MARKET PERFORM

Dan Leonard (212) 277-6116

Dan.Leonard@Leerink.com

Justin.Bowers@Leerink.com

Justin Bowers, CFA (212) 277-6066

Reason for report:

COMPANY UPDATE



CELLULAR DYNAMICS INTERNATIONAL

Long-Term Growth Outlook for Stem Cell Technology Promising

- Bottom Line: Our attendance at the Society of Toxicology (SOT) annual meeting reinforced our long-term growth outlook for the use of induced pluripotent stem cells (iPSCs). ICEL is the clear market leader. However, we believe a more gradual adoption curve is likely, and we have modestly lowered our 2014 estimates accordingly. We maintain our Market Perform rating and our \$17 price target.
- Increased interest in stem cells at SOT 2014. SOT 2014 included 19 sessions and 32 posters addressing stem cell tech versus only 1 session and 19 posters during SOT 2013. The breadth of content expanded, with discussions on drug discovery, toxicity, and potential clinical applications. Overall, we found that the stem cell sessions were well attended and more populated than concurrent sessions in the immediate vicinity.
- Emerging applications and customers on the horizon. We encountered two large biopharmas that use stem cells for drug discovery, e.g., one for 131 compounds in clinical development. We also learned that biopharma is using ICEL's iPSCs to discover candidates for infectious disease and glucose-related conditions. Academic institutions are also using the technology for drug development. One is working with various biopharma companies to augment their development efforts, though acknowledged that biopharma does not have as much experience with stem cells as the academic community. Another researcher is using ICEL's cells for the development of a miRNA-based therapeutic to counter cardiomyopathy. Separately, we also met a multi-national company that is exploring the use of ICEL's iPSCs for its flavor division. We believe this and the Nestle deal validate the opportunity for iPSCs beyond traditional biomedical research and pharma customers.
- ICEL is winning is the market. Our discussions with attendees cited ICEL consistently as the market leader in iPSCs. Other companies mentioned included Axiogenesis, Cellectis, ReproCELL, and GE (licenses from ICEL) to a lesser extent. We also believe that ICEL is having greater success at penetrating the biopharma customer market globally, and is the leading supplier of iPSCs in Japan per our recent diligence.
- Change in guidelines would accelerate iPSC adoption. Regulators' proposal to change the clinical guidelines to assess proarrythmic risk was also discuss widely at SOT (see our 8/19/13 note for further discussion).
- Still some more work to do. Researchers thematically cited improvements needed before widespread adoption, including: batch consistency, sensitivity, and reproducibility.
- Reducing forecasts. We lowered our 2014 estimates to assume a more conservative 1H14 customer ramp.

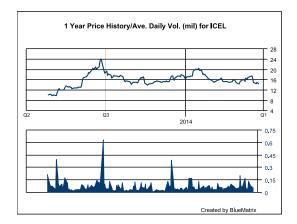
Dec Yr	1Q	2Q	3Q	4Q	FY Rev	1Q	2Q	3Q	4Q	FY EPS	P/E
2013A	\$2.4	\$2.8	\$2.5	\$4.2	\$11.9	(\$3.28)	(\$2.92)	(\$0.62)	(\$0.43)	(\$3.19)	NM
2014E - New	\$4.7	\$5.4	\$5.4	\$6.3	\$21.8	(\$0.36)	(\$0.37)	(\$0.34)	(\$0.42)	(\$1.48)	NM
2014E - Old	\$5.3	\$5.7	\$5.4	\$6.5	\$22.8	(\$0.33)	(\$0.36)	(\$0.34)	(\$0.41)	(\$1.44)	NM
2015E					\$47.8					(\$0.75)	NM
2016E					\$71.0					(\$0.04)	NM

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

GAAP EPS.

