AEGIS CAPITAL CORP

Biotechnology
Difei Yang, Ph.D.
646-502-2436
dyang@aegiscap.com

Company Update / Estimates Change

November 9, 2016

Conatus Pharmaceuticals Inc.

Rating: Buy

Conatus reports in-line, announces ENCORE-PH trial initiation

Key Metrics

CNAT - NYSE	$1.56
Pricing Date	Nov 8 2016
Price Target	$7.00
52-Week Range	$4.05 - $1.40
Shares Outstanding (mm)	22.1
Market Capitalization (mm)	$34.5
3-Mo Average Daily Volume	529,343
Book Value/Share	$1.26
Price/Book	1.2x

EPS FY: December

	2015A	Prior 2016E	Curr. 2016E	Prior 2017E	Curr. 2017E
1Q-Mar	(0.38)	--	(0.35)A	(0.31)E	(0.47)E
2Q-Jun	(0.31)	--	(0.30)A	(0.38)E	(0.45)E
3Q-Sep	(0.31)	--	(0.31)A	(0.38)E	(0.46)E
4Q-Dec	(0.30)	(0.30)E	(0.32)E	(0.37)E	(0.45)E
FY	(1.30)	(1.26)E	(1.28)E	(1.45)E	(1.83)E
P/E	NM		NM		NM

REVENUE

	2015A	Prior 2016E	Curr. 2016E	Prior 2017E	Curr. 2017E
1Q-Mar	0.0	--	0.0A	--	0.0E
2Q-Jun	0.0	--	0.0A	--	0.0E
3Q-Sep	0.0	--	0.0A	--	0.0E
4Q-Dec	0.0	--	0.0E	--	0.0E
FY	0.0	--	0.0E	--	0.0E

Company Description:

Conatus Pharmaceuticals is a biotechnology company that focuses on the development and commercialization of medicines treating liver disease. Lead compound, Emricasan, is a first in class, orally active caspase protease inhibitor designed to reduce the activity of enzymes that mediate inflammation. The company was founded in 2005 and is headquartered in San Diego, California.

Investment Highlights:

- **In-line EPS for 3Q16.** Conatus reported third quarter earning loss of ($0.31), in-line with street estimates of ($0.34). Still in clinical development stage, the company reported no revenue for the quarter, and as such we focus on Emricasan's progress. Cash on hand as of September 30, 2016 was ~$31 mil, enough to carry the company into the second half of 2017, as R&D costs increase to parallel the multiple clinical trials for Emricasan.
- **ENCORE-PH initiated in November.** The Phase IIb 24-week trial, slated to readout in 2018, initiated in November 2016. The trial will operate in ~90 North American and European sites, enrolling ~240 patients across 3 dosing arms of 5mg/25mg/50mg Emricasan twice daily and a placebo arm. Management stated that the trial will be at least 80% powered to detect the differences between active arms vs. placebo. The primary endpoint for the trial is the change in hepatic venous pressure gradient (HVPG). The secondary end point include responder analysis measured by proportion of patients with a meaningful reduction, defined as a 20% or greater decrease, in HPVG.
- **Multi-prong, FDA backed clinical trial approach.** With guidance from the FDA stating preference towards single etiology trials, Conatus is taking a three prong trial approach: 1) ENCORE-PH was initiated in November 2016; 2) ENCORE-LF is set to begin in 1H17; and 3) ENCORE-XT which are extension studies of ENCORE-PH and ENCORE-LF. ENCORE-PH is a Phase IIb trial targeting patients with early stage liver cirrhosis and severe portal hypertension with HVPG baseline values of 12 mmHg or higher. ENCORE-LF has the potential to be either a Phase IIb or IIb/III trial and will focus on patients with later stage key compensated NASH Cirrhosis.
- **Valuation.** We used DCF to determine our target price. Using our Emricasan forecast for portal hypertension indication, which we believe is the indication with the smallest market potential, we layered the probability of clinical development success rate of 20% and finally applied a 10% discount rate to estimated cash flow to reach our target price of $7.
- **Risks.** Other than typical risks associated with investing in companies in the healthcare industries, such as R&D, regulatory, manufacturing, and commercialization risks, investing in Conatus Pharmaceuticals, Inc. carries several firm-specific risks: Conatus' business is dependent on the success of a single drug candidate, Emricasan, which will require significant additional clinical testing; Developing new drugs are expensive and the resulted capital raise may cause dilution to current shareholders; Conatus is highly dependent on its key personnel; The competition is fierce in developing therapies for treating liver disease and investors should view Conatus as a highly speculative investment.

