

## Enanta Pharmaceuticals

### Meaningful Upside from Hep C; Initiating at OW

We are initiating coverage of Enanta Pharma (ENTA) with an Overweight rating and \$25 December 2013 PT. Enanta is a clinical-stage biotech focused on the development of small molecule drugs for infectious diseases, most notably hepatitis C (hep C). The lead program is ABT-450 being developed with AbbVie (covered by JPM analyst Chris Schott) for the treatment of hep C. ABT-450 is currently in multiple phase 3 trials with data expected in 4Q13 and regulatory filings (US and EU) expected in mid-2014. While hep C is a very competitive therapeutic category, our recent physician survey indicates meaningful market share for ABT-450-containing regimens. Prior phase 2 data for ABT-450 regimens support a high probability of phase 3 success and a peak WW opportunity of almost \$3B, driving peak royalties to Enanta of ~\$175M with no associated costs. While Enanta has other assets in its pipeline, they are in preclinical or phase 1 testing; our \$25 Dec 2013 target is based only on value from ABT-450. Given significant economics from ABT-450 and the scarcity of all-oral, IFN-free phase 3 agents in hep C, we're initiating coverage with an Overweight rating.

- **Key value driver is ABT-450 in hep C.** In phase 2 studies, the combination of ABT-450/r (with ABT-267 (NS5A) + ABT-333 (non-nuc) +RBV) resulted in impressive viral cure rates of 97.5% in genotype 1, treatment naïve hep C patients. Importantly, this regimen offers many advantages over the standard of care including higher cure rates (>95% vs. >70%), shorter duration of therapy (3 months vs. 6-12 months) and much better tolerability without interferon. This profile should be confirmed in the ongoing phase 3 studies, in our view.
- **Physician survey data support meaningful market share in hep C.** We expect Gilead to initially gain a majority share (~70%) of the all-oral, IFN-free market for hep C, with AbbVie garnering the remaining ~30% share. This is still a meaningful opportunity for AbbVie (and Enanta) considering the significant increase in treated patients and market expansion. Indeed, our model assumes a 60-70% increase in treated hep C patients by 2015, though data from our recent physician survey forecasts a ~130% increase in treated patients.
- **Overweight rating; \$25 Dec 2013 PT.** Our valuation is based on a SOTP analysis including royalties on ABT-450 (85% probability of success and a 15% discount rate). Taken together, the value of ABT-450 (\$20/share) and net cash (\$5/share), results in a \$25/share price target

#### Enanta Pharmaceuticals (ENTA;ENTA US)

FYE Sep	2011A	2012A	2013E	2014E	2015E
EPS Reported (\$)					
Q1 (Dec)	-	-	0.13A	-	-
Q2 (Mar)	-	-	0.22	-	-
Q3 (Jun)	-	-	(0.34)	-	-
Q4 (Sep)	-	-	(0.34)	-	-
FY	0.04	0.10	(0.33)	1.39	4.74

Source: Company data, Bloomberg, J.P. Morgan estimates.

### Initiation Overweight

ENTA, ENTA US

Price: \$19.68

Price Target: \$25.00

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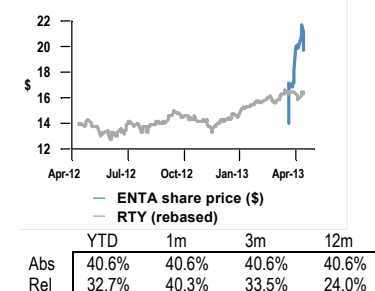
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#### Price Performance



#### Company Data

Price (\$)	19.68
Date Of Price	12 Apr 13
52-week Range (\$)	22.17-14.00
Market Cap (\$ mn)	331.34
Fiscal Year End	Sep
Shares O/S (mn)	17
Price Target (\$)	25.00
Price Target End Date	31-Dec-13

#### See page 23 for analyst certification and important disclosures.

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**Enanta  
Pharmaceuticals  
(ENTA)  
Overweight**

## Investment Thesis

### Key value driver is ABT-450 in hep C

ABT-450 is a protease inhibitor being developed for the treatment of hep C, in collaboration with AbbVie. ABT-450 is currently in multiple phase 3 trials (data in 4Q13) as part of a three DAA combination with ABT-267 (NS5A) and ABT-333 (non-nuc). In the phase 2 AVIATOR study, this three DAA combination with RBV resulted in a 97.5% SVR12 (ITT) with a clean safety profile. Importantly, this regimen offers several key advantages over the standard of care including high cure rates (high 90% range vs. ~70%), shorter duration to therapy (3 mo vs. 6-12 mo) and improved tolerability (no rash/anemia and regimen is IFN free). There are a lot of companies focused on the hep C market, but ABT-450 could achieve a meaningful share based on high cure rates and good tolerability. We project peak WW total regimen sales of nearly \$3B with Enanta receiving peak royalties of ~\$175M.

### ABT-450 competitive profile

Hep C is a hot therapeutic market, and development of next-generation all-oral IFN-free regimens is very competitive. We currently view Gilead as the market leader given robust phase 2 data in GT1 for sofosbuvir (GS-7977; nuc) + ledipasvir (GS-5885; NS5A), which demonstrated 100% SVR. While we view the efficacy and safety profiles of the Enanta/AbbVie and Gilead regimens as largely comparable, we see some disadvantages for the ABT-450 regimen, namely pill burden (4-6 pills vs. 1 pill), the need for ritonavir boosting and potential requirement for RBV. However, despite these disadvantages, our survey indicates physicians attribute 20-30% share to the ABT-450 regimen relative to Gilead's regimen. Of note, these differentiating factors could potentially be eliminated by the next-generation protease inhibitors, but little information is available for the agent with phase 1 data expected in 4Q13. While the ABT-450 regimen could face competition from other regimens in the future, we believe the current profile leaves room for improvement.

### Meaningful market opportunity for ABT450

We expect Gilead to gain a majority share (~70%) of the all-oral, IFN-free market for hep C, with AbbVie garnering the remaining ~30% share. This is still a meaningful opportunity considering a significant increase in market expansion. For example, our model assumes a 60-70% increase in the number of treated hep C patients by 2015, though data from our recent physician survey show an expected ~130% increase in treated patients. We forecast WW 2015-2017 ABT-450 regimen sales of \$753M, \$2.17B and \$2.56B, respectively. Of note, this compares with Chris Schott's forecast (who covers AbbVie) of \$600M, \$1.75B and \$2.5B, respectively.

### Partnerships reduce risk and provide funding

Enanta is currently developing ABT-450 (phase 3) and EDP-239 (phase 1) for the treatment of hep C in collaboration with AbbVie and Novartis (covered by JPM analyst Alexandra Hauber), respectively. These opportunities maximize the potential for success as hep C requires combination therapy and spreads the risks of clinical development. Additionally, these partnerships provide meaningful economics in the form of milestones (\$112M and \$45M already received). Furthermore, AbbVie and Novartis bear the costs of further clinical development.

## Risks to Rating and Price Target

### **Clinical risk**

Predicting the outcome of late-stage clinical trials is very difficult. As such, ABT-450 is currently in multiple phase 3 trials that may fail to demonstrate a similar outcome to phase 2 studies from both an efficacy or safety perspective. Thus, ABT-450's ability to demonstrate a meaningful benefit in hep C is critical to ENTA shares and a key source of clinical risk.

### **Regulatory risk**

Assuming ABT-450 is successful in phase 3 trials in hep C, the next step would be regulatory approval. Even if ABT-450 demonstrates a clinical benefit, there is no assurance that US or EU regulators will approve the drug. Thus, ABT-450 could face difficulties obtaining approval from the FDA or EMEA.

### **Commercial risk**

Enanta has no marketed products. For ABT-450, the company will rely on partner AbbVie to market the drug in hep C. This market is very competitive with multiple products approved and in development. As such, even though ABT-450 has a competitive profile it could fail to gain meaningful market share.

