

Cellular Dynamics International Inc

Equity Research

March 28, 2014

Price: \$14.45 (03/27/2014) **Price Target:** \$18.00 (Prior \$20.50)

OUTPERFORM (1)

Doug Schenkel

617.946.3918 doug.schenkel@cowen.com

Shaun Rodriguez, Ph.D.

617.946.3929 shaun.rodriguez@cowen.com

Chris Lin

617.946.3825 chris.lin@cowen.com

Key Data

NASDAQ: ICEL Symbol 52-Week Range: \$24.11 - 9.50 Market Cap (MM): \$227.8 Net Debt (MM): \$(32.8) Cash/Share: \$19.55 Dil. Shares Out (MM): Enterprise Value (MM): \$171.0 ROIC: ROE (LTM): NA BV/Share: \$4.50 Dividend: NA

FY (Dec)	2013A	2014E	2015E
Revenue (MM)		
Q1	\$2.4	\$4.0	\$8.2
Prior Q1	-	\$5.1	
Q2	\$2.8	\$4.7	\$9.6
Prior Q2	-	\$6.9	
Q3	\$2.5	\$4.9	\$12.1
Prior Q3	-	\$7.1	
Q4	\$4.2	\$6.8	\$15.1
Prior Q4	\$4.3	\$10.9	
Year	\$11.9	\$20.5	\$45.0
Prior Year	\$12.1	\$30.0	

Earnings Update

Updating Model To Reflect Recent Update

The Cowen Insight

We are updating our model subsequent to recent conversations with management and a model review. We are reducing our PT to \$18 from \$20.50 (~4x our updated 2016 revenue forecast). We believe shares remain interesting for those with a higher risk tolerance and longer-term objective.

Q4 Results Were About As Expected

Q4 revenue of \$4.2MM (+41.3% Y/Y) was about in line with consensus and our forecast for \$4.3MM. Product sales of \$2.5MM (+8.6% Y/Y) was \$0.6MM below our forecast, but we had noted that sales could be lumpy due to the early stages of product rollout and irregular customer demand. Management noted revenue was driven by: (1) increased unit sales of iCell products; (2) significant increases in Collaborations, Partnerships, and Other revenues arising from ICEL's center of excellence agreements with Eli Lilly and AstraZeneca; and (3) sales of new cell types in early release testing with customers. Encouragingly, ICEL's top 10 customers averaged \$830K in revenue for F13 as compared to \$445K last year, indicating increasing traction with existing customers. Further, customer adoption appears to be increasing as well – ICEL sold to 150 customers in FY13 as compared to 128 in FY12.

No Guidance Provided. We Are Reducing Our Forecast

Management did not provide revenue guidance for 2014. Based on recent trends and low visibility, we are reducing our revenue estimates for 2014, 2015, and 2016 from \$30MM to \$21MM, \$56MM to \$45MM, and \$80MM to \$60MM, respectively. We feel it is prudent to make these fairly material cuts given low visibility on the potential revenue ramp. With that said, we note that we are still forecasting >70% Y/Y revenue growth in both 2014 and 2015 and believe there is still potential bias to the upside. Even subsequent to these cuts, shares trade at ~3x our 2016 revenue forecast; given the broad potential applications for ICEL products, we believe shares remain interesting for those with a higher risk tolerance and longer-term objective.

_

At A Glance

Our Investment Thesis

Cellular Dynamics is a pioneer in the field of using induced pluripotent stem cells (iPSC) to produce potentially any cell type in the human body in a standardized and cost efficient way on an industrial scale. Via its low-cost, high-quality products, we believe CDI is well positioned to address various market opportunities including in vitro therapeutic research, stem cell banking, and in vivo therapeutic use. While we acknowledge visibility on the financial trajectory remains low, we believe these market opportunities are robust and that CDI is well positioned to address these market opportunities via its product offerings and seasoned management team. The company's early success including working with many of the top biopharmaceutical companies in the world is encouraging. Accordingly, we continue to recommend as a longer term Outperform.

Forthcoming Catalysts

- Quarterly earnings report
- Strategic developments
- Announcement of major new customers

Base Case Assumptions

- Customer adoption accelerates, key top accounts exceed \$1MM/year
- Adoption on Hepatocytes and other products in pipeline in line with expectations
- Stem Cell Banking market potential materializes slower than management forecast
- Customized MyCell growth represents upside relative to our forecast

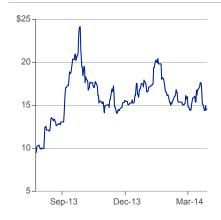
Upside Scenario

- Customer adoption accelerates, multiple key accounts approach \$2MM/year
- Adoption on Hepatocytes and other products in pipeline faster than expected
- Stem Cell Banking market potential materializes in line with management forecast
- Customized MyCell growth represents upside relative to our forecast

Downside Scenario

- Customer adoption slower than anticipated, key top accounts remain under \$1MM/year
- Adoption on Hepatocytes and other products in pipeline slower than expectations
- Stem Cell Banking market potential fail to materialize
- Customized MyCell products gain limited traction

Price Performance



Source: Bloomberg

Company Description

Cellular Dynamics International is a low cost, high quality, high volume developer and manufacturer of standardized, fully functional human cells based on a method using induced pluripotent stem cells (iPSC). The company's products include iCells (Cardiomyocytes, Neurons, Endothelial Cells, Hepatocytes), iPSCs, and MyCells (custom iPSCs and iCells). These products have the potential to transform 3 markets: (1) in vitro drug development - to enable higher R&D success rate; (2) stem cell banking (cost effective manufacture of autologous cells); and (3) in vivo therapeutic use.

