February 2014, 225,408 warrants were exercised resulting in net issuance of 223,153 shares of Series 1 nonconvertible preferred stock. During the year ended September 30, 2014, we recorded a \$0.2 million increase in the fair value of our warrant liability due to the remeasurement of the fair value of the outstanding warrants for Series 1 nonconvertible preferred stock and Series 1 nonconvertible preferred stock.

During the year ended September 30, 2013, we recorded a small amount of income due to the expiration of our series E warrants during the year, as well as a \$0.4 million decrease in the fair value of our warrant liability due to the remeasurement of the fair value of the outstanding warrants for Series 1 nonconvertible preferred stock.

During the year ended September 30, 2012, we recorded a small amount of expense related to the increase in the fair value of our warrant liability as of September 30, 2012, primarily as a result of the remeasurement of our Series E warrants at the reporting date utilizing the Black-Scholes option-pricing model.

**Income tax benefit.** During the year ended September 30, 2014 we reversed the net deferred tax asset valuation allowance, which resulted in an income tax benefit of \$15.3 million. The total amount of the valuation allowance released was approximately \$22.9 million. If AbbVie's paritaprevir-containing regimens are approved in fiscal 2015, we expect that our effective tax rate for fiscal 2015 will reflect the applicable combined U.S. federal and state statutory tax rates.

**Liquidity and Capital Resources**

From our inception through September 30, 2014, we have financed our operations primarily through contract payments under our collaborations, private placements of our equity, government research and development contracts and grants and our IPO that was completed in March 2013. As of September 30, 2014, we had \$131.8 million in cash, cash equivalents and short- and long-term marketable securities.

The following table shows a summary of our cash flows for each of the years ended September 30, 2014, 2013 and 2012.

	<b>Year Ended September 30,</b>		
	<b>2014</b>	<b>2013</b>	<b>2012</b>
	<b>(in thousands)</b>		
<b>Cash provided by (used in):</b>			
Operating activities	\$ 20,179	\$ 10,653	\$ 22,623
Investing activities	\$ 497	\$ (69,216)	\$ (18,040)
Financing activities	\$ 1,164	\$ 56,911	\$ (909)

**Net cash provided by operating activities**

During the year ended September 30, 2014, operating activities provided \$20.2 million of cash. The cash flow provided by operating activities primarily resulted from our net income of \$34.4 million, partially offset by uses of cash by net non-cash items of \$12.0 million and net changes in our assets and liabilities of \$2.3 million. Our net income in fiscal 2014 was primarily due to \$40.0 million of milestone payments we earned and received from AbbVie during the third quarter of fiscal 2014 and \$7.7 million recognized under our government contract with NIAID, net of our operating expenses. Our net non-cash items in the period consisted primarily of a benefit from deferred income taxes of \$15.3 million and purchased premium on marketable securities of \$2.0 million, partially offset by stock-based

compensation of \$2.7 million and amortization of premium on marketable securities of \$2.1 million. Net sources of cash from changes in our operating assets and liabilities during the year ended September 30, 2014 consisted primarily of a \$2.9 million increase in accounts receivable and unbilled receivables, partially offset by a decrease of \$0.6 million in prepaid expenses and a \$0.4 increase in accounts payable. The increase in accounts receivable and unbilled receivables was primarily due to the timing of our billings and collections under the NIAID contract. The \$0.2 million net source of cash from changes in accounts payable and accrued expenses was primarily due to the timing of payments made by us to vendors.

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During the year ended September 30, 2013, operating activities provided \$10.7 million of cash. The cash flow provided by operating activities primarily resulted from our net income of \$9.6 million, as well as from net non-cash charges of \$0.3 million and \$0.7 million from changes in our operating assets and liabilities, respectively. Our net income in fiscal 2013 was primarily due to \$32.1 million of revenue recognized upon receipt of a \$15.0 million milestone payment earned under our collaboration agreement with AbbVie and an \$11.0 million milestone payment earned under our collaboration with Novartis, and \$4.4 million recognized under our government contract with NIAID, net of our operating expenses. Our net non-cash charges in the period primarily consisted of \$1.1 million of stock-based compensation expense and \$1.3 million related to amortization of the premium on our marketable securities, offset in part by \$1.8 million of purchased premium on marketable securities. Net sources of cash from changes in our operating assets and liabilities during the year ended September 30, 2013 consisted primarily of a \$1.4 million decrease in accounts receivable and unbilled receivables and \$0.1 increase in accounts payable, which were offset in part by a \$0.3 million increase in prepaid expenses and other current assets and a \$0.3 decrease in accrued expenses. Cash provided by the \$1.4 million decrease in accounts receivable was primarily due to the timing of our billings and collections under the NIAID contract. The \$0.2 million net use of cash from changes in accounts payable and accrued expenses was primarily due to the timing of payments made by us to vendors.

During the year ended September 30, 2012, operating activities provided \$22.6 million of cash. The cash flow provided by operating activities primarily resulted from our net income of \$21.4 million and net non-cash charges of \$1.1 million, together partially offset by net uses of cash of \$0.1 million from changes in our operating assets and liabilities. Our net income in the period was primarily due to recognition of \$35.6 million of revenue related to the upfront payment and research funding we received under our collaboration arrangement with Novartis as well as \$6.1 million of revenue recognized from the NIAID contract, both offset by our operating expenses. Our net non-cash charges in the period primarily consisted of \$0.6 million of amortization of the premium on our marketable securities and \$0.4 million of stock-based compensation expense. Net uses of cash from changes in our operating assets and liabilities during the year ended September 30, 2012 consisted primarily of \$0.8 million and \$1.9 million increases in our accounts receivable and unbilled receivables, respectively, principally related to our collaboration agreements with NIAID and Novartis, as well as an increase of \$0.2 million in our prepaid expenses and other current assets. These amounts were offset by a \$2.5 million increase in accounts payable and accrued expenses and a \$0.5 million increase in other long-term liabilities. Our accounts payable, accrued expense and other long-term liabilities balances were affected by the timing of payments made by us to our vendors and additionally reflected a \$1.0 million payable for the cost of a third-party license used in our research activities.

***Net cash provided by (used in) investing activities***

During the year ended September 30, 2014, net cash provided by investing activities was \$0.5 million. Net cash provided by investing activities during this period consisted primarily of cash received from the sales and maturities of marketable securities of \$99.9 million, substantially offset by the purchases of marketable securities of \$98.4 million and purchases of fixed assets of \$1.0 million.

During the year ended September 30, 2013, net cash used by investing activities was \$69.2 million. Net cash used by investing activities during this period consisted primarily of cash paid for the purchases of marketable securities of \$115.9 million and purchases of laboratory equipment of \$0.6 million, which was partially offset by cash received from the sales and maturities of marketable securities of \$47.3 million.

During the year ended September 30, 2012, net cash used in investing activities was \$18.0 million. Net cash used in investing activities during this period consisted primarily of purchases of marketable securities, which used cash of \$47.7 million, partially offset by cash received from the sale and maturities of marketable securities of \$28.7 million and an increase in cash of \$1.1 million due to a release of a letter of credit in December 2011 related to the previous

lease of our Watertown facility.



