

CAREDX, INC.

2Q Revenue Beat, Biz and Pipeline on Track

• **Bottom Line:** We reiterate our Outperform rating and \$13 price target following the 2Q beat, with de minimus estimate updates.

• **Strong revenue beat, positive operating margin excluding one-time acquisition costs.** Revenue for the quarter came in at \$6.8M, above our \$6.1 estimate. This notably includes two unusually large cash collections as of June, accounting for ~\$0.3M in revenue. AlloMap test volumes were >3,000 during the quarter, representing ~20% growth YoY and above our estimate of 2,861. Gross margin for the quarter was 64.5%, slightly above our estimate of 64%. EBIT margin came in below our (-2.5%) estimate at (-5.1%), driven by one-time costs of \$750K associated with the ImmuMetrix acquisition. Excluding one-time costs, EBIT for the quarter came in at \$405K, or a 6% margin.

• **AlloMap growth continues to track expectations and company guidance.** The AlloMap test is on protocol at 60 of 125 transplant centers, which represents an increase from 54 disclosed previously. Enrollment in the Outcomes AlloMap Registry (OAR) continues with over 500 patient results in the registry as of June 2014. Reimbursement for AlloMap remains strong with 175M covered lives and ~45M covered by payors without a formal policy, and coverage adopted by AET (OP), CI (OP), HUM (OP), Kaiser, WLP (OP), and a few state Medicaid programs. As of June, reimbursement had been collected for ~79% of AlloMap results delivered in the 12 months ended Dec. 31, 2013.

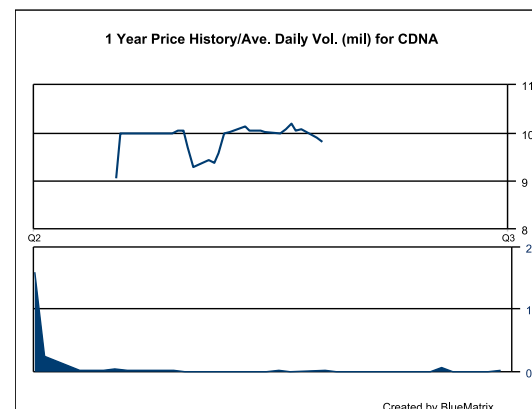
• **We remain optimistic on the opportunity for pipeline cfDNA products.** Feedback (communicated by CDNA management) at the World Transplant Congress in July highlighted KOL support of CDNA's cell free DNA (cfDNA) technology in two particular areas: (1) as a tool for personalized immunosuppression given prevalence of over- and under-suppression in transplant patients, and (2) in post-rejection diagnosis to measure success of intervention over time. Enrollment in the cfDNA outcomes registry (D-OAR) for cfDNA-heart launched as anticipated in 3Q; additionally, management plans no change in its commercialization plan for its cfDNA products as a result of the FDA's draft guidance on lab developed tests (LDTs).

• **Estimates little changed.** Save some fine tuning of our sharecount assumptions which we consider immaterial, our forward estimates are little changed.

Key Stats:

(NASDAQ:CDNA)

S&P 600 Health Care Index:	1,326.64
Price:	\$9.95
Price Target:	\$13.00
Methodology:	4x EV/TTM estimated revenue ending June 2016
52 Week High:	\$10.88
52 Week Low:	\$8.49
Shares Outstanding (mil):	10.5
Market Capitalization (mil):	\$104.5
Book Value/Share:	\$2.97
Cash Per Share:	\$5.20
Dividend (ann):	\$0.00
Dividend Yield:	0.0%



Dec Yr	1Q	2Q	3Q	4Q	FY Rev	1Q	2Q	3Q	4Q	FY EPS	P/E
2013A	\$5.0	\$5.5	\$5.8	\$5.9	\$22.1	(\$0.19)	(\$0.12)	(\$0.12)	(\$0.08)	(\$0.51)	NM
2014E - New	\$5.9A	\$6.8A	\$6.6	\$7.0	\$26.2	(\$0.21)A	\$0.13A	(\$0.15)	(\$0.10)	(\$0.37)	NM
2014E - Old	\$5.9A	\$6.1	\$6.5	\$7.1	\$25.6	(\$0.21)A	(\$0.11)	(\$0.17)	(\$0.12)	(\$0.60)	NM
2015E - New	--	--	--	--	\$30.3	--	--	--	--	(\$0.43)	NM
2015E - Old	--	--	--	--	\$30.1	--	--	--	--	(\$0.49)	NM
2016E - New	--	--	--	--	\$40.3	--	--	--	--	(\$0.08)	NM
2016E - Old	--	--	--	--	\$40.2	--	--	--	--	(\$0.10)	NM

Source: Company Information and Leerink Partners LLC Research
Revenues in millions.

