EQUITY RESEARCH FIRST GLANCE

RBC Capital Markets

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Aerie Pharmaceuticals, Inc.

More pre-clinical data supporting new mechanisms and broader markets for AR-13324

Outperform
Speculative Risk
NASDAQ: AERI
Price: USD 20.04

All values in USD unless otherwise noted.

Impact:
Modest positive – More support for AERI's drug working uniquely in glaucoma.

New evidence that continues to highlight 1) AERI's drug's unique mechanism of action and first-in-class/ best-in-class status, plus 2) ability to work consistently and well in patients with lower baseline IOP is a differentiator vs. current market leading drugs and 3) demonstrate a role in a potentially poorly served market segment, normotensive patients with glaucoma. The key value inflection points for 2014 remain 1) Phase IIb data for PG324 around mid-2014 (or sooner since the first patient is now dosed) and 2) Phase III AR-13324 studies could begin by mid-2014 and top-line efficacy results could read out by mid-2015. AERI owns all rights to these product candidates. We are buyers of AERI shares at current levels.

AR-13324 lowered EVP in animal models. '324 was already known to reduce intraocular pressure (IOP) by increasing outflow through the trabecular meshwork (primary drain) and reducing fluid production. In vivo data shows that '324 lowered IOP by reducing episcleral venous pressure (EVP). Results were statistically significant for EVP and IOP reductions after the third daily dose and concluded up to 42% of the reduction in IOP may be due to this reduction in EVP. IOP is determined by four mechanisms, including EVP, which accounts for nearly half of IOP in normotensive patients and one-third of IOP in patients with elevation IOP (24-30 mmHg). Data will be presented at ARVO in May.

Another differentiating characteristic vs. existing glaucoma treatments. AR-13324 is a rho kinase and norepinephrine transporter inhibitor, which is a new mechanism of action for the treatment of glaucoma in two decades. The ability to lower EVP especially adds another aspect which is unique to AR-13324 and not available for any approved glaucoma drug. Current drugs are more effective in patients with higher baseline IOPs because EVP contribution is less.

Why positive PG324 data would be a big deal. If the Phase IIb is 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. If the Phase III is positive, 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, and 3 of 4 causes of glaucoma.

Priced as of prior trading day's market close, EST (unless otherwise noted).

For Required Conflicts Disclosures, see Page 2

Required disclosures

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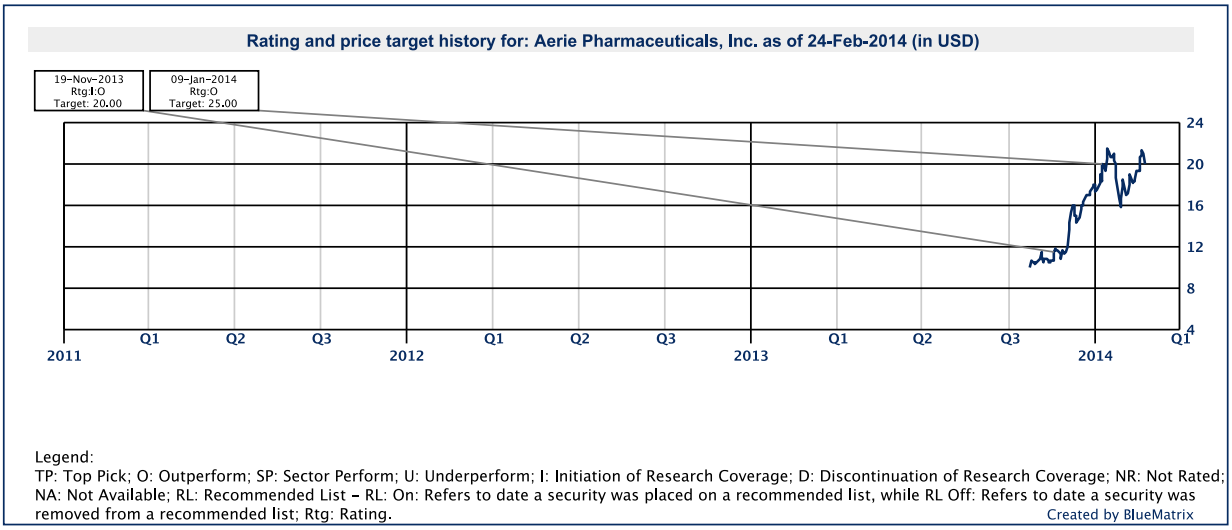

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