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***Net cash provided by (used in) financing activities***

Net cash provided by financing activities during the year ended September 30, 2014 was \$1.2 million and consisted of proceeds of \$1.1 million from the exercise of stock options and a \$0.1 million tax benefit from exercises of stock options.

Net cash provided by financing activities during the year ended September 30, 2013 was \$56.9 million and consisted of \$59.9 million of proceeds from our IPO, net of underwriting discounts and commissions, and proceeds of \$0.6 million from the exercise of stock options, offset by \$3.5 million of expenses related to our IPO and paid during the period.

Net cash used in financing activities for fiscal 2012 consisted of payments of deferred offering costs in anticipation of our initial public offering, partially offset by proceeds received from the exercise of stock options.

As of September 30, 2014, we had \$131.8 million in cash, cash equivalents and investments. We believe that our existing cash, cash equivalents and investments as of September 30, 2014, will be sufficient to meet our anticipated cash requirements for at least the next 24 months. However, our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially.

Our future capital requirements are difficult to forecast and will depend on many factors, including:

whether our existing collaboration continues to generate substantial milestone payments, and ultimately royalties, to us;

the number and characteristics of the future product candidates we pursue;

the scope, progress, results and costs of researching and developing any of our future product candidates on our own, including conducting preclinical research and clinical trials;

the timing of, and the costs involved in, obtaining regulatory approvals for any future product candidates we develop independently;

the cost of commercialization activities, if any, of any future product candidates we develop independently that are approved for sale, including marketing, sales and distribution costs;

the cost of manufacturing our future product candidates and any products we successfully commercialize independently, including manufacturing for clinical development;

our ability to maintain our existing collaboration and to establish new collaborations, licensing or other arrangements and the financial terms of such agreements;

the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patents, including litigation costs and the outcome of such litigation; and

the timing, receipt and amount of sales of, or royalties on ABT-450, ABT-493 and our future product candidates, if any.

We do not believe that inflation had a material effect on our business, financial condition or results of operations in the last three fiscal years. If our costs were to become subject to significant inflationary pressures, we could not offset such higher costs through revenue increases because our revenues are substantially outside of our control. Our inability to do so could harm our business, financial condition and results of operations.

### **Off-Balance Sheet Arrangements**

We do not engage in any off-balance sheet financing activities. We do not have any interest in entities referred to as variable interest entities, which include special purpose entities and other structured finance entities.

**Table of Contents****Recently Issued Accounting Pronouncements**

In May, 2014, the Financial Accounting Standards Board (the FASB) issued ASU No. 2014-09, *Revenue from Contracts with Customers* (Topic 606), which supersedes all existing revenue recognition requirements, including most industry-specific guidance. The new standard requires a company to recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration that the company expects to receive for those goods or services. The new standard will be effective for us on October 1, 2017. We are currently evaluating the potential impact that Topic 606 may have on our financial position and results of operations.

**Contractual Obligations and Commitments**

We lease office space in Watertown, Massachusetts under a seven-year lease that commenced on October 1, 2011. In fiscal 2012, we entered into an intellectual property license agreement that will require us to make certain non-cancelable payments over the next three years. The following table summarizes our contractual obligations at September 30, 2014 and the effect such obligations are expected to have on our liquidity and cash flow in future periods:

	Total	Payments Due By Fiscal Year			More Than 5 years
		Less Than 1 Year	1-3 Years (in thousands)	3-5 Years	
Operating lease commitments	\$ 3,944	\$ 946	\$ 1,971	\$ 1,027	\$
Intellectual property license	200	200			
Total <sup>(1)</sup>	\$ 4,144	\$ 1,146	\$ 1,971	\$ 1,027	\$

(1) As of September 30, 2014, we had outstanding warrants for the purchase 1,774,581 shares of our Series 1 nonconvertible preferred stock and 223,153 shares of Series 1 nonconvertible preferred stock that we classified as a long-term liability on our balance sheet, recorded at fair value of \$1.8 million. If those warrants are exercised, the Series 1 nonconvertible preferred stock issued upon exercise would require the payment of \$2.0 million upon a qualifying merger or sale of this company. The table above does not include this liability because we are unable to estimate the timing of this required payment, or if it will be required at all.

**ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK*****Interest Rate Sensitivity***

We had cash, cash equivalents and marketable securities of \$131.8 million at September 30, 2014, which consisted of cash, government and agency securities, corporate bonds and commercial paper and certificates of deposit. Interest income is sensitive to changes in the general level of interest rates; however, due to the nature of these investments, we do not believe that we have any material exposure to changes in the fair value of our investment portfolio as a result of changes in interest rates. We had no debt outstanding as of September 30, 2014.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

Our consolidated financial statements, together with the report of our independent registered public accounting firm, appear on pages F-1 through F-31 of this Annual Report on Form 10-K.

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**ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

**ITEM 9A. CONTROLS AND PROCEDURES**

**Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in the Company's reports under the Securities Exchange Act of 1934, as amended (the Exchange Act), is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, including our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, as the Company's are designed to do, and management necessarily was required to apply its judgment in evaluating the risk related to controls and procedures.

In connection with the preparation of this Form 10-K, as of September 30, 2014, an evaluation was performed under the supervision and with the participation of our management, including the CEO and CFO, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Based on that evaluation, our management concluded that our disclosure controls and procedures were effective at a reasonable assurance level as of September 30, 2014. These conclusions were communicated to the Audit Committee.

**Management's Report on Internal Control Over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Exchange Act. Our internal control system is designed to provide reasonable assurance to the Company's management and Board of Directors regarding the preparation and fair presentation of published financial statements. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Our management has assessed the effectiveness of our internal control over financial reporting as of September 30, 2014. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its 2013 *Internal Control - Integrated Framework*. Based on this assessment, our management has concluded that as of September 30, 2014 our internal control over financial reporting is effective.

As an Emerging Growth Company, as defined under the terms of the Jobs Act of 2012, the Company's independent registered accounting firm is not required to issue an attestation report on the internal control over financial reporting.

*Change in Internal Control over Financial Reporting* There were no changes in our internal control over financial reporting that occurred during our last quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**ITEM 9B. OTHER INFORMATION**

None.

**Table of Contents****PART III****ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

Portions of the response to this item are incorporated herein by reference from the discussion responsive thereto under the captions Election of Directors Nominees for Director and Current Directors , Section 16(a) Beneficial Ownership Reporting Compliance , Executive Officers and Corporate Governance Board and Committee Matters in the Company Definitive Proxy Statement relating to the 2015 Annual Meeting of Stockholders (the 2015 Proxy Statement).

We have adopted a Code of Business Conduct and Ethics (the code of ethics) that applies to all of our directors, officers and employees. The code of ethics is available on our website at [www.enanta.com](http://www.enanta.com). In addition, if we make any substantive amendments to the code of ethics or grant any waiver, including any implicit waiver, from a provision of the code to any of our executive officers or directors, we will disclose the nature of such amendment or waiver as required by applicable law.