Key Stats:	(NASDAQ:ICEL)
itcy Ctats.	(IIAODAQ.IOLL)

S&P 600 Health Care Index:	1,249.14
Price:	\$14.45
Price Target:	\$17.00
Methodology: ~6x EV/2015E revs for tools a	
	Rx
52 Week High:	\$24.11
52 Week Low:	\$9.50
Shares Outstanding (mil):	15.8
Market Capitalization (mil):	\$228.3
Book Value/Share:	\$5.28
Cash Per Share:	\$3.94
Dividend (ann):	\$0.00
Dividend Yield:	0.0%





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 Market Perform rating reflects a view that risks are balanced with rewards absent greater visibility on the revenue ramp.

VALUATION

Our \$17 price target assumes an enterprise value (using projected levels of debt and cash) that is ~6x our revenue forecast for the twelve months ended Dec-2015, including ~\$0.30/share of value for the CIRM contract, which we value separately due to its fixed term. This multiple 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. We additionally consider ICEL's Rx opportunity worth ~\$2/share based on the median of comparable stem cell technology companies.

RISKS TO VALUATION

Risks to our price target for ICEL include, but are not limited to: 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)

Dan Leonard, 212-277-6116

ncome Statement													dan.leoi	nard@leerink.com
	2011	2012	Mar-13	Jun-13	Sep-13	Dec-13	2013	Mar-14e	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	\$2,193	\$2,855	\$2,869	\$3,847	\$11,763	\$30,564	\$45,152
Collabs, partnerships, other	<u>1,137</u>	<u>1,404</u>	<u>636</u>	843	730	1,677	3,886	<u>2,500</u>	<u>2,500</u>	2,500	2,500	10,000	17,200	<u>25,800</u>
otal revenue	2,597	6,582	2,390	2,812	2,523	4,159	11,884	4,693	5,355	5,369	6,347	21,763	47,764	70,952
COGS	<u>727</u>	2,089	<u>577</u>	<u>676</u>	<u>371</u>	<u>678</u>	2,302	<u>702</u>	<u>914</u>	<u>918</u>	<u>1,231</u>	<u>3,764</u>	9,780	14,449
ross profit	1,870	4,493	1,813	2,136	2,152	3,481	9,582	3,991	4,441	4,451	5,116	17,999	37,983	56,504
SG&A	9,513	12,422	3,636	3,282	5,406	4,949	17,273	4,670	4,972	4,725	5,695	20,062	26,270	31,929
R&D	<u>13,660</u>	14,301	<u>3,856</u>	<u>3,911</u>	3,906	4,899	16,572	4,723	5,029	4,778	5,759	20,289	22,449	24,124
perating income (loss)	(21,303)	(22,230)	(5,679)	(5,057)	(7,160)	(6,367)	(24,263)	(5,402)	(5,560)	(5,052)	(6,338)	(22,352)	(10,736)	451
Interest expense (income)	44	34	7	4	358	347	716	261	265	268	272	1,066	1,116	1,139
Other expense, net	<u>(3)</u>	<u>0</u>	<u>0</u>	<u>0</u>	(20)	<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>
retax income	(21,344)	(22,264)	(5,686)	(5,061)	(7,498)	(6,713)	(24,958)	(5,663)	(5,825)	(5,320)	(6,610)	(23,418)	(11,852)	(688)
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>
et income	(\$21,344)	(\$22,264)	(\$5,686)	(\$5,061)	(\$7,498)	(\$6,713)	(\$24,958)	(\$5,663)	(\$5,825)	(\$5,320)	(\$6,610)	(\$23,418)	(\$11,852)	(\$688)
asic shares outstanding	1,734	1,734	1,734	1,734	12,087	15,756	7,828	15,766	15,776	15,786	15,796	15,781	15,821	15,861
Diluted shares outstanding	1,734	1,734	1,734	1,734	12,087	15,756	7,828	15,766	15,776	15,786	15,796	15,781	15,821	15,991
PS diluted	(\$12.31)	(\$12.84)	(\$3.28)	(\$2.92)	(\$0.62)	(\$0.43)	(\$3.19)	(\$0.36)	(\$0.37)	(\$0.34)	(\$0.42)	(\$1.48)	(\$0.75)	(\$0.04)
EPS growth														
ales growth		153.4%	108.6%	123.2%	104.6%	41.3%	80.6%	96.3%	90.4%	112.8%	52.6%	83.1%	119.5%	48.5%
Product gross margin	50.2%	59.7%	67.1%	65.7%	79.3%	72.7%	71.2%	68.0%	68.0%	68.0%	68.0%	68.0%	68.0%	68.0%
SG&A % of revenue	366.3%	188.7%	152.1%	116.7%	214.3%	119.0%	145.3%	99.5%	92.8%	88.0%	89.7%	92.2%	55.0%	45.0%
R&D % of revenue	526.0%	217.3%	161.3%	139.1%	154.8%	117.8%	139.4%	100.6%	93.9%	89.0%	90.7%	93.2%	47.0%	34.0%
Operating margin	(820.3%)	(337.7%)	(237.6%)	(179.8%)	(283.8%)	(153.1%)	(204.2%)	(115.1%)	(103.8%)	(94.1%)	(99.9%)	(102.7%)	(22.5%)	0.6%
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%
&A BITDA	\$1,366 (\$19,937)	\$1,433 (\$20,797)	\$341 (\$5,338)	\$338 (\$4,719)	\$322 (\$6,838)	\$321 (\$6,046)	\$1,322 (\$22,941)					\$1,407 (\$20,945)	\$2,172 (\$8,564)	\$2,435 \$2,886
	(\$13,337)]	(\$20,131)	(43,330)	(ψ+,/ 13)	(\$0,030)	(\$0,040)	(\$22,341)				L	(\$20,343)]	(40,504)	\$2,000
ree cash flow	(0.10,000)	(004.004)	(0.4.000)	(0.4.00.4)	(00.040)	(0.4.007)	(004.000)				ſ	(000,000)	(0.10.000)	4707
Operarating cash flow	(\$19,232)	(\$21,004)	(\$4,829)	(\$4,624)	(\$6,940)	(\$4,907)	(\$21,300)					(\$22,269)	(\$12,606)	\$727
CapX	(558)	(132)	(120)	(173)	(353)	(1,171)	(1,817)					(1,877)	(4,175)	(3,949)
Free cash flow	(\$19,790)	(\$21,136)	(\$4,949)	(\$4,797)	(\$7,293)	(\$6,078)	(\$23,117)				L	(\$24,146)	(\$16,781)	(\$3,223)