The Disclosure section may be found on pages 4 - 5 of this report.

- **Abstracts to be presented at The Liver Meeting in November.** Of the four total posters to be presented, two in particular stand out, Posters #2095 and #2097, both of which showed review scores placing them in the top 10 percent of submitted posters, landing them on "presidential posters of distinction" list. Poster #2095 displays promising oral Emricasan Phase II results. Further supporting the study of Emircasan in patients with cirrhosis, the data revealed in poster #2095 displayed results from the Conatus' 6-month Phase II study of oral Emricasan. The study randomized patients with cirrhosis of various etiologies to Emricasan 25 mg vs. placebo for the first half and an open label Emricasan treatment in the second half. The biggest improvement was seen within a subgroup of patients with baseline MELD scores ≥15, where oral Emricasan had a significant treatment effect of -2.8 vs. placebo in MELD scores after 6-months. Poster #2097 displays improvements to hepatic microcirculatory dysfunction from in vivo study. Emricasan was delivered to CCl4-cirrhotic rats, whose portal pressure (PP) was then measured revealing significantly lower PP (12.7±0.6 vs. 15.1±0.3 mmHg; p=0.03) than in rats receiving carboxymethyl cellulose (CMG). The in vivo results, demonstrates the first liver sinusoidal microvascular dysfunction improvements for Emricasan in a pre-clinical model of cirrhosis.
- **Partnership could be a near-term catalyst.** While several recently completed clinical trials on Emricasan have demonstrated encouraging efficacy signals, the data is inconclusive. However, the long development history of Emricasan has shown that the compound is safe and efficacy on biomarker, such as ALT and AST, has been demonstrated. It is conceivable that a pharmaceutical company with more financial resources could become interested in developing the asset. Management has guided that they are open to outlicense WW rights on fibrosis-related indications as well as ex-US cirrhosis indications.

CONATUS PHARMACEUTICALS, INC.: CONSOLIDATED INCOME STATEMENT
(U.S. dollars in thousands, except shares and per share amounts)