Analyst Top Picks

	Ticker	Price (03/27/2014)	Price Target	Rating
Illumina	ILMN	\$142.97	\$195.00	Outperform
Thermo Fisher Scientific	TMO	\$117.67	\$125.00	Outperform

March 28, 2014

Figure 1 Cellular Dynamics (ICEL) Revenue Model

(MM, except EPS)	Q1:13	Q2:13	Q3:13	Q4:13	Q1:14E	Q2:14E	Q3:14E	Q4:14E	Q1:15E	Q2:15E	Q3:15E	Q4:15E	2013	2014E	2015E	2016E	2017E	2018E	5Y CAGR
TOTAL REVENUE	\$2.4	\$2.8	\$2.5	\$4.2	\$4.0	\$4.7	\$4.9	\$6.8	\$8.2	\$9.6	\$12.1	\$15.1	\$11.9	\$20.5	\$45.0	\$60.0	\$71.3	\$86.4	48.7%
Product Sales (iCells + MyCells)	\$1.8	\$2.0	\$1.8	\$2.5	\$2.2	\$2.4	\$2.4	\$3.7	\$3.6	\$3.8	\$3.9	\$5.6	\$8.0	\$10.6	\$16.8	\$24.8	\$34.8	\$43.5	
Collaborations/Other	\$0.6	\$0.8	\$0.7	\$1.7	\$1.8	\$2.3	\$2.6	\$3.1	\$4.7	\$5.9	\$8.2	\$9.5	\$3.9	\$9.8	\$28.2	\$35.2	\$36.5	\$42.9	
Revenue Growth	109%	123%	105%	41%	69%	68%	95%	63%	104%	105%	145%	122%	81%	72%	120%	33%	19%	21%	
Product Sales	173%	68%	67%	9%	27%	20%	31%	49%	60%	59%	65%	52%	54%	33%	58%	48%	40%	25%	
Collaborations, Other	26%	880%	362%	155%	184%	178%	251%	85%	158%	150%	219%	206%	177%	153%	187%	25%	4%	18%	
Cost of Product Sales	\$0.6	\$0.7	\$0.4	\$0.7	\$0.7	\$0.7	\$0.7	\$1.1	\$1.1	\$1.2	\$1.2	\$1.7	\$2.3	\$3.3	\$5.1	\$7.3	\$10.1	\$12.4	
Gross Profit	\$1.2	\$1.3	\$1.4	\$1.8	\$1.5	\$1.6	\$1.6	\$2.6	\$2.5	\$2.6	\$2.7	\$4.0	\$5.7	\$7.4	\$11.8	\$17.5	\$24.7	\$31.1	
Gross Margin %	67.1%	65.7%	79.3%	72.7%	69.0%	69.0%	69.0%	69.5%	69.5%	69.5%	70.0%	70.5%	71.2%	69.2%	69.9%	70.5%	71.0%	71.5%	
Incremental Margin	39.1%	32.5%	11.7%	(287.2%)	24.0%	14.7%	64.1%	37.0%	29.7%	29.7%	28.5%	27.6%	7.6%	37.0%	28.7%	28.3%	27.8%	26.5%	
Cost of Collaborations/Other	\$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	\$0.0	\$0.0	\$0.0	\$0.0	
Gross Profit	\$0.6	\$0.8	\$0.7	\$1.7	\$1.8	\$2.3	\$2.6	\$3.1	\$4.7	\$5.9	\$8.2	\$9.5	\$3.9	\$9.8	\$28.2	\$35.2	\$36.5	\$42.9	
Gross Margin %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Incremental Margin	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%	0.0%	0.0%	0.0%	0.0%	
iCells & MyCells	\$1.8	\$2.0	\$1.8	\$2.5	\$2.2	\$2.4	\$2.4	\$3.7	\$3.6	\$3.8	\$3.9	\$5.6	\$8.0	\$10.6	\$16.8	\$24.8	\$34.8	\$43.5	40.3%
Growth	173%	68%	67%	9%	27%	20%	31%	49%	60%	59%	65%	52%	54%	33%	58%	48%	40%	25%	
Volume - cell lines	1,552	1,628	1,307	2,117	1,846	2,014	1,787	2,876	2,648	2,816	2,721	4,243	6,605	8,523	12,428	18,303	25,648	31,744	
Growth	160%	49%	30%	1%	19%	24%	37%	36%	43%	40%	52%	48%	38%	29%	46%	47%	40%	24%	