### **Financial risk**

Following completion of its initial public offering, Enanta has ~\$120M in cash on hand. While the protease inhibitor and NS5A programs are funded entirely by partners AbbVie and Novartis and pre-commercial milestones are expected, royalty revenues are not expected until 2015. In the meantime, the company continues to advance its early-stage pipeline. As such, Enanta may choose to raise additional capital, which could dilute current shareholders.

### **Legal risk**

Enanta relies on patents to protect its business. For ABT-450, issued and pending applications in the US expire between 2023 and 2031. Importantly, pending ABT-450 composition and use claims are expected to provide protection to at least 2029, assuming these patents are issued. An inability to defend these patents could substantially limit the commercial opportunities.

## Company Description

Enanta is a clinical-stage biotechnology company focused on the discovery and development of small molecule therapeutics for infectious disease. The company has no marketed products, but has 5 compounds currently under development for the treatment of hepatitis C (hep C). The most advanced of which is ABT-450 currently in phase 3 trials by AbbVie, while the remaining compounds are in phase 1 or preclinical testing. The company is also developing EDP-788, an antibiotic for MRSA currently in preclinical testing.

## Background and Pipeline

Enanta was founded in 1995 and is focused on the discovery and development of small molecule drugs for infectious diseases through a robust chemistry-driven approach. The company is developing several direct acting antivirals (DAAs) for the treatment of hep C. Significant advances in the treatment of hep C suggest that potent combination therapy could be the most effective approach to achieving high cure rates and in the absence of injected interferon. To that end, the company is developing five agents against various validated hep C targets. Furthermore, Enanta is collaborating with both AbbVie and Novartis in hep C – which will enable greater unique drug combinations well beyond what Enanta could test on its own. Additionally, Enanta is also developing an antibiotic for the treatment of drug-resistant bacteria such as MSRA.

The pipeline consists of six drugs in development (see Table 1). The most advanced is ABT-450, a protease inhibitor for hep C. ABT-450 is being developed in collaboration with AbbVie, and it is the anchor drug in various DAA regimens of three agents. In phase 2 combination trials, cure rates were very robust supporting advancement into multiple phase 3 trials. Enanta is also developing a next-generation protease inhibitor under the collaboration with AbbVie that is in phase 1 testing. EDP-239, an NS5A inhibitor for hep C, is being developed in collaboration with Novartis and is also in phase 1 testing. Additionally, several cyclophilin inhibitor and several nucleotide inhibitor candidates are currently in the early stages of development. Beyond hep C, Enanta is developing EDP-788, a bicyclolide antibiotic, currently in preclinical development for the treatment of drug-resistant bacteria such as MSRA.

Table 1: Enanta Pipeline Overview

Product	Indication	Partner	Preclinical	PhI	PhII	PhIII	Marketed
ABT-450 (Protease Inhibitor)	Hep C	AbbVie					
EDP-239 (NS5A inhibitor)	Hep C	Novartis					
Next Generation Protease Inhibitor	Hep C	AbbVie					
Nucleotide Polymerase Inhibitor	Hep C	None					
Cyclophilin Inhibitor	Hep C	None					
EDP-788 (Bicyclolide antibiotic)	MRSA	None					

Source: Company reports.

## Catalyst and Milestones

The most important upcoming catalyst for Enanta is data from various phase 3 combination trials of ABT-450. The initial data from these studies are expected

beginning in 4Q13, but likely not before the hep C–focused AASLD meeting in November (1-5, Washington, DC). Regulatory filings on a worldwide basis are expected in mid-2014 followed by a launch in early 2015. Additionally, data from phase 1 trials of EDP-239 and the next-generation protease inhibitor could be available in 2H13. We expect data from these phase 1 trials to provide an early glimpse into how these drugs stack up relative to other agents in development. Notably, our Enanta model doesn't account for better economics from AbbVie should ABT-450 or the next-gen protease move to a two DAA regimen from a three DAA regimen. In addition, EDP-239 is not accounted for in our operating model or valuation.

Table 2: Enanta Catalysts

Est Timing	Drug	Indication	Event	Significance
4Q13	ABT-450	Hep C	Data from phase 3 trials	High
2H13	EDP-239	Hep C	Data from a phase 1 trial	Medium
2H13	Next-gen PI	Hep C	Data from phase 1 trial	Medium
2H13	Cyclophilin Inhibitor	Hep C	Select a preclinical candidate	Low
2H13	Nucleotide inhibitor	Hep C	Select a preclinical candidate	Low
1H14	EDP-788	MRSA	Initiate a phase 1 trial	Low
Mid 2014	ABT-450	Hep C	US and EU Regulatory filing	High
Early 2015	ABT-450	Hep C	US and EU Launch	High

Source: J.P. Morgan estimates; company data.

## AbbVie Collaboration

Enanta entered into a collaboration agreement with Abbott Laboratories in November 2006 that was later assigned to AbbVie in January 2013. Under the collaboration, AbbVie is responsible for funding all research and development as well as obtaining regulatory approval and commercialization of ABT-450 and next-generation products. Enanta has received a total of \$112M in milestones consisting of an upfront payment of \$57M (2006), \$40M for successful completion of phase 2a studies (2010) and \$15M for the start of phase 3 studies (2012). Looking forward, Enanta is also eligible to receive an additional \$195M in pre-commercial milestones as well as an additional \$80M for each follow-on protease inhibitor. Importantly, Enanta receives tiered royalties ranging from low-double digits up to 20%, or up to the high teens on a blended basis on net AbbVie sales attributable to PI's (either ABT-450 or the next-gen protease) under the collaboration. This is the biggest longer-term driver of the Enanta P&L. For the next-generation protease, Enanta has an option to fund 40% of US development and commercialization costs in exchange for 40% of the profits attributable to the protease inhibitor, though the company waived this right for ABT-450.

## Novartis Collaboration

Enanta also entered into a collaboration agreement with Novartis in February 2012, related to EDP-239, an NS5A inhibitor, as well as next-generation products. Similar to the AbbVie collaboration, Novartis is responsible for funding all costs of further development, obtaining regulatory approval and commercialization. Enanta received \$34M in upfront milestone payments (March 2012) and \$11M for start of phase 1 (January 2013). Enanta is eligible to receive up to an additional \$395M in milestones as well as tiered royalties from low-double digits up to high teens on a blended basis

on Novartis's net sales attributable to the NS5A inhibitor under the collaboration. Importantly, Enanta has also retained co-detail rights in the US.

## ABT-450 for Hep C

ABT-450 is a protease inhibitor being developed for the treatment of hep C, in collaboration with AbbVie. ABT-450 is currently in multiple phase 3 trials as part of a three DAA combination with ABT-267 (NS5A) and ABT-333 (non-nuc). In the phase 2 AVIATOR study, this three DAA combination together with RBV resulted in a 97.5% SVR12 (on an ITT basis) with a clean safety profile. Importantly, this regimen offers several key advantages over the current standard of care including increased cure rates (high 90% range vs. ~70%), shorter duration to therapy (3 months vs. 6-12 months) and improved tolerability (no rash/anemia). Perhaps the biggest commercial attribute is that the regimen is IFN-free, which has long been associated with poor tolerability. Of note, development of next-generation all-oral IFN-free hep C regimens is competitive, and we expect Gilead to be the market leader, initially with GS-7977 + RBV (2014) and followed by GS-7977 + GS-5885 (2015). That said, we believe there is room for ABT-450 and project peak WW total regimen sales of nearly \$3B of which Enanta receives a royalty. In our view, Enanta is poised to benefit from 1) a significant increase in the number of treated hep C patients coming into therapy with the launch of all-oral, IFN therapies, and 2) a transition by AbbVie from a three DAA regimen to a two DAA regimen provided that ABT-450 (or the next-gen protease inhibitor) is part of either regimen.

### Hep C: A Brief Overview

Hepatitis C is the result of a chronic infection that leads to inflammation of the liver. Over time, this inflammation can lead to liver disease that includes cirrhosis, liver failure and even liver cancer. Indeed, disease progression is slow and often takes many years to manifest with infected individuals showing no symptoms for 10 to 20 years. As such, diagnosis rates remain low with many infected individuals not seeking treatment or, in some cases, not even aware of their chronic infection.

