

RBC Capital Markets

December 5, 2013

Aerie Pharmaceuticals, Inc.

Everything on track for a potential Phase IIb readout in 2014

Our view: AERI provided an update on timing of the start and readouts of PG324 and AR-13324 clinical trials, which are in-line to slightly ahead of expectations.

Key points:

AERI shares present a potentially large upside opportunity based on what we view as two shots on goal. First, the Street is excited about the potential for PG324 as a blockbuster drug for glaucoma and hence the Phase IIb readout in 2014. Second, we believe AR-13324, which is entering Phase III trials, could also present a large market opportunity in glaucoma based on its safer, more convenient, and novel mechanism of action profile. We are buyers of AERI ahead of PG324 Phase IIb data and especially on any pullbacks (see our AERI initiation report dated Nov 19 and AAO note dated Nov 25 for details on why combination drugs can work and why AR-13324 could supersede all second-line drugs).

Phase IIb PG324 study ready to begin as soon as clinical trial product is released. We expect a start in early 2014, ~300 patients (baseline 21-36 mmHg), comparison vs. latanoprost and AR-13324, and data around mid-/ 2H:14 given the 28-day efficacy readout. We believe this will be one of the key catalysts for AERI shares in 2014.

Phase III AR-13324 also nearly ready to begin pending data from two toxicology studies, which we expect to be clean, and an end of Phase II meeting with the FDA. Phase III could start in early 2H:14, enroll ~1,200 patients (baseline 21-26 mmHg), compare AR-13324 to timolol (noninferiority endpoint), and potentially have 3-month efficacy data around mid-2015, which is the next big catalyst for AERI shares.

Physicians' expectations for AR-13324 higher than the Street's. At AAO AERI saw physician excitement about potential AR-13324. We have previously stated AR-13324 could have several roles including in patients intolerant of or resistant to using prostaglandins or in low tension glaucoma first line and in anyone about to start second-line combinations.

Partnership is not needed though potential partners seem interested. At the recently concluded AAO meeting potential partners expressed an interest in AERI's pipeline. An opportunistic regional partnership in 2014 or 2015 especially one that targets Asia where patients have low tension glaucoma could be a positive.

Sufficient cash through NDA filing. 3Q:13 showed a higher loss but the key financial metric is the pro forma cash position of \$70M, which is sufficient to see AERI through to AR-13324 NDA filing in 1H:16.

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Outperform

Speculative Risk

NASDAQ: AERI; USD 13.60

Price Target USD 20.00

WHAT'S INSIDE	
☐ Rating/Risk Change	☐ Price Target Change
☐ In-Depth Report	☑ Est. Change
☐ Preview	✓ News Analysis

Scenario Analysis*

4	Downside Scenario	Current Price	Price Target	Upside Scenario	
	7.00 ↓ 49%	13.60	20.00 ↑ 47%	32.00 ↑ 135%	

*Implied Total Returns

Key Statistics

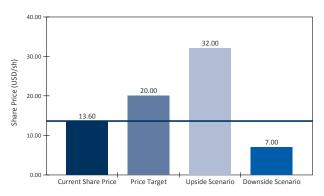
Shares O/S (MM):	23.2	Market Cap (MM):	316
Dividend:	0.00	Yield:	0.0%

RRC Estimates

KDC Estimates				
FY Dec	2013E	2014E	2015E	
Revenue	0.0	0.0	0.0	
EPS, Adj Diluted	(1.05)	(1.01)	(1.06)	
P/AEPS	NM	NM	NM	
Revenue	Q1	Q2	Q3	Q4
2013	0.0A	0.0A	0.0A	0.0E
2014	0.0E	0.0E	0.0E	0.0E
EPS, Adj Diluted				
2013	(0.41)A	(0.28)A	(10.81)A	(0.22)E
Prev.			(0.22)E	
2014	(0.24)E	(0.25)E	(0.26)E	(0.26)E
All values in USD unless of	therwise noted	i.		

Target/Upside/Downside Scenarios

Exhibit 1: Aerie Pharmaceuticals, Inc.



Source: RBC Capital Markets estimates

Target price/ base case

We value AERI at \$20 per share, which includes US and EU sales of AR-13324 and PG324. We assign a 60% probability of success and a value of $^{\circ}$ \$14 per share to the US and \$6 per share to the EU opportunity. We assume a US launch in 2017 and an EU launch in 2018. We forecast peak PG324 sales of \$700–800MM and AR-13324 sales of \$200–300MM in the US and \$500–600MM and \$100–200MM in the EU, respectively. Finally, we assume patent protection through 2030 and include a terminal value based on a discount rate of 15% and a growth rate of -50%.

