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# Otonomy, Inc. (OTIC)

# Overweight

# OTIC 3Q14 Earnings: Model Update

#### CONCLUSION

OTIC reported its first earnings since its IPO. The company continues to advance its pipeline in ear disease space. The leading program for pediatric patients with middle ear infections who require TTP is on track for NDA filing in 1H 2015, which in our review represents at minimum \$200M market opportunities in the US alone. The second program, OTO-104 for Ménière's disease, is progressing well with P2b data due 1H 2015. OTIC recently acquired rights to use Ipsen's gacyclidine clinical/preclinical data, which should help accelerate development of OTO-311, a sustained-exposure formulation of gacyclidine for treating tinnitus. We continue to believe that OTIC offers a very attractive risk and reward profile in the small-cap space. It is our top small-cap pick. Reiterate OW with PT of \$46.

#### 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\$23.68 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	_	(2.84)
FY16E EPS	_	(3.85)
52-Week High / Low	US\$28.:	20 / US\$15.19
Shares Out (mil)		9.8
Market Cap. (mil)		US\$232.1
Avg Daily Vol (000)		
Book Value/Share		US\$5.26
Net Cash Per Share		US\$16.86
Debt to Total Capital		0%
Yield		0.00%
Fiscal Year End		Dec



YEAR REVENUE ( m)								EARNINGS PER SHARE ()						
YEAR	Mar	Jun	Sep	Dec	FY	FY RM	Mar	Jun	Sep	Dec	FY	FY P/E		
2014E	o.oA	o.oA	o.oA	0.0	0.0	NA	(5.07)A	(3.86)A	(1.23)A	(0.68)	(5.23)	NM		
2015E	0.0	0.0	0.0	0.0	0.0	NA	(0.62)	(0.61)	(0.70)	(0.91)	(2.84)	NM		
2016E	_	_	_	_	13.0	17.9x	_	_	_	_	(3.85)	NM		

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Otonomy, Inc.

Page 1 of 9/09

	Key Events For OTIC											
Program	Disorder	Туре	Event	Expected Timing								
AuriPro		Regulatory	File NDA with the FDA	1H 2015								
	TTP	Commercial	Commercial launch in US	2016								
OTO-104	Ménière's disease	Clinical	P2 readouts	1H 2015								
010-104	Meniere's disease	Clinical	Initiate pivotal trial	2H 2015								
		Preclinical	File IND and initiate P1b study	2015								
OTO-311	Tinnitus	Competitive/ validating	Auris Medical P3 data for AM-101	1H16								

Source: Company reports and Piper Jaffray

Otonomy, Inc.

Page 2 of 9/10

OTIC Discounted Cash Flow (DCF) and Equity Valuation (\$ M):								
Assumed Discount Rate (%)	10.5%							
Discounted Net Cash Flow (2014-'20)	887							
Terminal Growth Rate (%)	3.0%							
Implied Terminal Year FCF Multiple	13.7x							
NPV of FCFF	\$1,171							
Terminal Value as % of total	24.3%							
Add: Net Cash	165							
Shares Outstanding 2017E (million)	29							
Price Target	\$46							

Source: Company Reports and Piper Jaffray.

	OTIC DCF Valuation Analysis											
	Discount Rate											
		10.0%	10.5%	11.0%	11.5%							
<u> </u>	2.0%	\$45	\$41	\$37	\$34							
nina	3.0%	\$52	\$46	\$42	\$38							
Terminal Growth	4.0%	\$61	\$54	\$49	\$44							
₽ 0	5.0%	\$73	\$64	\$57	\$51							
	6.0%	\$92	\$79	\$69	\$61							

Source: Company Reports and Piper Jaffray.

	C	OTIC Potential Upside Vs Current										
		10.0%	10.5%	11.0%	11.5%							
اء ح	2.0%	90%	72%	57%	44%							
rminal	3.0%	119%	97%	78%	62%							
lern Gro	4.0%	157%	129%	106%	85%							
ا ا	5.0%	211%	173%	142%	116%							
	6.0%	292%	237%	193%	157%							

Source: Company Reports and Piper Jaffray.

OTIC Annual P&L	2013A	Q1 14A	Q2 14A	Q3 14A	Q4 14E	2014E	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	12.0	\$37	11.0	11.0	11.0	12.0	\$45
% Revenue	N/A										
SG&A	\$4	1.6	1.6	2.0	3.0	\$8	3.0	3.0	5.0	9.0	\$20
% Revenue	N/A										
Total Operating Expenses	\$20	10.6	9.8	9.4	15.0	\$45	14.0	14.0	16.0	21.0	\$65
Operating Income (loss)	(\$20)	(10.6)	(9.8)	(9.4)	(15.0)	(\$45)	(14.0)	(14.0)	(16.0)	(21.0)	(\$65)
Interest and Other Income, Net	\$0	(0.3)	(0.3)	(2.6)	(0.3)	(\$4)	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)	(\$15)	(\$48)	(\$14)	(\$14)	(\$16)	(\$21)	(\$64)
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)	(15.3)	(\$48)	(13.9)	(13.9)	(15.9)	(20.9)	(\$65)
Stock option expenses	0	0.3	0.3	0.3	0.3	1	1	1	1	1	2
% Revenue	N/A										
Net Income, non-GAAP	(\$20)	(11.1)	(10.4)	(12.3)	(15.6)	(\$49)	(14.4)	(14.4)	(16.4)	(21.4)	(\$67)
Diluted EPS (Non-GAAP)	(\$4.51)	(\$5.19)	(\$3.95)	(\$1.25)	(\$0.70)	(\$5.34)	(\$0.64)	(\$0.63)	(\$0.72)	(\$0.93)	(\$2.92)
Diluted EPS, GAAP	(\$4.47)	(\$5.07)	(\$3.86)	(\$1.23)	(\$0.68)	(\$5.23)	(\$0.62)	(\$0.61)	(\$0.70)	(\$0.91)	(\$2.84)
Diluted Shares Outstanding (MM)	4.5	2.1	2.6	9.8	22.4	9.2	22.6	22.7	22.9	23.0	23

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. November 12, 2014

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Otonomy, Inc.