An estimated 170M people worldwide are believed to be infected with HCV. In the US, approximately 3.2M people are chronically infected with an estimated incidence of 17,000 each year. The majority of the hep C market is genotype 1 (GT1), which accounts for ~75% of infections in the US and Europe with the remaining ~25% being GT2 and GT3. Recently, improvements in treatment have been made with the availability of first-generation protease inhibitors including Vertex's Incivek and Merck's Victrelis. These agents have improved cure rates (about 70% in GT1-infected patients) and reduced treatment durations, but tolerability remains a meaningful barrier to treatment largely due to the use of IFN. IFN use causes severe flu-like symptoms and can increase the discontinuation of a regimen or create a barrier to seek a cure in the first place. As such, significant room for improvement remains, but competition is intense with many biotech and pharmaceutical companies in the race for an all-oral, IFN-free regimen.

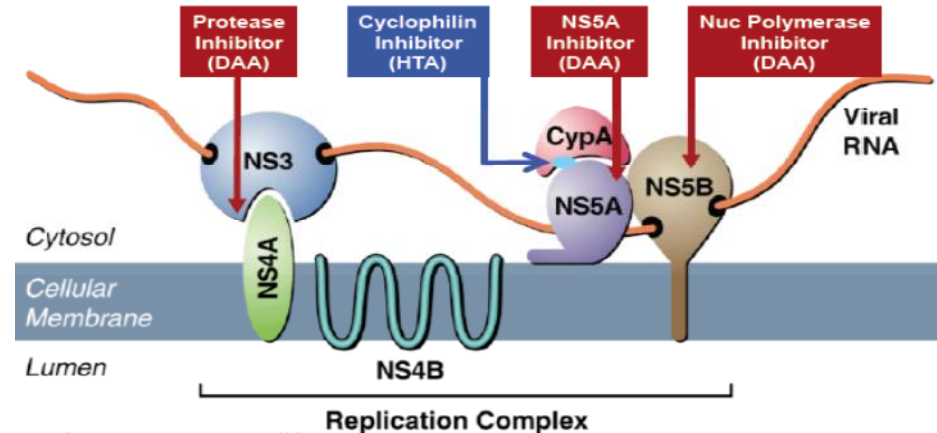
### ABT-450: Mechanism of Action

ABT-450 is an NS3 protease inhibitor that disrupts the normal viral life cycle. Of note, ABT-450 requires pharmacologic boosting with low doses of the drug ritonavir.



As the hep C virus replicates, translated proteins are processed into active/functional proteins. The NS3 protease plays a critical role in protein processing (see Figure 1). As such, inhibiting the protease prevents the formation and assembly of these active proteins and thus prevents replication and viability of the virus. Vertex's Incivek and Merck's Victrelis are both first-generation NS3 protease inhibitors launched in 2011.

Figure 1: Hep C Viral Replication



Source: Company reports.

### Phase 3 Program Under Way

In November 2012, Enanta's partner AbbVie announced the initiation of a comprehensive phase 3 program for ABT-450-containing regimens in GT1 hep C. This program consists of seven trials (see Table 3), six of which will be used for initial registration with 2,200 patients (excludes TURQUOISE I). Of note, the three DAA regimen will include a co-formulation of ABT450/r + ABT-267 as a two-tablet regimen taken once a day in combination with ABT-333 as a single pill taken twice daily (4 pills in total +/- RBV). SAPHIRE I and SAPHIRE II will evaluate 3 DAA + RBV in GT1a/b naïve and experienced patients, respectively (12-week duration). PEARL II, PEARL III and PEARL IV will evaluate 3 DAA +/- RBV in naïve GT1a/b, and experienced GT1b (12-week duration). TURQUOISE I and TURQUOISE II will evaluate 3 DAA + RBV in HCV/HIV co-infected patients and cirrhotics (12- and 24-week duration). Data from these studies are expected to be available beginning in 4Q13 with regulatory filings in mid-2014.



Table 3: Summary of Phase 3 Trials

Study Name	Regimen	Patient Population	Treatment Duration
<b>SAPPHIRE I</b>	450/r/267 + 333 + RBV	Naïve genotype 1a and 1b patients (n=600)	12 weeks (placebo-controlled)
<b>SAPPHIRE II</b>	450/r/267 + 333 + RBV	Experienced genotype 1a and 1b patients (n=400)	12 weeks (placebo-controlled)
<b>PEARL II</b>	450/r/267 + 333 w/w out RBV	Experienced genotype 1b patients (n=200)	12 weeks
<b>PEARL III</b>	450/r/267 + 333 w/w out RBV	Naïve genotype 1b patients (n=400)	12 weeks
<b>PEARL IV</b>	450/r/267 + 333 w/w out RBV	Naïve genotype 1a patients (n=300)	12 weeks
<b>TURQUOISE I<sup>(3)</sup></b>	450/r/267 + 333 + RBV	Naïve and experienced genotype 1a and 1b patients, co-infected with HIV (n=300)	Ranging 12 and 24 weeks
<b>TURQUOISE II</b>	450/r/267 + 333 + RBV	Compensated cirrhotic naïve and experienced genotype 1a and 1b patients (n=300)	Ranging 12 and 24 weeks

Notes:

(1) 450/r/267 is a co-formulation of ABT-450, a protease inhibitor from the Enanta/AbbVie collaboration that is dosed with the boosting agent, ritonavir (r), and ABT-267, an NS5A inhibitor from AbbVie. 333 is ABT-333, a non-nucleoside polymerase inhibitor from AbbVie. RBV refers to ribavirin.

(2) Patients who are treatment “naïve” have not previously been treated with HCV therapies. Patients who are treatment “experienced” have been treated previously with interferon and ribavirin. Patients infected with genotype 1a virus are generally more difficult to treat than genotype 1b patients.

(3) AbbVie has announced that the Turquoise I study will not be part of the initial registration package.

Source: Company reports.

## Review of Phase 2 AVIATOR Data

At the 2012 AASLD meeting, detailed phase 2 data from the AVIATOR study were presented (see Table 4). This study evaluated different combinations of ABT-450/r (PI), ABT-267 (NS5A) and ABT-333 (non-nuc) for various durations (8wk, 12wk and 24wks) in GT1 naïve and null responders. The combination of ABT-450/r + ABT-267 + ABT-333 + RBV (triple combo DAA with RBV) for 12wks in GT1 naïve patients and null responders resulted in SVR12 of 97.5% (GT1a 96% and GT1b 100%) and 93.3% (GT1a 89% and GT1b 100%) on an ITT basis, respectively. Additionally, the triple combo DAA regimen without RBV for 12 wks in GT1 naïve patients reached SVR12 of 87.3%. The triple combo DAA regimen with RBV in GT1 naïve patients for a shorter 8wk duration resulted in SVR12 of 87.5%. For the dual DAA combos with RBV SVR12 of 85.4% (ABT-450r + ABT-333 + RBV) and 89.9% (ABT-450r + ABT-267 + RBV) were achieved. This study indicates that the highest SVR rates are achieved with a triple DAA combo with RBV for a 12wk duration of treatment in GT1 naïves. This set of data supported the advance of this triple combo into phase 3 testing. Overall, the data were quite strong and de-risking when assessing the probability of success in the phase 3 program.