**ITEM 11. EXECUTIVE COMPENSATION**

The response to this item is incorporated herein by reference from the discussion responsive thereto under the following captions in the 2015 Proxy Statement: Executive Compensation and Corporate Governance Compensation Committee Interlocks and Insider Participation.

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The response to this item is incorporated herein by reference in part from the discussion responsive thereto under the caption Beneficial Ownership of Common Stock in the 2015 Proxy Statement.

The following table provides information about the securities authorized for issuance under the Company's equity compensation plans as of September 30, 2014:

**Equity Compensation Plan Information**

<b>Plan Category</b>	<b>Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)</b>	<b>Weighted average exercise price of outstanding options, warrants and rights (b)</b>	<b>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)</b>
	1,388,566 <sup>(2)</sup>	\$ 15.39	412,493 <sup>(3)</sup>

Equity compensation plans approved by security holders <sup>(1)</sup>			
Equity compensation plans not approved by security holders			
<b>Totals</b>	1,388,566 <sup>(2)</sup>	\$ 15.39	412,493 <sup>(3)</sup>

- (1) Consists of the Company's Amended and Restated 1995 Equity Incentive Plan, as amended, the Company's 2012 Equity Incentive Plan, as amended, and the Company's Employee Stock Purchase Plan.
- (2) Consists of shares of the Company's common stock issuable upon exercise of outstanding options issued under the Company's Amended and Restated 1995 Equity Incentive Plan and the Company's 2012 Equity Incentive Plan.
- (3) Consists of shares of the Company's common stock reserved for future issuance under the Company's 2012 Equity Incentive Plan and the Company's Employee Stock Purchase Plan. Does not include 557,863 shares that were automatically added to the Company's 2012 Equity Incentive Plan by its terms as of October 1, 2014.



**Table of Contents****ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

The response to this item is incorporated herein by reference from the discussion responsive thereto under the caption Corporate Governance Certain Relationships and Related Transactions and Corporate Governance Board and Committee Matters in the 2015 Proxy Statement.

**ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES**

The response to this item is incorporated herein by reference from the discussion responsive thereto under the captions Corporate Governance Board and Committee Matters and Audit Committee Report Audit Fees in the 2015 Proxy Statement.

**PART IV****ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES****(a) 1. FINANCIAL STATEMENTS**

The financial statements are included under Part II, Item 8 of this Report.

**2. FINANCIAL STATEMENTS SCHEDULE**

Schedules are omitted because they are not applicable, or are not required, or because the information is included in the consolidated financial statements and notes thereto.

**3. EXHIBITS**

The exhibits are listed below under Part IV, Item 15(b) of this Report.

**(b) EXHIBITS**

3.1	Restated Certificate of Incorporation of Enanta Pharmaceuticals, Inc.	8-K	03/28/2013	3.1	001-35839
3.2	Amended and Restated Bylaws of Enanta Pharmaceuticals, Inc.	8-K	03/28/2013	3.2	001-35839
4.1	Specimen certificate evidencing shares of common stock.	S-1/A	02/05/2013	4.1	333-184779
4.2	Form of Series 1 Non-Convertible Preferred Stock Warrant	S-1	11/06/2012	4.2	333-184779
10.1#	Form of Indemnification Agreement for directors and officers.	S-1/A	02/05/2013	10.7	333-184779
10.2#	Amended and Restated Employment Agreement between the Company and Jay R. Luly, Ph.D., dated as of March 4, 2013.	S-1/A	03/05/2013	10.5	333-184779
10.3#	Form of Amended and Restated Employment Agreement for Executive Officers other than Chief Executive Officer.	S-1/A	03/05/2013	10.17	333-184779

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10.4	Collaborative Development and License Agreement between the Company and Abbott Laboratories, dated November 27, 2006; as amended by a First Amendment to Collaborative Development and License Agreement dated January 27, 2009 and a Second Amendment to Collaborative Development and License Agreement dated December 9, 2009 (assigned to AbbVie Inc. as of January 1, 2013).	S-1/A	02/05/2013	10.1	333-184779	
10.5	Third Amendment to Collaborative Development and License Agreement between the Company and AbbVie dated October 20, 2014.					X
10.6	Agreement between the Company and the National Institute of Allergy and Infectious Diseases, dated September 30, 2011.	S-1	11/06/2012	10.3	333-184779	
10.7	Modification No. 1, dated August 28, 2013, to that certain Agreement between the Company and the National Institute of Allergy and Infectious Diseases.	10-K	12/18/2013	10.8	001-35839	
10.8	Modification No. 2, dated August 29, 2013, to that certain Agreement between the Company and the National Institute of Allergy and Infectious Diseases.	10-K	12/18/2013	10.9	001-35839	
10.9	Lease Agreement between Company and ARE-500 Arsenal Street LLC, dated as of April 15, 2011.	S-1	11/06/2012	10.6	333-184779	
10.10	Third Amended and Restated Registration Rights Agreement, dated as of August 23, 2012.	S-1/A	11/06/2012	10.4	333-184779	
10.11#	Amended and Restated 1995 Equity Incentive Plan.	S-1/A	03/05/2013	10.8	333-184779	
10.12#	Form of Incentive Stock Option Certificate under Amended and Restated 1995 Equity Incentive Plan.	S-1/A	03/05/2013	10.9	333-184779	
10.13#	Form of Non-Statutory Stock Option Certificate under Amended and Restated 1995 Equity Incentive Plan.	S-1/A	03/05/2013	10.10	333-184779	
10.14#	Form of Non-Statutory Stock Option Certificate for directors under Amended and Restated 1995 Equity Incentive Plan.	S-1/A	03/05/2013	10.11	333-184779	
10.15#	2012 Equity Incentive Plan (As adjusted to reflect the application of the 1-for-4.31 reverse stock split of the Company's common stock effected on March 1, 2013).	10-K	12/18/2013	10.16	001-35839	
10.16#	Form of Incentive Stock Option Agreement under 2012 Equity Incentive Plan.	S-1/A	03/05/2013	10.13	333-184779	
10.17#	Form of Non-Statutory Stock Option Agreement under 2012 Equity Incentive Plan.	S-1/A	03/05/2013	10.14	333-184779	
10.18#	Form of Non-Statutory Stock Option Certificate for directors under 2012 Equity Incentive Plan.	S-1/A	03/05/2013	10.15	333-184779	
10.19#	Employee Stock Purchase Plan.	S-1/A	02/05/2013	10.16	333-184779	
21.1	Subsidiaries of the Company.					X
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.					X

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31.1	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.	X
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.	X
32.1	Certification of the Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X
101	The following materials from the Annual Report of Enanta Pharmaceuticals, Inc. on Form 10-K for the year ended September 30, 2014, formatted in XBRL (eXtensible Business Reporting Language): (i) Balance Sheets as of September 30, 2014 and September 30, 2013 of Enanta Pharmaceuticals, Inc., (ii) Statements of Operations for the years ended September 30, 2014 and 2013 of Enanta Pharmaceuticals, Inc., (iii) Statements of Cash Flows for the years ended September 30, 2014 and 2013 of Enanta Pharmaceuticals, Inc., and (iv) Notes to Financial Statements of Enanta Pharmaceuticals, Inc.	X

# Management contract or compensatory plan, contract or agreement. Confidential treatment granted as to portions of this Exhibit. The confidential portions of this Exhibit have been omitted and are marked by asterisks. This Exhibit has been filed separately with the commission pursuant to an application for confidentiality treatment. The confidential portions of this Exhibit have been omitted and are marked by asterisks.

