

Adamas Pharmaceuticals, Inc.

Namzaric NDA Approval Starts Clock for Royalty Revenue Stream as ADS-5102 Phase III Program Continues

- Before the open on Wednesday, December 24, Adamas and partner Forest Laboratories, a subsidiary of Actavis (ACT \$256.88), received approval of their NDA for their Namenda XR/ donepezil fixed-dose combination (MDX-8704), under the commercial name Namzaric for the indication of moderate-to-severe dementia of the Alzheimer's type for the U.S. market. As part of their agreement, Actavis paid Adamas a \$30 million milestone payment and will owe royalties on Namenda XR and MDX-8704 five years after launch, which will begin in 2018 and 2019, respectively. Forest/Actavis is responsible for U.S. commercialization, while Adamas holds rights to ex-U.S. commercialization.
- During 2013, Forest management noted in several public statements the likelihood of a "hard-switch" from Namenda to Namenda XR during 2014. While the switch continues, it does not appear to be as "hard" as we had anticipated. As of the most recent IMS Health monthly prescription data (shown in exhibit 1), Namenda XR holds 31% market share in the total Namenda franchise, up from 16% at year-end 2013. We had always viewed the Namenda/Namenda XR hard-switch as a likely a proxy for the launch of Namzaric. We note that this switch is lagging our eventual double-switch estimate for Namzaric, which we had assumed would peak at 50% of market share for the franchise, including generics. However, this switch has likely been complicated by suits against Actavis and an injunction against the company pulling the immediate release formulation from the market which we discuss below. Namzaric will be available in a 28/10 mg and 14/10 mg (memantine extended release/donepezil) dosage strengths, which include the most common dosage form of donepezil (10 mg) and will bring together in a once-daily pill the most common drug regimen for Alzheimer's patients. While we believe that Namenda XR and Namzaric will face some market share loss during both switches as well as some price erosion (20%), we also view Namzaric as an ideal product to expand into more moderate patients and will aid the franchise through increased compliance, an issue in the Alzheimer's patient population.
- During the third quarter, the Namenda franchise strengthened its intellectual property and protections against generic competition. In early November, Forest and Merz entered into a settlement with Wockhardt Limited, whereby Wockhardt Limited received a non-exclusive license to make and sell its generic versions of Namenda XR starting March 23, 2026, only two months prior to the expiration of the last to expire patents. Although there are several other parties still involved, we believe this settlement, largely in line with the patent expiration date, reinforces the strength of the company's focus on patents related to pharmacokinetics and clinical outcomes. And while we anticipate additional settlements surrounding the IP of the Namenda franchise, we also believe the bolstering of the Namenda franchise IP should bode well for the IP surrounding ADS-5102.

Adamas Pharmaceuticals is a developer of specialty therapeutics for the treatment of disorders affecting the central nervous system. The company is based in Emeryville, California.

Tim Lugo
+1 415 248 2870
tlugo@williamblair.com

Raju Prasad, Ph.D.
+1 312 364 8469
rprasad@williamblair.com

Please consult pages 4-5 of this report for all disclosures. Analyst certification is on page 4. William Blair & Company, L.L.C. does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as a single factor in making an investment decision.

December 26, 2014

Stock Rating: **Outperform**
Company Profile: **Aggressive Growth**
Price Target: \$35.00

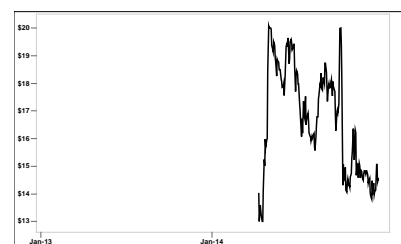
Symbol: ADMS (NASDAQ)
Price: \$16.45 (52-Wk.: \$12-\$22)
Market Value (mil.): \$251
Fiscal Year End: December
Long-Term EPS Growth Rate:
Dividend/Yield: None

	2013A	2014E	2015E
Estimates			
EPS FY	\$5.99	\$-0.78	\$-1.00
CY		\$-0.78	\$-1.00
Sales (mil.)	71	26	36
Valuation			
FY P/E	2.7x	NM	NM
CY P/E		NM	NM

Trading Data (FactSet)	
Shares Outstanding (mil.)	17
Float (mil.)	3
Average Daily Volume	68,710

Financial Data (FactSet)	
Long-Term Debt/Total Capital (MRQ)	0.0
Book Value Per Share (MRQ)	7.8
Return on Equity (TTM)	69.1

