

Otonomy, Inc. (OTIC)

Overweight

Takeaways From A Day With Management; Reiterate Overweight

CONCLUSION

We hosted OTIC management last week for investor meetings and came away with some important new perspectives which we believe justify our confidence in the company's outlook. With P2b Meniere's data for OTO-104 in Q2, we believe there will be a strong buying opportunity on the news given progress moving towards AuriPro commercialization and upside from the Meniere's opportunity if successful. We reiterate our OW and \$46 PT.

- **Plenty of potential incremental buyers:** One of our most interesting takeaways is how many investors are still new to the OTIC story (IPO'ed in 2014), but all were impressed that the company has a derisked lead asset and an emerging pipeline in an ENT space which has been underserved historically.
- **ENT market is ripe for the picking:** There are a number of favorable dynamics which should help OTIC establish a dominant presence in the ENT space. It's a greenfield opportunity with essentially no pharmaceutical commercial presence. ENT specialists have a 'surgeon' mentality and tend to opt for hands-on experience over study data, much like the retina community. Similar to retina specialists, they are also apt to use drugs off-label. Also, ENT specialists tend to aggregate into large practices, making them easy to target with a small sales force. OTIC will work to 'grow KOLs' by funding research and education opportunities, maximizing the value of R&D spend.
- **Multiple avenues for growth:** As a short-term use product, AuriPro can still achieve growth via gradual penetration into a large market (think of Angiomax, Cubicin, Ofirmev, Xiaflex, Difcid) plus adding new indications to the label and potentially international expansion. As well, success with OTO-104 or OTO-301 represent sizable expansion opportunities which would meaningfully leverage AuriPro's presence. OTO-104, intratympanic dexamethasone, may also have its own pipeline of indications such as acute onset or chemo-related hearing loss.
- **Comfortable with our AuriPro assumptions:** The AuriPro launch will take some time for P&T committee approvals for hospital based use, which represents a bulk of the market. J-codes will be needed for outpatient delivery. With approval likely by YE, we estimate \$13M sales in 2016 and \$30M in 2017 at a \$225/treatment price point. There may be upside to our pricing assumption as OTIC notes that payers start to push back at a level closer to \$350 or higher. We do assume OTO-104 contribution in Meniere's, and we will have a clearer sense of that program after pending P2b data.

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\$35.76

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)	—	0.0
FY16E Rev (mil)	—	13.0
FY15E EPS	—	(2.93)
FY16E EPS	—	(3.63)

52-Week High / Low	US\$41.99 / US\$15.19
Shares Out (mil)	9.8
Market Cap. (mil)	US\$350.4
Avg Daily Vol (ooo)	210
Book Value/Share	US\$7.26
Net Cash Per Share	US\$7.37
Debt to Total Capital	0%
Div (ann)	US\$0.00
Fiscal Year End	Dec

Price Performance - 1 Year



Source: Bloomberg

YEAR	REVENUE (m)						EARNINGS PER SHARE ()					
	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	0.0	0.0	0.0	0.0	0.0	NA	(0.57)	(0.61)	(0.77)	(0.97)	(2.93)	NM
2016E	—	—	—	—	13.0	27.0X	—	—	—	—	(3.63)	NM

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Key Events For OTIC				
Program	Disorder	Type	Event	Expected Timing
AuriPro	TTP	Regulatory	FDA Approval	2H 2015
	AOMT	Clinical	P2 results	2015/2016
	New Indication	Clinical	Initiate trials in additional indications	2015
OTO-104	Ménière's disease	Clinical	Phase 2b data readout	2Q 2015
		Clinical	Initiate 2nd pivotal trial	2H 2015
OTO-311	Tinnitus	Preclinical	File IND and initiate P1b study	2015
		Competitive/ validating	Auris Medical P3 data for AM-101	1H 2016

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)	901
Terminal Growth Rate (%)	3.0%
Implied Terminal Year FCF Multiple	13.7x
NPV of FCFF	\$1,215
Terminal Value as % of total	25.8%
Add: Net Cash	165
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%	\$50	\$46	\$41	\$38
	4.0%	\$59	\$53	\$47	\$43
	5.0%	\$71	\$63	\$56	\$50
	6.0%	\$89	\$77	\$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%	23%	12%	2%	(6%)
	3.0%	41%	27%	16%	6%
	4.0%	65%	47%	33%	20%
	5.0%	98%	75%	55%	39%
	6.0%	149%	114%	87%	65%

Source: Company Reports and Piper Jaffray.