Table 4: Phase 2 AVIATOR Response Data

Duration	Treatment-naïve Patients					Null Responders	
	8 wks	12 wks				12 wks	
Regimen	450/r	450/r	450/r	450/r	450/r	450/r	450/r
	267		267	267	267	267	267
	333	333	333	333	333	333	333
	RBV	RBV	RBV		RBV	RBV	RBV
Number dosed	80	41	79	79	79	45	45
Breakthroughs (N)	0	1	1	1	0	0	3
Relapses (N)	9	4	5	5	1	5	0
Lost to follow-up or withdrawn consent prior to SVR <sub>12</sub>	1	1	2	4	1	0	0
SVR <sub>12</sub> rate (ITT) <sup>a</sup> , % (n/N)	87.5% (70/80)	85.4% (35/41)	89.9% (71/79)	87.3% (69/79)	97.5% (77/79)	88.9% (40/45)	93.3% (42/45)
SVR <sub>12</sub> rate (Observed data) <sup>b</sup> , % (n/N)	88.6% (70/79)	87.5% (35/40)	92.2% (71/77)	92.0% (69/75)	98.7% (77/78)	88.9% (40/45)	93.3% (42/45)

<sup>a</sup>ITT: Intent-to-treat population, includes all patients who received at least one dose of study drug

<sup>b</sup>Observed data: Excludes patients with values missing for reasons other than virologic failure or discontinuation due to AEs

Source: AASLD 2012.

All the combinations were found to be safe and well tolerated. The most common adverse events (AEs) included fatigue, headache, insomnia and nausea (see Table 5). Less than 1% of patients discontinued due to AEs. No drug-related SAEs occurred except one patient developed arthralgia in a 24-week arm that was considered possibly drug related. Transient asymptomatic elevations of indirect bilirubin were observed. However, this is not surprising given the known impact of ABT-450 on the bilirubin transporter OATP1B1.

Table 5: Phase 2 AVIATOR Safety Data (>5% in any arm)

Duration	Treatment-naïve Patients					Null Responders	
	8 wks	12 wks				12 wks	
Regimen	450/r	450/r	450/r	450/r	450/r	450/r	450/r
	267		267	267	267	267	267
	333	333	333	333	333	333	333
	RBV	RBV	RBV		RBV	RBV	RBV
Number dosed	80	41	79	79	79	45	45
Any AE, n (%)	20 (25.0)	12 (29.3)	14 (17.7)	10 (12.7)	19 (24.1)	7 (15.6)	11 (24.4)
Fatigue	7 (8.8)	2 (4.9)	3 (3.8)	3 (3.8)	2 (2.5)	1 (2.2)	3 (6.7)
Headache	3 (3.8)	4 (9.8)	3 (3.8)	0	1 (1.3)	0	1 (2.2)
Insomnia	2 (2.5)	1 (2.4)	1 (1.3)	0	4 (5.1)	1 (2.2)	0
Nausea	1 (1.3)	2 (4.9)	1 (1.3)	0	2 (2.5)	0	1 (2.2)
Bilirubin increase	0	0	1 (1.3)	0	2 (2.5)	0	0

Source: AASLD 2012.

## Competitive Profile

Given the phase 2 data (described above from AVIATOR), clearly ABT-450 represents a significant advancement over existing therapies. Recall, the current standard of care for GT1 hep C is either Vertex's Incivek or Merck's Victrelis in combination with IFN + RBV. These regimens have to be dosed 3x daily with IFN + RBV use for 6 months or in some cases 12 months with viral cure rates of ~70%. In addition to the poor tolerability of IFN and RBV, Incivek causes rash and Victrelis causes anemia. In contrast, the 3DAA combination has multiple advantages including improved cure rates (high 90% range), shorter duration to therapy (3 months) and improved tolerability with no rash or anemia and in an IFN-free regimen. (We note JPM analyst Chris Schott covers Merck.)

Competition to develop improved next-generation regimens is perhaps one of the most intense therapeutic landscapes in biotech/pharma, and we view Enanta/AbbVie and Gilead as the market leaders. Of note, both are currently in phase 3 trials with regulatory filing expected in 2014. Gilead's leading regimen is sofosbuvir (GS-7977; nuc) + ledipasvir (GS-5885; NS5A). In a phase 2 ELECTRON study, this combination with RBV demonstrated cure rates of 100% and a clean safety profile in GT1 naïve patients with 3 months of therapy. Overall, comparing the phase 2 results of AVIATOR with those of ELECTRON, the efficacy and safety profiles are largely comparable, in our view (see Table 6).

Table 6: Enanta/AbbVie vs. Gilead

Company	Enanta / AbbVie	Gilead
Study	AVIATOR	ELECTRON
Trial Subpopulation	Naïve GT1 (n=79)	Naïve GT1 (n=25)
Regimen	ABT-450/r + ABT-267 + ABT-333 + RBV	GS-7977 + GS-5885 + RBV
Class	PI + NS5A + Non-Nuc	Nuc + NS5A
Duration	3 months	3 months
SVR	97.50%	100%
Safety	Clean	Clean
Current Phase of Development	Phase 3	Phase 3

Source: Company reports.

However, a closer comparison of these regimens reveals some slight differences. The ABT-450 regimen requires boosting with ritonavir, which may lead to drug/drug interactions in a larger commercial setting. Additionally, the ABT-450 regimen requires three DAAs in comparison to only two for Gilead. The Enanta/AbbVie regimen in phase 3 (co-formulated) requires 4 pills/day (ABT-450/r + ABT-267 = 2 pill 1x daily and ABT-333 = 1 pill 2x daily) assuming RBV is excluded. Of note, Gilead has also co-formulated GS-7977 + GS-5885 into 1 pill/day, which is being used in the ongoing phase 3 trials, similarly assuming RBV is excluded. As such, we view the need for ritonavir boosting and greater pill burden as a slight disadvantage for the Enanta/AbbVie regimen relative to Gilead's regimen.

Additionally, the Enanta/AbbVie regimen may require RBV and is being tested in phase 3 with or without RBV. Similarly, Gilead's regimen is also being tested with and without RBV in phase 3. However, data from a related phase 2 study indicates

that RBV is not needed when a nuc + NS5A are combined (GS-7977 + daclatasvir). While we believe Gilead's regimen is unlikely to require RBV, this needs to be confirmed in phase 3. At this point it remains unclear if the Enanta/AbbVie regimen will require RBV given available data, and we expect phase 3 data to shed light on this question.

In the future, these differences in pill burden could potentially be eliminated. Under the AbbVie collaboration a next-generation PI is currently in phase 1. Although little is known about this agent, it was designed to enable once-daily dosing without ritonavir boosting and was designed to be co-formulated with AbbVie's next-generation NS5A inhibitor. Of note, data from the ongoing phase 1 trial of the next generation PI are expected in 2013.

### Physician Perspective

We recently conducted a hep C survey of 60 high-volume physicians specializing in hepatology, infectious disease and gastroenterology (all physicians responded; survey was in the form of a questionnaire emailed as a web link). Overall, physicians were split on the impact of pill burden on adoption, with 48% indicating it is not meaningful (see Figure 2).

*NO "I think pts will gladly take more pills if it means a) an interferon-free therapy, b) higher chance of success, and c) shorter duration of treatment."*

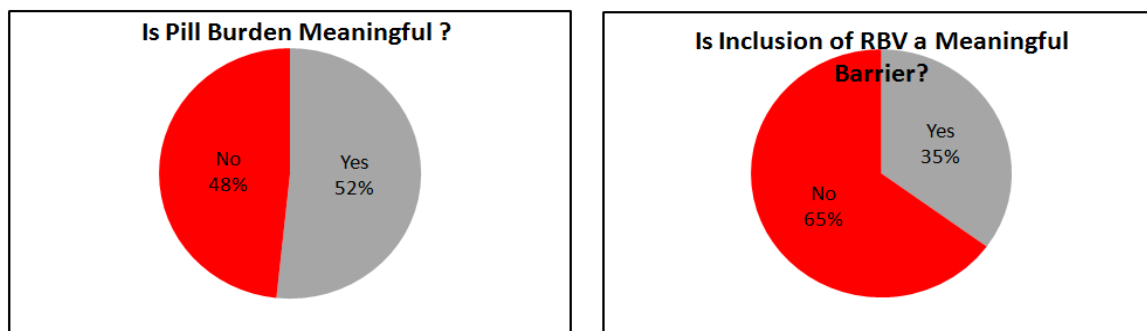
*YES "Pill burden creates inconvenience which leads to non-compliance and treatment failure"*

Additionally, the exclusion of RBV from an all-oral regimen didn't appear to be as urgent as the elimination of IFN when it comes to adoption. Indeed, 65% of physicians indicated that the inclusion of RBV in the regimen was NOT a meaningful barrier to adoption (see Figure 2).

