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Atara Biotherapeutics

Biotechnology

US Equity Research
24 September 2015

BUY
unchanged

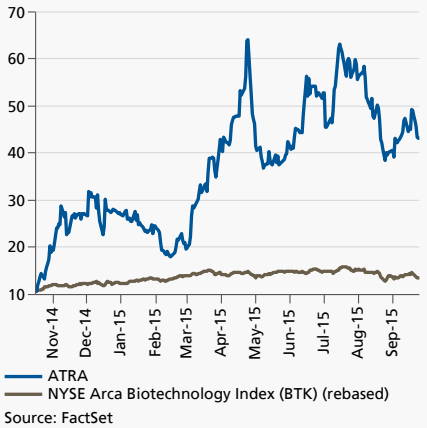
PRICE TARGET	US$80.00
unchanged	
Price (24-Sep)	US$43.10
Ticker	ATRA-NASDAQ

52-Week Range (US$):	9.66 - 65.56
Avg Daily Vol (000s) :	0.3
Market Cap (US$M):	1,214
Shares Out. (M) :	24.2

FYE Dec	2014A	2015E	2016E
Revenue (US$M)	0	0	0
EPS Adj&Dil (US$)	(8.50)	(2.03)	(4.65)

Quarterly Revenue	Q1	Q2	Q3	Q4
2014A	0	0	0	0
2015E	0A	0A	0	0
2016E	0	0	0	0

Quarterly EPS Adj&Dil	Q1	Q2	Q3	Q4
2014A	0.00	0.00	(4.20)	0.00
2015E	(0.41)A	(0.25)A	(0.69)	(0.65)
2016E	(0.88)	(0.96)	(1.41)	(1.35)



Source: FactSet

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Company Update

WT1-CTL demonstrates promising single-agent Phase 1 data in heme malignancies

Early efficacy in single-agent WT1-CTL in relapsed/refractory MM and PCL following AlloHCT

WT1-CTL, an off-the-shell cytotoxic T-cell therapy directed towards the WT1 cancer protein, demonstrated good preliminary efficacy in myeloma patients undergoing allogeneic SCT. Atara released an abstract detailing single-agent activity in a Phase 1 trial of n=7 heavily pre-treated, relapsed-refractory multiple myeloma (MM) and plasma cell leukemia (PCL) patients one year following alloHCT and three infusions of WT-1-CTL. The results show:

- three complete remissions (CR)
- one partial response (PR)
- two stable disease (SD)
- one progressive disease (PD)

This represents a disease control rate (DCR) of 86%. Full data will be presented on Saturday (9/26) during the IMW conference.

WT1-CTL may improve alloHCT response in r/r MM, PCL

Based on strong early efficacy, WT1-CTL may improve the alloHCT regimen in r/r MM and PCL if durability and safety can be maintained. Taking into account the small sample size, WT1-CTL demonstrated a CR of 42% and 0% mortality at one year, compared to published data for alloHCT showing a cure rate of 34-62% and mortality 20-26% in MM at 1-year. There is no published information on alloHCT in PCT. Due to high treatment-related mortality, alloHCT is typically utilized only in candidates that have a chance of achieving a cure. Based on these preliminary data, and if it can be maintained during long-term followup, WT1-CTL seems to confer similar efficacy with a reduction in mortality compared to alloHCT alone.

WT1 data opens door for other oncoprotein targets and demonstrates technology works in non-viral targets

Early data for WT1-CTL validates Atara's off-the-shell, target-specific T-cell platform in oncology. We believe Atara will likely leverage its platform to develop CTLs targeted to other distinctive oncogenes. Atara has a distinct advantage compared to other immunotherapy companies as its off-the-shelf approach provides the most favorable economics and scalability.

Reiterate BUY with $80 price target

We are encouraged by the continued progress with Atara's CTL platform beyond its lead program in EBV. We look forward to further data readouts for the EBV and PINTA-745 programs by YE2015.

For important information, please see the Important Disclosures beginning on page 4 of this document.

Figure 1: ATRA expected catalysts

Event	Timing	Description	Effect	Importance	Notes
Data	YE15	WT1-CTL	↑	High	Phase 1 data in r/r MM/PCL
Data	YE15	PINTA-745	↑	Critical	Results of Phase 2 in PEW in dialysis
Data	YE15	MSK T-cell programs	↑	Critical	Additional data
Data	1H16	STM-434	↑	High	Results of Phase 1 in ovarian and solid tumors

