

Foundation Medicine (FMI)

2Q14 Reimbursement Improvement Offsets Slight Vol. Softness vs Our Street High View - Pharma Solid - Guidance Reaffirmed - Maintain OP - PT to \$48

- **2Q14 sales beat estimates while EPS was slightly lower.** FMI reported 2Q14 revenue of \$14.5 MM and GAAP EPS loss of (\$0.49), beating our sales estimate of \$13.5 MM and missing our (\$0.46) EPS loss estimate. Consensus estimates were for \$13.4 MM & an EPS of loss of (\$0.48).
- **Clinical volumes of 5,908 were slightly below our 6,079 estimate (which we believe was the Street High) while associated revenue came in fine.** Despite the 3% delta vs our clinical test volume estimate volumes remain solidly on track to hit the high end of the company's guidance.
- **Reimbursement levels improved in 2Q14 driven by Heme, allowing clinical sales to reach our estimate.** Better payment progress from the higher priced (25% premium) heme test helped drive reimbursement to \$3,600 vs our model of \$3,400. We continue to be encouraged on the reimbursement trend as a result of greater market awareness, increasing publications plus more frequent and deeper payor discussions. While we are still waiting for additional data from the 10-Q, collection efficiency and sales rep effectiveness appeared to be flat-to-down q/q.
- **Deeper pharma penetration drove the bulk of revenue upside versus our model.** Pharma samples processed in 2Q14 were 1,261 vs our 900 estimate and pharma revenues were \$5 MM vs our \$4 MM estimate.
- **Higher R&D drove slightly worse EPS. GMs ok. Test volume and revenue guidance reiterated.**
- **Lowering test volume forecasts, driving slightly lower 2015 & 2016 estimates.**
- **Maintain OP. Lowering PT to \$48 from \$50 on more conservative volume estimates.** We arrive at our new \$48 price target through an EV/sales valuation framework, still assuming a ~9x 2016E EV/sales multiple with no cash and 29 MM shares outstanding, discounted back at 15%. This multiple is justified to us given FMI's hyper growth profile (~83% 3-year CAGR, +60% in 2016), cancer focus and the very early stages of adoption (~9% share in 2016). On a 2015E EV/sales multiple basis, shares of FMI are trading at a premium to the group median (6.6x vs 3.7x).

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Price
\$25.65

Rating
OUTPERFORM

12-Month Price Target
\$48 (from \$50)

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Company Information

Shares Outst (M)	28
Market Cap (M)	\$723
52-Wk Range	\$19.51 - \$45
Cash/sh	4
Enterprise Value	624
LT Debt/Cap	0
2015 EV/Sales	7 x
Book Value/sh	3.8

Company Description

Foundation Medicine is the leading provider of test services to oncologists for the deep analysis of genetic alterations in cancer. These test results provide clinically actionable information for rare, recurring & stubborn solid tumors and hematologic cancers.

FYE Dec	2013A	2014E			2015E		
REV (M)	ACTUAL	CURR.	PREV.	CONS.	CURR.	PREV.	CONS.
Q1 Mar	\$5.2A	\$11.5A		\$11.5A	\$21.2E	\$22.1E	\$21.8E
Q2 Jun	\$5.9A	\$14.5A	\$13.5A	\$13.4A	\$24.2E	\$25.7E	\$23.6E
Q3 Sep	\$8.2A	\$15.7E	\$16.2E	\$15.5E	\$27.8E	\$29.7E	\$27.9E
Q4 Dec	\$9.7A	\$18.5E	\$19.0E	\$17.8E	\$31.2E	\$33.5E	\$30.9E
Year*	\$29.0A	\$60.2E	\$60.1E	\$58.0E	\$104.4E	\$110.9E	\$108.6E
Change	172%	108%			74%		
	2013A	2014E			2015E		
EPS	ACTUAL	CURR.	PREV.	CONS.	CURR.	PREV.	CONS.
Q1 Mar	(\$0.64)A	(\$0.44)A		(\$0.44)A	(\$0.40)E		(\$0.42)E
Q2 Jun	(\$0.52)A	(\$0.49)A	(\$0.46)A	(\$0.48)A	(\$0.39)E	(\$0.37)E	(\$0.37)E
Q3 Sep	(\$0.44)A	(\$0.44)E		(\$0.45)E	(\$0.32)E	(\$0.31)E	(\$0.31)E
Q4 Dec	(\$0.48)A	(\$0.44)E		(\$0.46)E	(\$0.31)E	(\$0.29)E	(\$0.29)E
Year*	(\$2.08)A	(\$1.81)E	(\$1.77)E	(\$1.82)E	(\$1.42)E	(\$1.37)E	(\$1.37)E
P/E	NM	NM			NM		
Change	410%	-13%			-21%		

Consensus estimates are from Thomson First Call.

