

## Agios Pharmaceuticals

### Updating Our Model Post 2Q

Agios reported 2Q GAAP loss per share of \$2.80. We continue to believe Agios's platform technology is based on strong science. A key differentiator of the company's technology platform is that predictive metabolic biomarkers can be identified and genetically defined patient populations can be targeted. Of note, the company's three lead assets—AG-221 (IDH2m inhibitor; oncology), AG-120 (IDH1m inhibitor; oncology), AG-348 (PKR activator; PK Deficiency)—all have supportive early stage literature. That said, value creation for the company is weighted to mid 2014/2H14. Our Neutral rating balances strong science and potential of differentiated therapeutics with the early stage of the company.

- **Adjusting estimates:** We are updating our model to reflect 2Q tends. We have fine tuned our operating expenses. Our 2013-2015 GAAP EPS estimates change to (\$1.48), (\$0.92) and (\$0.24) from (\$1.38), (\$1.07) and (\$0.39), respectively.
- **Reiterate Neutral rating.**

### Neutral

**AGIO, AGIO US**

Price: \$26.93

**Price Target: \$35.00**

#### Biotechnology

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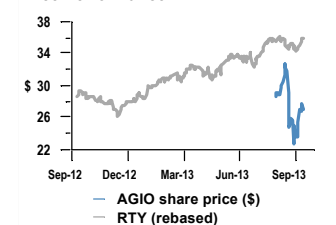
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#### Price Performance



#### Agios Pharmaceuticals (AGIO;AGIO US)

FYE Dec	2012A	2013E	2013E	2014E	2014E	2015E	2015E
		(Prev)	(Curr)	(Prev)	(Curr)	(Prev)	(Curr)
Analyst Adjusted Diluted							
EPS (\$)							
Q1 (Mar)	-	(0.39)A	(0.39)A	-	-	-	-
Q2 (Jun)	-	(0.39)A	(2.74)A	-	-	-	-
Q3 (Sep)	-	(0.31)	(0.26)	-	-	-	-
Q4 (Dec)	-	(0.32)	(0.27)	-	-	-	-
FY	(1.18)	(1.38)	(1.48)	(1.07)	(0.92)	(0.39)	(0.24)

Source: Company data, Bloomberg, J.P. Morgan estimates.

#### Company Data

Price (\$)	26.93
Date Of Price	12 Sep 13
52-week Range (\$)	33.45-18.00
Market Cap (\$ mn)	649.77
Fiscal Year End	Dec
Shares O/S (mn)	24
Price Target (\$)	35.00
Price Target End Date	30-Dec-14

#### See page 4 for analyst certification and important disclosures.

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## Changes to Our Model

We are updating our model to reflect 2Q trends. We have fine tuned our operating expenses. Our 2013-2015 GAAP EPS change to (\$1.48), (\$0.92), and (\$0.24) from (\$1.38), (\$1.07), and (\$0.39), respectively.

Table 1: Changes to Our Model - Agios

	2013E OLD	2013E NEW	2014E OLD	2014E NEW	2015E OLD	2015E NEW
Total Revenue	25.2	25.1	35.2	35.1	65.2	65.1
R&D	49.5	50.9	56.9	57.0	62.6	62.7
SG&A	7.9	7.7	8.6	8.5	9.1	8.9
Total Op Ex	57.3	58.6	65.5	65.5	71.6	71.6
Net income	-40.1	-35.8	-38.3	-32.7	-14.4	-8.8
<b>GAAP EPS (\$)</b>	<b>-1.38</b>	<b>-1.48</b>	<b>-1.07</b>	<b>-0.92</b>	<b>-0.39</b>	<b>-0.24</b>
Shares	29.0	24.1	35.7	35.7	36.7	36.7

Source: J.P. Morgan estimates.

## Investment Thesis

Agios's core science focuses on identifying drug targets in deregulated metabolic pathways. In particular, with the use of high throughput mass spectrometry and the "flux biochemistry" approach, many drug targets have been identified that modulate critical biological pathways. The company's three lead assets are early stage: AG-221 (IDH2m inhibitor) and AG-120 (IDH1m inhibitor), both for oncology indications, and AG-348 (PKR activator), for an orphan disease known as pyruvate kinase deficiency. The scientific rationale appears very robust to us, but the company is only entering phase 1. Our Neutral rating balances strong science and potential of differentiated therapeutics with the early stage of the company.

## Valuation

Our Dec 2014 price target of \$35 for AGIO is based on a comparable company analysis. For comparables we use select biotech companies with a focus on oncology and orphan diseases. Our comparable group has a mean market cap of ~\$1B and a firm value of ~\$900M. Since Agios is currently in preclinical development relative to our comparable companies in clinical development, we apply an appropriate ~10% discount.

## Risks to Rating and Price Target

*Upside risks include* 1) faster than anticipated development of lead assets, 2) quicker path to market, 3) company could be viewed as strategically attractive. *Downside risks include* 1) failure to show differentiated therapeutic benefit of lead assets or trial failure, 2) FDA requires long development pathway, and 3) out-year financing risk.

