

May 6, 2014

OUTPERFORM
from **MARKET PERFORM**

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Reason for report:

RATING CHANGE

CELLULAR DYNAMICS INTERNATIONAL

Upgrade to Outperform; Long-Term Adoption Play

• **Bottom Line:** We are upgrading ICEL to Outperform from Market Perform with a view that signposts for adoption of ICEL's technology have largely been favorable and point toward growth longer term. We maintain our price target of \$17, which represents 47% upside to Tuesday's close.

• **Positive incremental signposts support iPSC use.** Since induced pluripotent stem cell (iPSC) technology is early in commercialization, we find ourselves following long-term signposts as much or more than actual quarterly revenue results. We believe the positive incremental signals since our Nov. '13 downgrade outweigh the negative. Positive long-term demand signals include: (1) collaborations with the Hamner Institutes and Jain Foundation; (2) a long-term supply agreement with Nestle, ICEL's first such deal in nutrition science; and (3) BMY's (OP) recent acquisition of iPierian, which could enhance interest in iPSCs for drug discovery (see our 5/2/2014 note for more detail). Additionally, we picked up incrementally positive diligence on ICEL's opportunity at the Society of Toxicology (SOT) annual meeting (see our 3/28/14 note).

• **Long-term opportunity for technology adoption not reflected in current stock price, in our view.** We believe the case for long-term adoption of iPSCs is solid. iPSCs can be used in disease modeling to improve the understanding of molecular pathways underlying disease phenotypes, e.g., the molecular causes for arrhythmia in cardiomyocytes. Another application is in drug screening and discovery, to determine the effects of candidate drugs and new compounds, and to identify target pathways. iPSCs can also be valuable in cardiac, neural, and liver toxicity tests to assess cellular toxic responses. Additionally, the FDA has proposed a change to clinical guidelines for assessing the proarrhythmic risk of drug compounds to include iPSCs (see our 8/19/13 note for further discussion).

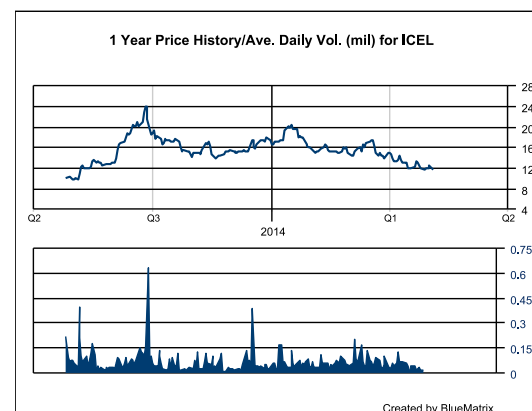
• **Timing of adoption difficult to predict, and we're moderating our forecast accordingly.** We've reduced our revenue forecast modestly to reflect a slower ramp in ICEL's contract with the California Institute for Regenerative Medicine (CIRM) as well as some moderation in the base business following a softer-than-expected 1Q.

• **Risks include adoption ramp and pharma consolidation.** Aside from the inherent risk of forecasting new technology adoption, we'd highlight potential downside from biopharma consolidation as a primary risk to our upgrade (note, AZN [OP] comprised 15% of 2013 revenue).

Key Stats:

(NASDAQ:ICEL)

S&P 600 Health Care Index:	1,212.60
Price:	\$11.53
Price Target:	\$17.00
Methodology:	~8.5x EV/2015E revs for tools and \$2 for Rx
52 Week High:	\$24.11
52 Week Low:	\$9.50
Shares Outstanding (mil):	15.8
Market Capitalization (mil):	\$182.2
Book Value/Share:	\$3.40
Cash Per Share:	\$3.41
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	\$2.4	\$2.8	\$2.5	\$4.2	\$11.9	(\$3.28)	(\$2.92)	(\$0.62)	(\$0.43)	(\$3.19)	NM
2014E - New	\$2.9A	\$4.4	\$4.5	\$6.6	\$18.4	(\$0.52)A	(\$0.47)	(\$0.48)	(\$0.42)	(\$1.88)	NM
2014E - Old	\$4.7	\$5.4	\$5.4	\$6.3	\$21.8	(\$0.36)	(\$0.37)	(\$0.34)	(\$0.42)	(\$1.48)	NM
2015E - New	--	--	--	--	\$44.2	--	--	--	--	(\$1.15)	NM
2015E - Old	--	--	--	--	\$47.8	--	--	--	--	(\$0.75)	NM
2016E - New	--	--	--	--	\$71.0	--	--	--	--	(\$0.18)	NM
2016E - Old	--	--	--	--	\$71.0	--	--	--	--	(\$0.04)	NM