Table of Contents**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, this 11th day of December, 2014.

**ENANTA PHARMACEUTICALS, INC.**

By: /s/ Jay R. Luly, Ph.D.  
Jay R. Luly, Ph.D.  
*Chief Executive Officer*

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

Signature	Title	Date
/s/ Jay R. Luly, Ph.D.	President and Chief Executive	December 11, 2014
Jay R. Luly, Ph.D.	Officer and Director (Principal Executive Officer)	
/s/ Paul J. Mellett	Chief Financial Officer	December 11, 2014
Paul J. Mellett	(Principal Financial and Accounting Officer)	
/s/ Ernst-Günter Afting, M.D., Ph.D.	Director	December 11, 2014
Ernst-Günter Afting, M.D., Ph.D.		
/s/ Stephen Buckley, Jr.	Director	December 11, 2014
Stephen Buckley, Jr.		
/s/ Bruce L.A. Carter, Ph.D.	Director	December 11, 2014
Bruce L.A. Carter, Ph.D.		
/s/ George S. Golumbeski, Ph.D.	Director	December 11, 2014
George S. Golumbeski, Ph.D.		
/s/ Terry Vance	Director	December 11, 2014
Terry Vance		



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**ENANTA PHARMACEUTICALS, INC.**

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**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**  
**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of

Enanta Pharmaceuticals, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, comprehensive income, changes in redeemable and convertible preferred stock and stockholders' equity (deficit) and cash flows present fairly, in all material respects, the financial position of Enanta Pharmaceuticals, Inc. and its subsidiary at September 30, 2014 and 2013 and the results of their operations and their cash flows for each of the three years in the period ended September 30, 2014 in conformity with accounting principles generally accepted in the United States of America. 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 of these statements 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts

December 11, 2014

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**Table of Contents****ENANTA PHARMACEUTICALS, INC.****CONSOLIDATED BALANCE SHEETS****(in thousands, except share and per share amounts)**

	<b>September 30,</b>	
	<b>2014</b>	<b>2013</b>
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 30,699	\$ 8,859
Short-term marketable securities	60,065	92,621
Accounts receivable	1,724	808
Unbilled receivables	2,770	784
Deferred tax assets	11,123	
Prepaid expenses and other current assets	1,594	1,641
<b>Total current assets</b>	<b>107,975</b>	<b>104,713</b>
Property and equipment, net	1,803	1,121
Long-term marketable securities	41,003	10,703
Deferred tax assets	4,198	
Restricted cash	436	436
<b>Total assets</b>	<b>\$ 155,415</b>	<b>\$ 116,973</b>
<b>Liabilities and Stockholders Equity</b>		
Current liabilities:		
Accounts payable	\$ 1,874	\$ 1,481
Accrued expenses	2,872	3,035
Deferred revenue		10
<b>Total current liabilities</b>	<b>4,746</b>	<b>4,526</b>
Warrant liability	1,584	1,620
Series 1 nonconvertible preferred stock	202	
Other long-term liabilities	229	359
<b>Total liabilities</b>	<b>6,761</b>	<b>6,505</b>
Commitments and contingencies (Note 12)		
Stockholders equity:		
Common stock; \$0.01 par value; 100,000,000 shares authorized; 18,803,390 and 18,138,597 shares issued and 18,594,574 and 17,929,781 shares outstanding at September 30, 2014 and 2013, respectively	188	181
Additional paid-in capital	221,580	217,741
Treasury stock, at par value; 208,816 shares at September 30, 2014 and 2013	(2)	(2)
Accumulated other comprehensive loss	(100)	(2)
Accumulated deficit	(73,012)	(107,450)



Total stockholders' equity	148,654	110,468
Total liabilities and stockholders' equity	\$ 155,415	\$ 116,973

The accompanying notes are an integral part of these consolidated financial statements.

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**Table of Contents****ENANTA PHARMACEUTICALS, INC.****CONSOLIDATED STATEMENTS OF OPERATIONS****(in thousands, except share and per share amounts)**

	<b>Year Ended September 30,</b>		
	<b>2014</b>	<b>2013</b>	<b>2012</b>
<b>Revenue</b>	\$ 47,741	\$ 32,053	\$ 41,706
Operating expenses:			
Research and development	18,740	16,841	15,115
General and administrative	10,016	6,183	5,302
<b>Total operating expenses</b>	<b>28,756</b>	<b>23,024</b>	<b>20,417</b>
Income from operations	18,985	9,029	21,289
Other income (expense):			
Interest income	467	248	118
Interest expense	(18)	(31)	
Change in fair value of warrant liability and Series 1 nonconvertible preferred stock, net	(166)	381	(8)
<b>Total other income (expense), net</b>	<b>283</b>	<b>598</b>	<b>110</b>
Income before income taxes	19,268	9,627	21,399
Income tax benefit	15,170		
Net income	34,438	9,627	21,399
Accretion of redeemable convertible preferred stock to redemption value		(2,526)	(5,367)
Net income attributable to participating securities		(13,670)	(14,663)
<b>Net income (loss) attributable to common stockholders</b>	<b>\$ 34,438</b>	<b>\$ (6,569)</b>	<b>\$ 1,369</b>
Net income (loss) per share attributable to common stockholders:			
Basic	\$ 1.88	\$ (0.67)	\$ 1.26
Diluted	\$ 1.80	\$ (0.67)	\$ 1.13
Weighted average common shares outstanding:			
Basic	18,354,791	9,788,039	1,088,784
Diluted	19,185,228	9,788,039	2,474,823

The accompanying notes are an integral part of these consolidated financial statements.

**Table of Contents****ENANTA PHARMACEUTICALS, INC.  
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME****(in thousands)**

	<b>Year Ended September 30,</b>		
	<b>2014</b>	<b>2013</b>	<b>2012</b>
Net income	\$ 34,438	\$ 9,627	\$ 21,399
Other comprehensive income (loss):			
Net unrealized gains (losses) on marketable securities, net of tax of \$0	(98)	(12)	11
Total other comprehensive income (loss)	(98)	(12)	11
Comprehensive income	\$ 34,340	\$ 9,615	\$ 21,410

The accompanying notes are an integral part of these consolidated financial statements.