Upside scenario

Our upside scenario includes $^{\circ}$ \$23 per share in value for the US opportunity and $^{\circ}$ \$9 per share in value for the EU opportunity. We forecast peak PG324 sales of \$1.2–1.3B in the US and \$900M–\$1B in the EU and AR-13324 sales of \$200–300MM in the US and \$200–300MM in the EU. We assign products in the pipeline a 60% probability of success, a discount rate of 15%, and a terminal growth rate of -50%.

Downside scenario

Our downside scenario assumes that PG324 will not be approved in the US or EU. We value the US opportunity for AR-13324 at \$5 per share and the EU opportunity at \$3 per share. We assume market share ramps up to roughly 15% of total second-line glaucoma prescriptions in the US and 10% in the EU. Under such a scenario, peak sales are forecast to be \$400–500M in the US and \$300–400MM in the EU. We assign AR-13324 a 60% probability of success, a discount rate of 15%, and a terminal growth rate of -50%.

Investment summary

We believe AERI shares offer the potential for significant upside as both products in development, AR-13324 and PG324, use a new mechanism of action for the treatment of glaucoma, a blockbuster potential market. AR-13324 will enter Phase III trials based on positive Phase IIb data and PG324 a Phase IIb study based on promising preclinical data in 2014. Results from these and additional studies are expected 2014–2016. Millions of patients worldwide suffer from glaucoma, most need multiple medications, and we forecast peak sales of AERI's products at ~\$1B.

AERI owns 100% of the rights to AR-13324 and PG324 worldwide and patent protection extends into 2030, which means the company is free to partner or be acquired. Given that ophthalmology remains an attractive therapeutic area and AERI's product candidates could have a convenient, one drop once per day efficacy and safety profile, progress through clinical and regulatory milestones, as well as a partnership, could all be upside catalysts.

Potential Catalysts for AERI Shares

- Phase IIb data for PG324 in 2014. Important catalyst as it could show differentiation in efficacy vs. latanoprost, the current market leader.
- Phase III data for AR-13324 in 2015. Important catalyst as positive data could lead to an NDA and MAA filing.
- Phase III data for PG324 in 2016. Key catalyst as clean safety and efficacy beyond latanoprost could make PG324 the firstline drug of choice.
- Potential partnership for AR-13324 and PG324. AERI owns worldwide rights to both product candidates and a partnership is likely after Phase III data.
- Potential approvals and launches in 2017 in the US and 2018 in the EU following regulatory filings in 2016.

Risks to Our Investment Thesis

- Pivotal Phase III and earlier-stage studies could fail.
 AR-13324 must show non-inferiority to a comparator over a longer period and PG324 must show a benefit in patients, which raises risk of failure.
- PG324 Phase IIb study could fail. Our assumption for success is based on pre-clinical data with PG324, and testing it in patients increases risk.
- AERI could fail to find a partner for AR-13324 and PG324 outside the US.
- Sales ramp of AR-13324 and PG324 could lag expectations
 as clinicians fail to take up AERI's drugs, payers put up
 hurdles for reimbursing branded drugs, and cheaper generic
 drugs with other mechanisms hamper market penetration.



Aerie Pharmaceuticals - Income Statement

FYE December 31

(in MM; except per share)	3Q:13A	Est.	Var.
REVENUES			
Total Revenues			
EXPENSES			
COGS			
R&D	2.4	3.3	(0.9)
SG&A	3.3	1.8	1.5
Other			
Total Expenses	5.7	5.1	0.6
Operating Income (Expense)	(5.7)	(5.1)	(0.6)
OTHER			
Interest income		0.1	(0.1)
Interest expense		(0.2)	0.2
Other	(5.1)		(5.1)
Total Other Income (Expense)	(5.1)	(0.1)	(4.9)
Income before Tax	(10.9)	(5.2)	(5.7)
Taxes			
Net income (loss)	(10.9)	(5.2)	(5.7)
EPS, Basic (GAAP)	(\$10.81)	(\$0.22)	(\$10.59)
EPS, Diluted (GAAP)	(\$1.13)	(\$0.16)	(\$0.97)
Shares outstanding, Basic	1.0	23.2	(22.2)
Shares outstanding, Diluted	9.6	31.8	(22.2)

Source: Company reports and RBC Capital Markets estimates.