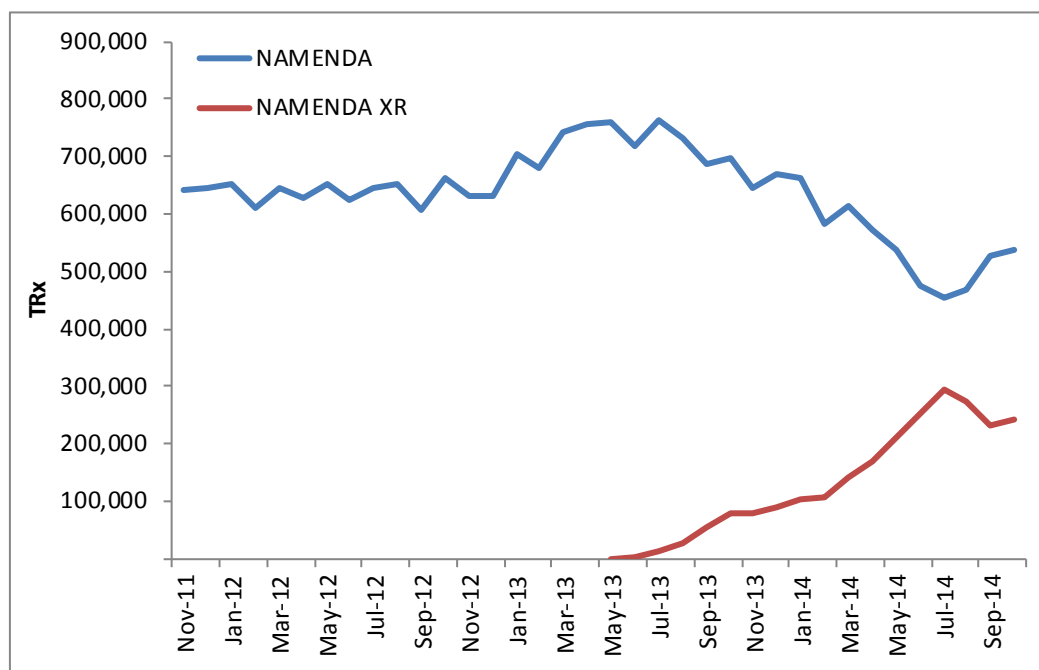
Two-Year Price Performance Chart



Sources: FactSet, William Blair & Company estimates

- In addition to the settlement, the New York Attorney General filed antitrust and state law violations in September against Forest/Actavis on Namenda, claiming that they are pushing patients to newer patented drugs to avoid losses from generic alternatives coming out in 2015. On their third-quarter earnings call, Actavis stated that the New York litigation would be a template for lawsuits ongoing in other states and on December 15, Actavis received a preliminary injunction to continue distribution of Namenda. Although this was a setback for the company in transitioning patients, Actavis state that they will appeal the injunction and stated that the ruling would not impact its ability to continue transitioning patients to Namenda XR and launch a direct-to-consumer advertising campaign on January 5. We will continue to monitor the ongoing litigation between Actavis and New York regarding this issue and a likely drawn-out process.
- Aside from Namzaric, Adamas is in the process of completing its Phase III clinical program for ADS-5102, the company's wholly owned product for levodopa-induced dyskinesia in patients with Parkinson's disease (PD-LID). The company plans for their comprehensive Phase III program to complete enrollment in 2015, with a planned NDA submission in 2016. The company has three ongoing trials for the treatment of PD-LID, including EASE LID 3, a randomized, double-blind study that is expected to enroll 70 patients with PD-LID for treatment with 340 mg of ADS-5102 vs. placebo, dosed once-daily at bedtime for 13 weeks. EASE LID, a Phase III trial with approximately 130 patients that will assess the efficacy of 340 mg of ADS-5102 vs. placebo once daily at bedtime for 26 weeks, and EASE LID 2, a Phase III open-label safety study of ADS-5102 in approximately 200 patients with PD-LID. The primary endpoint of the studies are a reduction in dyskinesia as assessed by the Unified Dyskinesia Rating Scale (UDysRS), with "ON" time (periods without dyskinesia) and "OFF" time (periods when medication is not working well) and Unified Parkinson's Disease Rating Scale (MDS-UPDRS) as secondary endpoints, similar to the company's completed Phase II/III EASED study. We believe the study design of the clinical trials suggests a high probability for success given the company's clinical experience with ADS-5102 to date in combination with the literature for immediate release amantadine for the treatment of PD-LID.
- Overall, the company has identified three specific areas for additional testing of ADS-5102, with up to two studies set to begin in 2015: hyperkinetic movement disorders similar to LID (i.e., chorea associated with Huntington's disease, tardive dyskinesia, and Tourette's syndrome), hypokinetic movement disorders (i.e., walking and fatigue issues associated with multiple sclerosis), and neuropsychiatric disorders (i.e., depression and Alzheimer's disease). We view the broadening of the program as a positive, as literature already suggests potential efficacy of immediate release amantadine in several of these indications.
- We continue to rate shares with an Outperform rating, based on our belief that ADS-5102 is an effective compound that should produce a best-in-class ON/OFF time and reductions in dyskinesia in Parkinson's patients with LID. While data from the Phase II/III EASED study compared ADS-5102 to placebo, we believe the product provides clear benefits over immediate release amantadine given our review of literature available in this setting. We ultimately believe the product will gain a significant penetration into the moderate and severe Parkinson's disease patient population and estimate peak year sales to exceed \$500 million. In addition to LID, we believe ADS-5102 will likely have a role in additional indications such as the movement disorders and/or neurocognitive disorders such as Alzheimer's as well as receiving royalties related to Namenda XR and Namzaric from Actavis/Forest Laboratories.