*NO "I understand that many, if not most of the current trials show that the addition of ribavirin drastically improve SVR rates. I have basically accepted that this will likely be part of my future regimens"*

*NO "RBV can be managed with little problem"*

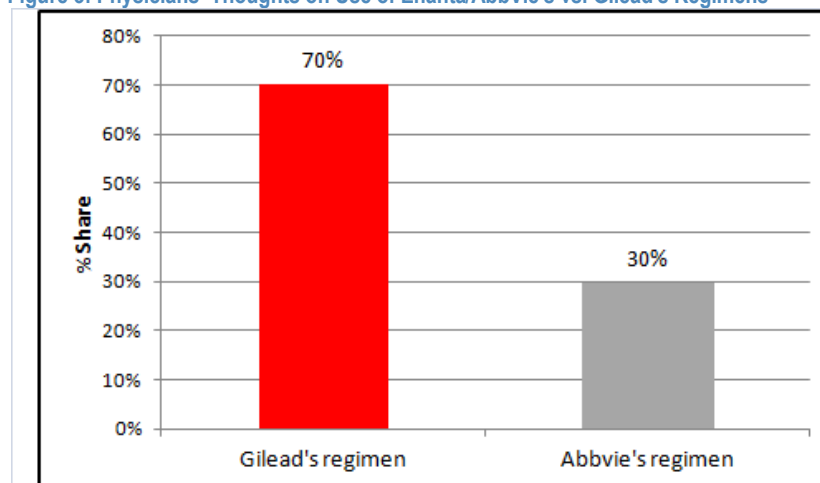
Figure 2: Physicians' Thoughts on Pill Burden and Use of RBV



Source: J.P. Morgan.

Despite commentary from physicians that pill burden and the inclusion of RBV are not meaningful when it comes to adoption, there appears to be a preference for Gilead's regimen over Enanta/AbbVie's regimen. Indeed, assuming both regimens required RBV results in >90% SVR with clean safety profiles (difference is pill burden; 4-6/day Enanta/AbbVie vs. 1/day Gilead), 30% of physicians would prefer the Enanta/AbbVie regimen (see Figure 3). Of note, assuming Gilead's regimen did not require RBV, the preference for the Enanta/AbbVie regimen declines slightly to 18%.

Figure 3: Physicians' Thoughts on Use of Enanta/AbbVie's vs. Gilead's Regimens



Source: J.P. Morgan.

Note: These survey comments have been reproduced in their original form and have not been edited. Survey comments should not be attributed to J.P. Morgan and are not representative of its views

### ABT-450 Market Opportunity

Our model currently includes the opportunity for ABT-450 in both the US and EU with no value outside of these regions. In the US, we assume a prevalence of 3.2M (2010) and estimate that ~123K hep C patients are diagnosed and treated in 2013 (see Table 7). We conservatively assume this increases to 212K (or +72% compared with 140% indicated by our survey) as warehoused patients enter treatment in 2015. We assume ABT-450 revenues in GT1 only, beginning in early 2015 with an annual price of \$45K. We assume peak penetration of 20- 37%.

In Europe, we assume a prevalence of 4.0M (2010) and estimate that ~70K hep C patients are diagnosed and treated in 2013 (see Table 8). We assume this increases to 113K in 2015. We similarly assume ABT-450 revenues in GT1 only, beginning in early 2015 with an annual price of \$45K. We assume peak penetration of 28-33%.

Overall, we project 2015-17 WW ABT-450 sales of \$753M, \$2.2B and \$2.6B, respectively. We estimate peak WW sales of nearly \$3B in 2018. We project Enanta receives royalties (low-double digits to high teens) on the portion of net revenues attributed to ABT-450 (1/3 of total ABT-450 regimen sales), which translates into \$30M, \$101M and \$153M in 2015-17, respectively.

Table 7: ABT-450 US Market Model

US HCV Market Model	2010A	2011A	2012A	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Total HCV Population	3,200	3,128	3,032	2,923	2,800	2,628	2,416	2,213	2,020	1,843	1,691
GT 1, 2, 3 Treated patients	72	96	109	123	173	212	203	194	177	152	127

	2010A	2011A	2012A	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>Genotype 1 Tmt Naïve Patients (000)</b>	<b>35</b>	<b>47</b>	<b>53</b>	<b>60</b>	<b>84</b>	<b>103</b>	<b>99</b>	<b>94</b>	<b>86</b>	<b>74</b>	<b>62</b>
Share: Peg-IFN / RBV alone	100%	38%	20%	15%	10%	7%	3%	2%	3%	2%	5%
Share: Incivek + P/R		48%	55%	25%	10%						
Share: Victrelis + P/R		15%	15%	10%	2%						
Share: TMC-435 / BI-201335 / Dac / Vertex / Achillion / Idenix							2%	8%	10%	15%	25%
Share: GS-7977 containing regimens					24%	35%	55%	60%	65%	55%	40%
<b>Share: ABT450 containing regimens</b>					<b>0%</b>	<b>7%</b>	<b>20%</b>	<b>21%</b>	<b>19%</b>	<b>19%</b>	<b>17%</b>
Share: Warehoused / Not Treated / Product X		0%	10%	50%	54%	50%	15%	5%	3%	8%	15%
Total ABT-450 Patients					-	7,528	19,295	19,355	16,196	14,083	10,201
Monthly Price (\$)					15,000	15,000	15,000	15,000	15,000	15,000	15,000
Duration of therapy (months)					3	3	3	3	3	3	3
<b>ABT-450 Sales (\$M)</b>					<b>\$0</b>	<b>\$339</b>	<b>\$868</b>	<b>\$871</b>	<b>\$729</b>	<b>\$634</b>	<b>\$459</b>

	2010A	2011A	2012A	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>Genotype 1 Tmt Experienced Patients (000)</b>	<b>22</b>	<b>29</b>	<b>33</b>	<b>37</b>	<b>52</b>	<b>63</b>	<b>61</b>	<b>58</b>	<b>53</b>	<b>46</b>	<b>38</b>
Share: Peg-IFN / RBV alone	100%	58%	35%	30%	13%	15%	18%	13%	6%	3%	6%
<b>Share: Incivek + P/R</b>		<b>31%</b>	<b>40%</b>	<b>15%</b>	<b>10%</b>						
Share: Victrelis + P/R		2%	5%	10%	2%						
Share: TMC-435 / BI-201335 / Dac / Vertex / Achillion / Idenix							2%	5%	7%	12%	17%
Share: GS-7977 containing regimens						5%	25%	45%	50%	45%	35%
<b>Share: ABT450 containing regimens</b>						<b>11%</b>	<b>19%</b>	<b>29%</b>	<b>37%</b>	<b>35%</b>	<b>35%</b>
Share: Warehoused / Not Treated / Product X		10%	20%	45%	75%	70%	40%	13%	2%	5%	7%
Total ABT-450 Patients					-	6,981	11,569	16,849	19,616	15,965	13,316
Monthly Price (\$)					15,000	15,000	15,000	15,000	15,000	15,000	15,000
Duration of therapy (months)					3	3	3	3	3	3	3
<b>ABT-450 Sales (\$M)</b>					<b>\$0</b>	<b>\$314</b>	<b>\$521</b>	<b>\$758</b>	<b>\$883</b>	<b>\$718</b>	<b>\$599</b>

<b>US ABT-450 Sales (\$M)</b>	<b>\$0</b>	<b>\$653</b>	<b>\$1,389</b>	<b>\$1,629</b>	<b>\$1,612</b>	<b>\$1,352</b>	<b>\$1,058</b>
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Source: J.P. Morgan estimates.