Source: Canaccord Genuity estimates

Figure 2: ATRA valuation

Product	Peak Sales / Royalty ($MM)	Peak Year	NPV at launch ($MM)	Probability Adjustment	Current Value ($MM)	EV/S multiple	Value / Share NPV	Value / Share EV / S	Average NPV, EV / S
PINTA-745									
US	1,575	2025	3,470	40%	576	5.5	$24	$41	$32
Ex-US (royalty)	127	2026	340	40%	73	5.5	$3	$3	$3
STM-434									
US	185	2025	269	30%	(1)	5.5	($0)	$4	$2
Ex-US (royalty)	11	2026	97	30%	16	5.5	$1	$0	$0
EBV-CTL									
Hematopoetic Stem Cell Transplant									
US	164	2025	622	50%	239	5.5	$10	$6	$8
Ex-US (royalty)	42	2025	192	50%	66	5.5	$3	$1	$2
Solid Organ Transplant									
US	187	2023	1,206	50%	410	5.5	$17	$7	$12
Ex-US (royalty)	23	2022	301	50%	103	5.5	$4	$1	$3
CMV-CTL									
US	123	2025	227	35%	38	5.5	$2	$3	$2
Ex-US (royalty)	36	2026	99	35%	18	5.5	$1	$1	$1
Equity Value							**$64**	**$66**	$65
Total Equity Value							$64	$66	$65
Net Cash							$15	$15	$15
Value per share							**$79**	**$82**	**$80**
Shares Outstanding (MM)							24		

Risk-Free Rate	2%
Beta	1.3
Risk Premium	9%
Discount Rate	13%

Source: Canaccord Genuity estimates

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Figure 3: ATRA Income Statement

($000's) [FY - DEC]	2014A	1Q15A	2Q15A	3Q15E	4Q15E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
Revenue:													
PINTA-745 - US									-	-	246,790	610,184	890,533
PINTA-745 - Ex-US royalty									-	-	-	20,884	51,124
STM-434 - US									-	18,800	57,810	80,982	161,655
STM-434 - Ex-US royalty									-	-	1,210	3,722	6,358
EBV-CTL - US													
HSCT									32,345	62,973	114,467	133,649	153,882
Solid Organ Transplant									20,166	62,321	106,998	132,266	158,959
EBV-CTL - Ex-US royalty													
HSCT									9,547	18,621	32,893	37,616	42,386
Solid Organ Transplant									3,208	9,673	16,202	19,539	22,910
CMV-CTL - US									-	17,088	35,209	54,409	74,736
CMV-CTL - Ex-US royalty									-	-	-	-	14,732
Total revenue	**-**	-	-	-	-	**-**	**-**	**-**	**65,267**	**189,477**	**611,580**	**1,093,250**	**1,577,274**
COGS	-	-	-	-	-	-	-	-	10,502	32,237	112,255	202,298	287,953
Gross profit	-	-	-	-	-	-	-	-	54,765	157,241	499,325	890,952	1,289,321
Operating expenses:													
Research and development	**15,446**	**5,767**	**7,007**	**12,771**	**12,198**	**37,743**	**124,300**	**144,750**	**146,982**	**150,306**	**150,280**	**480,085**	**777,552**
PINTA745	2,311	1,477	1,433	1,500	200	4,610	50,000	53,333	56,000	58,800	61,740	64,827	68,068
STM 434	4,389	664	628	1,250	1,250	3,792	13,333	16,667	17,500	12,250	8,575	7,718	6,946
ATA 842	624	982	1,825	1,000	1,000	4,807	4,000	7,333	13,333	35,000	36,750	37,118	29,694
T-cell therapy Programs (Option to license T-cell therapies	2,000	122	4,587	5,380	5,379	15,468	38,617	48,150	39,918	23,014	20,911	19,028	17,344
EBV-CTL				3,267	3,267	6,533	25,067	30,080	15,040	7,520	6,768	6,091	5,482
CMV-CTL				1,513	1,513	3,025	12,050	16,870	23,618	14,171	12,754	11,478	10,331
WT1-CTL				601	600	1,201	1,500	1,200	1,260	1,323	1,389	1,459	1,532
Other R&D												327,975	630,910
Employee and overhead costs	6,122	2,522	3,034	3,641	4,369	13,566	18,350	19,267	20,230	21,242	22,304	23,419	24,590
Research and development costs paid to Amgen	(1,066)					0							
In-process R&D acquired from Amgen	-					0							
In-process R&D acquired from MSK			(4,500)										
Selling, General and Administrative	12,710	3,544	3,601	4,500	4,500	16,145	17,044	18,748	29,998	52,498	86,248	90,561	95,089
Total operating expenses	42,536	9,311	6,108	17,271	16,698	49,388	141,344	163,499	176,980	202,804	236,528	570,645	872,641
Operating Profit	**(42,536)**	**(9,311)**	**(6,108)**	**(17,271)**	**(16,698)**	**(49,388)**	**(141,344)**	**(163,499)**	**(122,215)**	**(45,564)**	**262,796**	**320,307**	**416,680**
Interest expense / income (net)	125	153	163			316							
Provision (benefit) for income taxes	25	(2)				(2)							
Unrealized losses on investments	25	82				82							
Other comprehensive loss			(48)										
Income tax benefit (expense)													
Net income	**(42,361)**	**(9,078)**	**(5,993)**	**(17,271)**	**(16,698)**	**(49,040)**	**(141,344)**	**(163,499)**	**(122,215)**	**(45,564)**	**262,796**	**320,307**	**416,680**
GAAP EPS	**($8.50)**	**($0.41)**	**($0.25)**	**($0.69)**	**($0.65)**	**($2.03)**	**($4.65)**	**($4.90)**	**($3.38)**	**($1.20)**	**$6.60**	**$7.66**	**$9.49**
Shares Diluted	4,986	21,918	24,224	24,951	25,699	24,198	30,423	33,373	36,113	37,919	39,815	41,805	43,896

Source: Company reports and Canaccord Genuity estimates

Appendix: Important Disclosures

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Target Price / Valuation Methodology:

Atara Biotherapeutics - ATRA

Our $80 price target for Atara is based on an average of two valuation models. We utilize a sum-of-the-parts probability-adjusted NPV model with a 13% discount rate, and probability-adjust each indication between 30% and 50% based on the product and stage of development. Our effective discount rate is ~23% when taking into account probability adjustments. We also utilize a 5.5x multiple, based on a historical analysis of biotechnology companies, for an EV/S model.

