

Eagle Pharmaceuticals, Inc.

Ryanodex Approved With Launch Expected in the Fourth Quarter; Maintain Outperform

- Before the open today, July 23, Eagle Pharmaceuticals announced that the FDA has approved Ryanodex, a dantrolene sodium injectable suspension, for the treatment of malignant hyperthermia, a rare disease that can be fatal and is normally associated with the administration of certain general anesthetics. The Ryanodex 505(b)(2) NDA was submitted in January and was designated for priority review in March. Eagle was also informed by the FDA that a decision on seven-year orphan exclusivity will be made over the next four to six weeks. This approval makes for the second FDA-approved product for the company this month; its ready-to-use bendamustine product received approval for indolent B-cell non-Hodgkin lymphomas (NHL) on July 7.
- While malignant hyperthermia is a rare disease, current guidelines state that hospitals must carry at least two doses of the current formulation of dantrolene within their pharmacies. We believe the market for the current formulation of dantrolene approximates \$20 million domestically and an additional \$20 million internationally. Following the approval announced today, Eagle will launch the product with a limited salesforce of between 5 and 10 hospital representatives calling on pharmacies at the corporate level. Eagle is the exclusive licensee of four U.S. patents for Ryanodex and it represents the first product to be solely marketed by the company.
- To administer the current formulation of dantrolene, an average of 12 vials must be reconstituted for the patient in more than 700 milliliters of IV fluid, a process that may take 15-20 minutes. This product preparation must occur during a critical period for the physician and patient, with malignant hyperthermia episodes characterized by a rapid increase in body temperature and rapid presentation of symptoms. Eagle's Ryanodex is a ready-to-use formulation of dantrolene that can be administered with 95% less volume (250 mg of Ryanodex in 5 mL of sterile water) and can be administered in under a minute. Given the crisis environment in which dantrolene is normally administered, we believe there may be room for a pricing at premium to the current formulation; however, pricing for the Ryanodex product will likely not be disclosed until the FDA decides on orphan designation.
- Aside from malignant hyperthermia, Eagle is progressing on the design of the company's clinical program using the Ryanodex formulation for the treatment of exertional heat stroke (EHS). While we forecast Ryanodex as holding peak sales in the United States of \$20 million, the expansion of Ryanodex into the treatment of EHS would expand the peak sales potential of Ryanodex to over \$200 million, by our estimates. Management will begin an exploratory study in EHS by year-end, and while data produced from the study will likely be informative only for next steps, off-label use of the product may begin as early as calendar 2015 in select settings such as the military.

Eagle Pharmaceuticals is a developer of best-in-class injectable therapeutics. The company is using the 505(b)(2) pathway to enter the market before first-to-file generics.

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

Please consult pages 3-4 of this report for all disclosures. Analyst certification is on page 3. 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.

July 23, 2014

Stock Rating: **Outperform**
Company Profile: **Aggressive Growth**
Price Target: \$22.00

Symbol: EGRX (NASDAQ)
Price: \$13.07 (52-Wk.: \$9-\$16)
Market Value (mil.): \$183
Fiscal Year End: September
Long-Term EPS Growth Rate:
Dividend/Yield: None

	2013A	2014E	2015E
Estimates			
EPS Q1	NA	A\$-0.20	NA
Q2	NA	A\$-0.25	NA
Q3	NA	A\$-0.39	NA
Q4	NA	A\$-0.48	NA
FY	\$-0.51	\$-1.33	\$0.45
CY			
Sales (mil.)	NA	14,250	47,750
Valuation			
FY P/E	NM	NM	29.0x
CY P/E		NA	NA

Trading Data (FactSet)	
Shares Outstanding (mil.)	9
Float (mil.)	3
Average Daily Volume	97,142

Financial Data (FactSet)	
Long-Term Debt/Total Capital (MRQ)	0.0
Book Value Per Share (MRQ)	3.2
Return on Equity (TTM)	0.0

Two-Year Price Performance Chart



Sources: FactSet, William Blair & Company estimates

- While the market for Ryanodex is modest, we are impressed by management's continued execution with two recent positive FDA decisions and obtaining of orphan drug designation for its bendamustine 10-minute infusion formulation. We maintain our Outperform rating on shares of Eagle and our \$22 price target. Given what we believe are modest assumptions for the peak penetration and timing of the bendamustine launch, as well as dantrolene, we derive a net present value (NPV) for the company's pipeline of \$22 per share. However, given the potentially significant cash flow available to Eagle following a launch of bendamustine, we believe management may seek to deploy that cash through in-licensing and acquisitions. Risks for Eagle include the significant litigation the company will likely face as it attempts to bring its 505(b)(2) pipeline to the market, particularly from Teva Pharmaceuticals (TEVA \$54.95) for its branded bendamustine product Treanda.

