

Otonomy, Inc. (OTIC)

Overweight

OTIC 2Q15 Earnings Update: AuriPro Approval On The Horizon

CONCLUSION

After the close, OTIC reported 2Q15 earnings. The company continues to rapidly advance its clinical pipeline, with lead asset AuriPro on track for FDA approval by year-end and launch in early 2016, which we believe represents a \$100M+ market opportunity in annual sales for its lead indication alone. OTO-104 is advancing into 2 P3 trials with the first one expected to start before year-end, which represents a sizeable opportunity for OTIC in the context of 600,000+ Meniere's disease pts in the US alone. USPTO recently issued a Declaration of Interference for a patent dispute between OTIC and a competitor and OTIC was designated as the "Senior Party" which we believe further solidifies the company's leading position in extended releasing technology to treat ear diseases. We remain our OW rating with a PT of \$46. OTIC is a top SMID cap pick.

- **OTO-104 advancing into P3:** The company is advancing OTO-104 into 2 P3 trials for treating Meniere-induced vertigo and is in the midst of finalizing the trial design with the FDA. We believe OTO-104 is an active drug and the probability of hitting primary endpoints (i.e. monthly vertigo reduction vs. placebo) in the P3 trials is high. OTIC plans to provide an update on this program at an analyst event scheduled on Oct. 7th in NYC.
- **AuriPro approval and launch:** We remain bullish on the prospect of AuriPro approval. While the company already hinted a slow ramp for year one due to P&T committee approvals for hospitals (which usually take 6-9 months), we believe investors are underappreciating the readiness of ENT community to ultimately adopt new technologies and the willingness to move these into off-label settings. That said, to reflect the fact that 2016 is primarily a year oriented towards facilitating access as opposed to uptake, we are reducing our 2016/2017 estimates. In parallel, OTIC is working to expand AuriPro to other indications, i.e. acute otitis media and acute otitis externa, both of which are currently in P2 studies. These indications collectively represent equally large (or even larger) market opportunities for AuriPro.
- **Financials:** The company ended Q2 with \$190.3M in cash/cash equivalents, which should be sufficient to support the operation until early 2017. With an EV of just ~\$380M and a derisked AuriPro (peak sales likely > \$200M), we see shares as quite attractive and urge investors to revisit this name ahead of AuriPro approval.

RISKS TO ACHIEVEMENT OF PRICE TARGET

Development candidates may face clinical, regulatory or commercial setbacks.

COMPANY DESCRIPTION

OTIC is developing drugs to treat a variety of ear conditions.

PRICE: US\$24.71

TARGET: US\$46.00

DCF thru 2022, 10.5% discount rate, 3.0% terminal growth rate

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Changes	Previous	Current
Rating	—	Overweight
Price Tgt	—	US\$46.00
FY15E Rev (mil)	—	US\$0.0
FY16E Rev (mil)	US\$13.0	US\$4.0
FY15E EPS	US\$(2.98)	US\$(2.89)
FY16E EPS	US\$(3.76)	US\$(3.96)

52-Week High / Low	US\$41.99 / US\$15.19
Shares Out (mil)	24.2
Market Cap. (mil)	US\$598.0
Avg Daily Vol (ooo)	245
Book Value/Share	US\$8.81
Net Cash Per Share	US\$7.88
Debt to Total Capital	0.0%
Div (ann)	US\$0.00
Fiscal Year End	Dec

Price Performance - 1 Year



Source: Bloomberg

YEAR	REVENUE (US\$ m)						EARNINGS PER SHARE (US\$)					
	Mar	Jun	Sep	Dec	FY	FY RM	Mar	Jun	Sep	Dec	FY	FY P/E
2014A	0.0	0.0	0.0	0.0	0.0	NA	(5.07)	(3.86)	(1.23)	(0.46)	(5.46)	NM
2015E	0.0A	0.0A	0.0	0.0	0.0	NA	(0.52)A	(0.52)A	(0.82)	(1.02)	(2.89)	NM
2016E	0.5	0.5	1.0	2.0	4.0	149.5x	(0.96)	(0.97)	(0.99)	(1.04)	(3.96)	NM

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Key Events For OTIC				
Program	Disorder	Type	Event	Expected Timing
AuriPro	TTP	Regulatory	FDA Approval	2H 2015
	AOMT	Clinical	Additional P2 results	2016
	Acute Otitis Externa	Clinical	P2 results	2016
OTO-104	Ménière's disease	Clinical	Initiate the first P3 trial	2H 2015
		Clinical	Initiate the second P3 trial	1H 2016
OTO-311	Tinnitus	Preclinical	File IND and initiate P1b study	2015
		Competitive/ validating	Auris Medical P3 data for AM-101	1H 2016
Analyst Event	Oct. 7 th , 2015			

Source: Company reports and Piper Jaffray

OTIC Discounted Cash Flow (DCF) and Equity Valuation (\$ M):	
Assumed Discount Rate (%)	10.5%
Discounted Net Cash Flow (2014-'20)	867
Terminal Growth Rate (%)	3.0%
Implied Terminal Year FCF Multiple	13.7x
NPV of FCFF	\$1,172
Terminal Value as % of total	26.0%
Add: Net Cash	201
Shares Outstanding 2017E (million)	30
Price Target	\$46

Source: Company Reports and Piper Jaffray.