* Numbers may not add up due to rounding.



Source: Thomson Reuters

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Investment Thesis

FMI is a lab services company whose test menu is focused on the genetic analysis of rare, recurring and aggressive tumors. FMI's testing platform leverages next-generation sequencing (NGS) to identify clinically actionable genetic mutations within tumor cells. The company's two tests are FoundationOne, a pan-cancer panel for solid tumors, and FoundationOne Heme, a panel for hematological malignancies (i.e., leukemia, lymphoma & myeloma). These tests are targeted for use by academic and community-based oncologists, as well as biopharmaceutical companies for use in cancer therapeutic R&D. We believe FMI's FoundationOne test represents the first mover and highest-quality test commercially available for detailed genomic workup of tumors. We estimate the company's test volumes and sales will grow above an 85% CAGR for the next three years and we believe FMI has many years of significant growth potential ahead as the opportunity in solid tumors, blood-based cancers and future cancer monitoring products is largely untapped. We believe investors are overly concerned about potential competitive threats and potential challenges to reimbursement near term which are overhangs on the shares currently. We believe continued strong execution by the company, lack of viable competition and continued reimbursement progress with large payors will drive solid financials, thus inspiring confidence and meaningful share price appreciation in the near term. We believe the late 2013 addition of high-quality sales reps, improving sales force efficiency and recent menu expansion, combined with growing physician awareness tees up a strong case for test volume outperformance in the near term. Additionally, we believe sentiment on shares is medium-low and based primarily on reimbursement concerns. Based on the slightly earlier clinical outcomes data from US oncology and better traction with the higher priced FoundationOne heme test recently, we believe average reimbursement is likely to become easier, representing near term validation for our long term thesis.

Results

FMI reported 2Q14 revenue of \$14.5 MM and GAAP EPS loss of (\$0.49), beating our sales estimate of \$13.5 MM and missing our (\$0.46) EPS loss estimate. Consensus estimates were for \$13.4 MM & an EPS of loss of (\$0.48).

Figure 1: 1Q14 Results

	2Q14			
	REV (m)	EPS	Volumes*	Reimbursement**
Actual	14.5	(\$0.49)	5,908	\$3,600
Wedbush	13.5	(\$0.46)	6,079	\$3,400
Consensus	13.4	(\$0.48)	NA	NA

*clinical only

**reimbursement per clinical sample (when paid)

Source: Company data, Wedbush Securities, Inc.

Top-Line Color

Total revenue of \$14.5 MM was up 145% y/y and up 27% q/q driven by FoundationOne clinical revenue and pharma services sales. The company reported \$9.4 MM in clinical revenue, which matched our estimate. As a reminder, most of the company's revenue is recorded on a cash basis and the timing between test processing and revenue collection can vary. Pharma services revenue was \$5.1 MM versus our \$4 MM estimate.

Clinical test volume of 5,908 during 2Q14 was just below our 6,079 estimate. Clinical test volume grew over 260% y/y and 26% q/q. Reimbursement for paid clinical tests was approximately \$3,600 in 2Q14, which was above prior quarter levels of \$3,400. The company still expects average reimbursement to vary between periods. FoundationOne Solid tumor tests performed in 2Q14 were 4,960 which was up versus our 4,764 estimate. 2Q14 FoundationOne Heme tests were 948, below our 1,315 model. Our greater conservatism on Heme test growth is what is driving most of the decrease in our 2015 sales estimates.

Of note, the company grew its 2Q14 community based test volume base which was split 40/60 (academic vs community) vs 46/54 in 1Q14. As expected there were no meaningful changes with respect to the Medicare story. FMI continues to submit claims to Medicare using miscellaneous codes, but is still not receiving payment from Medicare as FoundationOne is still not covered by the agency. The company is appealing Medicare claims and is continuing dialogue with its local Medicare administrative contractor and other regional contractors. .