OTIC Annual P&L	2013A	Q1 14A	Q2 14A	Q3 14A	Q4 14A	2014A	Q1 15E	Q2 15E	Q3 15E	Q4 15E	2015E
Total U.S. Product Sales (000s)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ex-US royalty	\$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	\$0	\$0	\$0
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
% Product sales	0	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
R&D	\$16	9.0	8.3	7.4	7.2	\$32	11.0	12.0	13.0	15.0	\$51
% Revenue	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	1.6	1.6	2.0	2.7	\$8	3.0	3.0	6.0	9.0	\$21
% Revenue	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	10.6	9.8	9.4	9.9	\$40	14.0	15.0	19.0	24.0	\$72
Operating Income (loss)	(\$20)	(10.6)	(9.8)	(9.4)	(9.9)	(\$40)	(14.0)	(15.0)	(19.0)	(24.0)	(\$72)
Interest and Other Income, Net	\$0	(0.3)	(0.3)	(2.6)	0.1	(\$3)	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
Pretax Income (Loss)	(\$20)	(\$11)	(\$10)	(\$12)	(\$10)	(\$43)	(\$14)	(\$15)	(\$19)	(\$24)	(\$71)
Income Taxes (Benefit)	\$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%
Net Income, adjusted (GAAP)	(\$20)	(10.8)	(10.2)	(12.0)	(9.8)	(\$43)	(13.9)	(14.9)	(18.9)	(23.9)	(\$72)
Stock option expenses	0	0.3	0.3	0.3	0.9	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
Net Income, non-GAAP	(\$20)	-10.6	-9.9	-11.8	-8.9	(\$41)	(14.4)	(15.4)	(19.4)	(24.4)	(\$74)
Diluted EPS (Non-GAAP)	(\$4.51)	(\$4.95)	(\$3.76)	(\$1.20)	(\$0.42)	(\$5.24)	(\$0.59)	(\$0.63)	(\$0.79)	(\$0.99)	(\$3.01)
Diluted EPS, GAAP	(\$4.47)	(\$5.07)	(\$3.86)	(\$1.23)	(\$0.46)	(\$5.46)	(\$0.57)	(\$0.61)	(\$0.77)	(\$0.97)	(\$2.93)
Diluted Shares Outstanding (MM)	4.5	2.1	2.6	9.8	21.2	7.9	24.2	24.4	24.5	24.7	24

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. April 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%	10%	20%	30%	35%	40%	45%	50%
% penetration, high barrier population	0%	0%	0%	0%	2%	5%	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%	5%	15%	35%	40%	50%	50%
AuriPro treatments/yr, U.S. (000s)	\$0	\$0	\$0	\$0	\$59	126	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	\$13	\$30	\$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	\$13	\$30	\$66	\$100	\$132	\$167	\$200
Meniere's patients, U.S. (000s)	650	650	650	663	676	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	\$5,150	\$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