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

INVESTMENT THESIS

ICEL is well positioned as the leading commercial supplier of differentiated human cells derived from induced pluripotent stem cells (iPSCs). We believe cells derived from iPSCs will become increasingly utilized for compound screening and toxicity testing in the biopharmaceutical industry, among other applications. Several signposts suggest the iPSC industry is poised for rapid growth. Our Outperform rating reflects a view that long-term demand drivers for iPSCs are not reflected in the current stock price.

VALUATION

Our \$17 price target assumes an enterprise value (using projected levels of debt and cash) that is ~8.5x our revenue forecast, excluding CIRM and therapeutic partnerships, for the twelve months ended Dec-2015. This price target includes ~\$0.30/share of value for the CIRM contract, which we value separately due to its fixed term, as well as ~\$2/share for ICEL's therapeutics opportunity, based on the median of comparable stem cell technology companies. The ~8.5x multiple on base revenues is an increase from our previous multiple of ~6x, reflecting our increased confidence in ICEL's long-term outlook, and is a premium to the median Life Science Tools & Diagnostics median forward twelve month revenue multiple of 4x, which we believe appropriate given ICEL's strong growth prospects.

RISKS TO VALUATION

Risks to our price target for ICEL include, but are not limited to: biopharma consolidation, the pace of adoption of its iCell products among biopharmaceutical customers, nature and timing of FDA guidance/regulations, competitive pressures from in-house and commercial producers of iPSC lines, policy decisions, and market extension into therapeutic applications.

Cellular Dynamics (ICEL)