Page 4 of 9 12

OTIC Product Model	2012A	2013A	2014E	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

Otonomy, Inc.

Page 5 of 9/13

OTIC Annual P&L	2012A	2013A	2014E	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	\$37	\$45	\$50	\$50	\$65	\$70	\$75	\$75	\$80
% Revenue	N/A	N/A	N/A	N/A	N/A	N/A	64.7%	30.2%	19.1%	14.9%	12.7%
SG&A	\$2.4	\$3.5	\$8	\$20	\$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	\$45	\$65	\$121	\$138	\$174	\$211	\$261	\$287	\$303
Operating Income (loss)	(10.9)	(19.9)	(\$45)	(\$65)	(\$108)	(\$103)	(\$73)	\$21	\$132	\$216	\$327
Interest and Other Income, Net	\$3.4	\$0.3	(\$4)	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1
Accretion, convertible preferred	(8.0)	(0.5)	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pretax Income (Loss)	(\$8)	(\$20)	(\$48)	(\$64)	(\$107)	(\$102)	(\$72)	\$22	\$133	\$217	\$328
Income Taxes (Benefit)	0.0	0.0	\$0	\$0	\$0	\$0	\$0	\$7	\$40	\$65	\$98
Tax rate	0%	0%	0%	0%	0%	0%	0%	30%	30%	30%	30%
Net Income, adjusted (GAAP)	(8.37)	(20.1)	(\$48)	(\$65)	(\$107)	(\$102)	(\$72)	\$16	\$93	\$152	\$230
Stock option expenses	0	0	1	2	2	3	4	5	8	10	13
% Revenue	N/A	2%	2%	2%	2%						
Net Income, non-GAAP	(\$8.6)	(\$20.3)	(\$47)	(\$63)	(\$105)	(\$99)	(\$69)	\$20	\$101	\$162	\$242
Diluted EPS (Non-GAAP)	(\$3.46)	(\$4.51)	(\$5.12)	(\$2.75)	(\$3.77)	(\$3.47)	(\$2.19)	\$0.63	\$3.01	\$4.63	\$6.68
Diluted EPS, GAAP	(\$3.38)	(\$4.47)	(\$5.23)	(\$2.84)	(\$3.85)	(\$3.58)	(\$2.30)	\$0.48	\$2.78	\$4.34	\$6.33
Diluted Shares Outstanding (MM)	2.5	4.5	9.2	22.8	27.8	28.6	31.3	32.4	33.6	34.9	36.3

Source: Company Reports and Piper Jaffray.

Otonomy, Inc.

Page 6 of 9 14

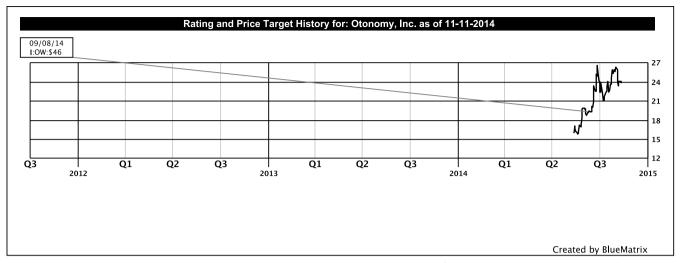
Cash Flow Statement	2012A	2013A	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
Net Income (Loss)	-8.4	-20.1	-48.4	-64.6	-107.0	-102.4	-72.1	15.7	93.2	151.6	229.8
Accretion to RV of convert	0.8	0.5	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation and amortization	0.2	0.3	0.2	0.5	1.0	1.2	1.3	1.4	2.0	2.5	3.0
Stock-based compensation	0.2	0.2	1.0	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)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deferred rent	0.3	(0.0)	0.0	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)	0.6	1.1	(1.7)	(5.4)	(17.4)	(36.0)	(41.2)	(27.8)	(32.9)
Cash From Operations	(10.8)	(19.5)	(46.6)	(61.0)	(105.7)	(103.7)	(84.7)	(14.3)	61.9	136.3	212.5
Capex	(0.2)	(0.5)	(0.5)	(2.0)	(2.5)	(3.0)	(3.5)	(3.5)	(5.9)	(7.5)	(9.5)
FCF	(11.0)	(20.0)	(47.1)	(63.0)	(108.2)	(106.7)	(88.2)	(17.8)	56.0	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	49.0	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	104.0	0.0	200.0	0.0	100.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash From Financing	8.0	52.6	153.0	0.0	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	105.9	(63.0)	91.8	(106.7)	11.8	(17.8)	56.0	128.8	203.0
Cash/equivalents at beginning	7.7	4.7	37.3	143.2	80.2	171.9	65.3	77.1	59.3	115.4	244.1
Cash/equivalents at end	4.7	37.3	143.2	80.2	171.9	65.3	77.1	59.3	115.4	244.1	447.2

Proprietary to Piper Jaffray & Co. November 12, 2014

Otonomy, Inc.

Page 7 of 9 15

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Legend:

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									
			IB Serv.	./Past 12 Mos.					
Rating	Count	Percent	Count	Percent					
BUY [OW]	375	61.68	95	25.33					
HOLD [N]	221	36.35	23	10.41					
SELL [UW]	12	1.97	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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Otonomy, Inc.
Page 8 of 9 16



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Otonomy, Inc.

Page 9 of 917