Exhibit 1
Adamas Pharmaceuticals
Namenda/Namenda XR Total Prescriptions Per Month



Source: IMS Health

Valuation

We derive our \$35 price target from a risk-adjusted net present value (NPV) for the company's royalty stream from both Namenda XR and Namzaric. Adamas's royalty stream for both products will not begin until five years after launch for either product. For our valuation of ADS-5102, we assume the product will launch in 2017, following the company's second Phase III study in 2016 and subsequent filing that year. Given the strength of data to date and the known efficacy of amantadine in Parkinson's disease, we are risk-adjusting the probability of success by 75%. We assume peak sales six years after launch, which we believe is conservative given the familiarity of physicians treating with amantadine. We continue to assign an Outperform rating to shares of Adamas Pharmaceuticals.

Risks

An investment in shares of Adamas Pharmaceuticals involves clinical, regulatory, and financial risks that are typical for developmental-stage biopharmaceutical companies. We estimate that Adamas will be profitable over 2014 and 2015; however, the company might incur losses beginning in 2016 as preparations for the launch of ADS-5102 begin. In addition to the risks associated with ADS-5102 development, there are intellectual property, manufacturing, and competition risks to consider.

IMPORTANT DISCLOSURES

William Blair was a manager or co-manager of a public offering of equity securities for Adamas Pharmaceuticals, Inc. within the prior 12 months.

William Blair is a market maker in the security of Adamas Pharmaceuticals, Inc.

William Blair intends to seek investment banking compensation in the next three months from Adamas Pharmaceuticals, Inc.

Within the past 12 months William Blair has provided or is providing investment banking services to or has an investment services relationship with Adamas Pharmaceuticals, Inc.

Additional information is available upon request.

This report is available in electronic form to registered users via R*Docs™ at www.rdocs.com or www.williamblair.com.

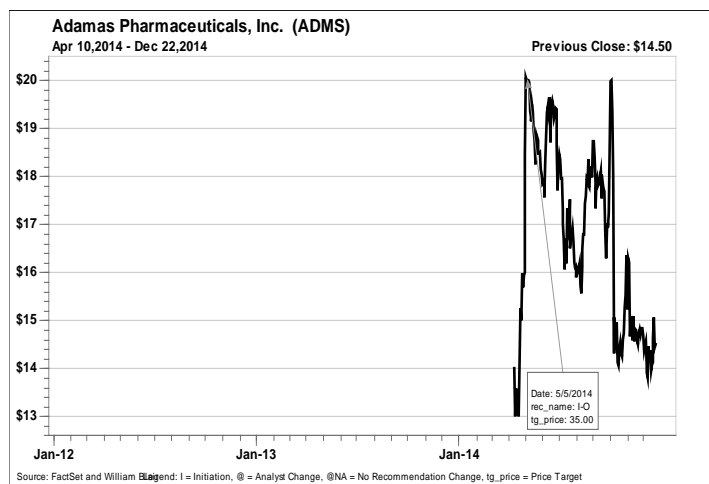
Please contact us at +1 800 621 0687 or consult williamblair.com/Research-and-Insights/Equity-Research/Coverage.aspx for all disclosures.

Tim Lugo attests that 1) all of the views expressed in this research report accurately reflect his/her personal views about any and all of the securities and companies covered by this report, and 2) no part of his/her compensation was, is, or will be related, directly or indirectly, to the specific recommendations or views expressed by him/her in this report. We seek to update our research as appropriate, but various regulations may prohibit us from doing so. Other than certain periodical industry reports, the majority of reports are published at irregular intervals as deemed appropriate by the analyst.