OTIC DCF Valuation Analysis					
Discount Rate					
Terminal Growth		10.0%	10.5%	11.0%	11.5%
	2.0%	\$44	\$40	\$37	\$34
	3.0%	\$51	\$46	\$42	\$38
	4.0%	\$59	\$53	\$48	\$43
	5.0%	\$71	\$62	\$56	\$50
	6.0%	\$89	\$76	\$67	\$59

Source: Company Reports and Piper Jaffray.

OTIC Potential Upside Vs Current					
Discount Rate					
Terminal Growth		10.0%	10.5%	11.0%	11.5%
	2.0%	106%	88%	73%	59%
	3.0%	135%	113%	94%	78%
	4.0%	175%	146%	122%	101%
	5.0%	230%	191%	159%	132%
	6.0%	312%	256%	211%	175%

Source: Company Reports and Piper Jaffray.

OTIC Annual P&L	2013A	2014A	Q1 15A	Q2 15A	Q3 15E	Q4 15E	2015E	Q1 16E	Q2 16E	Q3 16E	Q4 16E	2016E
Total U.S. Product Sales (000s)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$1	\$2	\$4
ex-US royalty	\$0	\$0	0.0	0.0	0.0	0.0	\$0	0.0	0.0	0.0	0.0	\$0
Total Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$1	\$2	\$4
Costs & Expenses:												
Cost of Goods Sold	\$0	\$0	0.0	0.0	0.0	0.0	\$0	0.0	0.0	0.0	0.0	\$0
% Product sales	0	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
R&D	\$16	\$32	8.6	7.3	14.0	16.0	\$46	12.0	13.0	12.0	13.0	\$50
% Revenue	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SG&A	\$4	\$8	3.5	5.4	6.0	9.0	\$24	16.0	16.0	18.0	20.0	\$70
% Revenue	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Operating Expenses	\$20	\$40	12.1	12.6	20.0	25.0	\$70	28.0	29.0	30.0	33.0	\$120
Operating Income (loss)	(\$20)	(\$40)	(12.1)	(12.6)	(20.0)	(25.0)	(\$70)	(27.8)	(28.2)	(29.0)	(31.0)	(\$116)
Interest and Other Income, Net	\$0	(\$3)	0.1	0.1	0.1	0.1	\$1	0.1	0.1	0.1	0.1	\$1
Accretion, convertible preferred	(\$1)	(\$0)	0.0	0.0	0.0	0.0	\$0	0.0	0.0	0.0	0.0	\$0
Pretax Income (Loss)	(\$20)	(\$43)	(\$12)	(\$13)	(\$20)	(\$25)	(\$69)	(\$28)	(\$28)	(\$29)	(\$31)	(\$115)
Income Taxes (Benefit)	\$0	\$0	0.0	0.0	0.0	0.0	\$0	0.0	0.0	0.0	0.0	\$0
Tax rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Income, adjusted (GAAP)	(\$20)	(\$43)	(12.0)	(12.5)	(19.9)	(24.9)	(\$69)	(27.7)	(28.1)	(28.9)	(30.9)	(\$116)
Stock option expenses	0	2	1	1	1	1	2	1	1	1	1	2
% Revenue	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Net Income, non-GAAP	(\$20)	(\$41)	(12.5)	(13.0)	(20.4)	(25.4)	(\$71)	(28.2)	(28.6)	(29.4)	(31.4)	(\$118)
Diluted EPS (Non-GAAP)	(\$4.51)	(\$5.24)	(\$0.54)	(\$0.54)	(\$0.84)	(\$1.04)	(\$2.97)	(\$0.98)	(\$0.99)	(\$1.00)	(\$1.06)	(\$4.03)
Diluted EPS, GAAP	(\$4.47)	(\$5.46)	(\$0.52)	(\$0.52)	(\$0.82)	(\$1.02)	(\$2.89)	(\$0.96)	(\$0.97)	(\$0.99)	(\$1.04)	(\$3.96)
Diluted Shares Outstanding (MM)	4.5	7.9	23.2	24.1	24.3	24.4	24	28.7	29.0	29.3	29.6	29

Source: Company Reports and Piper Jaffray.