During 2Q14 the company hired 2 new sales reps (vs 17 in 1Q14), which was in-line with our estimate. FMI is well above its plan to have 45-50 account representatives by year end. 2Q14 results suggest that sales rep productivity was flattish vs 1Q14 which is consistent with our prior view and the company's commentary.

GMs and Opex

2Q14 gross margins were 54.3%, which missed our estimate by roughly 70 BPs, but in-line with typically GMs variances in early stage businesses. Sales and marketing of \$7.1 MM was 2% below our forecast. R&D was \$8.6 MM or 18% above our forecast for reasons that are not entirely clear, but could be due to greater clinical trial activity and FoundationOne enhancements. G&A was \$5.8 MM in 2Q14, representing a 3% improvement and which appeared to be driven by lower stock comp expense.

Figure 2: Variance

	2Q13A	2Q14E	2Q14A	Δ Y/Y	Δ A/E
Revenues:					
Total Revenues	5,920	13,484	14,496	145%	8%
Cost of revenues	2,219	6,068	6,619	198%	9%
Gross profit	3,701	7,416	7,877	113%	6%
Gross Margins	62.5%	55.0%	54.3%	-13%	-1%
Selling and Marketing	3,057	7,281	7,170	135%	-2%
General and administrative	4,755	6,000	5,825	23%	-3%
Research and development	6,097	7,300	8,645	42%	18%
Total operating expenses	13,910	20,581	21,640	56%	5%
Operating Income	(10,209)	(13,165)	(13,763)	35%	5%
Interest income	(65)	280	(16)	-75%	-106%
Other	(96)	0	0		
Income before taxes	(10,370)	(12,885)	(13,779)	33%	7%
Provision for income taxes	0	0	0		
Tax Rate					
Net income	(10,370)	(12,885)	(13,779)	33%	7%
Accretion of convertible preferred stock	(42)	0	0	-100%	NA
Net Income	(10,412)	(12,885)	(13,779)	32%	7%
GAAP EPS -Basic	(\$0.52)	(\$0.46)	(\$0.49)	-4%	7%
GAAP EPS -Diluted	(\$0.52)	(\$0.46)	(\$0.49)	-4%	7%
GAAP EPS adjusted -Diluted	(\$0.52)	(\$0.46)	(\$0.49)	-4%	7%
Weighted average shares - basic	20,129	27,775	27,877	38%	0%
Weighted average shares - diluted	20,129	27,775	27,877	38%	0%
Cash and Equivalents	35,965	103,012	98,779	175%	-4%
Debt	0	0	0	NA	NA
Net Cash	35,965	103,012	98,779	175%	-4%
Net Cash/share	2	4	4	98%	-4%
NOLs		(78,042)	(78,936)	NA	1%
% of Rev.	2Q13A	2Q14E	2Q14A		
Gross Margins	63%	55%	54%		
Sales and Marketing	48%	46%	51%		
General and administrative	80%	44%	40%		
Research and development	103%	54%	60%		
Total operating expenses	235%	153%	149%		
EBIT	-172%	-98%	-95%		
Tax rate	0%	0%	0%		
Net income	-176%	-96%	-95%		

Source: Company data, Wedbush Securities, Inc.

Valuation

We arrive at our new 12-month \$48 price target through EV/sales valuation framework where we assume a 9x 2016E EV/sales multiple with no net cash and roughly 29 MM shares outstanding discounted back at 15%. This multiple is justified to us given the 2016 growth profile (~60% y/y), cancer focus and very early penetration story (<10% share in 2016). On a 2015E EV/sales bases, shares of FMI are trading at 6.6x representing a premium to the current group median multiple of 3.7x. Versus the molecular diagnostics lab service growth comps, FMI is trading at a premium on a 2015 EV/sales multiple basis (6.6x vs. 3.3x median).

Figure 3: Potential Catalysts

Catalyst	Timing
Earnings	Nov-14
Additional publications (ASH meeting)	2H14/2015
Additional FoundationOne Solid enhancements	2015
Additional new product milestones	2015
In-Network Contracts with Large Payors	??
CMS coverage decision	??