Table 8: ABT-450 EU Market Model

EU HCV Market Model	2010A	2011A	2012A	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Total HCV Population	4,000	3,960	3,916	3,850	3,780	3,685	3,571	3,454	3,340	3,222	3,109
<b>GT 1, 2, 3 Treated patients</b>	<b>40</b>	<b>44</b>	<b>66</b>	<b>70</b>	<b>95</b>	<b>113</b>	<b>118</b>	<b>114</b>	<b>118</b>	<b>113</b>	<b>106</b>

<b>Genotype 1 Tmt Naïve Patients (000)</b>	<b>20</b>	<b>21</b>	<b>32</b>	<b>34</b>	<b>46</b>	<b>55</b>	<b>57</b>	<b>56</b>	<b>57</b>	<b>55</b>	<b>52</b>
Share: Peg-IFN / RBV alone	100%	100%	25%	5%	5%	2%	5%	2%	3%	5%	3%
<b>Share: Incivek + P/R</b>			<b>55%</b>	<b>60%</b>	<b>25%</b>	<b>17%</b>					
Share: Victrelis + P/R			10%	10%	5%	2%					
Share: TMC-435 / BI-201335 / Dac / Vertex / Achillion / Idenix								5%	10%	20%	25%
Share: GS-7977 containing regimens						15%	20%	30%	40%	35%	40%
<b>Share: ABT450 containing regimens</b>						<b>4%</b>	<b>22%</b>	<b>23%</b>	<b>33%</b>	<b>25%</b>	<b>20%</b>
Share: Warehoused / Not Treated / Product X		0%	10%	25%	65%	60%	50%	38%	13%	15%	13%
Total ABT-450 Patients					-	2,213	12,640	12,779	18,625	13,823	10,460
Monthly Price (\$)					15,000	15,000	15,000	15,000	15,000	15,000	15,000
Duration of therapy (months)					3	3	3	3	3	3	3
<b>ABT-450 Sales (\$M)</b>					-	<b>100</b>	<b>\$569</b>	<b>\$575</b>	<b>\$838</b>	<b>\$622</b>	<b>\$471</b>

<b>Genotype 1 Tmt Experienced Patients (000)</b>	<b>12</b>	<b>13</b>	<b>20</b>	<b>21</b>	<b>29</b>	<b>34</b>	<b>35</b>	<b>34</b>	<b>35</b>	<b>34</b>	<b>32</b>
Share: Peg-IFN / RBV alone	100%	100%	35%	10%	8%	5%	15%	13%	13%	5%	0%
<b>Share: Incivek + P/R</b>		<b>0%</b>	<b>40%</b>	<b>55%</b>	<b>25%</b>	<b>15%</b>					
Share: Victrelis + P/R		0%	5%	10%	2%	0%					
Share: TMC-435 / BI-201335 / Dac / Vertex / Achillion / Idenix								2%	5%	15%	25%
Share: GS-7977 containing regimens						5%	10%	20%	30%	30%	25%
<b>Share: ABT450 containing regimens</b>							<b>13%</b>	<b>23%</b>	<b>28%</b>	<b>26%</b>	<b>20%</b>
Share: Warehoused / Not Treated / Product X			20%	25%	65%	75%	70%	50%	30%	25%	25%
Total ABT-450 Patients					-	-	4,596	7,864	9,875	8,846	6,342
Monthly Price (\$)					15,000	15,000	15,000	15,000	15,000	15,000	15,000
Duration of therapy (months)					3	3	3	3	3	3	3
<b>ABT-450 Sales (\$M)</b>					-	-	<b>\$207</b>	<b>\$354</b>	<b>\$444</b>	<b>\$398</b>	<b>\$285</b>

<b>EU ABT-450 Sales (\$M)</b>	<b>\$0</b>	<b>\$100</b>	<b>\$776</b>	<b>\$929</b>	<b>\$1,282</b>	<b>\$1,020</b>	<b>\$756</b>
<b>WW ABT-450 Sales (\$M)</b>	<b>\$0</b>	<b>\$753</b>	<b>\$2,165</b>	<b>\$2,558</b>	<b>\$2,894</b>	<b>\$2,372</b>	<b>\$1,814</b>
<b>WW ABT450 royalties (\$M)</b>		<b>\$30</b>	<b>\$101</b>	<b>\$153</b>	<b>\$174</b>	<b>\$142</b>	<b>\$109</b>
% royalty		12%	14%	18%	18%	18%	18%

Source: J.P. Morgan estimates.



## EDP-239 in Hep C

EDP-239 is an NS5A inhibitor for the treatment of hep C being developed in collaboration with Novartis. A phase 1 trial was initiated in November 2012, and data could be available in 2H13. In preclinical studies, EDP-239 demonstrated the potential for low once-daily dosing, good activity against resistant mutations and picomolar replicon activity (see Table 9). Although not directly comparable, the picomolar activity is consistent with that of other competitive NS5As. We believe EDP-239 has potential, but currently exclude it from our model given the early stage of development.

Table 9: EDP-239 Replicon Activity

Company	Drug	GT1a EC50* pM	GT1b EC50* pM
Enanta	EDP-239	31	7
Achillion	ACH-3102	26	5
BMS	BMS-790052	50	9
Gilead	GS-5885	41	5
GSK	GSK2336805	44	8
Idenix	IDX-719	6.2	2.4
Presidio	PPI-461	210	10

- Published values using different assays
- Values not directly comparable, but provide general guidance as to the high potencies seen in the NS5A inhibitor class

Source: Company reports.

## Financial Outlook

### Income Statement

We project FY2013-16 total revenues of \$39M, \$65M, \$160M, \$156M and \$154M, respectively (see Table 11). We anticipate a launch of ABT-450 in 2015 in both the US and Europe with FY2015-17 WW sales of \$753M, \$2.2B and \$2.6B, respectively. Enanta will receive FY2015-17 royalties of \$30M, \$101M and \$154M, respectively.

We expect R&D expense to increase with advancement of the wholly owned early-stage pipeline. Of note, development and commercialization of ABT-450 and EDP-239 are fully funded by AbbVie and Novartis, respectively. We also expect only modest increases in SG&A as the expense of the ABT-450 launch will be fully

covered by AbbVie. We project FY2013-FY2017 GAAP EPS of (\$0.33), \$1.39, \$4.74, \$3.48 and \$2.32, respectively.

## Balance Sheet and Cash Flow

At the end of December 2012 (FY1Q), Enanta had \$52.9M in cash and equivalents (includes \$15M milestone from AbbVie for start of phase 3). Including, the \$11M milestone from Novartis for start of phase 1 and the net proceeds of \$56M from the IPO completed in March 2013, we estimate Enanta currently has ~\$120M in cash and equivalents (see Table 12 and Table 13). We conservatively assume additional equity could be raised in 2014.

## Valuation

### Sum of the Parts

Our December 2013 price target of \$25 for ENTA is based on our sum-of-the-parts NPV analysis including ABT-450 only (see Table 10). We project ABT-450 sales to 2029, consistent with IP protection, assume no terminal value and a 15% discount rate. We further assume an 85% probability of success for ABT-450 in Phase 3. This is consistent with that of prior phase 3 hep C studies. We derive a value of \$20/share for ABT-450. This take in combination with net cash of \$5/share supports our December 2013 PT of \$25.

Table 10: Enanta Sum of the Parts Valuation

NPV	Total	/Share
WW ABT450 royalty + milestones	\$399	\$20
Current cash	\$96	
LT Debt	\$0	
<b>Net Cash (\$ in millions)</b>	<b>\$96</b>	<b>\$5</b>
<b>Total (\$ in millions)</b>	<b>\$495</b>	<b>\$25</b>

Source: J.P. Morgan estimates.