INVESTMENT THESIS

We rate Brisbane, California-based CareDx (CDNA) Outperform with a \$13 price target. CDNA markets a non-invasive molecular gene expression test (AlloMap) of 20 genes for heart transplant recipients to diagnose acute cellular rejection, reduce use of biopsy, and better tailor immunosuppression post-transplant to patient needs. Additionally, the company is developing products for post-transplant monitoring that use nextgen sequencing (NGS) to detect cell free DNA (cfDNA). We believe the company will continue to successfully expand its core AlloMap franchise while developing its cfDNA products, which could be marketed as early as 1H15. We believe CDNA's pipeline opportunity is undervalued at current levels and thus our Outperform rating.

VALUATION

Our \$13 price target corresponds to an enterprise value (using projected levels of debt and cash) that is ~4x our revenue estimate for the twelve months ended June-16. This is roughly in line with the tools/diagnostics peer group median multiple, which we believe adequately balances concerns over the size of CDNA's opportunity in heart transplant with its opportunities in kidney and other transplants.

RISKS TO VALUATION

CDNA's risks include, but are not limited to: the trajectory of the AlloMap revenue ramp, the ability to successfully develop and commercialize products using cfDNA for transplant surveillance, and the impact of a changing regulatory environment in the U.S. for diagnostics.

CareDx (CDNA)

Dan Leonard, 212-277-6116

Income statement

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Period Ended (\$ thousands)	2012	2013	Mar-14	Jun-14	Sep-14e	Dec-14e	2014e	2015e	2016e
Revenues									
Testing revenue	\$19,730	\$21,672	\$5,834	\$6,710	\$6,497	\$6,861	\$25,902	\$29,491	\$38,743
Other	<u>721</u>	<u>426</u>	<u>90</u>	<u>66</u>	<u>90</u>	<u>90</u>	<u>336</u>	<u>800</u>	<u>1,600</u>
Total revenues	20,451	22,099	5,924	6,776	6,587	6,951	26,238	30,291	40,343
Cost of service	<u>7,930</u>	<u>9,078</u>	<u>2,162</u>	<u>2,403</u>	<u>2,339</u>	<u>2,433</u>	<u>9,336</u>	<u>10,602</u>	<u>13,918</u>
Gross profit	12,521	13,021	3,762	4,373	4,249	4,518	16,902	19,689	26,424
SG&A	10,111	10,701	3,269	3,926	3,491	3,406	14,092	15,449	18,154
R&D	<u>4,752</u>	<u>3,176</u>	<u>720</u>	<u>792</u>	<u>1,976</u>	<u>1,877</u>	<u>5,365</u>	<u>7,876</u>	<u>7,665</u>
Operating income (loss)	(2,342)	(856)	(227)	(345)	(1,219)	(765)	(2,555)	(3,635)	605
Interest expense (income)	2,703	2,150	548	644	482	404	2,078	1,514	1,517
Other, net	<u>14</u>	<u>536</u>	<u>529</u>	<u>(366)</u>	<u>0</u>	<u>0</u>	<u>163</u>	<u>0</u>	<u>0</u>
Pretax income	(5,059)	(3,542)	(1,304)	(623)	(1,701)	(1,168)	(4,797)	(5,149)	(911)
Taxes	<u>0</u>	<u>0</u>	<u>0</u>	<u>(1,500)</u>	<u>0</u>	<u>0</u>	<u>(1,500)</u>	<u>0</u>	<u>0</u>
Net income	(\$5,059)	(\$3,542)	(\$1,304)	\$877	(\$1,701)	(\$1,168)	(\$3,297)	(\$5,149)	(\$911)
Basic shares outstanding	6,913	6,923	6,172	1,013	11,144	11,800	7,532	11,925	12,125
Diluted shares outstanding	6,913	6,923	6,172	6,940	11,144	11,800	9,014	11,925	12,125
EPS diluted	(\$0.73)	(\$0.51)	(\$0.21)	\$0.13	(\$0.15)	(\$0.10)	(\$0.37)	(\$0.43)	(\$0.08)
<i>EPS growth</i>									
Revenue growth		9.8%	21.3%	25.8%	13.7%	18.0%	19.5%	13.9%	31.4%
Volume (Ths)	8,337	10,064	2,792	3,000	3,094	3,191	12,077	13,647	15,694
Gross margin	61.2%	58.9%	63.5%	64.5%	64.5%	65.0%	64.4%	65.0%	65.5%
SG&A % of revenue	49.4%	48.4%	55.2%	57.9%	53.0%	49.0%	53.7%	51.0%	45.0%
R&D % of revenue	23.2%	14.4%	12.2%	11.7%	30.0%	27.0%	20.4%	26.0%	19.0%
Operating margin	(11.5%)	(3.9%)	(3.8%)	(5.1%)	(18.5%)	(11.0%)	(9.7%)	(12.0%)	1.5%
Tax rate	0.0%	0.0%	0.0%	240.8%	0.0%	0.0%	31.3%	0.0%	0.0%
D&A expense	\$1,072	\$663	\$106	\$89	\$87	\$91	\$374	\$393	\$517
EBITDA	(\$1,270)	(\$193)	(\$121)	(\$256)	(\$1,132)	(\$673)	(\$2,182)	(\$3,242)	\$1,122
Free cash flow									
Operating cash flow	(\$1,776)	(\$546)	\$180				(\$5,648)	(\$4,122)	\$256
CapX	<u>(141)</u>	<u>(98)</u>	<u>(19)</u>				<u>(775)</u>	<u>(671)</u>	<u>(1,120)</u>
Free cash flow	(\$1,917)	(\$644)	\$161				(\$6,422)	(\$4,793)	(\$864)