Source: Company data, Wedbush Securities, Inc.

Risks

Risks to attainment of our price target include a fiercely competitive diagnostics and lab service market. Additionally, clinical adoption for new paradigms of testing in diagnostics is difficult to predict and private payor as well as Medicare reimbursement for *FoundationOne* and *FoundationOne Heme* could prove to be more challenging than expected.

FMI is dependent on Illumina (ILMN, NEUTRAL) for equipment and other materials related to next-generation sequencing. If ILMN were to stop supplying the material or were to enter the space as a competitor, it could lead to an interruption in FMI's ability to perform its menu of tests. The near-term risk of this has been mitigated through a five-year supply agreement FMI signed with ILMN in July 2013.

The company operates a CLIA certified lab at their Cambridge, MA headquarters where they conduct *FoundationOne*. Operating as a CLIA lab allows the company to avoid the FDA regulatory 510(k)/PMA pathway for diagnostic devices. The FDA could more tightly regulate CLIA lab-based tests as medical devices, which would likely cause significant disruption to the business.

Figure 4: Income Statement

	2011	2012	2013	1Q14	2Q14	3Q14E	4Q14E	2014E	1Q15E	2Q15E	3Q15E	4Q15E	2015E
Product Revenue	2,057	10,645	28,990	11,455	14,496	15,676	18,543	60,170	21,225	24,179	27,799	31,246	104,449
Total Revenues	2,057	10,645	28,990	11,455	14,496	15,676	18,543	60,170	21,225	24,179	27,799	31,246	104,449
Cost of revenues	258	5,681	11,659	5,291	6,619	7,054	8,344	27,309	8,490	9,672	11,120	12,498	41,780
COGS as % of sales			36%										
Gross profit	1,799	4,964	17,331	6,164	7,877	8,622	10,198	32,861	12,735	14,508	16,679	18,748	62,669
Gross Margins	87.5%	46.6%	59.8%	53.8%	54.3%	55.0%	55.0%	54.6%	60.0%	60.0%	60.0%	60.0%	60.0%
Selling and Marketing	1,555	3,454	12,508	5,690	7,170	7,054	7,417	27,331	8,278	9,188	9,174	10,624	37,263
General and administrative	6,992	8,644	21,865	5,700	5,825	6,400	7,500	25,425	7,600	7,700	7,800	7,850	30,950
Research and development	9,023	14,777	24,901	6,915	8,645	7,600	7,700	30,860	8,300	8,600	8,900	9,200	35,000
Total operating expenses	17,570	26,875	59,275	18,305	21,640	21,054	22,617	83,616	24,178	25,488	25,874	27,674	103,213
Operating Income	(15,771)	(21,911)	(41,944)	(12,141)	(13,763)	(12,432)	(12,419)	(50,755)	(11,443)	(10,981)	(9,194)	(8,926)	(40,544)
Interest income	(421)	(421)	(1,452)	(25)	(16)	247	223	429	182	164	134	106	586
Other	(845)	(61)	269	0	0	0	0	0	0	0	0	0	0
Income before taxes	(17,037)	(22,393)	(43,127)	(12,166)	(13,779)	(12,185)	(12,195)	(50,326)	(11,261)	(10,817)	(9,061)	(8,819)	(39,958)
Provision for income taxes	0	0	-	0	0	0	0	0	0	0	0	0	0
Tax Rate													
Net income	(17,037)	(22,393)	(43,129)	(12,166)	(13,779)	(12,185)	(12,195)	(50,326)	(11,261)	(10,817)	(9,061)	(8,819)	(39,958)