Current disclosure information for this company can be found at <http://www.piperjaffray.com/researchdisclosures>.

Proprietary to Piper Jaffray & Co. August 12, 2015

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OTIC Product Model	2012A	2013A	2014A	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
TTP Procedures/Yr, U.S. (000s)	1,000	1,000	1,000	1,005	1,010	1,015	1,020	1,025	1,030	1,036	1,041
% children	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
# children TTP procedures/yr, U.S. (000s)	900	900	900	905	909	914	918	923	927	932	937
% of market without payor obstacles	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%
% penetration, low barrier population	0%	0%	0%	0%	3%	14%	30%	35%	40%	45%	50%
% penetration, high barrier population	0%	0%	0%	0%	0%	3%	15%	20%	25%	30%	35%
# adult TTP procedures/yr, U.S. (000s)	100	100	100	101	101	102	102	103	103	104	104
% penetration, adults	0%	0%	0%	0%	1%	2%	15%	35%	40%	50%	50%
AuriPro treatments/yr, U.S. (000s)	\$0	\$0	\$0	\$0	\$16	85	229	297	350	408	457
Cost/treatment	\$225	\$225	\$225	\$225	\$225	234	243	253	263	274	285
Total AuriPro revenue, U.S. (mm) For TTP	\$0	\$0	\$0	\$0	\$4	\$20	\$56	\$75	\$92	\$112	\$135
AuriPro revenue, Other (mm)	\$0	\$0	\$0	\$0	\$0	\$0	\$10	\$25	\$40	\$55	\$65
Total AuriPro revenue, U.S. (mm)	\$0	\$0	\$0	\$0	\$4	\$20	\$66	\$100	\$132	\$167	\$200
Meniere's patients, U.S. (000s)	650	650	650	663	0	697	717	746	776	807	839
% OTO-104 penetration	0%	0%	0%	0%	0%	0%	1%	3%	5%	6%	7%
OTO-104 ears treated, U.S. (000s)	0	0	0	0	0	0	4	19	39	48	59
Cost/yr	\$5,000	\$5,000	\$5,000	\$5,000	\$0	\$5,305	\$5,517	\$5,737	\$5,967	\$6,206	\$6,454
OTO-104 revenue/yr, U.S. (mm)	\$0	\$0	\$0	\$0	\$0	\$0	\$20	\$107	\$232	\$300	\$380

Source: Company reports, PJC estimates

OTIC Annual P&L	2012A	2013A	2014A	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
Total U.S. Product Sales (000s)	\$0	\$0	\$0	\$0	\$4	\$20	\$85	\$207	\$364	\$467	\$580
ex-US royalty	\$0	\$0	\$0	\$0	\$0	\$5	\$15	\$25	\$30	\$35	\$50
Total Revenues	\$0	\$0	\$0	\$0	\$4	\$25	\$100	\$232	\$394	\$502	\$630
Cost of Goods Sold	\$0	\$0	\$0	\$0	\$1	\$2	\$9	\$21	\$36	\$47	\$53
% Product sales	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
R&D	\$8.5	\$16.3	\$32	\$46	\$50	\$50	\$55	\$55	\$75	\$75	\$78
% Revenue	N/A	N/A	N/A	N/A	N/A	N/A	54.7%	23.7%	19.1%	14.9%	12.4%
SG&A	\$2.4	\$3.5	\$8	\$24	\$70	\$85	\$100	\$120	\$150	\$165	\$180
% Revenue	N/A	N/A	N/A	N/A	N/A	N/A	99.5%	51.7%	38.1%	32.9%	28.6%
Total Operating Expenses	\$10.9	\$19.9	\$40	\$70	\$121	\$137	\$164	\$196	\$261	\$287	\$311
Operating Income (loss)	(10.9)	(19.9)	(\$40)	(\$70)	(\$116)	(\$112)	(\$63)	\$36	\$132	\$216	\$319
Interest and Other Income, Net	\$3.4	\$0.3	(\$3)	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1
Accretion, convertible preferred	(0.8)	(0.5)	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pretax Income (Loss)	(\$8)	(\$20)	(\$43)	(\$69)	(\$115)	(\$111)	(\$62)	\$37	\$133	\$217	\$320
Income Taxes (Benefit)	0.0	0.0	\$0	\$0	\$0	\$0	\$0	\$11	\$40	\$65	\$96
Tax rate	0%	0%	0%	0%	0%	0%	0%	30%	30%	30%	30%
Net Income, adjusted (GAAP)	(8.37)	(20.1)	(\$43)	(\$69)	(\$116)	(\$111)	(\$62)	\$26	\$93	\$152	\$224
Stock option expenses	0	0	2	2	2	3	4	5	8	10	13
% Revenue	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2%	2%	2%	2%
Net Income, non-GAAP	(\$8.6)	(\$20.3)	(\$41)	(\$67)	(\$114)	(\$108)	(\$59)	\$31	\$101	\$162	\$237
Diluted EPS (Non-GAAP)	(\$3.46)	(\$4.51)	(\$5.24)	(\$2.80)	(\$3.90)	(\$3.61)	(\$1.79)	\$0.91	\$2.89	\$4.46	\$6.29
Diluted EPS, GAAP	(\$3.38)	(\$4.47)	(\$5.46)	(\$2.89)	(\$3.97)	(\$3.71)	(\$1.90)	\$0.78	\$2.67	\$4.18	\$5.96
Diluted Shares Outstanding (MM)	2.5	4.5	7.9	24.0	29.2	30.0	32.6	33.7	34.9	36.2	37.6