Period Ending	2013A	2014A	Q115A	Q215A	Q315A	Q415A	2015A	Q116A	Q216A	Q316A	Q416E	2016E	Q117E	Q217E	Q317E	Q417E	2017E
Emricasan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Revenue	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**					
Cost of Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of net sales																	
Gross Profit	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Operating Expenses																	
Research & Development	(6,947)	(14,909)	(3,884)	(4,070)	(4,103)	(4,241)	(16,298)	(4,698)	(4,246)	(4,825)	(5,000)	(18,770)	(8,000)	(8,000)	(8,000)	(8,000)	(32,000)
Selling General and Administrative	(4,651)	(7,379)	(2,081)	(1,994)	(1,958)	(1,799)	(7,832)	(2,576)	(2,238)	(2,069)	(2,249)	(9,132)	(2,602)	(2,283)	(2,496)	(2,294)	(9,675)
Intangible Amortization	0	0					0					0					
Impairment of Goodwill	0	0					0					0					
Total Operating Expenses	**(11,598)**	**(22,288)**	**(5,965)**	**(6,064)**	**(6,061)**	**(6,040)**	**(24,130)**	**(7,274)**	**(6,485)**	**(6,895)**	**(7,249)**	**(27,902)**	**(10,602)**	**(10,283)**	**(10,496)**	**(10,294)**	**(41,675)**
Operating Income or Loss	**(11,598)**	**(22,288)**	**(5,965)**	**(6,064)**	**(6,061)**	**(6,040)**	**(24,130)**	**(7,274)**	**(6,485)**	**(6,895)**	**(7,249)**	**(27,902)**	**(10,602)**	**(10,283)**	**(10,496)**	**(10,294)**	**(41,675)**
Total Other Income/Expenses Net	(3,577)	(19)	(9)	25	(8)	19	27	27	31	45		103					0
Earnings Before Interest And Taxes	(15,175)	(22,307)	(5,974)	(6,040)	(6,069)	(6,021)	(24,104)	(7,247)	(6,454)	(6,849)	(7,249)	(27,799)	(10,602)	(10,283)	(10,496)	(10,294)	(41,675)
Interest Expense	(440)	(13)	(6)	(18)	2	(17)	(39)	(18)	(18)	(18)		(53)					0
Income Before Tax	(14,735)	(22,320)	(5,980)	(6,057)	(6,067)	(6,038)	(24,142)	(7,265)	(6,471)	(6,867)	(7,249)	(27,851)	(10,602)	(10,283)	(10,496)	(10,294)	(41,675)
Income Tax Expense	0	0	0	0	0	(6)	(6)	(7)	0	0	0	0	0	0	0	0	0
	0																
Gain from extinguishment of convertible preferred stock	11,016																
Net income applicable to participating securities	(5,919)																
Net Income From Continuing Ops	(9,638)	(22,320)	(5,980)	(6,057)	(6,067)	(6,044)	(24,148)	(7,272)	(6,471)	(6,867)	(7,249)	(27,851)	(10,602)	(10,283)	(10,496)	(10,294)	(41,675)
Other Adjustment	0	0															
Net Income	**(4,602)**	**(22,320)**	**(5,980)**	**(6,057)**	**(6,067)**	**(6,044)**	**(24,148)**	**(7,272)**	**(6,471)**	**(6,867)**	**(7,249)**	**(27,851)**	**(10,602)**	**(10,283)**	**(10,496)**	**(10,294)**	**(41,675)**
Preferred Stock And Other Adjustments																	
Net Income Applicable To Common Shares	**(4,602)**	**(22,320)**	**(5,980)**	**(6,057)**	**(6,067)**	**(6,044)**	**(24,148)**	**(7,272)**	**(6,471)**	**(6,867)**	**(7,249)**	**(27,851)**	**(10,602)**	**(10,283)**	**(10,496)**	**(10,294)**	**(41,675)**
Number of Shares Outstanding (in 000)	7,358	15,479	15,582	19,338	19,668	19,834	18,618	20,626	21,542	22,411	22,523	21,775	22,635	22,749	22,862	22,977	22,806
GAAP-EPS	**($0.63)**	**($1.44)**	**($0.38)**	**($0.31)**	**($0.31)**	**($0.30)**	**($1.30)**	**($0.35)**	**($0.30)**	**($0.31)**	**($0.32)**	**($1.28)**	**($0.47)**	**($0.45)**	**($0.46)**	**($0.45)**	**($1.83)**

Source: Aegis Capital Analysis

Required Disclosures

Price Target

$7

Valuation Methodology

We used DCF to determine our target price. Using our Emricasan forecast for portal hypertension indication, which we believe is the indication with the smallest market potential, we layered the probability of clinical development success rate of 20% and finally applied a 10% discount rate to estimated cash flow to reach our target price of $7.

Risk Factors

Risks. Other than typical risks associated with investing in companies in the healthcare industries, such as R&D, regulatory, manufacturing, and commercialization risks, investing in Conatus Pharmaceuticals, Inc. carries several firm-specific risks: Conatus' business is dependent on the success of a single drug candidate, Emricasan, which will require significant additional clinical testing; Developing new drugs are expensive and the resulted capital raise may cause dilution to current shareholders; to fully capitalize Emricasan's commercial value in the case of regulatory approval, the company needs to undergo a number of corporate changes, often risky; Conatus is highly dependent on its key personnel; The competition is fierce in developing therapies for treating liver disease and investors should view Conatus as a highly speculative investment.