Accretion of convertible preferred stock	(296)	(286)	(139)	0	0	0	0	0	0	0	0	0	0
Net Income	(17,333)	(22,679)	(43,268)	(12,166)	(13,779)	(12,185)	(12,195)	(50,326)	(11,261)	(10,817)	(9,061)	(8,819)	(39,958)
GAAP EPS -Basic	(\$3.52)	(\$0.41)	(\$2.09)	(\$0.44)	(\$0.49)	(\$0.44)	(\$0.44)	(\$1.81)	(\$0.40)	(\$0.39)	(\$0.32)	(\$0.31)	(\$1.42)
GAAP EPS -Diluted	(\$3.52)	(\$0.41)	(\$2.08)	(\$0.44)	(\$0.49)	(\$0.44)	(\$0.44)	(\$1.81)	(\$0.40)	(\$0.39)	(\$0.32)	(\$0.31)	(\$1.42)
Non-GAAP EPS -Diluted	(\$3.52)	(\$0.41)	(\$2.08)	(\$0.44)	(\$0.49)	(\$0.44)	(\$0.44)	(\$1.81)	(\$0.40)	(\$0.39)	(\$0.32)	(\$0.31)	(\$1.42)
Weighted average shares - basic	4,930	55,642	21,577	27,734	27,877	27,919	27,961	27,872	28,017	28,059	28,101	28,143	28,143
Weighted average shares - diluted	4,930	55,642	21,778	27,734	27,877	27,919	27,961	27,873	28,017	28,059	28,101	28,143	28,143
Cash and Equivalents	10,852	54,838	124,293	112,000	98,779	89,249	72,651	72,651	65,596	53,520	42,595	27,043	27,043
Net Cash	10,852	54,838	124,293	112,000	98,779	89,249	72,651	72,651	65,596	53,520	42,595	27,043	27,043
Net Cash/share			5	4	4	3	3	2.6	2.34	1.91	1.52	0.96	1
NOLs			(52,991)	(65,157)	(78,936)	(91,121)	(103,317)	(103,317)	(114,578)	(125,395)	(134,455)	(143,275)	(143,275)
% of Sales	2011	2012	2013	1Q14	2Q14	3Q14E	4Q14E	2014E	1Q15E	2Q15E	3Q15E	4Q15E	2015E
Gross Margins	87%	47%	60%	54%	54%	55%	55%	55%	60%	60%	60%	60%	60%
Sales and Marketing	76%	32%	43%	50%	49%	45%	40%	45%	39%	38%	33%	34%	36%
General and administrative	340%	81%	75%	50%	40%	41%	40%	42%	36%	32%	28%	25%	30%
Research and development	439%	139%	86%	60%	60%	48%	42%	51%	39%	36%	32%	29%	34%
Total operating expenses	854%	252%	204%	160%	149%	134%	122%	139%	114%	105%	93%	89%	99%
EBIT	-767%	-206%	-145%	-106%	-95%	-79%	-67%	-84%	-54%	-45%	-33%	-29%	-39%
Tax rate	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Net income	-843%	-213%	-149%	-106%	-95%	-78%	-66%	-84%	-53%	-45%	-33%	-28%	-38%
Free Cash Flow	-1015%	-199%	-132%	-59%	-94%	-70%	-81%	-77%	-24%	-42%	-32%	-42%	-36%
y/y Δ	2011	2012	2013	1Q14	2Q14	3Q14E	4Q14E	2014E	1Q15E	2Q15E	3Q15E	4Q15E	2015E
Total Revenues	NA	418%	172%	120%	145%	91%	92%	108%	85%	67%	77%	69%	74%
Cost of revenues	NA	2102%	105%	122%	198%	147%	98%	134%	60%	46%	58%	50%	53%
Gross Margins	NA	-47%	28%	-1%	-13%	-16%	-3%	-9%	12%	10%	9%	9%	10%
Sales and Marketing	NA	122%	262%	214%	135%	132%	61%	119%	45%	28%	30%	43%	36%
General and administrative	NA	24%	153%	81%	23%	-1%	0%	16%	33%	32%	22%	5%	22%
Research and development	NA	64%	69%	39%	42%	9%	13%	24%	20%	-1%	17%	19%	13%
Total operating expenses	NA	53%	121%	84%	56%	28%	19%	41%	32%	18%	23%	22%	23%
EBIT	NA	39%	91%	70%	35%	12%	-8%	21%	-6%	-20%	-26%	-28%	-20%
Tax rate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Net income	NA	31%	91%	68%	32%	-3%	-7%	16%	-7%	-21%	-26%	-28%	-21%

Source: Company data, Wedbush Securities, Inc.