Income Statement

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	2011	2012	Mar-13	Jun-13	Sep-13	Dec-13	2013	Mar-14	Jun-14e	Sep-14e	Dec-14e	2014e	2015e	2016e
Revenue														
Product	\$1,460	\$5,178	\$1,754	\$1,969	\$1,793	\$2,482	\$7,998	\$1,462	\$2,166	\$2,134	\$3,103	\$8,864	\$22,205	\$34,970
Collabs, partnerships, other	<u>1,137</u>	<u>1,404</u>	<u>636</u>	<u>843</u>	<u>730</u>	<u>1,677</u>	<u>3,886</u>	<u>1,477</u>	<u>2,200</u>	<u>2,400</u>	<u>3,500</u>	<u>9,577</u>	<u>22,000</u>	<u>36,000</u>
Total revenue	2,597	6,582	2,390	2,812	2,523	4,159	11,884	2,939	4,366	4,534	6,603	18,441	44,205	70,970
COGS	<u>727</u>	<u>2,089</u>	<u>577</u>	<u>676</u>	<u>371</u>	<u>678</u>	<u>2,302</u>	<u>446</u>	<u>693</u>	<u>683</u>	<u>993</u>	<u>2,815</u>	<u>7,106</u>	<u>11,190</u>
Gross profit	1,870	4,493	1,813	2,136	2,152	3,481	9,582	2,493	3,673	3,851	5,610	15,626	37,100	59,779
SG&A	9,513	12,422	3,636	3,282	5,406	4,949	17,273	5,390	5,500	5,600	5,924	22,414	28,070	33,001
R&D	<u>13,660</u>	<u>14,301</u>	<u>3,856</u>	<u>3,911</u>	<u>3,906</u>	<u>4,899</u>	<u>16,572</u>	<u>4,916</u>	<u>5,239</u>	<u>5,531</u>	<u>6,008</u>	<u>21,694</u>	<u>26,081</u>	<u>28,388</u>
Operating income (loss)	(21,303)	(22,230)	(5,679)	(5,057)	(7,160)	(6,367)	(24,263)	(7,813)	(7,066)	(7,280)	(6,323)	(28,482)	(17,052)	(1,609)
Interest expense (income)	44	34	7	4	358	347	716	304	281	285	290	1,160	1,187	1,216
Other expense, net	<u>(3)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>(20)</u>	<u>(1)</u>	<u>(21)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Pretax income	(21,344)	(22,264)	(5,686)	(5,061)	(7,498)	(6,713)	(24,958)	(8,117)	(7,347)	(7,566)	(6,612)	(29,642)	(18,239)	(2,825)
Taxes	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net income	(\$21,344)	(\$22,264)	(\$5,686)	(\$5,061)	(\$7,498)	(\$6,713)	(\$24,958)	(\$8,117)	(\$7,347)	(\$7,566)	(\$6,612)	(\$29,642)	(\$18,239)	(\$2,825)
Basic shares outstanding	1,734	1,734	1,734	1,734	12,087	15,756	7,828	15,760	15,770	15,780	15,790	15,775	15,815	15,855
Diluted shares outstanding	1,734	1,734	1,734	1,734	12,087	15,756	7,828	15,760	15,770	15,780	15,790	15,775	15,815	15,855
EPS diluted	(\$12.31)	(\$12.84)	(\$3.28)	(\$2.92)	(\$0.62)	(\$0.43)	(\$3.19)	(\$0.52)	(\$0.47)	(\$0.48)	(\$0.42)	(\$1.88)	(\$1.15)	(\$0.18)
<i>EPS growth</i>														
Sales growth		153.4%	108.6%	123.2%	104.6%	41.3%	80.6%	23.0%	55.3%	79.7%	58.8%	55.2%	139.7%	60.5%
Sales growth ex CIRM			108.6%	123.2%	104.6%	35.1%	77.8%	9.1%	26.8%	40.1%	28.3%	26.6%	144.5%	73.9%
Product gross margin	50.2%	59.7%	67.1%	65.7%	79.3%	72.7%	71.2%	69.5%	68.0%	68.0%	68.0%	68.2%	68.0%	68.0%
SG&A % of revenue	366.3%	188.7%	152.1%	116.7%	214.3%	119.0%	145.3%	183.4%	126.0%	123.5%	89.7%	121.5%	63.5%	46.5%
R&D % of revenue	526.0%	217.3%	161.3%	139.1%	154.8%	117.8%	139.4%	167.3%	120.0%	122.0%	91.0%	117.6%	59.0%	40.0%
Operating margin	(820.3%)	(337.7%)	(237.6%)	(179.8%)	(283.8%)	(153.1%)	(204.2%)	(265.8%)	(161.9%)	(160.6%)	(95.8%)	(154.4%)	(38.6%)	(2.3%)
Tax rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D&A	\$1,366	\$1,433	\$341	\$338	\$322	\$321	\$1,322	\$335				\$1,356	\$2,047	\$2,436
EBITDA	(\$19,937)	(\$20,797)	(\$5,338)	(\$4,719)	(\$6,838)	(\$6,046)	(\$22,941)	(\$7,478)				(\$27,126)	(\$15,005)	\$826
Free cash flow														
Operating cash flow	(\$19,232)	(\$21,004)	(\$4,829)	(\$4,624)	(\$6,940)	(\$4,907)	(\$21,300)	(\$7,711)				(\$27,334)	(\$14,061)	\$1,579
CapX	<u>(558)</u>	<u>(132)</u>	<u>(120)</u>	<u>(173)</u>	<u>(353)</u>	<u>(1,171)</u>	<u>(1,817)</u>	<u>(605)</u>				<u>(1,779)</u>	<u>(3,462)</u>	<u>(4,373)</u>
Free cash flow	(\$19,790)	(\$21,136)	(\$4,949)	(\$4,797)	(\$7,293)	(\$6,078)	(\$23,117)	(\$8,316)				(\$29,113)	(\$17,523)	(\$2,794)
Other														
Revenue ex CIRM	\$2,597	\$6,582	\$2,390	\$2,812	\$2,523	\$3,977	\$11,702	\$2,608	\$3,566	\$3,534	\$5,103	\$14,810	\$36,205	\$62,970
Growth		153.4%	108.6%	123.2%	104.6%	35.1%	77.8%	9.1%	26.8%	40.1%	28.3%	26.6%	144.5%	73.9%

Notes:

Source: Company reports and Leerink Partners estimates

Cellular Dynamics (ICEL)

