# J.P.Morgan

## **Otonomy**

### 3Q Snapshot & Model Update

We are updating our OTIC model based on the company's 3Q results (there was no conference call). After its initial public offering in August, the quarterly update was largely incremental. We continue to believe that OTIC is attractively positioned with one de-risked asset in AuriPro for the treatment of middle ear effusion in pediatric patients requiring TTP surgery (positive Ph3 data in hand; NDA expected in 1H15), important upcoming data for OTO-104 in Ménière's disease (Phase 2b results in 1H15e), and longer-term upside optionality in OTO-311 for tinnitus (a blockbuster opportunity). Maintain OW.

- **Upcoming events.** In the next 6-12 months, the key upcoming catalysts include Phase 2b data from the ongoing Phase 2b trial of OTO-104 in Ménière's disease in 1H15. Otonomy also plans to submit an NDA for AuriPro in 1H15 for potential approval and launch in 2016. We also expect the company to file an IND and initiate clinical development of OTO-311 in tinnitus in 2015.
- 3Q results. 3Q EPS was (\$1.23) vs. JPMe of (\$0.77), largely driven by post-IPO share counts. 3Q OpEx of \$9.4M was lower than JPMe of \$13.7M (due to lower than expected R&D of \$7.4M vs. JPMe of \$11.6M). That said, OTIC is not yet an earnings story.
- **Estimate changes.** We have updated our model for 3Q results; changes were minimal. We are maintaining our YE15 target of \$32.
- **Balance sheet update.** OTIC ended 3Q with ~\$165M in cash (and no debt) after completing an IPO in August (J.P. Morgan acted as a joint book-runner) generating ~\$104M in net proceeds.

### Overweight

OTIC, OTIC US Price: \$23.68

Price Target: \$32.00

#### Biotechnology

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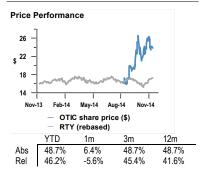
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J.P. Morgan Securities LLC



Otonomy, Inc. (OTIC;OTIC US)

FYE Dec	2012A	2013A	2014E	2014E	2015E	2015E	2016E	2016E
			(Prev)	(Curr)	(Prev)	(Curr)	(Prev)	(Curr)
EPS Reported (\$)								
Q1 (Mar)	-	(1.04)	(3.65)A	(3.65)A	-	-	-	-
Q2 (Jun)	-	-	(3.40)A	(3.40)A	-	-	-	-
Q3 (Sep)	-	-	(0.77)	(1.23)A	-	-	-	-
Q4 (Dec)	-	-	(0.75)	(0.76)	-	-	-	-
FY	(3.38)	(7.64)	(4.51)	(5.33)	(3.09)	(3.11)	(3.11)	(3.12)

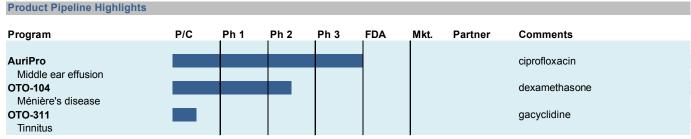
Company Data	
Price (\$)	23.68
Date Of Price	12 Nov 14
52-week Range (\$)	28.20-15.19
Market Cap (\$ mn)	501.38
Fiscal Year End	Dec
Shares O/S (mn)	21
Price Target (\$)	32.00
Price Target End Date	31-Dec-15

#### See page 6 for analyst certification and important disclosures.

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## **Pipeline**

Figure 1: OTIC Pipeline



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

## **Upcoming Events**

Figure 2: OTIC Upcoming Events
Anticipated Newsflow Highlights

Anticipated Newslot	gg		
Program	Event	Expected Timing	Significance
AuriPro	Submit NDA	1H15	Medium
	Initiate clinical trials in other indications	2015	Low
	Potential US Launch	2016	High
OTO-104	Phase 2b results in Ménière's disease	1H15	Medium
	Initiate single-dose Phase 3 study	2H15	Medium
	Initiate multiple-dose safety studies	4Q14	Medium
ОТО-311	File IND	2015	Medium
	Initiate Phase 1b study	2015	Medium