Valuation

We believe shares of Eagle continue to hold a strong risk/reward profile, given the potential for significant profitability pending successful development of the company's four disclosed products. The company's pathway through a 505(b)(2) approval process, in our view, holds a reduced development risk compared with many small-cap development-stage specialty pharmaceutical companies.

We hold a price target of \$22, based on a net present value of the company's lead development programs, EP-3101 (ready-to-use bendamustine) for CLL and NHL, Ryanodex for malignant hyperthermia, and EP-6101 (RTU-bivalirudin). In this calculation, we assume a launch of Ryanodex in the fourth quarter of 2014 and a launch of EP-3101 in late 2015; however, the timing of the later product will be heavily influenced by the outcome of litigation between Teva Pharmaceuticals and Eagle over the ability to market its product. Our full model with additional details is available from a William Blair & Company, L.L.C. salesperson.

Risks

While most risks in development-stage therapeutic companies involve clinical risk, we believe the ongoing litigation with Teva Pharmaceuticals and likely other companies whose products Eagle is targeting with its pipeline is the major risk for Eagle Pharmaceuticals. In addition to the litigation risk, investment in shares of Eagle also involves regulatory, commercialization, and financial risk, common in development-stage specialty pharmaceutical companies. The company expects to announce safety data from its 10-minute bendamustine infusion during 2014; this safety trial may hold some risk given the faster infusion time of the product, which could lead to higher rates of nausea.

The company's pipeline is also focused on products near the end of their life cycles, and generic companies are traditionally strong competitors for market share, sometimes taking prices to unsustainable levels. We believe pricing and the resulting market share gains or losses will be a risk for Eagle as the company brings its therapies to the market.

William Blair & Company, L.L.C.

IMPORTANT DISCLOSURES

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

William Blair is a market maker in the security of Eagle Pharmaceuticals, Inc. and may have a long or short position.

William Blair intends to seek investment banking compensation in the next three months from Eagle 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 Eagle 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.

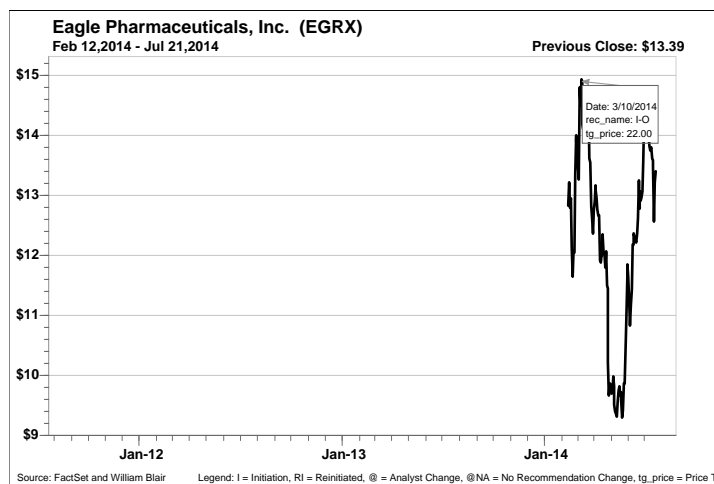
Please contact us at +1 800 621 0687 or consult williamblair.com/Research-and-Insights/Equity-Research/Coverage.aspx for all disclosures.

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: 17,113.54

S&P 500: 1,983.53

NASDAQ: 4,456.02



Current Rating Distribution (as of 06/30/14)

Coverage Universe	Percent	Inv. Banking Relationships*	Percent
Outperform (Buy)	67	Outperform (Buy)	16
Market Perform (Hold)	30	Market Perform (Hold)	2
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 HAS BEEN APPROVED FOR DISTRIBUTION IN THE UNITED KINGDOM BY WILLIAM BLAIR INTERNATIONAL, LIMITED, REGULATED BY THE FINANCIAL CONDUCT AUTHORITY (FCA), AND IS DIRECTED ONLY AT, AND IS ONLY MADE AVAILABLE TO, PERSONS FALLING WITHIN COB 3.5 AND 3.6 OF THE FCA HANDBOOK (BEING “ELIGIBLE COUNTERPARTIES” AND “PROFESSIONAL CLIENTS”). THIS DOCUMENT IS NOT TO BE DISTRIBUTED OR PASSED ON TO 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.