News Flow

Timing	Expected News Flow	Program
Early 2014	Initiate Phase IIb studies in glaucoma	PG324
1Q:14	3-month data from 6- and 9 -month tox studies	AR-13324
Mid-2014	Initiate Phase III trials in glaucoma	AR-13324
Mid-2014	Phase IIb results	PG324
2014 / 2015	Final 6- and 9-month data from 2 tox studies	AR-13324
2014 / 2015	Potential ex-US partnership(s)	
Mid-2015	Efficacy results from Phase III studies	AR-13324
1H / Mid-2015	Initiate Phase III trials in glaucoma	PG324
2H:15 / Early 2016	Phase III results in glaucoma	AR-13324
2015 / 2016	Initiate Phase I trials	AR-13533
Mid-2016	File NDA	AR-13324
1H / Mid-2016	Efficacy results from Phase III studies	PG324
2H:16 / Early 2017	Phase III results in glaucoma	PG324
1H / mid-2017	Expect approval and launch	AR-13324
Mid-2017	File NDA	PG324
Mid-2018	Expect approval and launch	PG324

Source: Company reports.

Pipeline

Product	Mechanism	Stage	Indication	Partner
AR-13324	Dual-action ROCK / NET inhibitor	Phase III planned	Glaucoma	
PG324	Triple-action ROCK / NET inhibitor and	Phase IIb planned	Glaucoma	
	latanoprost, a PGA			
AR-13533	Dual-action ROCK / NET inhibitor	Pre-clinical	Glaucoma	

Source: Company reports.



Valuation

We value AERI at \$20 per share, which includes US and EU sales of AR-13324 and PG324. We assign a probability of success of 65% to both products and a value of \sim \$14 per share to the US and \$6 per share to the EU opportunity. We assume a US launch in 2017 and an EU launch in 2018. Currently, we assume that AERI will sell AR-13324 and PG324 in the US and a partner will commercialize these compounds outside the US. We forecast peak PG324 sales of \$700–800MM in the US and \$500–600MM in the EU and AR-13324 sales of \$200–300MM in the US and \$100–200MM in the US. We currently assign no additional value to the earlier-stage pipeline. Finally, we assume product sales extend through 2030 and include a terminal value based on a discount rate of 15% and a terminal growth rate of -50%.

Price target impediments

Our price target is dependent solely on the clinical, regulatory and commercial success of AR-13324 and PG324. A Phase IIb study for PG324 and a Phase III study for AR-13324 are expected in 2014 and failure to demonstrate efficacy or safety in one or both of these studies would be a significant setback. Furthermore, any setbacks in regulatory approvals in the US or EU, delay in launch, failure to secure a partnership outside the US for AR-13324 and PG324, increased competition or other limitations to the market potential of these products either due to better efficacy and/or safety outcomes or pricing pressure due to the availability of generic drugs for glaucoma, could negatively impact our valuation.

Company description

Aerie Pharmaceuticals, Inc. is a biotechnology company targeting ophthalmic disorders specifically glaucoma, which is a blockbuster potential markets. Sales of products targeting glaucoma totaled \$4.5B globally and more than 30 million prescriptions for glaucoma drugs were written in the US alone. AERI's drug candidates work by inhibiting rho-kinase and the norepinephrine transporter, a new mechanism of action, something not seen for glaucoma in nearly two decades. AR-13324 could enter Phase III trials in 2014 and PG324 could enter Phase II trials in 2014 and Phase III trials in 2015. These drugs could be used as stand-alone agents for first- or second-line therapy or combined with existing agents.