Source: Company reports and J.P. Morgan estimates

Figure 3: OTIC Income Statement

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	2012A	2013A	1Q14A	2Q14A	3Q14A	4Q14E	2014E	2015E	2016E	2017E	2018E	2019E
AuriPro Revenues									6.9	31.7	63.8	106
OTO-104 Revenues								-	-	-	10.7	68
Total Product Revnue							-		6.9	31.7	74.6	174
License & Milestone	-	-					-	-	-	-	-	-
Contract, Grant & Collaboration	-	-					-	-	-	-	-	-
otal Revenues	-	-	-	-	-	-	-	-	6.9	31.7	74.6	174
COGS		_						_	1.0	4.1	8.2	15
R&D	8.5	16.3	9.0	8.3	7.4	13.6	38.2	49.1	50.6	55.7	60.7	6
SG&A	2.4	3.5	1.6	1.6	2.0	2.6	7.8	18.5	34.0	47.6	52.8	5
otal Operating Expenses	10.9	19.9	10.6	9.8	9.4	16.2	46.0	67.6	85.6	107.4	121.7	13
perating Income	(10.9)	(19.9)	(10.6)	(9.8)	(9.4)	(16.2)	(46.0)	(67.6)	(78.7)	(75.7)	(47.2)	3
ther income (expense)	(0.4)	(2.5)	0.1	(0.8)	(2.6)	0.2	(3.1)	0.3	0.2	0.2	0.2	,
hange in fair value of convertible pref. stock	3.8	2.8	(0.3)	(0.0)	(=.0)		(0.3)	-		-	-	
ncome Tax (benefit)			-	-			- (5.5)		.	.		
AAP Net Income	(7.6)	(19.6)	(10.717)	(10.615)	(12.0)	(16.0)	(49.4)	(67.3)	(78.5)	(75.5)	(47.0)	3
accretion to redemption value of convertible pref. stock	(0.8)	(0.5)	(0.0)	, ,	(0.0)	, ,	, , ,	, , ,	, /	, /	` -,	
GAAP Net Income attributable to common stockholders	(8.4)	(20.1)	(10.7)	(10.6)	(12.0)	(16.0)	(49.4)	(67.3)	(78.5)	(75.5)	(47.0)	3
Ion-GAAP Net Income	(8.4)	(20.1)	(10.6)	(10.4)	(11.6)	(15.8)	(48.3)	(66.2)	(77.2)	(73.8)	(44.7)	3:
AAP Basic EPS	(3.38)	(7.64)	(3.65)	(3.40)	(1.23)	(0.76)	(5.33)	(3.11)	(3.12)	(2.64)	(1.49)	1.
AAP Diluted EPS	(3.38)	(7.64)	(3.65)	(3.40)	(1.23)	(0.76)	(5.33)	(3.11)	(3.12)	(2.64)	(1.49)	1
on-GAAP Basic EPS			(3.59)	(3.32)	(1.18)	(0.75)	(5.21)	(3.06)	(3.07)	(2.58)	(1.41)	1.
on-GAAP Diluted EPS			(3.59)	(3.32)	(1.18)	(0.75)	(5.21)	(3.06)	(3.07)	(2.58)	(1.41)	1.
Basic Shares Outstanding	2.5	2.6	2.9	3.1	9.8	21.2	9.3	21.6	25.1	28.6	31.6	3
Diluted Shares Outstanding	2.5	2.6	2.9	3.1	9.8	21.2	9.3	21.6	25.1	28.6	31.6	3
largin Analysis:												
Gross margin	NM	NM	NM	NM	NM	NM	NM	NM	85%	87%	89%	9
Operating margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	20.9
Net margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	21.1
Tax Rate	0%	0.0%	0%	0%	0%	0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.
ost Analysis:												
COGS as % of tot. prod. sales	NM	NM .	NM	NM	NM	NM	NM	0.00%	15.00%	13.00%	11.00%	9.0
R&D as % of tot. revenue	NM	NM	NM	NM	NM	NM	NM	NM	734.34%	175.41%	81.48%	39.0
SG&A as % of tot. revenue	NM	NM	NM	NM	NM	NM	NM	NM	492.85%	150.06%	70.82%	31.0
ear-over-year growth:												
Total revenue		NM	NM	NM	NM	NM	NM	NM	NM	360.50%	134.89%	134.5
R&D Expense		91.67%	189.57%	NM	NM	NM	133.94%	28.37%	3.17%	10.00%	9.10%	12.4
SG&A Expense		45.93%	119.50%	NM	NM	NM	121.09%	138.13%	83.62%	40.21%	10.85%	2.6
Total operating expenses		81.59%	176.48%	NM	NM	NM	131.66%	46.91%	26.73%	25.48%	13.32%	13.5
Operating income		NM	NM	NM	NM	NM	131.66%	46.91%	16.53%	-3.86%	-37.66%	-177.4
Not income		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
Net income	1 1											
EPS		NM	NM	NM	NM	NM	-30.32%	-41.58%	0.43%	-15.55%	-43.69%	
		NM 6.28% NM	NM 14.14% NM	NM NM NM	NM NM NM	NM NM NM	-30.32% 252.81% #DIV/0!	-41.58% 133.06% 51.74%	0.43% 16.19% 2.34%	-15.55% 13.93% 29.72%	-43.69% 10.48% 1.76%	-167.5 9.4 19.0