ASP	\$1,130	\$1,209	\$1,371	\$1,172	\$1,207	\$1,178	\$1,315	\$1,285	\$1,344	\$1,342	\$1,422	\$1,321	\$1,211	\$1,249	\$1,353	\$1,355	\$1,357	\$1,370	
Growth	5%	13%	28%	7%	7%	(3%)	(4%)	10%	11%	14%	8%	3%	12%	3%	8%	0%	0%	1%	
Cardiomyocytes	\$1.1	\$1.2	\$1.0	\$1.4	\$1.2	\$1.3	\$1.2	\$1.7	\$1.7	\$1.8	\$1.8	\$2.3	\$4.8	\$5.4	\$7.6	\$10.2	\$13.3	\$15.9	27.2%
Growth	137%	110%	94%	38%	10%	5%	17%	20%	37%	37%	50%	37%	83%	13%	40%	35%	30%	20%	
Volume - cell lines	987	1,111	752	1,233	1,085	1,167	977	1,480	1,487	1,599	1,466	2,027	4,083	4,709	6,578	8,881	11,545	13,854	27.7%
Growth	126%	104%	115%	15%	10%	5%	30%	20%	37%	37%	50%	37%	70%	15%	40%	35%	30%	20%	
ASP	\$1,130	\$1,105	\$1,365	\$1,150	\$1,130	\$1,105	\$1,230	\$1,150	\$1,130	\$1,105	\$1,230	\$1,150	\$1,172	\$1,151	\$1,152	\$1,150	\$1,150	\$1,150	
Growth	5%	3%	27%	20%	0%	0%	(10%)	0%	0%	0%	0%	0%	8%	(2%)	0%	0%	0%	0%	
Neurons	\$0.6	\$0.4	\$0.6	\$0.8	\$0.7	\$0.8	\$0.7	\$1.2	\$1.0	\$1.0	\$1.0	\$1.9	\$2.4	\$3.5	\$4.8	\$7.4	\$10.4	\$13.3	40.6%
Growth	301%	(24%)	34%	(26%)	31%	89%	11%	54%	30%	30%	40%	50%	8%	43%	39%	52%	42%	28%	
Volume - cell lines	494	378	468	708	617	681	608	992	802	885	852	1,488	2,048	2,898	4,027	6,141	8,689	11,122	40.3%
Growth	282%	(26%)	(22%)	(18%)	25%	80%	30%	40%	30%	30%	40%	50%	(2%)	41%	39%	53%	42%	28%	
ASP	\$1,130	\$1,105	\$1,385	\$1,135	\$1,187	\$1,160	\$1,177	\$1,249	\$1,187	\$1,160	\$1,177	\$1,249	\$1,185	\$1,200	\$1,202	\$1,200	\$1,200	\$1,200	
Growth	5%	3%	26%	(10%)	5%	5%	(15%)	10%	0%	0%	0%	0%	10%	1%	0%	0%	0%	0%	
Other iCells	\$0.1	\$0.2	\$0.1	\$0.2	\$0.2	\$0.2	\$0.2	\$0.5	\$0.4	\$0.4	\$0.5	\$0.8	\$0.6	\$1.1	\$2.1	\$3.8	\$6.3	\$7.9	69.8%
Growth	138%	264%	89%	20%	110%	26%	96%	119%	150%	100%	100%	80%	80%	87%	99%	80%	66%	26%	
Volume - cell lines	72	138	88	176	143	166	202	405	358	332	404	728	474	916	1,823	3,281	5,414	6,768	70.2%
Growth	127%	254%	50%	9%	100%	20%	130%	130%	150%	100%	100%	80%	75%	93%	99%	80%	65%	25%	
ASP	\$1,130	\$1,105	\$1,355	\$1,183	\$1,187	\$1,160	\$1,152	\$1,123	\$1,187	\$1,160	\$1,152	\$1,123	\$1,184	\$1,146	\$1,149	\$1,150	\$1,160	\$1,170	
Growth	5%	3%	26%	10%	5%	5%	(15%)	(5%)	0%	0%	0%	0%	3%	(3%)	0%	0%	1%	1%	
MyCells	\$0.0	\$0.2	\$0.0	\$0.1	\$0.1	\$0.1	\$0.2	\$0.3	\$0.5	\$0.6	\$0.6	\$0.6	\$0.2	\$0.7	\$2.3	\$3.5	\$4.8	\$6.3	
Growth					NA	(41%)	NA	477%	400%	500%	200%	100%		215%	229%	50%	40%	30%	
Collaborations/Other	\$0.6	\$0.8	\$0.7	\$1.7	\$1.8	\$2.3	\$2.6	\$3.1	\$4.7	\$5.9	\$8.2	\$9.5	\$3.9	\$9.8	\$28.2	\$35.2	\$36.5	\$42.9	61.7%

Source: Company Reports and Cowen and Company.