Adnan Butt (415) 633-8588 Aerie Pharmaceuticals - Income Statement FYE December 31 (in MM: except per share REVENUES AR-13324 6.5 69.1 147.3 235.5 209.2 178.4 142.6 PG324 180.8 308.4 410.9 31.8 101.8 Product Sales 6.5 76.5 179.1 337.2 390.0 486.8 553.5 Rovalties 9.3 22.9 41.1 45.4 54.0 58.6 Total Revenues 6.5 85.8 202.0 378.4 435.3 540.8 612.1 **EXPENSES** COGS 17.9 33.7 39.0 55.4 R&D 3.2 3.2 2.4 3.4 12.1 3.8 4.0 4.3 4.5 16.5 20.0 22.5 20.0 10.0 5.0 5.0 5.0 5.0 5.0 SG&A 1.7 1.7 3.3 1.8 8.5 1.9 1.9 2.0 1.8 7.5 8.5 15.0 30.0 37.5 45.0 67.4 78.0 97.4 110.7 Other Total Expenses 1 Q 4.9 5.7 5.2 20.6 5.6 5.9 6.2 6.3 24.0 28.5 37.5 50.6 55.2 67.9 106.2 122.0 151.0 171.1 (4.9) (4.9) (5.7)(20.6) (5.9) (6.2)(6.3 (24.0) (28.5 (44.2) 30.6 134.1 313.3 389.7 441.0 Operating Income (Expense) OTHER Interest income 0.1 0.1 0.1 0.5 (0.2)(0.2)(0.1 (0.1)(0.1)(0.1)(0.2)(0.2) (0.2)(0.2)(0.2 (0.2)(0.2)(0.2)Interest expense (0.4) (0.1)(0.2)(0.2)Other (5.1)Total Other Income (Expense) (5.1)(23.8) (43.9 272.5 441.3 Income before Tax (5.1)(5.1)(10.9)(5.1)(20.9 (5.6)(5.9)(6.2)(6.3)(28.3 (37.2)30.9 134.4 313.6 390.0 10.5 45.7 106.6 132.6 150.1 Taxes Net income (loss) (5.1) (5.1) (10.9) (20.9 (5.6) (5.9) (6.2) (6.3 (23.8) (28.3 (37.2) (43.9 20.4 88.7 179.8 207.0 257.4 291.3 (5.1 EPS, Basic (GAAP) (\$0.41) (\$0.28) (\$10.81) (\$0.22) (\$1.51 (\$0.24) (\$0.25) (\$0.26) (\$0.26 (\$1.01) (\$1.06 (\$1.24) (\$1.44) \$2.80 \$5.56 \$6.27 \$7.65 \$8.48 EPS, Diluted (GAAP) (\$1.13) (\$0.94 (\$0.17) (\$0.18) (\$0.19)(\$0.74) (\$0.81 (\$0.97) (\$1.13) \$2.20 \$4.40 \$6.11 \$6.80 (\$0.24)(\$0.19) (\$0.16 (\$0.19 \$0.52 \$4.99 Shares outstanding, Basic 12.5 18.4 1.0 23.3 13.8 23.4 23.6 23.7 23.8 23.6 26.6 29.9 30.5 31.1 31.7 32.4 33.0 33.7 34.3 Shares outstanding, Diluted 26.9 9.6 31.8 22.3 31.9 32.1 32.2 32.3 32.1 35.1 38.4 39.0 39.6 40.2 40.9 41.5 42.2 42.8 2Q:13A 2013E 2Q:14E 2018 2023F Operating Ratio 2017 2021 10.0% 10.09 10.0% 10.0% 10.0% 10.0% 10.0% Gross Margin NA NA NA 90.0% 90.0% 90.0% 90.0% 90.0% 90.09 NA 90.09 R&D NA NA NA NA NA NA NA 308.7% 11.7% 2.5% 1.3% 1.1% 0.9% 0.8% SG&A NA NA NA NA NA NA NA 463.0% 43.79 22.3% 17.8% 17.9% 18.0% 18.1% Operating Margin NA NΔ NA NΔ ΝΔ NA NA NA NΔ ΝΔ -681 7% 35.7% 66 4% 71 9% 72 0% 72 1% 72 1% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% 34.0% -677.1% 23.8% 43.9% 47.5% 47.6% 47.6% 47.6% NA NA NA NA NA Net Margin NA NA NA Source: Company reports and RBC Capital Markets estimates **Balance Sheet - Select Items** 2Q:13A 2013E 2Q:14E 4Q:14E Cash and cash equivalents 2.4 (8.1)55.6 55.6 55.7 50.2 44.5 38.7 38.7 102.0 64.5 20.3 28.6 88.1 222.2 416.0 647.6 921.7 Prepaid expenses and other current assets 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 56.8 56.8 45.7 107.2 72 1 30.4 53.0 143.8 325.8 5353 795.8 1 089 7 35 (7.0)56.8 51 4 39.8 39.8 Total current assets Property, plant and equipment, net 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.0 0.0 (0.0) (0.1) (0.1) (0.2) (0.2) (0.3) (0.3) (0.4) (0.4) 3.7 (6.8) 56.9 56.9 56.9 51.5 45.7 39.9 39.9 107.2 72.1 30.3 52.8 143.6 325.6 534.9 795.4 1,089.3 Total assets Current Liabilities **Total current liabilities** 11.8 11.8 11.8 11.8 11.8 12.3 13.8 14.3 15.1 4.6 4.6 **Total liabilities** 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 Share Capita 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 162.5 162.5 162.5 162.5 162.5 Share Premium 0.1 0.1 68.5 68.5 68.5 68.5 68.5 68.5 68.5 162.5 162.5 162.5 162.5 Accumulated deficit (74.0) (84.5)(89.2 (89.2 (94.4)(99.8)(105.6)(111.4 (111.4) (138.1 (173.7 (216.0 (194.0 (103.7) 77.8 286.4 545 4 838.3 Total stockholders' equity 40.5 40.5 35.3 29.9 18.3 18.3 85.6 50.0 29.7 120.0 301.5 510.1 769.1 1,062.0 (12.7)(23.2)24.1 Total liabilities and stockholders Equity 56.9 56.9 51.8 46.3 34.7 34.7 102.0 66.9 25.1 47.7 138.5 320.4 529.8 790.2 1.084.1 3.7 (6.8) 40.6 Cash Flow Statement - Select Item 2013E 20.4 88.7 207.0 257.4 291.3 Net Income (loss) (5.1)(10.9)(5.1 (20.9) (5.6)(5.9)(6.2)(6.3 (23.8)(28.3 (37.2) (43.9) 179.8 Depreciation and amortization 0.0 0.0 0.0 0.1 0.0 0.0 0.0 0.0 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 Stock based compensation 0.4 0.4 0.4 0.4 1.6 0.4 0.4 0.4 Net cash provided (used) by operating activities (5.1) (2.5) (10.5) (4.7 (17.5 (5.1) (5.4) (5.7) (5.8 (22.1) (30.6 (37.5) (44.1 8.4 59.6 134 2 193.8 231.6 274 3 Purchase of property and equipment and intangible assets (0.0 (0.0)(0.0 (0.1 (0.1 (0.1 (0.1)(0.1) (0.1) Net cash used in investing activities (0.0)(0.0)(0.0) (0.0) (0.1)(0.1 (0.1)(0.1)(0.1 (0.1)(0.1 (0.1)(0.1 (0.1)(0.0) (0.1) (0.0)(0.0)Proceeds from issuances 68.4 68.4 94.0 7.0 68.4 75.4 Net cash provided by (used in) financing activities 94.0 Decrease in cash and cash equivalents (5.1)4.5 (10.5)63.7 57.9 (5.1)(5.4)(5.7)(5.8 (22.1) 63.4 (37.5) (44.2 8.3 59.5 134.1 193.7 231.6 274.2 Cash and cash equivalents at the beginning of the year 2.9 (2.1)2.4 (8.1 2.9 60.8 55.7 50.2 44.5 38.7 102.0 20.3 28.6 222.2 416.0 647.6