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## ENANTA PHARMACEUTICALS, INC.

## CONSOLIDATED STATEMENTS OF CHANGES IN REDEEMABLE AND CONVERTIBLE PREFERRED

## STOCK AND STOCKHOLDERS EQUITY (DEFICIT)

(in thousands, except share amounts)

	Series C, D, E, F and G Redeemable Convertible Preferred Stock		Series A and B Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Treasury Stock Shares	Amd	Accumulated Other Compre- hensive Income (Loss)	Accumulated Deficit	Stock holders Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount						
at er 30,	43,115,343	153,588	566,450	327	1,225,899	12		(208,816)	(2)	(1)	(131,970)	(
of ons					117,248	1	140					
ation related ptions							424					
of le e stock tion		5,367					(564)				(4,803)	
nsive										11		
ne												21,399
at er 30,	43,115,343	158,955	566,450	327	1,343,147	13		(208,816)	(2)	10	(115,374)	(
of ons					538,575	5	554					
ation related ptions							1,063					
of le e stock tion		2,526					(823)				(1,703)	

n of stock n	(43,115,343)	(161,481)	(566,450)	(327)	11,656,875	117	161,691				
of stock al ering costs					4,600,000	46	59,846			(4,590)	
nsive										(12)	
ne											9,627
at er 30,	\$	\$	18,138,597	\$ 181	\$ 217,741	(208,816)	\$ (2)	\$ (2)	\$ (107,450)	\$	
of ons			664,793	7	1,047						
tion elated ptions						2,682					
x om on										110	
nsive										(98)	
ne											34,438
at er 30,	\$	\$	18,803,390	\$ 188	\$ 221,580	(208,816)	\$ (2)	\$ (100)	\$ (73,012)	\$	

The accompanying notes are an integral part of these consolidated financial statements.

**Table of Contents****ENANTA PHARMACEUTICALS, INC.****CONSOLIDATED STATEMENTS OF CASH FLOWS****(in thousands)**

	<b>Year Ended September 30,</b>		
	<b>2014</b>	<b>2013</b>	<b>2012</b>
<b>Cash flows from operating activities</b>			
Net income	\$ 34,438	\$ 9,627	\$ 21,399
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization expense	352	221	172
Non-cash interest expense	8	31	
Change in fair value of warrant liability and Series 1 nonconvertible preferred stock	166	(381)	8
Stock-based compensation expense	2,682	1,063	424
Gain on sale of marketable securities	(3)		
Gain on disposal of property and equipment	(3)	(100)	(63)
Premium on marketable securities	(2,002)	(1,811)	
Amortization of premium on marketable securities	2,120	1,262	590
Benefit from deferred income taxes	(15,211)		
Income tax benefit from exercise of stock options	(110)		
Change in operating assets and liabilities:			
Accounts receivable	(916)	241	(788)
Unbilled receivables	(1,986)	1,109	(1,893)
Prepaid expenses and other current assets	568	(307)	(235)
Other assets		22	5
Accounts payable	399	115	763
Accrued expenses	(183)	(285)	1,726
Deferred revenue	(10)	(7)	17
Other long-term liabilities	(130)	(147)	498
<b>Net cash provided by operating activities</b>	<b>20,179</b>	<b>10,653</b>	<b>22,623</b>
<b>Cash flows from investing activities</b>			
Purchases of property and equipment	(1,028)	(606)	(252)
Proceeds from sales of property and equipment	3		66
Purchases of marketable securities	(98,405)	(115,888)	(47,694)
Sales of marketable securities	8,421	5,453	15,750
Maturities of marketable securities	91,506	41,825	12,950
Change in restricted cash			1,140
<b>Net cash provided by (used in) investing activities</b>	<b>497</b>	<b>(69,216)</b>	<b>(18,040)</b>
<b>Cash flows from financing activities</b>			

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Proceeds from initial public offering, net of underwriting discounts and commissions		59,892	
Proceeds from exercise of stock options	1,054	559	141
Payments of initial public offering costs		(3,540)	(1,050)
Income tax benefit from exercise of stock options	110		
<b>Net cash provided by (used in) financing activities</b>	<b>1,164</b>	<b>56,911</b>	<b>(909)</b>
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>21,840</b>	<b>(1,652)</b>	<b>3,674</b>
Cash and cash equivalents at beginning of period	8,859	10,511	6,837
Cash and cash equivalents at end of period	\$ 30,699	\$ 8,859	\$ 10,511
<b>Supplemental disclosure of cash flow information:</b>			
Cash paid for income taxes	\$ 148	\$	\$
<b>Supplemental disclosure of noncash financing activities:</b>			
Accretion of redeemable convertible preferred stock to redemption value	\$	\$ 2,526	\$ 5,367
Deferred initial public offering costs included in accounts payable and accrued expenses	\$	\$	\$ 1,079
Conversion of preferred stock into common stock	\$	\$ 161,808	\$
Exercise of Series 1 warrants into Series 1 nonconvertible preferred stock	\$ 206	\$	\$

The accompanying notes are an integral part of these consolidated financial statements.

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**ENANTA PHARMACEUTICALS, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(Amounts in thousands, except share and per share data)**

**1. Nature of the Business**

Enanta Pharmaceuticals, Inc. (the Company), incorporated in Delaware in 1995, is a research and development-focused biotechnology company that uses its chemistry-driven approach and drug discovery capabilities to create small molecule drugs primarily in the infectious disease field. The Company has programs to develop novel protease, NS5A, cyclophilin and nucleotide polymerase inhibitors targeted against the hepatitis C virus (HCV). Additionally, the Company has programs to discover new chemical entities for other diseases.

The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, the uncertainties of research and development, competition from technological innovations of others, dependence on collaborative arrangements, protection of proprietary technology, dependence on key personnel, compliance with government regulations and the need to obtain additional financing. Product candidates currently under development will require significant additional research and development efforts, including extensive preclinical and clinical testing and regulatory approval, prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel infrastructure, and extensive compliance reporting capabilities.

**2. Summary of Significant Accounting Policies**

**Basis of Presentation**

The accompanying consolidated financial statements include those of the Company and its subsidiary, Enanta Pharmaceuticals Security Corporation, after elimination of all intercompany accounts and transactions. The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP).

**Use of Estimates**

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. Significant estimates and assumptions reflected in these consolidated financial statements include, but are not limited to, management's judgments of separate units of accounting and best estimate of selling price of those units of accounting within its revenue arrangements; valuation of warrants, Series 1 nonconvertible preferred stock and stock-based awards; the useful lives of property and equipment; and the accounting for income taxes, including uncertain tax positions and the valuation of net deferred tax assets. Estimates are periodically reviewed in light of changes in circumstances, facts and experience. Actual results could differ from the Company's estimates.

**Cash Equivalents and Marketable Securities**

The Company considers all short-term, highly liquid investments with original maturities of ninety days or less at acquisition date to be cash equivalents. Marketable securities with original maturities of greater than three months and



remaining maturities of less than one year from the balance sheet date are classified as short-term marketable securities. Marketable securities with remaining maturities of greater than one year from the balance sheet date are classified as long-term marketable securities.