March 28, 2014

Figure 2 Cellular Dynamics (ICEL) Income Statement

(MM, except EPS)	Q1:13	Q2:13	Q3:13	Q4:13	Q1:14E	Q2:14E	Q3:14E	Q4:14E	Q1:15E	Q2:15E	Q3:15E	Q4:15E	2013	2014E	2015E	2016E	2017E	2018E	5Y CAGR	R Comments
	\$2.4	\$2.8	\$2.5	\$4.2	\$4.0	\$4.7	\$4.9	\$6.8	\$8.2	\$9.6	\$12.1	\$15.1	\$11.9	\$20.5	\$45.0	\$80.0	\$71.3	\$86.4	48.7%	Comments
TOTAL REVENUE Reported Growth	108.6%	123.2%	104.6%	41.3%	68.8%	\$4.7 67.8%	94.8%	63.5%	103.7%	104.6%	145.2%	122.0%	80.6%	72.2%	119.9%	33.3%	18.8%	21.2%	48./%	-
Reported Growth	100.090	123.290	104.090	41.390	00.090	07.090	94.690	03.390	103.790	104.690	143.290	122.090	00.090	72.290	119.9%	33.390	10.090	21.290		
Cost of Sales	\$0.6	\$0.7	\$0.4	\$0.7	\$0.7	\$0.7	\$0.7	\$1.1	\$1.1	\$1.2	\$1.2	\$1.7	\$2.3	\$3.3	\$5.1	\$7.3	\$10.1	\$12.4		
Gross Profit	\$1.8	\$2.1	\$2.2	\$3.5	\$3.3	\$4.0	\$4.2	\$5.7	\$7.1	\$8.5	\$10.9	\$13.4	\$9.6	\$17.2	\$40.0	\$52.7	\$61.2	\$74.0	50.5%	
% of sales	75.9%	76.0%	85.3%	83.7%	82.9%	84.4%	85.2%	83.4%	86.8%	88.1%	90.4%	89.0%	80.6%	84.0%	88.8%	87.8%	85.8%	85.7%		Overall gross profit not reflective of product gross margin;
Growth	80.8%	NM			84.4%	86.4%	94.6%	63.0%	NM	NM	NM	NM	NM	79.3%	NM	31.9%	16.1%	21.0%		Collaboration/other revenue recorded at 100% "GM"
Incremental Margin	65.1%	83.4%	93.5%	146.3%	93.1%	96.9%	85.1%	83.0%	90.6%	91.5%	93.9%	93.6%	96.0%	88.6%	92.8%	84.9%	75.3%	84.8%		
Barrier & Barrier	40.0	40.0	***	4			A		4- 4		^- •	40.0	***	***	400.0	***	401.0	An		
Research & Development	\$3.9 161.3%	\$3.9 139.1%	\$3.9 154.8%	\$4.9 119.0%	\$4.6 113.5%	\$4.7 98.8%	\$4.7 94.8%	\$4.7 69.7%	\$5.6 68.3%	\$5.7 59.0%	\$5.9 48.6%	\$6.0 39.8%	\$16.6 139.9%	\$18.6 91.1%	\$23.2 51.5%	\$24.0 40.0%	\$24.6 34.5%	\$25.5 29.5%	8.9%	
% of sales Growth	26.1%	3.9%	10.7%	25.3%	18.8%	19.2%	19.3%	(4.2%)	22.6%	22.2%	48.6% 25.6%	26.9%	16.2%	12.1%	24.4%	3.6%	2.4%	3.7%		
Sales & Marketing	\$1.5	\$1.5	\$1.7	\$1.8	\$1.9	\$2.0	\$2.0	\$2.1	\$2.1	\$2.1	\$2.2	\$2.3	\$6.5	\$7.9	\$8.6	\$9.5	\$10.5	\$11.4	11.8%	
% of sales	63.9%	53.5%	66.5%	43.4%	45.9%	41.3%	40.7%	30.9%	25.6%	21.8%	17.8%	14.9%	54.8%	38.6%	19.1%	15.8%	14.7%	13.2%	11.070	
Growth	67.1%	39.5%	55.0%	36.5%	21.2%	29.7%	19.1%	16.3%	13.5%	7.7%	7.5%	7.1%	48.2%	21.2%	8.9%	10.5%	10.0%	9.1%		
General & Administrative	\$2.1	\$1.8	\$3.7	\$3.1	\$3.1	\$3.1	\$3.1	\$3.1	\$3.1	\$3.1	\$3.1	\$3.1	\$10.7	\$12.4	\$12.4	\$12.7	\$13.5	\$14.3	6.0%	MAR 11: 2014 G&A guided to Q4:2013 run rate
% of sales	88.2%	63.2%	147.7%	74.4%	76.7%	65.6%	62.9%	45.5%	37.6%	32.1%	25.7%	20.5%	90.1%	60.5%	27.5%	21.2%	19.0%	16.6%		•