Source: Company reports and RBC Capital Markets estimates.

Cash and cash equivalents at the end of the year

(2.1)

24

55.7

50.2

38.7

445

38.7

102.0

20.3

64 5

28 6

222.2

416.0

88 1

647 6

921.7

60.8

(8.1)

55.6



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Outperform (O): Expected to materially outperform sector average over 12 months.

Sector Perform (SP): Returns expected to be in line with sector average over 12 months.

Underperform (U): Returns expected to be materially below sector average over 12 months.

Risk Rating

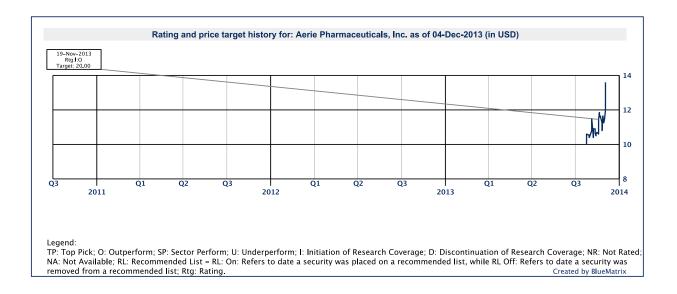
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			Investment Bank	ing
			Serv./Past 12 Mos.	
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HOLD [Sector Perform]	656	43.50	179	27.29
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