Risks to achieving Target Price / Valuation:

Atara Biotherapeutics - ATRA

Clinical risks: Atara Biotherapeutics is a clinical-stage biotechnology company and we see various clinical regulatory, competitive, and safety risks to our rating and price target. Importantly, Atara's T-cell programs are not approved by FDA and could generate negative clinical data. The PINTA-745 program may also generate negative efficacy and/or safety data in the current Phase 1/2 trial and/or in subsequent trials. The STM-434 program is early in development, and has not yet generated data in humans.

Manufacturing risks: Atara's T-cell programs carry higher manufacturing risk versus biologic antibodies and small molecules since they are generated from human samples in a complex manner. Atara could experience challenges in transferring manufacturing from MSK to a larger, commercial-scale facility, and the FDA may also request stringent validation for the transfer. Although less complex, the PINTA-745 and STM-434 programs also carry manufacturing risk, as they are biologic products.

Regulatory risks: Atara's programs are not approved by FDA and could carry higher regulatory risk than expected.

Commercial and competitive risks: Atara may secure FDA approval for one or more products in its pipeline, but may generate revenues below our estimates. Also, the company may be unable to secure favorable reimbursement due to growing pressure on drug costs in the US. The biotechnology sector is highly competitive, and current and/or future competitors may emerge for Atara's products that could result in materially lower revenues than projected.

Financial risks: Atara has no revenues, and may not have revenues for several years, during which time the company is likely to need to raise significant additional capital, resulting in potential dilution for shareholders.

Intellectual property risks: Atara's pipeline consists entirely of biologic assets, increasing the barriers to entry from an intellectual property standpoint, but other entities or companies may challenge the company's intellectual property portfolio.

Distribution of Ratings:

Global Stock Ratings (as of 09/24/15)

Rating	Coverage Universe		IB Clients
	#	%	%
Buy	617	62.58%	31.77%
Hold	283	28.70%	13.07%
Sell	28	2.84%	3.57%
Speculative Buy	58	5.88%	56.90%
	986*	100.0%	

*Total includes stocks that are Under Review

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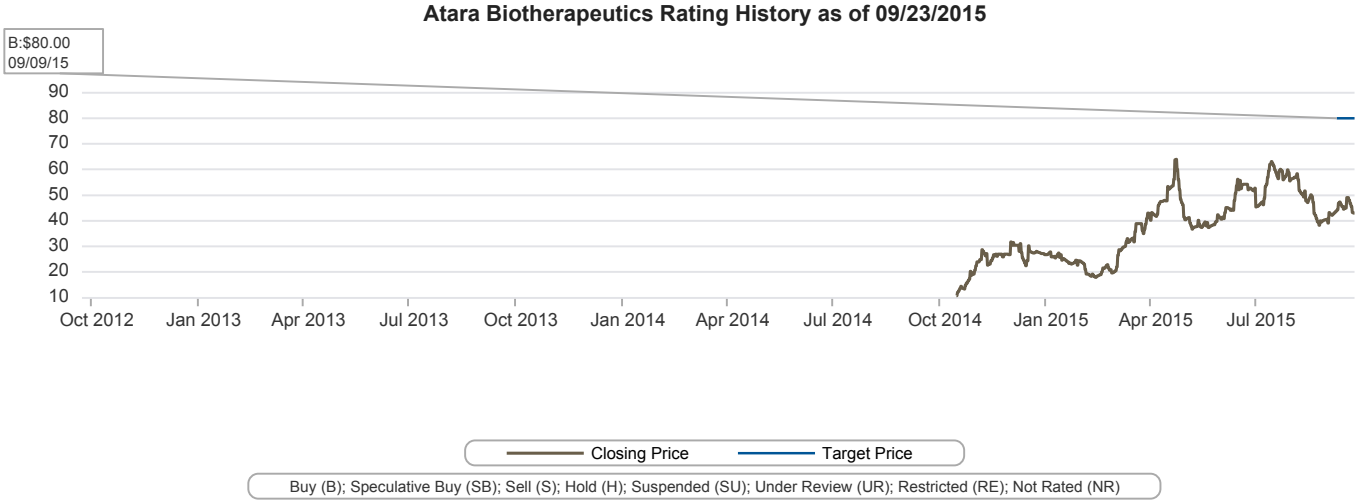
Atara Biotherapeutics Rating History as of 09/23/2015



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