## Agios Pharmaceuticals: Summary of Financials

Income Statement - Annual	FY12A	FY13E	FY14E	FY15E	Income Statement - Quarterly	1Q13A	2Q13A	3Q13E	4Q13E
Revenues	25	25	35	65	Revenues	6A	6A	6	6
Cost of products sold	0	0	0	0	Cost of products sold	0A	0A	0	0
Gross profit	-	-	-	-	Gross profit	-	-	-	-
SG&A	(7)	(8)	(8)	(9)	SG&A	(2)A	(2)A	(2)	(2)
R&D	(41)	(51)	(57)	(63)	R&D	(11)A	(13)A	(13)	(14)
Operating income	(23)	(33)	(30)	(6)	Operating income	(7)A	(9)A	(9)	(9)
EBITDA	(23)	(33)	(30)	(6)	EBITDA	(7)A	(9)A	(9)	(9)
Net interest (income) / expense	(4)	(2)	(2)	(2)	Net interest (income) / expense	(2)A	0A	(0)	(0)
Other income / (expense)	-	-	-	-	Other income / (expense)	-	-	-	-
Income taxes	0	0	0	0	Income taxes	0A	(2)A	0	0
Net income - GAAP	(27)	(36)	(33)	(9)	Net income - GAAP	(9)A	(10)A	(9)	(9)
Net income - recurring	(27)	(36)	(33)	(9)	Net income - recurring	(9)A	(10)A	(9)	(9)
Diluted shares outstanding	23	24	36	37	Diluted shares outstanding	23A	4A	35	35
EPS - excluding non-recurring	(1.18)	(1.48)	(0.92)	(0.24)	EPS - excluding non-recurring	(0.39)A	(2.74)A	(0.26)	(0.27)
EPS - recurring	(1.18)	(1.48)	(0.92)	(0.24)	EPS - recurring	(0.39)A	(2.74)A	(0.26)	(0.27)
Balance Sheet and Cash Flow Data	FY12A	FY13E	FY14E	FY15E	Ratio Analysis	FY12A	FY13E	FY14E	FY15E
Cash and cash equivalents	91	187	150	142	Sales growth	15.0%	0.1%	39.8%	85.4%
Accounts receivable	-	-	-	-	EBIT growth	38.3%	45.6%	(9.3%)	(78.7%)
Inventories	-	-	-	-	EPS growth - recurring	(86.7%)	25.9%	(38.3%)	(73.7%)
Other current assets	2	2	1	2	Gross margin	-	-	-	-
Current assets	130	226	188	180	EBIT margin	(91.6%)	(133.2%)	(86.4%)	(9.9%)
PP&E	4	4	4	5	EBITDA margin	(91.6%)	(133.2%)	(86.4%)	(9.9%)
Total assets	137	233	193	186	Tax rate	0.0%	0.0%	0.0%	0.0%
Total debt	-	-	-	-	Net margin	(108.7%)	(142.5%)	(93.1%)	(13.6%)
Total liabilities	93	93	88	88	Net Debt / EBITDA	-	-	-	-
Shareholders' equity	44	140	105	97	Net Debt / Capital (book)	-	-	-	-
Net income (including charges)	(20)	(36)	(33)	(9)	Return on assets (ROA)	(16.5%)	(19.4%)	(15.4%)	(4.7%)
D&A	1	1	1	2	Return on equity (ROE)	(51.0%)	(39.0%)	(26.7%)	(8.7%)
Change in working capital	(38)	0	(5)	0	Enterprise value / sales	-	-	-	-
Other	8	8	1	1	Enterprise value / EBITDA	-	-	-	-
Cash flow from operations	(50)	(27)	(35)	(6)	Free cash flow yield	(7.5%)	(4.0%)	(3.6%)	(0.6%)
Capex	(1)	(2)	(2)	(2)					
Free cash flow	(47)	(26)	(34)	(6)					
Cash flow from investing activities	23	122	(2)	(2)					
Cash flow from financing activities	0	0	0	0					
Dividends	-	-	-	-					
Dividend yield	-	-	-	-					

Source: Company reports and J.P. Morgan estimates.

Note: \$ in millions (except per-share data). Fiscal year ends Dec

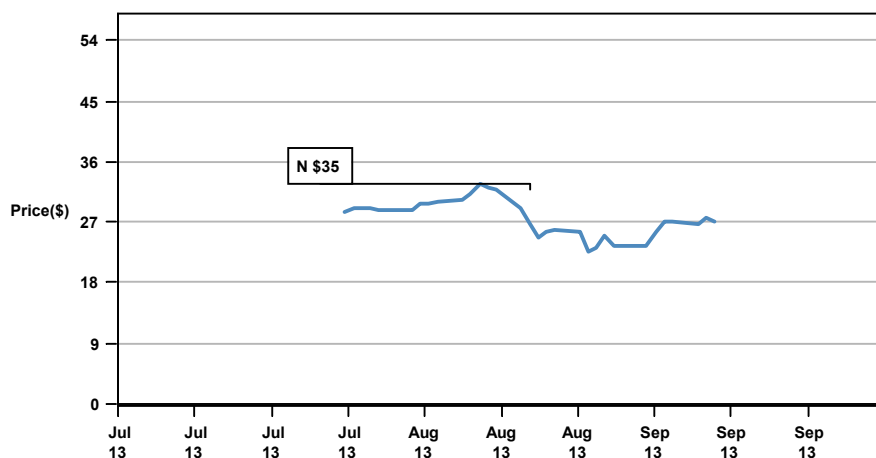
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Agios Pharmaceuticals (AGIO, AGIO US) Price Chart



Date	Rating	Share Price (\$)	Price Target (\$)
19-Aug-13	N	31.91	35.00

Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends.  
Initiated coverage Aug 19, 2013.

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