Growth	15.9%	(18.2%)	NM	38.9%	46.7%	74.0%	(17.0%)	0.0%	0.0%	0.0%	0.0%	0.0%	33.4%	15.6%	0.0%	2.8%	6.3%	5.9%		
Other/Intangible Amortization	\$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	\$0.0	\$0.0	\$0.0	\$0.0		
% of sales	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%	0.0%	0.0%	0.0%	0.0%		
Growth	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM		
T.10 " T	A	 -	 -	 -	4		***		***	****			 -	****			****	A== c		
Total Operating Expenses	\$7.5	\$7.2	\$9.3	\$9.8	\$9.5	\$9.7	\$9.8	\$9.9	\$10.8	\$10.9	\$11.1	\$11.4	\$33.8	\$38.9	\$44.2	\$46.2	\$48.6	\$51.2	8.6%	
% of sales Growth	313.5% 29.4%	255.8% 2.5%	369.1% 45.1%	236.8% 31.3%	236.1% 27.1%	205.7% 34.9%	198.4% 4.7%	146.1% 0.9%	131.5% 13.5%	112.8% 12.2%	92.1% 13.8%	75.2% 14.3%	284.8% 26.7%	190.1% 15.0%	98.1% 13.5%	77.0% 4.7%	68.1% 5.0%	59.2% 5.4%		
Growth	29.4%	2.5%	45.190	31.3%	27.190	34.9%	4.790	0.9%	13.5%	12.290	13.890	14.390	26.790	15.0%	13.5%	4.790	5.0%	5.4%		
EBITDA	(\$5.3)	(\$4.7)	(\$6.8)	(\$6.0)	(\$5.7)	(\$5.2)	(\$5.1)	(\$3.8)	(\$3.1)	(\$1.8)	\$0.4	\$2.7	(\$22.9)	(\$19.8)	(\$1.9)	\$9.2	\$15.7	\$26.2		
% of sales	(223,3%)	(167.8%)		(144.3%)	(141,4%)	(111.2%)	(103.6%)	(55.7%)	(37.8%)	(18.9%)	3.0%	17.6%	(192.6%)	(96.9%)	(4.2%)	15.2%	22.0%	30.3%		-
Growth	NM	NM		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	71.7%	66.8%		
Depreciation & Amortization	\$0.3	\$0.3	\$0.3	\$0.4	\$0.5	\$0.5	\$0.5	\$0.5	\$0.6	\$0.6	\$0.6	\$0.6	\$1.4	\$1.9	\$2.3	\$2.7	\$3.1	\$3.4		
Operating Profit	(\$5.7)	(\$5.1)	(\$7.2)	(\$6.4)	(\$6.2)	(\$5.7)	(\$5.6)	(\$4.3)	(\$3.7)	(\$2.4)	(\$0.2)	\$2.1	(\$24.3)	(\$21.7)	(\$4.2)	\$6.5	\$12.6	\$22.8		_
% of sales	(237.6%)	(179.8%)		(153.1%)	(153.2%)	(121.3%)	(113.2%)	(62.7%)	(44.7%)	(24.8%)	(1.7%)	13.8%	(204.2%)	(106.2%)	(9.3%)	10.8%	17.7%	26.4%		
Growth	NM (71 00/2	NM			NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM 71.4%	NM	95.0%	80.6% 67.4%		
Incremental Margin	(71.6%)	72.0%	(130.9%)	(46.9%)	(30.5%)	(34.9%)	66.6%	79.8%	59.9%	67.5%	75.1%	76.5%	(38.3%)	29.5%	/1.490	71.1%	54.7%	67.4%		
Other non-Operating Expense	\$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	\$0.0	\$0.0	\$0.0	\$0.0		
Net Interest Expense	\$0.0	\$0.0	\$0.4	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.2	\$0.2	\$0.2	\$0.2	\$0.7	\$1.4	\$1.0	\$0.0	\$0.0	\$0.0		
<u> </u>		•				•					-			•		•				
Earnings Before Taxes	(\$5.7)	(\$5.1)	(\$7.5)	(\$6.7)	(\$6.5)	(\$6.1)	(\$5.9)	(\$4.6)	(\$3.9)	(\$2.6)	(\$0.5)	\$1.8	(\$25.0)	(\$23.1)	(\$5.2)	\$6.5	\$12.6	\$22.8	-	
Margin	(237.9%)	(180.0%)		(161.4%)	(161.8%)	(128.6%)	(120.3%)	(67.8%)	(47.7%)	(27.3%)	(3.8%)	12.2%	(210.0%)	(112.9%)	(11.5%)	10.8%	17.7%	26.4%		