Notes:

Source: Company reports and Leerink Partners estimates

Cellular Dynamics (ICEL)

Balance Sheet (\$ thousands)	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14e	Jun-14e	Sep-14e	Dec-14e
Assets			-					
Cash, equivalents, and short-term investments	\$28,488	\$33,539	\$68,575	\$62,029	\$53,782	\$50,085	\$44,185	\$38,145
Accounts receivable	1,898	2,153	1,908	3,318	1,922	2,503	2,515	3,373
Inventory	2,483	2,643	3,507	3,884	2,691	3,504	3,521	4,722
Other	<u>1,544</u>	2,288	<u>1,092</u>	<u>964</u>	<u>1,052</u>	<u>1,370</u>	<u>1,377</u>	<u>1,847</u>
Total current assets	34,413	40,623	75,082	70,195	59,448	57,463	51,598	48,086
Property and equipment, net	777	738	901	2,052	2,235	2,550	2,557	3,022
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	3,997	3,872	3,747	3,622
Other	<u>10</u>	<u>232</u>	<u>221</u>	<u>209</u>	<u>209</u>	<u>209</u>	<u>209</u>	<u>209</u>
Total assets	\$46,287	\$52,588	\$87,163	\$83,395	\$72,706	\$70,911	\$64,928	\$61,757
Liabilities and shareholders' equity								
Notes payable and current maturities of long-term debt	\$338	\$18	\$18	\$18	\$595	\$595	\$595	\$595
Accounts payable	1,754	1,685	1,246	1,811	(673)	2,366	1,281	3,331
Accruals and other	<u>2,049</u>	2,230	<u>3,231</u>	<u>4,800</u>	1,929	<u>2,512</u>	2,525	3,385
Total current liabilities	4,141	3,933	4,495	6,629	1,851	5,473	4,400	7,312
Long-term debt	636	11,736	11,808	11,879	11,302	11,302	11,302	11,302
Other	<u>0</u>	<u>261</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	0
Total liabilities	\$4,77 7	\$15,930	\$16,303	\$18,50 8	\$13,15 3	\$16,775	\$15,702	\$18,614
Shareholders' equity	\$41,510	\$36,658	\$70,860	\$64,887	\$59,552	\$54,136	\$49,225	\$43,143
Total liabilities, shareholders' equity, and minority interest	\$46,287	\$52,588	\$87,163	\$83,395	\$72,706	\$70,911	\$64,928	\$61,757