The Company classifies all of its marketable securities as available-for-sale. All marketable securities are held with one investment manager. The Company continually evaluates the credit ratings of its investment portfolio

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and underlying securities. The Company invests in accordance with its investment policy and invests at the date of purchase in securities with a rating of A3 or higher and A- or higher according to Moody's and S&P, respectively. The Company reports available-for-sale investments at fair value as of each balance sheet date and records any unrealized gains and losses as a component of stockholders' equity. The cost of securities sold is determined on a specific identification basis, and realized gains and losses are included in other income (expense) within the statement of operations. If any adjustment to fair value reflects a decline in the value of the investment, the Company considers available evidence to evaluate the extent to which the decline is other than temporary and reduces the investment to fair value through a charge to the statement of operations. There were no such adjustments necessary during the years ended September 30, 2014, 2013 or 2012.

## **Restricted Cash**

As of September 30, 2014 and 2013, the Company had outstanding a letter of credit collateralized by a money market account of \$436 to the benefit of the landlord of the Company's current office lease. This amount was classified as long-term restricted cash as of September 30, 2014 and 2013.

## **Concentration of Credit Risk and of Significant Customers and Suppliers**

Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash, cash equivalents, marketable securities, accounts receivable and unbilled receivables. The Company has all cash and investment balances at one accredited financial institution, in amounts that exceed federally insured limits. The Company does not believe that it is subject to unusual credit risk beyond the normal credit risk associated with commercial banking relationships.

The Company has historically generated all of its revenue from its collaborative research and license agreements and a U.S. government contract (see Note 7). As of September 30, 2014, accounts receivable and unbilled receivables consisted solely of amounts due under the U.S. government contract. As of September 30, 2013, accounts receivable and unbilled receivables consisted of amounts due from the Company's collaborators and under the U.S. government contract (see Note 7).

The Company is completely dependent on third-party manufacturers for product supply for preclinical research activities in its non-partnered programs. In particular, the Company relies and expects to continue to rely exclusively on several manufacturers to supply it with its requirements for the active pharmaceutical ingredients related to these programs. These research programs would be adversely affected by a significant interruption in the supply of its active pharmaceutical ingredients.

## **Fair Value Measurements**

Certain assets and liabilities are carried at fair value under GAAP. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. A fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last is considered unobservable, is used to measure fair value:

Level 1 Quoted prices in active markets for identical assets or liabilities.

Level 2 Observable inputs (other than Level 1 quoted prices) such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

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The Company's cash equivalents and marketable securities assets and its warrant and Series 1 nonconvertible preferred stock liabilities are carried at fair value determined according to the fair value hierarchy described above (see Note 3). The carrying values of accounts receivable and unbilled receivables, accounts payable and accrued expenses approximate their fair value due to the short-term nature of these assets and liabilities.

**Property and Equipment**

Property and equipment are stated at cost less accumulated depreciation or amortization. Depreciation and amortization expense is recognized using the straight-line method over the following estimated useful lives:

Laboratory and office equipment	3-5 years
Leasehold improvements	Shorter of life of lease or estimated useful life
Purchased software	3-5 years
Computer equipment	3-5 years
Furniture	7 years

Expenditures for repairs and maintenance of assets are charged to expense as incurred. Costs of major additions and betterments are capitalized and depreciated on a straight-line basis over their useful lives. Upon retirement or sale, the cost and related accumulated depreciation or amortization of assets disposed of are removed from the accounts and any resulting gain or loss is included in income from operations.

**Impairment of Long-Lived Assets**

The Company reviews long-lived assets, including property and equipment, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant underperformance of the business in relation to expectations, significant negative industry or economic trends, and significant changes or planned changes in the use of the assets. If an impairment review is performed to evaluate a long-lived asset for recoverability, the Company compares forecasts of undiscounted cash flows expected to result from the use and eventual disposition of the long-lived asset to its carrying value. An impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of an asset are less than its carrying amount. The impairment loss would be based on the excess of the carrying value of the impaired asset over its fair value, determined based on discounted cash flows. To date, the Company has not recorded any impairment losses on long-lived assets.

**Revenue Recognition**

The Company's revenue is generated primarily through collaborative research and license agreements. The terms of these agreements contain multiple deliverables, which may include (i) licenses, (ii) research and development activities, and (iii) participation in joint research and development steering committees. The terms of these agreements may include nonrefundable upfront license fees, payments for research and development activities, payments based upon the achievement of certain milestones, and royalty payments based on product sales derived from the collaboration. In all instances, revenue is recognized only when the price is fixed or determinable, persuasive evidence of an arrangement exists, delivery has occurred or the services have been rendered, collectibility of the resulting receivable is reasonably assured, and the Company has fulfilled its performance obligations under the contract.

For agreements entered into prior to October 1, 2011, the Company evaluated license agreements with multiple deliverables to determine if the deliverable elements could be recognized separately by considering (i) if the delivered elements (typically the license) had standalone value to the customer, (ii) if the fair value of any undelivered elements (typically the research and development services and the steering committee activities) could be determined based on vendor-specific objective evidence ( VSOE ) or vendor objective evidence

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( VOE ), and (iii) if the arrangement included a general right of return relative to the delivered item, the delivery or performance of the undelivered item was considered probable and substantially within the control of the Company. VSOE of fair value was based on the consistent price of a deliverable when the Company regularly sold it on a standalone basis. Alternatively, VOE was based upon third-party objective evidence of fair value. If the delivered elements had value on a standalone basis and the fair value of the undelivered elements could be determined based on VSOE or VOE, revenues of such elements were then accounted for separately as delivered with arrangement consideration allocated to the delivered elements based on the residual value method. If either (i) the delivered elements were considered to not have standalone value or (ii) VSOE or VOE of fair value for any of the undelivered elements could not be determined, the arrangement was accounted for as a single unit of accounting and all payments received were recognized as revenue over the estimated period of performance of the entire arrangement.

On October 1, 2011, the Company adopted Accounting Standards Update ( ASU ) No. 2009-13, *Multiple-Deliverable Revenue Arrangements* ( ASU 2009-13 ). This guidance, which applies to multiple-element arrangements entered into or materially modified on or after October 1, 2011, amends the criteria for separating and allocating consideration in a multiple-element arrangement by modifying the fair value requirements for revenue recognition and eliminating the use of the residual value method. The selling prices of deliverables under the arrangement may be derived using third-party evidence ( TPE ) or a best estimate of selling price ( BEBP ), if VSOE is not available. The objective of BEBP is to determine the price at which the Company would transact a sale if the element within the license agreement was sold on a standalone basis. Establishing BEBP involves management's judgment and considers multiple factors, including market conditions and company-specific factors including those factors contemplated in negotiating the agreements as well as internally developed models that include assumptions related to market opportunity, discounted cash flows, estimated development costs, probability of success, and the time needed to commercialize a product candidate pursuant to the license. In validating the Company's BEBP, the Company considers whether changes in key assumptions used to determine the BEBP will have a significant effect on the allocation of the arrangement consideration between the multiple deliverables. Deliverables under the arrangement are separate units of accounting if (i) the delivered item has value to the customer on a standalone basis, and (ii) if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item is considered probable and substantially within the control of the Company. The arrangement consideration that is fixed or determinable at the inception of the arrangement is allocated to the separate units of accounting based on their relative selling prices. The appropriate revenue recognition model is applied to each element, and revenue is accordingly recognized as each element is delivered. The Company may exercise significant judgment in determining whether a deliverable is a separate unit of accounting. The Company elected to adopt ASU 2009-13 prospectively as of October 1, 2011.