Growth	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	95.0%	80.6%		
Income Taxes 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	\$0.0 NM	\$1.9 30.0%	\$3.8 30.0%	\$6.8 30.0%		
nate															INIVI	30.0%	30.0%	30.0%		
Net Income	(\$5.7)	(\$5.1)	(\$7.5)	(\$6.7)	(\$6.5)	(\$6.1)	(\$5.9)	(\$4.6)	(\$3.9)	(\$2.6)	(\$0.5)	\$1.8	(\$25.0)	(\$23.1)	(\$5.2)	\$4.5	\$8.8	\$16.0		-0
Margin	(237.9%)	(180.0%)	(297.2%)	(161,4%)	(161.8%)	(128.6%)	(120.3%)	(67.8%)	(47.7%)	(27.3%)	(3.8%)	12.2%	(210.0%)	(112.9%)	(11.5%)	7.6%	12.4%	18.5%		
Growth	NM	NM		,	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	95.0%	80.6%		
GAAP Earnings Per Share	(\$0.48)	(\$0.42)	(\$0.62)	(\$0.43)	(\$0.41)	(\$0.39)	(\$0.38)	(\$0.29)	(\$0.25)	(\$0.17)	(\$0.03)	\$0.12	(\$1.95)	(\$1.47)	(\$0.33)	\$0.29	\$0.56	\$1.01		
Shares Outstanding	12	12	12	16	16	16	16	16	16	16	16	16	13	16	16	16	16	16		
Growth	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	95.0%	80.6%		
					CELLULA	R DYNAMI	CS - CON	SENSUS ES	TIMATES											
(MM, except EPS)	Q1:13	Q2:13	Q3:13	Q4:13	Q1:14E	Q2:14E	Q3:14E	Q4:14E	Q1:15E	Q2:15E	Q3:15E	Q4:15E	2013	2014E	2015E	2016E	2017E	2018E		
Consensus Revenue			\$3.0	\$4.3	\$5.1	\$6.2	\$6.2	\$8.5	\$9.0	\$11.0	\$10.0	\$16.0	\$12.0	\$25.9	\$50.4	\$75.5	\$102.3			
Growth						NM	105.6%	98.4%	75.3%	77.4%	62.2%	89.0%		115.4%	94.2%	50.0%	35.4%			
Actual/ Cowen	\$2.4	\$2.8	\$2.5	\$4.2	\$4.0	\$4.7	\$4.9	\$6.8	\$8.2	\$9.6	\$12.1	\$15.1	\$11.9	\$20.5	\$45.0	\$60.0	\$71.3	\$86.4		
Consensus Gross Margin		71.7%		71.9%	72.8%	72.8%	72.4%	72.8%					72.8%	72.7%	73.3%	72.9%	79.7%			
Actual / Cowen	75.9%	76.0%	85.3%	83.7%	82.9%	84.4%	85.2%	83.4%	86.8%	88.1%	90.4%	89.0%	80.6%	84.0%	88.8%	87.8%	85.8%	85.7%		
Consensus Op. Margin	(007.0%)	(170.00/3	(202 00/ 3	(150.10/2	(150.00/3	(101.00/3	(110.00/3	(60.704)	(44.70/2	(24.0042	(1.70/3	10.00/	(204.20/.)	(100.00(2	(0.20/2	10.006	17 70/	20, 60/		
Actual /Cowen	(237.6%)	(179.8%)	(283.8%)	(153.1%)	(153.2%)	(121.3%)	(113.2%)	(62.7%)	(44.7%)	(24.8%)	(1.7%)	13.8%	(204.2%)	(106.2%)	(9.3%)	10.8%	17.7%	26.4%		
Consensus EPS Actual / Cowen	(\$0.48)	(\$0.41) (\$0.42)	(\$0.27) (\$0.62)	(\$0.30) (\$0.43)	(\$0.29) (\$0.41)	(\$0.29) (\$0.39)	(\$0.28) (\$0.38)	(\$0.28) (\$0.29)	(\$0.25)	(\$0.17)	(\$0.03)	\$0.12	(\$2.22) (\$1.95)	(\$1.14) (\$1.47)	(\$0.45) (\$0.33)	\$0.12 \$0.29	\$1.72 \$0.56	\$1.01		
ACTUAL / COWEII	(30.48)	(30.42)	(30.02)	(३७.43)	(30.41)	(३०.১৪)	(30.36)	(30.29)	(30.20)	(30.17)	(30.03)	ŞU.12	(31.95)	(/۱.4)	(३७.३४)	ŞU.29	QU.UÇ	\$1.01		