Figure 5: Balance Sheet

	2011	2012	2013E	2014E	2015E	2016E
Current assets:						
Total Cash and Cash Equivalents	10852	54,838	124,293	68,130	22,477	(6,436)
Accounts Receivable	278	2,195	6,262	9,271	15,623	26,773
Inventory	318	803	1,763	1,545	2,604	4,462
Prepaid expenses and other Current Assets	313	550	992	992	992	992
Total current assets	11,761	58,386	133,310	79,938	41,695	25,792
Property, Plant and Equipment	7,902	12,154	22,104	25,113	30,335	39,054
Accumulated Depreciation	(1,796)	(4,689)		(4,618)	(9,990)	(16,626)
Restricted cash and other non-current assets	198	188	1,854	2,983	2,983	2,983
Total assets	18,065	66,039	157,268	103,415	65,023	51,203
LIABILITIES AND STOCKHOLDERS' EQUITY						
Current liabilities:						
Accounts Payable and accrued expenses	2,408	5,072	7,007	6,873	8,483	10,279
Deferred revenue and Other Current Liabilities	1,832	3,458	8,752	8,752	8,752	8,752
Total current liabilities	4,240	8,530	15,759	15,625	17,235	19,031
Long-term liabilities:						
Long Term Debt	3,041	1,441	0	0	0	0
Other long term liabilities	632	807	9,798	9,798	9,798	9,798
Total liabilities	7,913	10,778	25,557	25,423	27,033	28,829
Stockholders' equity:						
Preferred Stock	32,455	98,658	0	0	0	0
Common Stock, APIC, RE	(22,303)	(43,397)	131,711	77,993	37,990	22,374
Total liabilities and stockholders' equity	18,065	66,039	157,268	103,415	65,023	51,203

Source: Company data, Wedbush Securities, Inc.

Figure 6: Cash Flow Statement

	2011	2012	2013	2014E	2015E	2016E
Cash Flows from Operating Activities:						
Net (loss) income	(17,037)	(22,393)	(42,944)	(50,337)	(40,003)	(15,616)
Depreciation	1,520	2,894	5,006	4,618	5,372	6,635
change in FV of investor rights obligation	1,067	0	0	0	0	0
change in FV of warrant liability	34	131	1,380	0	0	0
Stock-based compensation expense	73	1,535	7,316	0	0	0
common stock issued for services	0	0	4	0	0	0
non-cash interest expense/impairment	111	104	497	0	0	0
Change in working capital	99	480	(2,025)	(2,926)	(5,800)	(11,212)
Net cash provided by operating activities	(14,133)	(17,249)	(30,766)	(48,645)	(40,431)	(20,193)
Cash Flows from Investing Activities:						
Purchase of property and equipment	(5,410)	(3,183)	(6,930)	(3,009)	(5,222)	(8,719)
increase in restricted cash	0		(1,564)	(4,510)	0	0
Net cash used in investing activities	(5,410)	(3,183)	(8,494)	(7,519)	(5,222)	(8,719)
Cash Flows from Financing Activities:						
Proceeds from Issuance of Restricted Stock	114	70	49	0	0	0
proceeds from issuance of preferred stock	26,338	65,917	(10)	0	0	0
proceeds from issuance of common stock	0	0	110,381	0	0	0
change in notes payable	2,534	(1,569)	(1,705)	0	0	0
Net cash provided by financing activities	28,986	64,418	108,715	0	0	0
Net increase (decrease) in cash and cash equivalents	9,443	43,986	69,455	(56,163)	(45,653)	(28,912)
Cash and cash equivalents, beginning of period	10,852	54,838	124,293	124,293	68,130	22,477
Cash and cash equivalents, end of period	10,852	54,838	124,293	68,130	22,477	(6,436)

Source: Company data, Wedbush Securities, Inc.

Covered Public Companies Mentioned in this Report:

Company	Ticker	Rating	Price Target	Current Price
Illumina	ILMN	NEUTRAL	\$165	\$163

Analyst Biography

Zarak Khurshid is a senior equity research analyst covering the Medical Diagnostics and Life Science Tools sectors. Prior to joining Wedbush in January 2010, Mr. Khurshid was Vice President and senior equity research analyst with Caris & Company where he covered the Medical diagnostics and Life Sciences Tools sectors from 2006 to 2010. Mr. Khurshid's aggressive risk/reward focused investment style is supported by data points from a diverse network of contacts from industry, hospitals, clinical labs, and academia. Mr. Khurshid was ranked #1 in the Life Science Tools and Services sectors and #4 on Wall Street for earnings accuracy in 2012 by *Starmine*. Prior to his start on Wall Street with Pacific Growth Equities in 2004, Mr. Khurshid was a Research Associate with Cytokinetics and an Associate Bioengineer with Aurora Biosciences. Mr. Khurshid received a BS in Bioengineering and a BA in Economics from the University of California, San Diego.