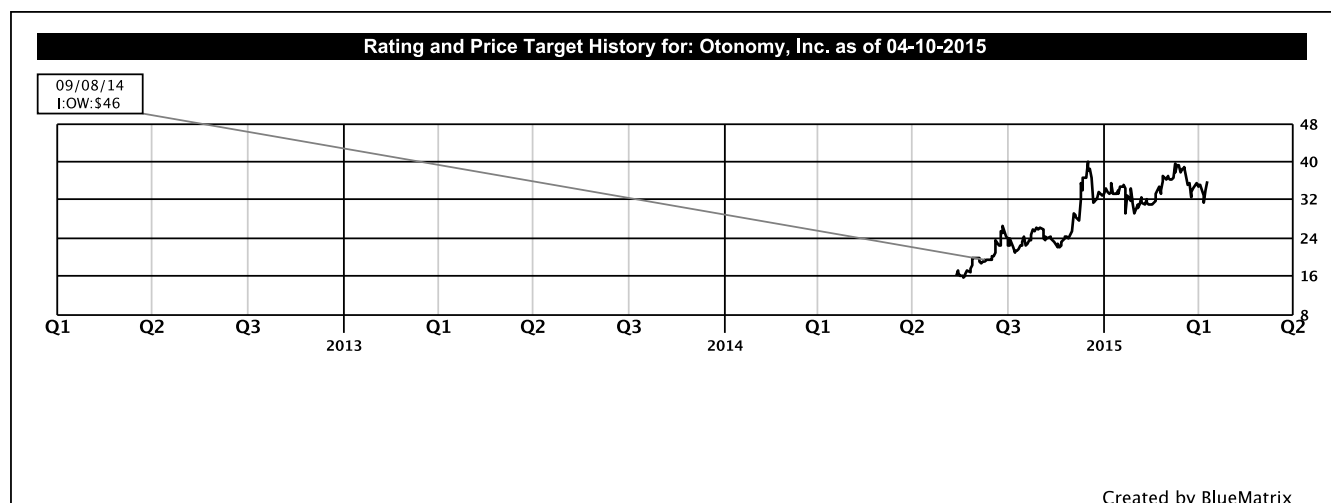
OTIC Annual P&L	2012A	2013A	2014A	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
Total U.S. Product Sales (000s)	\$0	\$0	\$0	\$0	\$13	\$30	\$85	\$207	\$364	\$467	\$580
ex-US royalty	\$0	\$0	\$0	\$0	\$0	\$5	\$15	\$25	\$30	\$35	\$50
Total Revenues	\$0	\$0	\$0	\$0	\$13	\$35	\$100	\$232	\$394	\$502	\$630
Cost of Goods Sold	\$0	\$0	\$0	\$0	\$1	\$3	\$9	\$21	\$36	\$47	\$58
% 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	\$51	\$50	\$50	\$55	\$55	\$75	\$75	\$80
% Revenue	N/A	N/A	N/A	N/A	N/A	N/A	54.7%	23.7%	19.1%	14.9%	12.7%
SG&A	\$2.4	\$3.5	\$8	\$21	\$70	\$85	\$100	\$120	\$150	\$165	\$165
% Revenue	N/A	N/A	N/A	N/A	N/A	N/A	99.5%	51.7%	38.1%	32.9%	26.2%
Total Operating Expenses	\$10.9	\$19.9	\$40	\$72	\$121	\$138	\$164	\$196	\$261	\$287	\$303
Operating Income (loss)	(10.9)	(19.9)	(\$40)	(\$72)	(\$108)	(\$103)	(\$63)	\$36	\$132	\$216	\$327
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)	(\$71)	(\$107)	(\$102)	(\$62)	\$37	\$133	\$217	\$328
Income Taxes (Benefit)	0.0	0.0	\$0	\$0	\$0	\$0	\$0	\$11	\$40	\$65	\$98
Tax rate	0%	0%	0%	0%	0%	0%	0%	30%	30%	30%	30%
Net Income, adjusted (GAAP)	(8.37)	(20.1)	(\$43)	(\$72)	(\$107)	(\$102)	(\$62)	\$26	\$93	\$152	\$230
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)	(\$70)	(\$105)	(\$99)	(\$59)	\$31	\$101	\$162	\$242
Diluted EPS (Non-GAAP)	(\$3.46)	(\$4.51)	(\$5.24)	(\$2.85)	(\$3.56)	(\$3.28)	(\$1.78)	\$0.90	\$2.87	\$4.42	\$6.38
Diluted EPS, GAAP	(\$3.38)	(\$4.47)	(\$5.46)	(\$2.93)	(\$3.63)	(\$3.38)	(\$1.88)	\$0.77	\$2.64	\$4.14	\$6.05
Diluted Shares Outstanding (MM)	2.5	4.5	7.9	24.5	29.5	30.3	33.0	34.1	35.3	36.6	38.0

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	-71.6	-107.0	-102.4	-62.1	26.2	93.2	151.6	229.8
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	1.0	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)	(1.7)	(5.4)	(17.5)	(36.0)	(41.0)	(27.8)	(32.9)
Cash From Operations	(10.8)	(19.5)	(35.1)	(70.1)	(105.7)	(103.7)	(74.8)	(3.8)	62.1	136.3	212.5
Capex	(0.2)	(0.5)	(0.8)	(2.0)	(2.5)	(3.0)	(3.5)	(3.5)	(5.9)	(7.5)	(9.5)
FCF	(11.0)	(20.0)	(35.9)	(72.1)	(108.2)	(106.7)	(78.3)	(7.3)	56.2	128.8	203.0
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	200.0	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	200.0	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	7.9	91.8	(106.7)	21.7	(7.3)	56.2	128.8	203.0
Cash/equivalents at beginning	7.7	4.7	37.3	156.1	164.0	255.8	149.2	170.9	163.6	219.8	348.5
Cash/equivalents at end	4.7	37.3	156.1	164.0	255.8	149.2	170.9	163.6	219.8	348.5	551.6

Proprietary to Piper Jaffray & Co. April 12, 2015

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I: Initiating Coverage
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]	372	60.69	104	27.96
HOLD [N]	227	37.03	17	7.49
SELL [UW]	14	2.28	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.

Analyst Certification — Joshua E. Schimmer, MD, Sr Research Analyst

— Jerry Yang, Ph.D., Research Analyst

— Steven P. Breazzano, Ph.D., Research Analyst

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- **Neutral (N):** Anticipated to perform in line relative to the median of the group of stocks covered by the analyst.
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