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

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### Investment Thesis, Valuation and Risks

#### Otonomy (Overweight; Price Target: \$32.00)

#### **Investment Thesis**

We have an OW rating on OTIC based on the potential of its two lead pipeline candidates: AuriPro (sustained exposure antibiotic) and OTO-104 (sustained exposure steroid). AuriPro has successfully completed Phase 3 trials in TTP surgery (ear tube placement); an NDA is expected in 1H15 and we expect a 2016 launch with peak sales of \$250M. OTO-104 is in a Phase 2b trial in Ménière's disease; data is expected in 1H15 and we assume launch in 2018 with peak sales of ~\$500M.

#### Valuation

Our Dec 2015 price target of \$32 is based on a blended average of our proprietary probability-adjusted scenario analysis (50%) and a risk-adjusted NPV model (50%).

#### **OTIC Valuation Summary**

•						
Discount rate		13%				
4Q15 Fully Diluted Shares (mm)		23.8				
			Peak W	'W sales est		
Main value drivers	Prob o	of approval	(avg.	scenario)	Avg pe	ak yr
US Auri Pro		85%	\$	273		2022
US OTO-104		70%	\$	497		2023
Valuation methodology	Valu	ie / share	We	ighting	Adj. v	alue/ shar
Real options scenario analysis	\$	35.91		50%		17.95
Risk adjusted NPV analysis	\$	28.19		50%		14.10
Total					\$	32.05
Catalyst/liquidity discount						0'
YE15 Price Target					\$	32

Source: J.P. Morgan estimates.

#### Risks to Rating and Price Target

OTIC is susceptible to the standard risks that apply to the entire biotech industry, including development, regulatory, commercial, manufacturing, financing, and IP pitfalls. More specific risks to the downside include clinical setbacks for the key pipeline product OTO-104 and pre-clinical candidate OTO-311, regulatory hurdles, and commercial setbacks.