In determining the separate units of accounting, the Company evaluates whether the license has standalone value to the collaborator based on consideration of the relevant facts and circumstances for each arrangement. Factors considered in this determination include the research and development capabilities of the collaborator and the availability of relevant research expertise in the marketplace. In addition, the Company considers whether or not (i) the collaborator can use the license for its intended purpose without the receipt of the remaining deliverables, (ii) the value of the license is dependent on the undelivered items, and (iii) the collaborator or other vendors can provide the undelivered items.

Under a collaborative research and license agreement, a steering committee is typically responsible for overseeing the general working relationships, determining the protocols to be followed in the research and development performed, and evaluating the results from the continued development of the product in order to determine the clinical studies to be performed. The Company evaluates whether its participation in joint research and development steering committees is a substantive obligation or whether the services are considered inconsequential or perfunctory. The Company's participation on a steering committee is considered participatory and therefore accounted for as a separate element when the collaborator requires the participation of the Company to ensure all elements of an arrangement are

maximized. Steering committee services that are considered participatory are combined with other research services or performance obligations required under an

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arrangement, if any, in determining the level of effort required in an arrangement and the period over which the Company expects to complete its aggregate performance obligations. Alternatively, the Company's participation on a steering committee is considered protective and therefore not accounted for as a separate element in a case where the Company can exercise or control when to be involved at its own discretion. Factors the Company considers in determining if its participation in a joint steering committee is participating or protective include: (i) which party negotiated or requested the steering committee, (ii) how frequently the steering committee meets, (iii) whether or not there are any penalties or other recourse if the Company does not attend the steering committee meetings, (iv) which party has decision making authority on the steering committee, and (v) whether or not the collaborator has the requisite experience and expertise associated with the research and development of the licensed intellectual property.

For all periods presented, whenever the Company determines that an element is delivered over a period of time, revenue is recognized using either a proportional performance model or a straight-line model over the period of performance, which is typically the research and development term. Full-time equivalents ( FTEs ) are typically used as the measure of performance. At each reporting period, the Company reassesses its cumulative measure of performance and makes appropriate adjustments, if necessary. The Company recognizes revenue using the proportional performance model whenever the Company can make reasonably reliable estimates of the level of effort required to complete its performance obligations under an arrangement. Revenue recognized under the proportional performance model at each reporting period is determined by multiplying the total expected payments under the contract (excluding royalties and payments contingent upon achievement of milestones) by the ratio of the level of effort incurred to date to the estimated total level of effort required to complete the performance obligations under the arrangement. Revenue is limited to the lesser of the cumulative amount of payments received or the cumulative amount of revenue earned, as determined using the proportional performance model as of each reporting period. Alternatively, if the Company cannot make reasonably reliable estimates the level of effort required to complete its performance obligations under an arrangement, then revenue under the arrangement is recognized on a straight-line basis over the period expected to complete the Company's performance obligations. If and when a contingent milestone payment is earned, the additional consideration to be received is allocated to the separate units of accounting in the arrangement based on their relative selling prices at the inception of the arrangement. Revenue is limited to the lesser of the cumulative amount of payments received or the cumulative amount of revenue earned, as determined on a straight-line basis as of the period end date. If the Company cannot reasonably estimate when its performance obligation period ends, then revenue is deferred until the Company can reasonably estimate when the performance obligation period ends.

Royalty revenue, if any, is recognized based on contractual terms when reported sales are reliably measurable and collectibility is reasonably assured, provided that there are no performance obligations then remaining. To date, none of the Company's products have been approved, and therefore the Company has not earned any royalty revenue from product sales.

During the years ended September 30, 2014, 2013 and 2012, the Company also generated revenue from a government contract under which the Company is reimbursed for certain allowable costs incurred for the funded project. Revenue from the government contract is recognized when the related service is performed. The related costs incurred by the Company under the government contract are included in research and development expense in the statements of operations.

Amounts received prior to satisfying all revenue recognition criteria are recorded as deferred revenue in the accompanying balance sheets. Amounts not expected to be recognized as revenue within the next twelve months of the balance sheet date are classified as long-term deferred revenue.

In the event that a collaborative research and license agreement is terminated and the Company then has no further performance obligations, the Company recognizes as revenue any portion of the upfront payment that had not



previously been recorded as revenue but was classified as deferred revenue at the date of such termination.

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### **Research and Development Costs**

Research and development costs are expensed as incurred. Included in research and development costs are wages, stock-based compensation and benefits of employees, third-party license fees and other operational costs related to the Company's research and development activities, including facility-related expenses and external costs of outside contractors engaged to conduct both preclinical and clinical studies. The Company also includes in research and development expense the costs to complete the Company's obligations under research collaborations.

### **Patent Costs**

All patent-related costs incurred in connection with filing and prosecuting patent applications are recorded as general and administrative expenses as incurred, as recoverability of such expenditures is uncertain.

### **Accounting for Stock-Based Compensation**

The Company measures all stock options and other stock-based awards granted to employees at the fair value on the date of the grant using the Black-Scholes option-pricing model. The fair value of the awards is recognized as expense, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award. The straight-line method of expense recognition is applied to all awards with service-only conditions. The Company records compensation expense related to performance-based awards when performance-based targets are deemed to be probable of being achieved. The Company classifies stock-based compensation expense in the statements of operations in the same manner in which the award recipient's payroll costs are classified.

### **Income Taxes**

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the financial statements or in the Company's tax returns. Deferred taxes are determined based on the difference between the financial reporting and tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. Changes in deferred tax assets and liabilities are recorded in the provision for income taxes. The Company assesses the likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent it believes, based upon the weight of available evidence, that it is more likely than not that all or a portion of deferred tax assets will not be realized, a valuation allowance is established through a charge to income tax expense. Potential for recovery of deferred tax assets is evaluated by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies.

The Company accounts for uncertainty in income taxes recognized in the financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties.

### **Net Income per Share**

The Company followed the two-class method when computing net income (loss) per share during periods prior to the IPO when the Company had issued shares that met the definition of participating securities. The two-class method was used to determine net income (loss) per share for each class of common and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method required income available to common stockholders for the period to be allocated between common and participating securities based upon their respective rights to receive dividends as if all income for the period had been distributed.