Notes:

Source: Company reports and Leerink Partners estimates

Disclosures Appendix

Analyst Certification

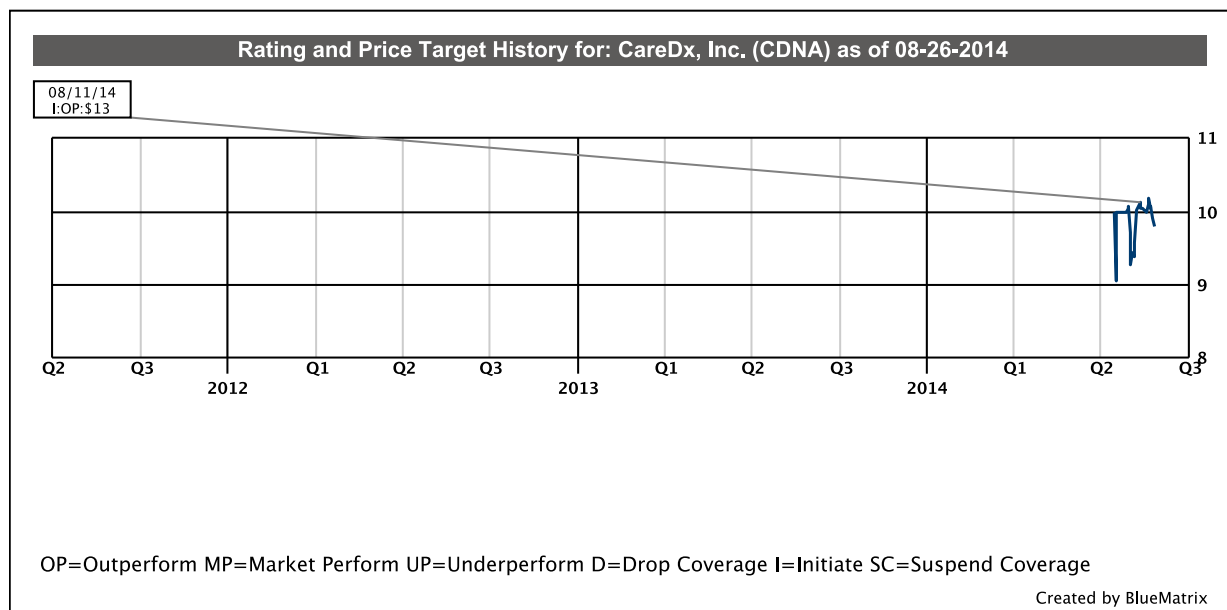
I, Dan Leonard, certify that the views expressed in this report accurately reflect my views and that no part of my compensation was, is, or will be directly related to the specific recommendation or views contained in this report.

Valuation

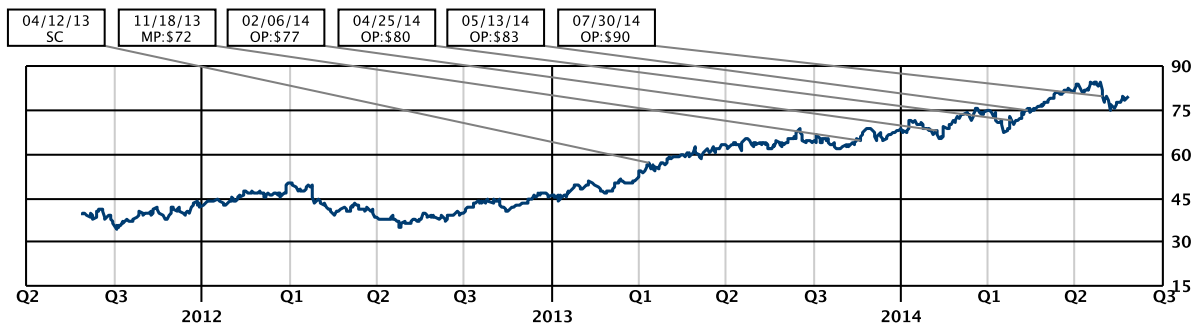
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Rating and Price Target History for: Aetna, Inc. (AET) as of 08-26-2014