## Management

### Jay R. Luly, Ph.D.

*President, CEO and Director*

In July 2003, Dr. Luly joined Enanta. Prior to that, he was an Entrepreneur in Residence at Oxford Biosciences Partners since 2002. Before joining Oxford, Dr Luly held positions as the SVP of Research and Development Operation and SVP of Discovery Strategy and Operations at Millennium Pharmaceuticals following the merger with LeukoSite, Inc., where he served as SVP of Drug Discovery and Preclinical Development. From 1983 to 1997 Dr. Luly held a number of drug discovery positions at Abbott Laboratories. Dr. Luly received a Ph.D. in Synthetic Organic Chemistry from the University of California, Berkeley and a B.S. from the University of Illinois, Urbana/Champaign. He serves on the Board of Trustees for the Boston Biomedical Research Institute.

**Yat Sun Or, Ph.D.**

*SVP Research and Development and CSO*

In November 1999, Dr. Or joined Enanta. From 1985 to 1999, Dr. OR held key leadership positions at Abbott Laboratories, where he received two Chairman's Awards for his research that led to the discovery and development of numerous Immunosuppressant and antibacterial drugs. Prior to Abbott, Dr. Or was a member of the cardiovascular drug discovery team at Schering-Plough. Dr. Or received a Ph.D. in Organic Chemistry from the University of Chicago and completed post-doctoral fellowships at Ohio State University and Indiana University.

**Paul J. Mellett**

*SVP Finance and Administration and CFO*

In September 2003, Mr. Mellett joined Enanta. From 2001 to 2003, he served as SVP and CFO of Essential Therapeutics. Prior to that, Mr. Mellett was CFO and VP of Administration at GelTex Pharmaceuticals, Inc., which was acquired by Genzyme in December 2000. From 1994 to 1997 he served as CFO for Marshall Contractors, a construction management firm specializing in the pharmaceutical, biotechnology and semiconductor industries, which was acquired by Fluor Corporation in 1996. From 1977 to 1994, Mr. Mellett was employed with Deloitte & Touche LLP, a public accounting firm, and was promoted to audit partner in 1989. Mr. Mellett received a B.S. in Business Administration from Boston College.

## Financial Statements

Table 11: Enanta Income Statement (2010A - 2017E)

(\$ in millions except per share data)	2010A	2011A	2012A	2013E	2014E	2015E	2016E	2017E
ABT450 royalties	0.0	0.0	0.0	0.0	0.0	30.1	101.0	153.5
Collaboration and milestone revenue	22.8	41.9	41.7	38.90	65.0	130.0	55.0	0.0
<b>Total Revenues</b>	<b>22.8</b>	<b>41.9</b>	<b>41.7</b>	<b>38.9</b>	<b>65.0</b>	<b>160.1</b>	<b>156.0</b>	<b>153.5</b>
<b>Operating Expenses</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Cost of sales	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Research and development	9.7	11.5	15.1	19.0	25.0	30.0	32.5	35.0
Sales, general and administrative	6.1	5.0	5.3	7.2	12.0	15.0	20.0	25.0
<b>Total Operating expenses</b>	<b>15.8</b>	<b>16.6</b>	<b>20.4</b>	<b>26.2</b>	<b>37.0</b>	<b>45.0</b>	<b>52.5</b>	<b>60.0</b>
<b>Operating Income</b>	<b>6.9</b>	<b>25.3</b>	<b>21.3</b>	<b>12.7</b>	<b>28.0</b>	<b>115.1</b>	<b>103.5</b>	<b>93.5</b>
Interest income	0.0	0.1	0.1	0.4	0.5	1.0	1.0	1.0
Interest expense	0.0	(3.2)	0.0	-.1	0.0	0.0	0.0	0.0
Other income (expense)	0.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Other Income	0.8	(2.0)	0.1	0.4	0.5	1.0	1.0	1.0
Pretax Income	7.7	23.3	21.4	13.0	28.5	116.1	104.5	94.5
Income tax (benefit)	(0.2)	0.0	0.0	0.0	0.0	0.0	15.7	33.1
<b>Net Income</b>	<b>7.9</b>	<b>23.3</b>	<b>21.4</b>	<b>13.0</b>	<b>28.5</b>	<b>116.1</b>	<b>88.8</b>	<b>61.4</b>
Accretion of redeemable convertible preferred stock to redemption value	(5.5)	(5.5)	(5.4)	-1.3	0.0	0.0	0.0	0.0
Net income allocable to participating securities	(2.2)	(15.4)	(14.7)	-18.8	0.0	0.0	0.0	0.0
Net income allocable to common stockholders	0.3	2.5	1.4	-7.1	28.5	116.1	88.8	61.4
<b>Diluted GAAP EPS</b>	<b>0.04</b>	<b>0.04</b>	<b>0.10</b>	<b>(0.33)</b>	<b>1.39</b>	<b>4.74</b>	<b>3.48</b>	<b>2.32</b>
Fully diluted shares outstanding	6.7	58.3	14.1	18.2	20.5	24.5	25.5	26.5

Source: Company reports and J.P. Morgan estimates.

Table 12: Enanta Balance Sheet (2010A – 2016E)

(\$ in millions except per share data)	2010A	2011A	2012A	2013E	2014E	2015E	2016E
<b>Assets</b>							
Cash and cash equivalents	0.5	6.8	10.5	62.0	164.9	281.1	369.9
Short-term marketable securities	0.0	16.5	33.3	33.3	33.3	33.3	33.3
Total Cash	0.5	23.3	43.8	95.3	198.2	314.3	403.1
Accounts receivable	0.0	0.3	1.0	1.0	1.0	1.0	1.0
Unbilled receivables	0.0	0.0	1.9	0.0	0.0	0.0	0.0
Restricted cash	0.0	1.1	0.0	0.0	0.0	0.0	0.0
Prepaid expenses and other current assets	0.1	0.4	0.6	0.0	0.0	0.0	0.0
<b>Total Current Assets</b>	<b>0.6</b>	<b>25.1</b>	<b>47.3</b>	<b>96.3</b>	<b>199.2</b>	<b>315.4</b>	<b>404.2</b>
Property and equipment, net	0.6	0.5	0.6	0.7	0.8	0.9	0.9
Long-term marketable securities	0.0	0.0	1.7	1.7	1.7	1.7	1.7
Restricted cash	1.1	0.4	0.4	0.4	0.4	0.4	0.4
Other assets	0.1	0.0	2.2	2.2	2.2	2.2	2.2
<b>Total Long Term Assets</b>	<b>1.8</b>	<b>1.0</b>	<b>4.9</b>	<b>4.9</b>	<b>5.0</b>	<b>5.1</b>	<b>5.2</b>
<b>Total Assets</b>	<b>2.4</b>	<b>26.1</b>	<b>52.2</b>	<b>101.3</b>	<b>204.3</b>	<b>320.4</b>	<b>409.4</b>
<b>Liabilities and Equity</b>							
Accounts payable	0.5	0.6	1.9	1.9	1.9	1.9	1.9
Accrued expenses	3.1	1.6	3.9	3.9	3.9	3.9	3.9
Deferred revenue	0.4	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Current Liabilities</b>	<b>4.0</b>	<b>2.1</b>	<b>5.7</b>	<b>5.7</b>	<b>5.7</b>	<b>5.7</b>	<b>5.7</b>
Warrant liability	0.0	2.0	2.0	2.0	2.0	2.0	2.0
Other long-term liabilities	0.0	2.0	2.5	2.5	2.5	2.5	2.5
<b>Total Long Term Liabilities</b>	<b>0.0</b>	<b>2.0</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>
<b>Total Liabilities</b>	<b>4.0</b>	<b>4.1</b>	<b>8.2</b>	<b>8.2</b>	<b>8.2</b>	<b>8.2</b>	<b>8.2</b>
Total Shareholders' Equity	(1.6)	22.0	43.9	93.0	196.0	312.2	401.1
<b>Total Liabilities and Equity</b>	<b>2.4</b>	<b>26.1</b>	<b>52.2</b>	<b>101.3</b>	<b>204.3</b>	<b>320.4</b>	<b>409.4</b>

Source: Company reports and J.P. Morgan estimates.