Balance Sheet (\$ thousands)	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14e	Sep-14e	Dec-14e
Assets								
Cash, equivalents, and short-term investments	\$28,488	\$33,539	\$68,575	\$62,029	\$53,700	\$46,840	\$39,051	\$33,099
Accounts receivable	1,898	2,153	1,908	3,318	2,627	1,899	1,871	2,720
Inventory	2,483	2,643	3,507	3,884	4,353	4,937	4,489	4,352
Other	<u>1,544</u>	<u>2,288</u>	<u>1,092</u>	<u>964</u>	<u>857</u>	<u>1,040</u>	<u>1,024</u>	<u>1,489</u>
Total current assets	34,413	40,623	75,082	70,195	61,537	54,716	46,435	41,660
Property and equipment, net	777	738	901	2,052	2,616	2,079	2,159	3,144
Goodwill	6,817	6,817	6,817	6,817	6,817	6,817	6,817	6,817
Other intangibles	4,270	4,178	4,142	4,122	4,120	3,995	3,870	3,745
Other	<u>10</u>	<u>232</u>	<u>221</u>	<u>209</u>	<u>197</u>	<u>197</u>	<u>197</u>	<u>197</u>
Total assets	\$46,287	\$52,588	\$87,163	\$83,395	\$75,287	\$67,804	\$59,478	\$55,563
Liabilities and shareholders' equity								
Notes payable and current maturities of long-term debt	\$338	\$18	\$18	\$18	\$1,593	\$625	\$625	\$625
Accounts payable	1,754	1,685	1,246	1,811	1,898	1,750	322	1,172
Accruals and other	<u>2,049</u>	<u>2,230</u>	<u>3,231</u>	<u>4,800</u>	<u>3,302</u>	<u>2,599</u>	<u>2,560</u>	<u>3,723</u>
Total current liabilities	4,141	3,933	4,495	6,629	6,793	4,973	3,507	5,519
Long-term debt	636	11,736	11,808	11,879	10,898	11,866	11,866	11,866
Other	<u>0</u>	<u>261</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total liabilities	\$4,777	\$15,930	\$16,303	\$18,508	\$17,691	\$16,840	\$15,374	\$17,386
Shareholders' equity	\$41,510	\$36,658	\$70,860	\$64,887	\$57,596	\$50,964	\$44,104	\$38,178
Total liabilities, shareholders' equity, and minority interest	\$46,287	\$52,588	\$87,163	\$83,395	\$75,287	\$67,804	\$59,478	\$55,563

Disclosures Appendix

Analyst Certification

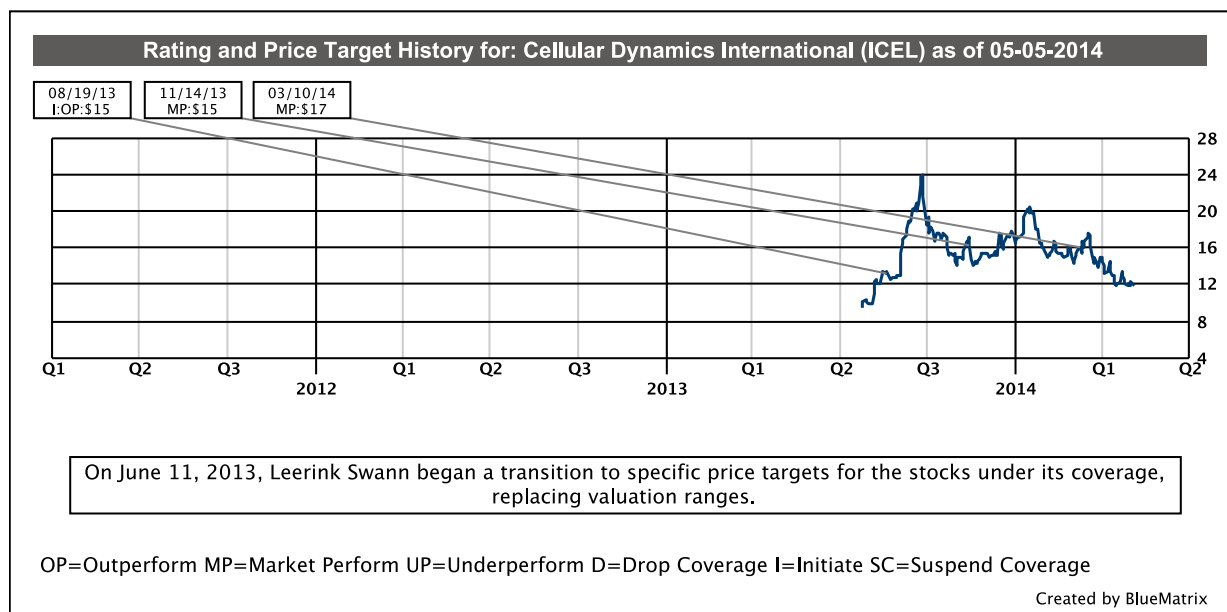
I, Dan Leonard, certify that the views expressed in this report accurately reflect my views and that no part of my compensation was, is, or will be directly related to the specific recommendation or views contained in this report.