## **Otonomy: Summary of Financials**

Income Statement - Annual	FY13A	FY14E	FY15E	FY16E	Income Statement - Quarterly	1Q14A	2Q14A	3Q14A	4Q14E
Revenues	0	0	0	7	Revenues	0A	0A	0A	0
Cost of products sold	0	0	0	(1)	Cost of products sold	0A	0A	0A	0
Gross profit	-	-	-	-	Gross profit	-	-	-	-
SG&A	(4)	(8)	(19)	(34)	SG&A	(2)A	(2)A	(2)A	(3)
R&D	(16)	(38)	(49)	(51)	R&D	(9)A	(8)A	(7)A	(14)
Operating income	(20)	(46)	(68)	(79)	Operating income	(11)A	(10)A	(9)A	(16)
EBITDA	(20)	(46)	(68)	(79)	EBITDA	(11)A	(10)A	(9)A	(16)
Net interest (income) / expense	-	-	. ,	-	Net interest (income) / expense	` _	` _	-	-
Other income / (expense)	(3)	(3)	0	0	Other income / (expense)	0A	(1)A	(3)A	0
Income taxes	) Ó	Ò	0	0	Income taxes	0A	ÒΑ	ÒΑ	0
Net income - GAAP	(20)	(49)	(67)	(78)	Net income - GAAP	(11)A	(11)A	(12)A	(16)
Net income - recurring	(20)	(49)	(67)	(78)	Net income - recurring	(11)A	(11)A	(12)A	(16)
Diluted shares outstanding	` á	Ý 9	22	25	Diluted shares outstanding	` źA	` 3A	`10A	21
EPS - excluding non-recurring	(7.64)	(5.33)	(3.11)	(3.12)	EPS - excluding non-recurring	(3.65)A	(3.40)A	(1.23)A	(0.76)
EPS - recurring	(7.64)	(5.33)	(3.11)	(3.12)	EPS - recurring	(3.65)A	(3.40)A	(1.23)A	(0.76)
Balance Sheet and Cash Flow Data	FY13A	FY14E	FY15E	FY16E	Ratio Analysis	FY13A	FY14E	FY15E	FY16E
Cash and cash equivalents	37	142	75	97	Sales growth	-	-	-	
Accounts receivable	-		-	-	EBIT growth	81.6%	131.7%	46.9%	16.5%
Inventories	_	_	_	_	EPS growth - recurring	125.9%	(30.3%)	(41.6%)	0.4%
Other current assets	2	2	2	2	Er o growth recurring	120.570	(00.070)	(41.070)	0.470
Current assets	39	144	77	100	Gross margin	_	_	_	_
PP&E	1	1	1	100	EBIT margin	_		_	(1142.2%)
Total assets	40	144	78	101	EBITDA margin	_	_	_	(1142.2%)
10141 433013	40	177	70	101	Tax rate	0.0%	0.0%	0.0%	0.0%
Total debt	0	0	0	0	Net margin	0.070	0.070	0.070	(1138.8%)
Total liabilities	4	3	3	4	Net margin	_	_	_	(1130.070)
Shareholders' equity	36	141	75	97	Net Debt / EBITDA	187.8%	308.2%	111.0%	123.6%
Shareholders equity	30	141	73	31	Net Debt / Capital (book)	3365.0%	32435.9%	18315.4%	25652.5%
Net income (including charges)	(20)	(49)	(67)	(78)	Net Debt / Capital (book)	3303.0 /6	32433.370	10313.470	23032.370
D&A	(20)	(49)	(07)	(70)	Return on assets (ROA)	(88.0%)	(53.6%)	(60.5%)	(87.9%)
	-	0	0	0	` ,	,	, ,	,	, ,
Change in working capital Other	(0)	1	1	1	Return on equity (ROE)	(133.3%)	(55.7%)	(62.3%)	(91.5%)
	(0)				Enterprise value / color				58.6
Cash flow from operations	(19)	(48)	(66)	(77)	Enterprise value / sales	NM	NM	NM	NM
0	(0)	(0)	(0)	(0)	Enterprise value / EBITDA				
Capex	(0)	(0)	(0)	(0)	Free cash flow yield	(32.0%)	(22.2%)	(13.0%)	(13.1%)
Free cash flow	(20)	(49)	(67)	(78)					
Cash flow from investing activities	(1)	(0)	(0)	(0)					
Cash flow from financing activities	53	153	0	100					
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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#### Otonomy (OTIC, OTIC US) Price Chart



Date	Rating	Share Price (\$)	Price Target (\$)
08-Sep-14	OW	19.39	32.00

Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends. Initiated coverage Sep 08, 2014.

The chart(s) show J.P. Morgan's continuing coverage of the stocks; the current analysts may or may not have covered it over the entire period.

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	(buy)	(hold)	(sell)
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IB clients*	57%	49%	34%
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IB clients*	76%	67%	51%

<sup>\*</sup>Percentage of investment banking clients in each rating category.

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