For important disclosures go to www.aegiscap.com.

I, Difei Yang, Ph.D., hereby certify that the views expressed in this research report accurately reflect my personal views about the subject companies and their securities. I also certify that I have not been, do not, and will not be receiving direct or indirect compensation in exchange for expressing the specific recommendations in this report.

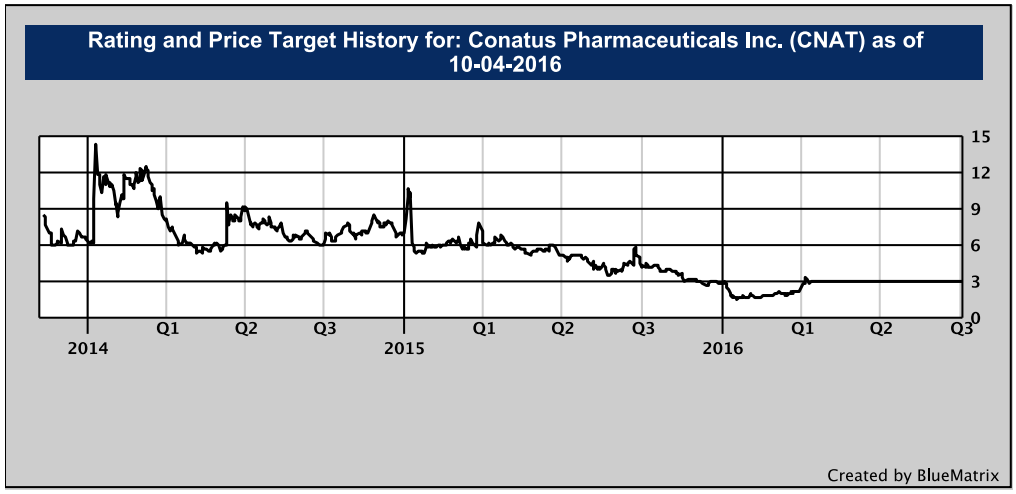
Research analyst compensation is not dependent upon investment banking revenues received by Aegis Capital Corp.

Aegis Capital Corp. intends to seek or expects to receive compensation for investment banking services from the subject company within the next three months.

The firm nor the Research Analyst have any material conflict of interest in which the Research Analyst has a reason to know or knows at the time of publication of this research report.

As of the report date neither Aegis Capital Corp. or its affiliates beneficially own 1% or more of any class of common equity securities of the subject company of this report.

Neither the research analyst who prepared this report or a member of the research analyst's household has a financial position in the debt or equity securities of the subject company.



Rating	Percent	Investment Banking Services/Past 12 Mos. Percent
BUY [BUY]	87.50	42.86
HOLD [HOLD]	12.50	36.36
SELL [SELL]	0.00	0.00

Meaning of Ratings

A) A Buy rating is assigned when we do not believe the stock price adequately reflects a company's prospects over 12-18 months.

B) A Hold rating is assigned when we believe the stock price adequately reflects a company's prospects over 12-18 months.

C) A Sell rating is assigned when we believe the stock price more than adequately reflects a company's prospects over 12-18 months.

Other Disclosures

Other Disclosures The information contained herein is based upon sources believed to be reliable but is not guaranteed by us and is not considered to be all inclusive. It is not to be construed as an offer or the solicitation of an offer to sell or buy the securities mentioned herein. Aegis Capital Corp., its affiliates, shareholders, officers, staff, and/or members of their families, may have a position in the securities mentioned herein, and, before or after your receipt of this report, may make or recommend purchases and/or sales for their own accounts or for the accounts of other customers of the Firm from time to time in the open market or otherwise. Opinions expressed are our present opinions only and are subject to change without notice. Aegis Capital Corp. is under no obligation to provide updates to the opinions or information provided herein. Additional information is available upon request.

The common stock of the subject company in this report may not be suitable for certain investors based on their investment objectives, degree of risk, as well as their financial status.

Aegis Capital Corp.
(212) 813-1010
810 Seventh Avenue, 18th Floor
New York, New York 10019