Valuation

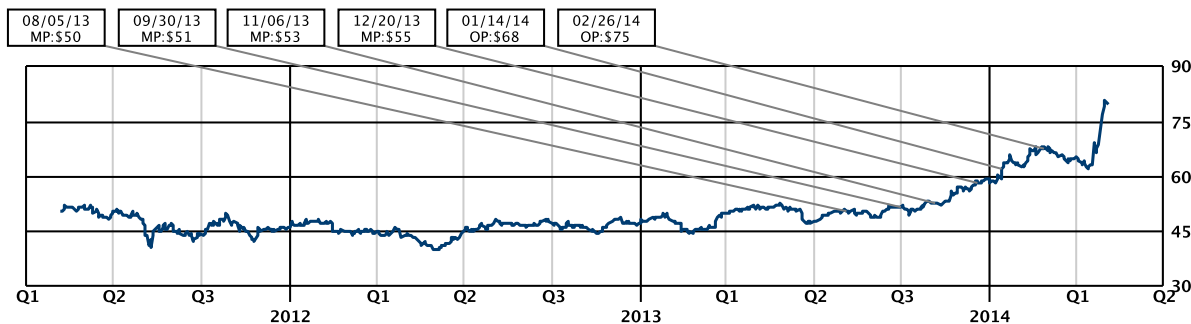
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Risks to Valuation

Risks to our price target for ICEL include, but are not limited to: biopharma consolidation, the pace of adoption of its iCell products among biopharmaceutical customers, nature and timing of FDA guidance/regulations, competitive pressures from in-house and commercial producers of iPSC lines, policy decisions, and market extension into therapeutic applications.



Rating and Price Target History for: AstraZeneca PLC (AZN) as of 05-05-2014

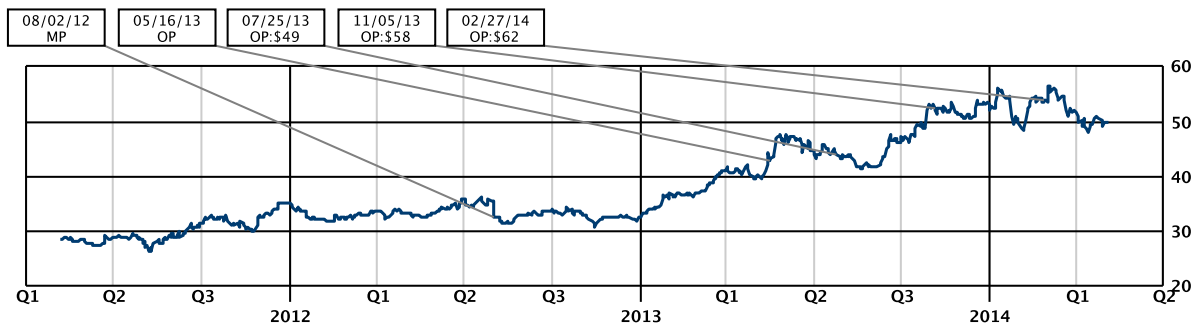


Leerink Swann initiated coverage of AZN with a Market Perform rating on Sept. 30, 2009. On June 11, 2013, Leerink Swann began a transition to specific price targets for the stocks under its coverage, replacing valuation ranges.

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

Created by BlueMatrix

Rating and Price Target History for: Bristol-Myers Squibb (BMY) as of 05-05-2014



Leerink Swann placed an Outperform rating on BMY on June 11, 2010. 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

Created by BlueMatrix

Distribution of Ratings/Investment Banking Services (IB) as of 03/31/14				
Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [OP]	131	68.23	46	35.11
HOLD [MP]	61	31.77	3	4.92
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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In the past 12 months, the Firm has received compensation for providing investment banking services to Cellular Dynamics International .

Leerink Partners LLC makes a market in Cellular Dynamics International.

Leerink Partners LLC is willing to sell to, or buy from, clients the common stock of AstraZeneca PLC and Bristol-Myers Squibb on a principal basis.

Leerink Partners LLC has acted as a co-manager for a public offering of Cellular Dynamics International in the past 12 months.

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