Analyst Certification

I, Zarak Khurshid, certify that the views expressed in this report accurately reflect my personal opinion and that I have not and will not, directly or indirectly, receive compensation or other payments in connection with my specific recommendations or views contained in this report.

Disclosure information regarding historical ratings and price targets is available at <http://www.wedbush.com/ResearchDisclosure/DisclosureQ214.pdf>

Investment Rating System:

Outperform: Expect the total return of the stock to outperform relative to the median total return of the analyst's (or the analyst's team) coverage universe over the next 6-12 months.

Neutral: Expect the total return of the stock to perform in-line with the median total return of the analyst's (or the analyst's team) coverage universe over the next 6-12 months.

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Rating Distribution (as of July 30, 2014)	Investment Banking Relationships (as of June 30, 2014)
Outperform: 54%	Outperform: 25%
Neutral: 42%	Neutral: 1%
Underperform: 4%	Underperform: 0%

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Wedbush Equity Research Disclosures as of August 13, 2014

Company	Disclosure
Foundation Medicine	1
Illumina	1

Research Disclosure Legend

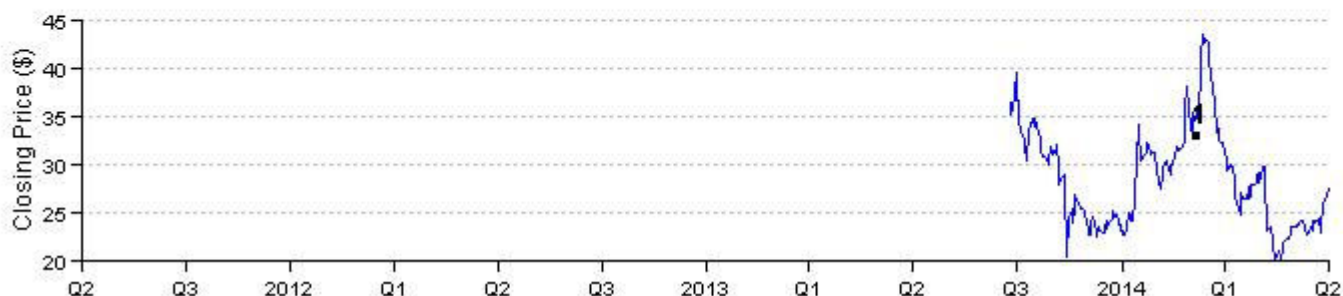
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FMI

1) 03/04/14
OUTPERFORM \$50



ILMN

1) 07/27/11 OUTPERFORM \$78	2) 10/07/11 OUTPERFORM \$35	3) 01/25/12 OUTPERFORM \$50	4) 02/08/12 OUTPERFORM \$65	5) 04/24/12 OUTPERFORM \$52	6) 01/04/13 NEUTRAL \$52	7) 04/23/13 NEUTRAL \$55
8) 07/24/13 NEUTRAL \$60	9) 10/15/13 NEUTRAL \$65	10) 10/22/13 NEUTRAL \$72	11) 01/23/14 NEUTRAL \$130	12) 01/29/14 NEUTRAL \$140	13) 04/23/14 NEUTRAL \$155	



* WS changed its rating system from (Strong Buy/Buy/Hold/Sell) to (Outperform/ Neutral/Underperform) on July 14, 2009.

Please access the attached hyperlink for WS' Coverage Universe: <http://www.wedbush.com/services/cm/g/equities-division/research/equity-research> Applicable disclosure information is also available upon request by contacting Ellen Kang in the Research Department at (213) 688-4529, by email to ellen.kang@wedbush.com, or the Business Conduct Department at (213) 688-8090. You may also submit a written request to the following: Business Conduct Department, 1000 Wilshire Blvd., Los Angeles, CA 90017.

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