DOW JONES: 18,024.17

S&P 500: 2,082.17

NASDAQ: 4,765.43



Current Rating Distribution (as of 11/30/14)

Coverage Universe	Percent	Inv. Banking Relationships*	Percent
Outperform (Buy)	64	Outperform (Buy)	16
Market Perform (Hold)	31	Market Perform (Hold)	3
Underperform (Sell)	1	Underperform (Sell)	0

*Percentage of companies in each rating category that are investment banking clients, defined as companies for which William Blair has received compensation for investment banking services within the past 12 months.

The compensation of the research analyst is based on a variety of factors, including performance of his or her stock recommendations; contributions to all of the firm's departments, including asset management, corporate finance, institutional sales, and retail brokerage; firm profitability; and competitive factors.

OTHER IMPORTANT DISCLOSURES

Stock ratings, price targets, and valuation methodologies: William Blair & Company, L.L.C. uses a three-point system to rate stocks. Individual ratings and price targets (where used) reflect the expected performance of the stock relative to the broader market (generally the S&P 500, unless otherwise indicated) over the next 12 months. The assessment of expected performance is a function of near-, intermediate-, and long-term company fundamentals, industry outlook, confidence in earnings estimates, valuation (and our valuation methodology), and other factors. Outperform (O) – stock expected to outperform the broader market over the next 12 months; Market Perform (M) – stock expected to perform approximately in line with the broader market over the next 12 months; Underperform (U) – stock expected to underperform the broader market over the next 12 months; not rated (NR) – the stock is not currently rated. The valuation methodologies used to determine price targets (where used) include (but are not limited to) price-to-earnings multiple (P/E), relative P/E (compared with the relevant market), P/E-to-growth-rate (PEG) ratio, market capitalization/revenue multiple, enterprise value/EBITDA ratio, discounted cash flow, and others.

Company Profile: The William Blair research philosophy is focused on quality growth companies. Growth companies by their nature tend to be more volatile than the overall stock market. Company profile is a fundamental assessment, over a longer-term horizon, of the business risk of the company relative to the broader William Blair universe. Factors assessed include: 1) durability and strength of franchise (management strength and track record, market leadership, distinctive capabilities); 2) financial profile (earnings growth rate/consistency, cash flow generation, return on investment, balance sheet, accounting); 3) other factors such as sector or industry conditions, economic environment, confidence in long-term growth prospects, etc. Established Growth (E) – Fundamental risk is lower relative to the broader William Blair universe; Core Growth (C) – Fundamental risk is approximately in line with the broader William Blair universe; Aggressive Growth (A) – Fundamental risk is higher relative to the broader William Blair universe.

The ratings, price targets (where used), valuation methodologies, and company profile assessments reflect the opinion of the individual analyst and are subject to change at any time.

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies—to our clients and our trading desks—that are contrary to opinions expressed in this research. Certain outstanding reports may contain discussions or investment opinions relating to securities, financial instruments and/or issuers that are no longer current. Always refer to the most recent report on a company or issuer before making an investment decision. Our asset management and trading desks may make investment decisions that are inconsistent with recommendations or views expressed in this report. We will from time to time have long or short positions in, act as principal in, and buy or sell the securities referred to in this report. Our research is disseminated primarily electronically, and in some instances in printed form. Electronic research is simultaneously available to all clients. This research is for our clients only. No part of this material may be copied or duplicated in any form by any means or redistributed without the prior written consent of William Blair & Company, L.L.C.

This is not in any sense a solicitation or offer of the purchase or sale of securities. The factual statements herein have been taken from sources we believe to be reliable, but such statements are made without any representation as to accuracy or completeness or otherwise. Opinions expressed are our own unless otherwise stated. Prices shown are approximate.

This material is distributed in the United Kingdom and the European Economic Area (EEA) by William Blair International, Ltd., authorized and regulated by the Financial Conduct Authority (FCA), and is only directed at and is only made available to persons falling within articles 19, 38, 47, and 49 of the Financial Services and Markets Act of 2000 (Financial Promotion) Order 2005 (all such persons being referred to as “relevant persons”). This document is intended for persons regarded as professional investors (or equivalent) and is not to be distributed to or passed onto any “retail clients.” No persons other than persons to whom this document is directed should rely on it or its contents or use it as the basis to make an investment decision.

“William Blair” and “R*Docs” are registered trademarks of William Blair & Company, L.L.C. Copyright 2014, William Blair & Company, L.L.C. All rights reserved.