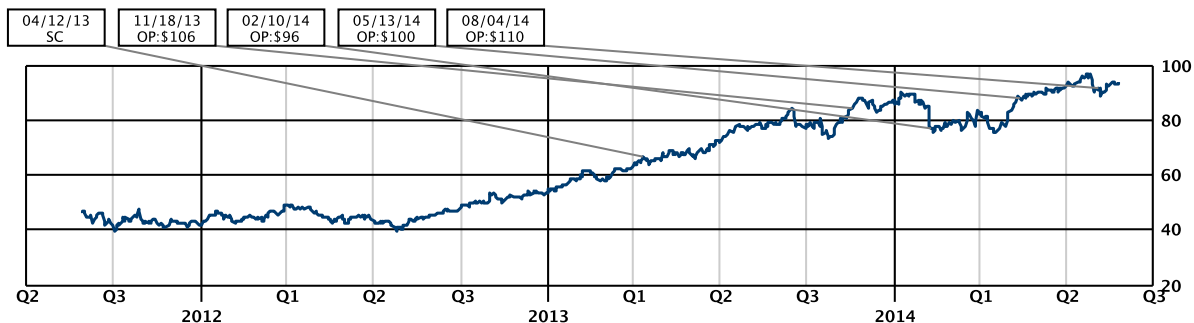


Leerink Swann placed an Outperform rating on AET on March 25, 2011. On June 11, 2013, Leerink Swann began a transition to specific price targets for the stocks under its coverage, replacing valuation ranges.

OP=Outperform MP=Market Perform UP=Underperform D=Drop Coverage I=Initiate SC=Suspend Coverage

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Rating and Price Target History for: CIGNA, Inc. (CI) as of 08-26-2014



Leerink Swann placed an Outperform rating on CI on May 8, 2009. On June 11, 2013, Leerink Swann began a transition to specific price targets for the stocks under its coverage, replacing valuation ranges.

OP=Outperform MP=Market Perform UP=Underperform D=Drop Coverage I=Initiate SC=Suspend Coverage

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Rating and Price Target History for: Humana, Inc. (HUM) as of 08-26-2014



Leerink Swann initiated coverage of HUM with a Market Perform rating on March 23, 2009. On June 11, 2013, Leerink Swann began a transition to specific price targets for the stocks under its coverage, replacing valuation ranges.

OP=Outperform MP=Market Perform UP=Underperform D=Drop Coverage I=Initiate SC=Suspend Coverage

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Rating and Price Target History for: WellPoint, Inc. (WLP) as of 08-26-2014



Leerink Swann placed an Outperform rating on WLP on May 27, 2009. On June 11, 2013, Leerink Swann began a transition to specific price targets for the stocks under its coverage, replacing valuation ranges.

OP=Outperform MP=Market Perform UP=Underperform D=Drop Coverage I=Initiate SC=Suspend Coverage

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Distribution of Ratings/Investment Banking Services (IB) as of 06/30/14				
Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [OP]	138	69.00	50	36.20
HOLD [MP]	62	31.00	2	3.20
SELL [UP]	0	0.00	0	0.00

Explanation of Ratings

Outperform (Buy): We expect this stock to outperform its benchmark over the next 12 months.

Market Perform (Hold/Neutral): We expect this stock to perform in line with its benchmark over the next 12 months.

Underperform (Sell): We expect this stock to underperform its benchmark over the next 12 months. The degree of outperformance or underperformance required to warrant an Outperform or an Underperform rating should be commensurate with the risk profile of the company.

For the purposes of these definitions the relevant benchmark will be the S&P 600® Health Care Index for issuers with a market capitalization of less than \$2 billion and the S&P 500® Health Care Index for issuers with a market capitalization over \$2 billion.

Important Disclosures

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MEDACorp is a network of healthcare professionals, attorneys, physicians, key opinion leaders and other specialists accessed by Leerink and it provides information used by its analysts in preparing research.

In the past 12 months, the Firm has received compensation for providing investment banking services to CareDx, Inc. .

Leerink Partners LLC makes a market in CareDx, Inc., Aetna, Inc., CIGNA, Inc., Humana, Inc. and WellPoint, Inc. Leerink Partners LLC is willing to sell to, or buy from, clients the common stock of Aetna, Inc., CIGNA, Inc., Humana, Inc. and WellPoint, Inc. on a principal basis.

Leerink Partners LLC has acted as the manager for a public offering of CareDx, Inc. in the past 12 months.

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