Source: Company Reports and Piper Jaffray.

Cash Flow Statement	2012A	2013A	2014A	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
Net Income (Loss)	-8.4	-20.1	-42.8	-69.4	-115.9	-111.2	-62.1	26.2	93.2	151.6	224.2
Accretion to RV of convert	0.8	0.5	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation and amortization	0.2	0.3	0.2	0.5	0.5	1.2	1.3	1.4	2.0	2.5	3.0
Stock-based compensation	0.2	0.2	1.7	2.0	2.0	3.0	3.5	4.6	7.9	10.0	12.6
Non cash interest exp	0.4	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change in FV of convert	(3.8)	(2.8)	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deferred rent	0.3	(0.0)	(0.1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Changes in operating assets and liability	(0.6)	(0.0)	2.6	(1.0)	(2.8)	(2.7)	(20.2)	(36.0)	(41.0)	(27.8)	(32.9)
Cash From Operations	(10.8)	(19.5)	(35.1)	(67.9)	(116.2)	(109.7)	(77.5)	(3.8)	62.1	136.3	206.9
Capex	(0.2)	(0.5)	(0.8)	(2.0)	(2.0)	(3.0)	(3.5)	(3.5)	(5.9)	(7.5)	(9.5)
FCF	(11.0)	(20.0)	(35.9)	(69.9)	(118.2)	(112.7)	(81.0)	(7.3)	56.2	128.8	197.4
Proceeds from convertible notes	8.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Proceeds from issuance of conv pref stocks	0.0	45.6	49.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Proceeds from issuance of common stocks	0.0	0.0	104.1	80.0	150.0	0.0	100.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash From Financing	8.0	52.6	154.7	80.0	150.0	0.0	100.0	0.0	0.0	0.0	0.0
Net increase in cash and cash equivalents	(3.0)	32.6	118.8	10.1	31.8	(112.7)	19.0	(7.3)	56.2	128.8	197.4
Cash/equivalents at beginning	7.7	4.7	37.3	156.1	166.3	198.1	85.4	104.4	97.1	153.3	282.1
Cash/equivalents at end	4.7	37.3	156.1	166.3	198.1	85.4	104.4	97.1	153.3	282.1	479.5

Proprietary to Piper Jaffray & Co. August 12, 2015

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R: Resuming Coverage
T: Transferring Coverage
D: Discontinuing Coverage
S: Suspending Coverage
OW: Overweight
N: Neutral
UW: Underweight
NA: Not Available
UR: Under Review

Distribution of Ratings/IB Services Piper Jaffray				
Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [OW]	421	59.55	105	24.94
HOLD [N]	268	37.91	14	5.22
SELL [UW]	18	2.55	0	0.00

Note: Distribution of Ratings/IB Services shows the number of companies currently in each rating category from which Piper Jaffray and its affiliates received compensation for investment banking services within the past 12 months. FINRA rules require disclosure of which ratings most closely correspond with "buy," "hold," and "sell" recommendations. Piper Jaffray ratings are not the equivalent of buy, hold or sell, but instead represent recommended relative weightings. Nevertheless, Overweight corresponds most closely with buy, Neutral with hold and Underweight with sell. See Stock Rating definitions below.

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- **Overweight (OW):** Anticipated to outperform relative to the median of the group of stocks covered by the analyst.
- **Neutral (N):** Anticipated to perform in line relative to the median of the group of stocks covered by the analyst.
- **Underweight (UW):** Anticipated to underperform relative to the median of the group of stocks covered by the analyst.

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