Notes:
Source: Company reports and Leerink Partners estimates



Disclosures Appendix Analyst Certification

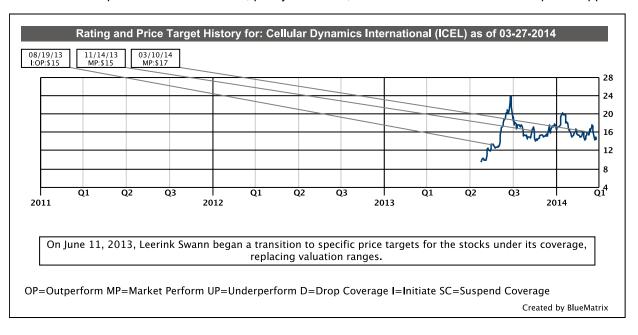
I, Dan Leonard, certify that the views expressed in this report accurately reflect my views and that no part of my compensation was, is, or will be directly related to the specific recommendation or views contained in this report.

Valuation

Our \$17 price target assumes an enterprise value (using projected levels of debt and cash) that is ~6x our revenue forecast for the twelve months ended Dec-2015, including ~\$0.30/share of value for the CIRM contract, which we value separately due to its fixed term. This multiple 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. We additionally consider ICEL's Rx opportunity worth ~\$2/share based on the median of comparable stem cell technology companies.

Risks to Valuation

Risks to our price target for ICEL include, but are not limited to: 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.





Distribution of Ratings/Investment Banking Services (IB) as of 12/31/13 IB Serv./Page 1							
Rating	Count	Percent	Count	Percent			
BUY [OP] HOLD [MP] SELL [UP]	118 65	64.50 35.50 0.00	30 2 0	25.00 3.00 0.00			

Explanation of Ratings

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

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

<u>Underperform (Sell):</u> 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

This information (including, but not limited to, prices, quotes and statistics) has been obtained from sources that we believe reliable, but we do not represent that it is accurate or complete and it should not be relied upon as such. All information is subject to change without notice. This is provided for information purposes only and should not be regarded as an offer to sell or as a solicitation of an offer to buy any product to which this information relates. The Firm, its officers, directors, employees, proprietary accounts and affiliates may have a position, long or short, in the securities referred to in this report, and/or other related securities, and from time to time may increase or decrease the position or express a view that is contrary to that contained in this report. The Firm's salespeople, traders and other professionals may provide oral or written market commentary or trading strategies that are contrary to opinions expressed in this report. The Firm's proprietary accounts may make investment decisions that are inconsistent with the opinions expressed in this report. The past performance of securities does not guarantee or predict future performance. Transaction strategies described herein may not be suitable for all investors. Additional information is available upon request by contacting the Editorial Department at One Federal Street, 37th Floor, Boston, MA 02110.

Like all Firm employees, analysts receive compensation that is impacted by, among other factors, overall firm profitability, which includes revenues from, among other business units, Institutional Equities, and Investment Banking. Analysts, however, are not compensated for a specific investment banking services transaction.