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The Company's redeemable convertible preferred shares and convertible preferred shares contractually entitled the holders of such shares to participate in dividends, but did not contractually require the holders of such shares to participate in losses of the Company. Accordingly, in periods in which the Company had participating securities and reported a net loss or a net loss attributable to common stockholders resulting from preferred stock dividends or accretion, net losses were not allocated to participating securities.

Basic net income (loss) per share attributable to common stockholders is computed by dividing the net income (loss) attributable to common stockholders by the weighted average number of shares of common stock outstanding for the period. Diluted net income (loss) attributable to common stockholders is computed by adjusting net income (loss) attributable to common stockholders to reallocate undistributed earnings based on the potential impact of dilutive securities, including outstanding stock options and outstanding warrants. Diluted net income (loss) per share attributable to common stockholders is computed by dividing the diluted net income (loss) attributable to common stockholders by the weighted average number of common shares outstanding for the period, including potential dilutive common shares assuming the dilutive effect of outstanding stock options and outstanding warrants. For periods in which the Company has reported net losses, diluted net loss per share attributable to common stockholders is the same as basic net loss per share attributable to common stockholders, since dilutive common shares are not assumed to have been issued if their effect is anti-dilutive.

## **Segment Data**

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company is a biotechnology company focused on discovering and developing small molecule drugs in the infectious disease field. Revenue is generated exclusively from transactions occurring in the United States, and all assets are held in the United States.

## **Comprehensive Income (Loss)**

Comprehensive income (loss) includes net income (loss) as well as other changes in stockholders' equity (deficit) that result from transactions and economic events other than those with stockholders. The Company's only element of other comprehensive income (loss) is unrealized gains and losses on available-for-sale marketable securities.

## **Recently Issued and Adopted Accounting Pronouncements**

In May, 2014, the Financial Accounting Standards Board (the "FASB") issued ASU No. 2014-09, *Revenue from Contracts with Customers* (Topic 606), which supersedes all existing revenue recognition requirements, including most industry-specific guidance. The new standard requires a company to recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration that the company expects to receive for those goods or services. The new standard will be effective for the Company on October 1, 2017. The Company is currently evaluating the potential impact that Topic 606 may have on its financial position and results of operations.

Other accounting standards that have been issued or proposed by the FASB or other standards-setting bodies that do not require adoption until a future date are not expected to have a material impact on the Company's financial statements upon adoption.

**Table of Contents****3. Fair Value of Financial Assets and Liabilities**

The following tables present information about the Company's financial assets and liabilities that were subject to fair value measurement on a recurring basis as of September 30, 2014 and 2013 and indicate the fair value hierarchy of the valuation inputs utilized to determine such fair value:

<b>Fair Value Measurements as of September 30, 2014 Using:</b>				
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Assets:</b>				
Cash equivalents	\$ 30,239	\$	\$	\$ 30,239
Commercial paper		7,499		7,499
Corporate bonds		88,056		88,056
U.S. Agency bonds		5,513		5,513
	\$ 30,239	\$ 101,068	\$	\$ 131,307
<b>Liabilities:</b>				
Warrant liability	\$	\$	\$ 1,584	\$ 1,584
Series 1 nonconvertible preferred stock			202	202
	\$	\$	\$ 1,786	\$ 1,786

<b>Fair Value Measurements as of September 30, 2013 Using:</b>				
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Assets:</b>				
Cash equivalents	\$ 7,517	\$	\$	\$ 7,517
U.S. Treasury notes	1,005			1,005
Commercial paper		10,596		10,596
Corporate bonds		84,755		84,755
U.S. Agency bonds		3,518		3,518
Certificate of deposit		3,450		3,450
	\$ 8,522	\$ 102,319	\$	\$ 110,841
<b>Liabilities:</b>				
Warrant liability	\$	\$	\$ 1,620	\$ 1,620
	\$	\$	\$ 1,620	\$ 1,620

Cash equivalents at September 30, 2014 and 2013 consist of money market funds.

During the years ended September 30, 2014, 2013 and 2012, there were no transfers between Level 1, Level 2 and Level 3.

As of September 30, 2014 and 2013, respectively, the warrant liability was comprised of the value of the warrants for the purchase of Series 1 nonconvertible preferred stock measured at fair value. At September 30, 2014 the outstanding Series 1 nonconvertible preferred stock was also measured at fair value. The fair value of both of these instruments was based on significant inputs not observable in the market, which represented a Level 3 measurement within the fair value hierarchy. The Company utilized a probability weighted valuation model which takes into consideration various outcomes that may require the Company to transfer assets upon exercise. The fair value of outstanding warrants to purchase our Series 1 nonconvertible preferred stock was \$1,584 and \$1,620 at September 30, 2014 and 2013, respectively. The fair value of Series 1 nonconvertible preferred stock was \$202 as of September 30, 2014. Changes in the fair value of the warrant liability and Series 1 nonconvertible preferred stock are recognized in the consolidated statements of operations.

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The recurring Level 3 fair value measurements of the Company's warrant liability and Series 1 nonconvertible preferred stock using probability-weighted discounted cash flow include the following significant unobservable inputs:

**September 30, 2014**

	<b>Unobservable Input</b>	<b>Range (Weighted Average)</b>
Warrant liability and Series 1 nonconvertible preferred stock	Probabilities of payout	10% - 90%
	Periods in which payout is expected to occur	2015 - 2016
	Discount rate	4.25%

**September 30, 2013**

	<b>Unobservable Input</b>	<b>Range (Weighted Average)</b>
Warrant liability	Probabilities of payout	25% - 90%
	Periods in which payout is expected to occur	2014 - 2018
	Discount rate	4.25%

The following table provides a rollforward of the aggregate fair values of the Company's warrants for the purchase of Series E preferred stock and Series 1 nonconvertible preferred stock and the outstanding Series 1 nonconvertible preferred stock for which fair value is determined by Level 3 inputs:

<b>Balance, September 30, 2011</b>	1,993
Warrants expired	(8)
Increase in fair value	19
Decrease in fair value	(3)
<b>Balance, September 30, 2012</b>	2,001
Warrants expired	(20)
Decrease in fair value	(361)
<b>Balance, September 30, 2013</b>	1,620
Warrants exercised	(206)
Series 1 nonconvertible preferred stock issued	206
Increase in fair value	166
<b>Balance, September 30, 2014</b>	\$ 1,786

**4. Marketable Securities**

As of September 30, 2014 and 2013, the fair value of available-for-sale marketable securities by type of security was as follows:

	<b>September 30, 2014</b>			
	<b>Amortized Cost</b>	<b>Gross Unrealized Gains</b>	<b>Gross Unrealized Losses</b>	<b>Fair Value</b>
Commercial paper	\$ 7,499	\$	\$	\$ 7,499
Corporate bonds	88,156	14	(114)	88,056
U.S. Agency bonds	5,513			5,513
	\$ 101,168	\$ 14	\$ (114)	\$ 101,068