Source: Company Reports, Thomson One, and Cowen and Company.

March 28, 2014

Valuation Methodology And Risks

Valuation Methodology

Life Science & Diagnostic Tools:

Price targets are based on several methodologies which may include: analysis of market risk, growth rate, revenue stream, discounted cash flows (DCF), EBITDA, EPS, cash flow (CF), free cash flow (FCF), EV/EBITDA, P/E, PE/growth, P/CF, P/FCF, premium (discount) / average group EV/EBITDA, premium (discount) / average group P/E, sum of the parts, net asset value, dividend returns, and return on equity (ROE) over the next 12 months.

Investment Risks

Life Science & Diagnostic Tools:

Risks to the Medical and Life Science Tools sector may include: reduction or delay in research and development budgets and government funding, reduced or delayed purchasing from health care / hospital customers, increased or extended regulatory hurdles or processes for regulated products, increased dependence on volatile emerging markets for revenues and profitability, and general macroeconomic challenges.

Risks To The Price Target

Risks include but are not limited to: product is in early stage and customer adoption could be slower than expected, competition could intensify, market opportunity is difficult to define, and low visibility on financial trajectory.

www.cowen.com 5



Addendum

Stocks Mentioned In Important Disclosures

Ticker	Company Name
ICEL	Cellular Dynamics International Inc
ILMN	Illumina
TMO	Thermo Fisher Scientific

Analyst Certification

Each author of this research report hereby certifies that (i) the views expressed in the research report accurately reflect his or her personal views about any and all of the subject securities or issuers, and (ii) no part of his or her compensation was, is, or will be related, directly or indirectly, to the specific recommendations or views expressed in this report.

Important Disclosures

Cowen and Company, LLC and or its affiliates make a market in the stock of Cellular Dynamics International Inc, Illumina and Thermo Fisher Scientific securities. Cellular Dynamics International Inc has been client(s) of Cowen and Company, LLC in the past 12 months.

Cellular Dynamics International Inc is or was in the past 12 months a client of Cowen and Company, LLC; during the past 12 months, Cowen and Company, LLC provided IB services.

Cowen and Company, LLC and/or its affiliates received in the past 12 months compensation for investment banking services from Cellular Dynamics International Inc.

Cowen and Company, LLC and/or its affiliates managed or co-managed a public offering of Cellular Dynamics International Inc within the past twelve months.

Cowen and Company, LLC compensates research analysts for activities and services intended to benefit the firm's investor clients. Individual compensation determinations for research analysts, including the author(s) of this report, are based on a variety of factors, including the overall profitability of the firm and the total revenue derived from all sources, including revenues from investment banking. Cowen and Company, LLC does not compensate research analysts based on specific investment banking transactions.

Disclaimer

This research is for our clients only. Our research is disseminated primarily electronically and, in some cases, in printed form. Research distributed electronically is available simultaneously to all Cowen and Company, LLC clients. All published research can be obtained on the Firm's client website, https://cowenlibrary.bluematrix.com/client/library.jsp

Further information on any of the above securities may be obtained from our offices. This report is published solely for information purposes, and is not to be construed as an offer to sell or the solicitation of an offer to buy any security in any state where such an offer or solicitation would be illegal. Other than disclosures relating to Cowen and Company, LLC, the information herein is based on sources we believe to be reliable but is not guaranteed by us and does not purport to be a complete statement or summary of the available data. Any opinions expressed herein are statements of our judgment on this date and are subject to change without notice.

For important disclosures regarding the companies that are the subject of this research report, please contact Compliance Department, Cowen and Company, LLC, 599 Lexington Avenue, 20th Floor, New York, NY 10022. In addition, the same important disclosures, with the exception of the valuation methods and risks, are available on the Firm's disclosure website at https://cowen.bluematrix.com/sellside/Disclosures.action.

Price Targets: Cowen and Company, LLC assigns price targets on all covered companies unless noted otherwise. The price target for an issuer's stock represents the value that the analyst reasonably expects the stock to reach over a performance period of twelve months. The price targets in this report should be considered in the context of all prior published Cowen and Company, LLC research reports (including the disclosures in any such report or on the Firm's disclosure website), which may or may not include price targets, as well as developments relating to the issuer, its industry and the financial markets. For price target valuation methodology and risks associated with the achievement of any given price target, please see the analyst's research report publishing such targets.

Notice to UK Investors: This publication is produced by Cowen and Company, LLC which is regulated in the United States by FINRA. It is to be communicated only to persons of a kind described in Articles 19 and 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005. It must not be further transmitted to any other person without our consent

Copyright, User Agreement and other general information related to this report

© 2014 Cowen and Company, LLC. Member NYSE, FINRA and SIPC. All rights reserved. This research report is prepared for the exclusive use of Cowen clients and may not be reproduced, displayed, modified, distributed, transmitted or disclosed, in whole or in part, or in any form or manner, to others outside your organization without the express prior written consent of Cowen. Cowen research reports are distributed simultaneously to all clients eligible to receive such research reports. Any unauthorized use or disclosure is prohibited. Receipt and/or review of this research constitutes your agreement not to reproduce, display, modify, distribute, transmit, or disclose to others outside your organization the contents, opinions, conclusion, or information contained in this report (including any investment recommendations, estimates or price targets). All Cowen trademarks displayed in this report are owned by Cowen and may not be used without its prior written consent.

