EQUITY RESEARCH FIRST GLANCE

RBC Capital Markets

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Aerie Pharmaceuticals, Inc.

Phase IIb initiated; timelines likely to be met or exceeded

Outperform
Speculative Risk
NASDAQ: AERI
Price: USD 17.91

All values in USD unless otherwise noted.

Impact
Positive – PG324 Phase IIb start is in line with guidance and could set up for a readout by mid-2014 or sooner

First impression
AERI management is executing as planned on previously stated timelines, giving confidence and visibility on value inflection points. First, we expect Phase IIb data for PG324 around mid-2014 (or sooner); the first patient is now dosed. Second, Phase III AR-13324 studies could begin by mid-2014 and top-line efficacy results could read out by mid-2015. These products represent a new mechanism of action and target the primary disease tissue in glaucoma, making them potential blockbuster opportunities in a market that continues to grow. AERI owns all rights to these products. We are buyers of AERI shares at current levels.

- **First patient dosed in PG324 Phase IIb glaucoma study.** PG324 is a combination of AR-13324, AERI's novel rho kinase and norepinephrine transporter inhibitor that works on the eye's primary drainage mechanism, and latanoprost, a prostaglandin, that works on the eye's secondary drainage mechanism. The combination one drop, once per day lowers intraocular pressure (IOP) by increasing drainage through the primary and secondary drains and reducing fluid production. AR-13324 is also hypothesized to also lower episcleral venous pressure.
- **Timelines could be rapid; guidance of mid-2014 for data appears comfortably achievable.** The first patient is dosed and the study will enroll approximately 300 patients. We believe enrollment can be rapid, and since the primary endpoint is at 28 days, even if enrollment takes 2–3 months, last patient on drug 1 month, follow-up and analysis a further 1–2 months, data are likely by mid-2014.
- **Why positive PG324 data would be a big deal.** The Phase IIb study compares PG324 to its individual components, two concentrations of AR-13324 (0.01% and 0.02%) and latanoprost. The primary endpoint is lowering of mean diurnal IOP on day 28 vs. baseline. If positive, results will show a statistically significant benefit over latanoprost (1–3 mmHg improvement), the current first-line drug of choice. Secondly, they will also validate the efficacy of AR-13324 in another Phase II study, lowering clinical risk for the AR-13324 pivotal program.
- **Why AR-13324 could be a drug in its own right.** AR-13324 is the first new mechanism of action to address glaucoma. From a big picture standpoint, since efficacy is comparable to a prostaglandin in patients with IOP <= 26 mmHg, it is a reasonable alternative given that it targets the primary disease mechanism in glaucoma. It is also a reasonable alternative for patients who do not want to use a prostaglandin first-line or for whom second-line drugs are not the ideal choice due to side effects.

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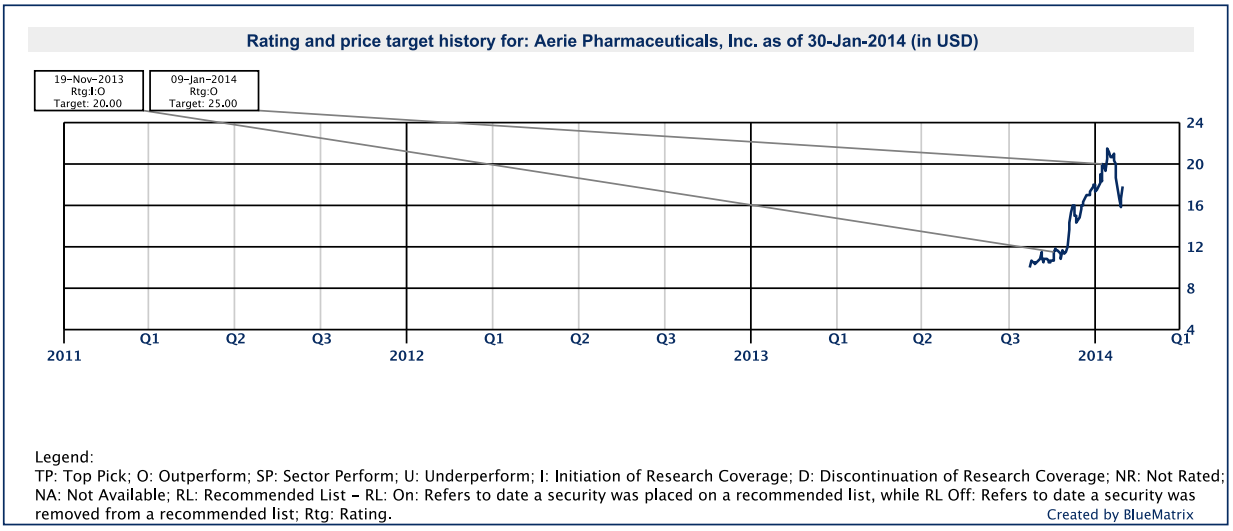

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