Table 13: Enanta Cash Flows (2010A – 2016E)

(\$ in millions except per share data)	2010A	2011A	2012A	2013E	2014E	2015E	2016E
<b>Cash Flows from Operating Activities:</b>							
Net Income	7.9	23.3	21.4	(0.5)	28.5	116.1	88.8
<b>Adjustments:</b>							
Depreciation and Amortization	0.6	0.5	0.2	0.2	0.2	0.2	0.2
<b>Changes in operating assets and liabilities:</b>							
Accounts receivable	(0.0)	(0.3)	(0.8)	0.0	0.0	0.0	0.0
Unbilled receivables	0.0	0.0	(1.9)	0.0	0.0	0.0	0.0
Prepaid expenses and other current assets	0.1	(0.3)	(0.2)	0.0	0.0	0.0	0.0
Accounts payable	0.2	0.1	0.8	0.0	0.0	0.0	0.0
Accrued expenses	1.8	(1.1)	1.7	0.0	0.0	0.0	0.0
Other long-term liabilities	(0.3)	(0.4)	0.5	0.0	0.0	0.0	0.0
Deferred revenue	(20.0)	(0.4)	0.0	0.0	0.0	0.0	0.0
Other assets	(0.1)	(0.0)	0.0	0.0	0.0	0.0	0.0
Net change in Working Capital	(18.4)	(2.4)	0.1	0.1	0.1	0.1	0.1
<b>Net Cash From Operations</b>	<b>(10.2)</b>	<b>24.0</b>	<b>22.6</b>	<b>(0.2)</b>	<b>28.8</b>	<b>116.4</b>	<b>89.1</b>
<b>Cash Flows from Investing Activities:</b>							
Purchases of property and equipment	(0.0)	(0.4)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)
Proceeds from sales of property and equipment	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Purchases of marketable securities	(0.6)	(33.6)	(47.7)	0.0	0.0	0.0	0.0
Sales of marketable securities	2.3	16.8	15.8	0.0	0.0	0.0	0.0
<b>Net Cash from Investing</b>	<b>1.7</b>	<b>(17.7)</b>	<b>(18.0)</b>	<b>(0.3)</b>	<b>(0.3)</b>	<b>(0.3)</b>	<b>(0.3)</b>
<b>Cash Flows from Financing Activities:</b>							
Proceeds from issuance of convertible notes	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Repayment of convertible notes	0.0	(2.0)	0.0	0.0	0.0	0.0	0.0
Payments of capital lease obligations	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0
Proceeds from exercise of stock options	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Equity financing	0.0	0.0	0.0	52.0	74.4	0.0	0.0
Payments of initial public offering costs	0.0	0.0	(1.1)	0.0	0.0	0.0	0.0
<b>Net Cash from Financing</b>	<b>0.0</b>	<b>0.0</b>	<b>(0.9)</b>	<b>52.0</b>	<b>74.4</b>	<b>0.0</b>	<b>0.0</b>

Source: Company reports and J.P. Morgan estimates.

## Enanta Pharmaceuticals: Summary of Financials

Income Statement - Annual	FY12A	FY13E	FY14E	FY15E	Income Statement - Quarterly	1Q13A	2Q13E	3Q13E	4Q13E
Revenues	42	39	65	160	Revenues	28A	11	0	0
Cost of products sold	0	0	0	0	Cost of products sold	0A	0	0	0
Gross profit	-	-	-	-	Gross profit	-	-	-	-
SG&A	(5)	(7)	(12)	(15)	SG&A	(1)A	(2)	(2)	(2)
R&D	(15)	(19)	(25)	(30)	R&D	(5)A	(5)	(5)	(5)
Operating income	21	13	28	115	Operating income	22A	4	(7)	(7)
EBITDA	21	13	28	115	EBITDA	22A	4	(7)	(7)
Net interest (income) / expense	0	0	1	1	Net interest (income) / expense	(0)A	0	0	0
Other income / (expense)	-	-	-	-	Other income / (expense)	-	-	-	-
Income taxes	0	0	0	0	Income taxes	-	-	-	-
Net income - GAAP	1	(7)	29	116	Net income - GAAP	2A	4	(7)	(7)
Net income - recurring	1	(7)	29	116	Net income - recurring	2A	4	(7)	(7)
Diluted shares outstanding	14	22	21	25	Diluted shares outstanding	14A	20	20	20
EPS - excluding non-recurring	0.10	(0.33)	1.39	4.74	EPS - excluding non-recurring	0.13A	0.22	(0.34)	(0.34)
EPS - recurring	0.10	(0.33)	1.39	4.74	EPS - recurring	0.13A	0.22	(0.34)	(0.34)
Balance Sheet and Cash Flow Data	FY12A	FY13E	FY14E	FY15E	Ratio Analysis	FY12A	FY13E	FY14E	FY15E
Cash and cash equivalents	11	76	178	295	Sales growth	(0.4%)	(6.8%)	67.3%	146.3%
Accounts receivable	1	1	1	1	EBIT growth	(15.9%)	(40.5%)	121.2%	311.1%
Inventories	-	-	-	-	EPS growth - recurring	131.2%	(437.5%)	(522.8%)	240.9%
Other current assets	2	0	0	0	Gross margin	-	-	-	-
Current assets	47	110	213	329	EBIT margin	51.0%	32.6%	43.1%	71.9%
PP&E	1	1	1	1	EBITDA margin	51.0%	32.6%	43.1%	71.9%
Total assets	52	115	218	334	Tax rate	0.0%	0.0%	0.0%	0.0%
Total debt	-	-	-	-	Net margin	3.3%	(18.2%)	43.8%	72.5%
Total liabilities	8	8	8	8	Net Debt / EBITDA	-	-	-	-
Shareholders' equity	44	107	210	326	Net Debt / Capital (book)	-	-	-	-
Net income (including charges)	21	13	29	116	Return on assets (ROA)	3.5%	(8.5%)	17.1%	42.1%
D&A	0	0	0	0	Return on equity (ROE)	4.2%	(9.4%)	18.0%	43.4%
Change in working capital	0	0	0	0	Enterprise value / sales	7.9	6.8	2.5	0.3
Other	0	0	0	0	Enterprise value / EBITDA	15.4	20.8	5.7	0.4
Cash flow from operations	23	13	29	116	Free cash flow yield	8.0%	3.0%	6.9%	23.9%
Capex	(0)	(0)	(0)	(0)					
Free cash flow	22	13	28	115					
Cash flow from investing activities	(18)	(0)	(0)	(0)					
Cash flow from financing activities	(1)	52	74	0					
Dividends	-	-	-	-					
Dividend yield	-	-	-	-					

Source: Company reports and J.P. Morgan estimates.

Note: \$ in millions (except per-share data). Fiscal year ends Sep



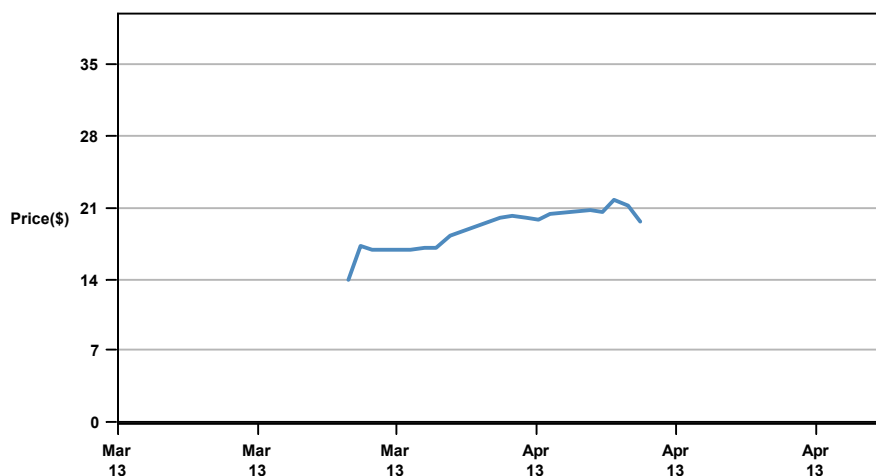
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Enanta Pharmaceuticals (ENTA, ENTA US) Price Chart



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