Cowen and Company, LLC. New York (646) 562-1000 Boston (617) 946-3700 San Francisco (415) 646-7200 Chicago (312) 577-2240 Cleveland (440) 331-3531 Atlanta (866) 544-7009 London (affiliate) 44-207-071-7500

COWEN AND COMPANY RATING DEFINITIONS

Cowen and Company Rating System effective May 25, 2013

Outperform (1): The stock is expected to achieve a total positive return of at least 15% over the next 12 months

Market Perform (2): The stock is expected to have a total return that falls between the parameters of an Outperform and Underperform over the next 12 months

Underperform (3): Stock is expected to achieve a total negative return of at least 10% over the next 12 months

Assumption: The expected total return calculation includes anticipated dividend yield

Cowen and Company Rating System until May 25, 2013

Outperform (1): Stock expected to outperform the S&P 500

Neutral (2): Stock expected to perform in line with the S&P 500

Underperform (3): Stock expected to underperform the S&P 500

Assumptions: Time horizon is 12 months; S&P 500 is flat over forecast period

Cowen Securities, formerly known as Dahlman Rose & Company, Rating System until May 25, 2013

Cellular Dynamics International Inc

Equity Research March 28, 2014

Buy – The fundamentals/valuations of the subject company are improving and the investment return is expected to be 5 to 15 percentage points higher than the general market return

Sell – The fundamentals/valuations of the subject company are deteriorating and the investment return is expected to be 5 to 15 percentage points lower than the general market return

Hold – The fundamentals/valuations of the subject company are neither improving nor deteriorating and the investment return is expected to be in line with the general market return

Cowen And Company Rating Definitions

Distribution of Ratings/Investment Banking Services (IB) as of 12/31/13

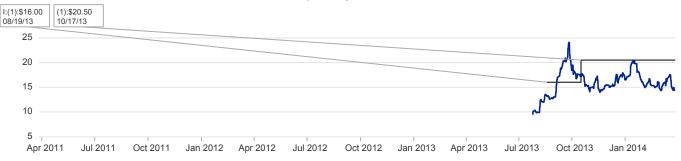
Rating	Count	Ratings Distribution	Count	IB Services/Past 12 Months
Buy (a)	415	59.20%	68	16.39%
Hold (b)	270	38.52%	4	1.48%
Sell (c)	16	2.28%	1	6.25%

(a) Corresponds to "Outperform" rated stocks as defined in Cowen and Company, LLC's rating definitions. (b) Corresponds to "Market Perform" as defined in Cowen and Company, LLC's ratings definitions. (c) Corresponds to "Underperform" as defined in Cowen and Company, LLC's ratings definitions.

Note: "Buy", "Hold" and "Sell" are not terms that Cowen and Company, LLC uses in its ratings system and should not be construed as investment options. Rather, these ratings terms are used illustratively to comply with FINRA and NYSE regulations.

Cellular Dynamics International Inc Rating History as of 03/27/2014

powered by: BlueMatrix





Illumina Rating History as of 03/27/2014

powered by: BlueMatrix



Closing Price Target Price

www.cowen.com

March 28, 2014







Initiated Coverage - 2/2/2009 - Outperform Rating

Legend for Price Chart:

I = Initation | 1 = Outperform | 2 = Market Perform | 3 = Underperform | UR = Price Target Under Review | T = Terminated Coverage | \$xx = Price Target | NA = Not Available

Points Of Contact

Analyst Profiles



Doug Schenkel Boston

617.946.3918 doug.schenkel@cowen.com

Doug Schenkel is a senior analyst covering tools and diagnostics. He joined Cowen in 2005 and holds an M.B.A. from the UCLA Anderson School.



Shaun Rodriguez, Ph.D.

Boston 617.946.3929

shaun.rodriguez@cowen.com

Shaun Rodriguez is an analyst covering life science tools and diagnostics. He joined Cowen in 2007 with a Ph.D. from Harvard University.



Chris Lin

Boston 617.946.3825

chris.lin@cowen.com

Chris Lin is an associate covering the life science tools and diagnostics sector. He joined Cowen with a BS from Boston University.

Reaching Cowen

Main U.S. Locations

New York

599 Lexington Avenue New York, NY 10022 646.562.1000 800.221.5616

Atlanta

3399 Peachtree Road NE Suite 417 Atlanta, GA 30326 866.544.7009

Boston

Two International Place Boston, MA 02110 617.946.3700 800.343.7068

Chicago

181 West Madison Street Suite 1925 Chicago, IL 60602 312.577.2240

Cleveland

20006 Detroit Road Suite 100 Rocky River, OH 44116 440.331.3531

Houston

600 Travis Street **Suite 1970** Houston, TX 77002 281.657.6800

San Francisco

555 California Street, 5th Floor San Francisco, CA 94104 415.646.7200 800.858.9316

International Locations

Cowen International Limited

London

1 Snowden Street - 11th Floor London EC2A 2DQ United Kingdom 44.20.7071.7500

Cowen and Company (Asia) Limited

Hong Kong

Suite 1401 Henley Building No. 5 Queens Road Central Central, Hong Kong 852 3752 2333