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.

Leerink Consulting LLC, an affiliate of Leerink Partners, is a provider of evidence-based strategy and consulting to the healthcare industry.

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

©2014 Leerink Partners LLC. All rights reserved. This document may not be reproduced or circulated without our written authority.

Leerink Partners LLC Equity Research							
	Eccilik i artifers EEO	Equity Research	,				
Director of Equity Research	John L. Sullivan, CFA	(617) 918-4875	john.sullivan@leerink.com				
Associate Director of Research	Alice C. Avanian, CFA	(617) 918-4544	alice.avanian@leerink.com				
Healthcare Strategy	John L. Sullivan, CFA	(617) 918-4875	john.sullivan@leerink.com				
	Alice C. Avanian, CFA	(617) 918-4544	alice.avanian@leerink.com				
Dietechnology	Haward Liona Dh D	(647) 040 4057	howard liang@loorink.com				
Biotechnology	Howard Liang, Ph.D.	(617) 918-4857	howard.liang@leerink.com				
	Joseph P. Schwartz	(617) 918-4575	joseph.schwartz@leerink.com				
	Marko Kozul, M.D.	(415) 905-7221	marko.kozul@leerink.com				
	Michael Schmidt, Ph.D.	(617) 918-4588	michael.schmidt@leerink.com				
	Jonathan Chang, Ph.D.	(617) 918-4015	jonathan.chang@leerink.com				
	Irene Lau	(415) 905-7256	irene.lau@leerink.com				
	Paul Matteis	(617) 918-4585	paul.matteis@leerink.com				
	Gena Wang, Ph.D., CFA	(212) 277-6073	gena.wang@leerink.com				
	Richard Goss	(617) 918-4059	richard.goss@leerink.com				
Life Science Tools	Dan Leonard	(212) 277-6116	dan.leonard@leerink.com				
and Diagnostics	Justin Bowers, CFA	(212) 277-6066	justin.bowers@leerink.com				
Pharmaceuticals/Major	Seamus Fernandez	(617) 918-4011	seamus.fernandez@leerink.com				
	Ario Arabi	(617) 918-4568	ario.arabi@leerink.com				
Specialty Pharmaceuticals,	Jason M. Gerberry, JD	(617) 918-4549	jason.gerberry@leerink.com				
Generics	Christopher W. Kuehnle, JD	(617) 918-4851	chris.kuehnle@leerink.com				
Medical Devices, Cardiology &	Danielle Antalffy	(212) 277-6044	danielle.antalffy@leerink.com				
Orthopedics	Richard Newitter	(212) 277-6088	richard.newitter@leerink.com				
	Robert Marcus, CFA	(212) 277-6084	robert.marcus@leerink.com				
	Ravi Misra	(212) 277-6049	ravi.misra@leerink.com				
Healthcare Services	Ana Gupte, Ph.D.	(212) 277-6040	ana.gupte@leerink.com				
ricaltricale Services	Alla Gupte, I II.D.	(212) 277-0040	ana.gupte@ieemink.com				
Healthcare Technology	David Larsen, CFA	(617) 918-4502	david.larsen@leerink.com				
& Distribution	Christopher Abbott	(617) 918-4010	chris.abbott@leerink.com				
Sr. Editor/Supervisory Analyst	Mary Ellen Eagan, CFA	(617) 918-4837	maryellen.eagan@leerink.com				
	Robert Egan	(017) 010-4007	· · · · · · · · · · · · · · · · · · ·				
Supervisory Analysts	· ·		bob.egan@leerink.com				
	Amy N. Sonne		amy.sonne@leerink.com				

New York 299 Park Avenue, 21st floor New York, NY 10171 (888) 778-1653 Boston One Federal Street, 37th Floor Boston, MA 02110 (800) 808-7525

San Francisco 201 Spear Street, 16th Floor San Francisco, CA 94105 (800) 778-1164