

Equity Research

Mara Goldstein

212-610-2215

mgoldstein@cantor.com

NewLink Genetics Corporation (NLNK-\$16.73)

Rating: BUY

Target Price: \$18.00

Phase III HyperAcute Pancreas Enrollment Update – Numbers Look Good

<u>EPS</u>	<u>1Q</u>	<u>2Q</u>	<u>3Q</u>	<u>4Q</u>
2010A	(1.02)A	(1.21)A	(1.49)A	(1.12)A
2011A	(1.07)A	(1.20)A	(1.09)A	(0.44)A
2012E	(0.23)A	(0.46)E	(0.56)E	(0.54)E
2013E	—	—	—	—
<u>REV</u>	<u>1Q</u>	<u>2Q</u>	<u>3Q</u>	<u>4Q</u>
2010A	0.3A	0.4A	0.4A	1.0A
2011A	0.6A	0.5A	0.4A	0.4A
2012E	0.4A	0.3E	0.3E	0.3E
2013E	—	—	—	—
<u>FY</u>	<u>2010A</u>	<u>2011A</u>	<u>2012E</u>	<u>2013E</u>
EPS	(4.84)A	(2.98)A	(1.77)E	(2.07)E
REV	2.1A	2.0A	1.3E	1.0E

- NewLink has confirmed that the Phase III HyperAcute Pancreas (algenpantucel-L) has passed the 50% enrollment market. This means that north of 360 patients out of the 722 expected to participate in the trial have been enrolled. With this enrollment pace, the trial should be fully enrolled by the end of 2013.
- And with the enrollment surpassing the 50% mark, an interim analysis trigger should be reached by 1Q:13. Our expectation has been that this could occur in late 4Q:12/early 1Q:13, and this time table seems feasible.
- We were impressed by the expanded Phase II dataset released at ASCO in early June, and this formed the basis for our price target upgrade at that time. We think the durability of response seen at three years is compelling (3-year survival of 42%), particularly given the low overall survival rate of pancreatic cancer patients. These data improve our confidence in the Phase III trial.
- In addition to impressive 1-, 2- and 3-year survival data from the HyperAcute Phase II program, data presentations at ASCO also showed compelling immune responses for the HyperAcute NSCLC (lung cancer) program. Additionally, data related to the IDO pathway inhibitor technology platform was disclosed and, in our view, provides another opportunity for valuation expansion.
- NLG8189, the first product from the IDO inhibitor pathway program, holds potential that has not yet been fully recognized in NewLink's pipeline or valuation. The data demonstrated that the mechanism is viable with NLG8189 and appears to be a solid candidate for combination therapy.
- We like NewLink for its pipeline of products addressing large and lucrative unmet medical needs, and we have greater enthusiasm for the Phase III pancreatic cancer trial post-ASCO based on data presented. Our price target remains \$18 and our rating remains BUY.

Current Statistics

Market Cap (\$Mil)	\$345.8	Float Shares (Mil):	NA
Short Interest (Mil):	NA		
52 Wk. Range	\$17.47-\$6.25		
Avg. Daily Trading Volume (3 mo.):	78,595		
Shares Out (Mil):	20.672		

Company Description

NewLink Genetics is a development stage company focused on cancer treatments. Founded in 1999, NewLink has two technology platforms, HyperAcute (allogeneic vaccine) and IDO inhibition (oral, small molecule), in various stages of trials. The HyperAcute program is the furthest in development, with the lead candidate, HyperAcute Pancreas, in a Phase III trial for pancreatic cancer. NewLink also has mid-stage trials underway in non small cell lung cancer and melanoma.

*Solid Pipeline with Many
Milestones, Compelling
Data*

Summary

NewLink is working in the rapidly developing field of cancer immunotherapy. The company has a novel approach based on a solid scientific foundation and is working in areas of tremendous unmet need. We have identified what we believe to be critical success factors for a cancer immunotherapy company and further believe that NewLink meets these criteria. The company has identified appropriate clinical settings with which to test its technology (modest disease burden, consistent booster dosing), has a robust trial design, is addressing critical unmet medical needs, and has a scalable, financially reasonable manufacturing process and technology. Additionally, the stage and depth of NewLink's clinical program is compelling, in our view, and there are multiple opportunities for milestone updates over the next 24 months. We are particularly encouraged by the Phase II HyperAcute Pancreas study as two- and three-year disease free and overall survival showed a strong and sustained response to the vaccine in a statistically significant manner.

- **Indications and Unmet Medical Needs.** Initial clinical programs are focused on pancreatic cancer, lung cancer, and melanoma: three diseases of major unmet medical need. The company has identified patient populations within these groups that are likely to benefit from the HyperAcute immunotherapy program and has designed clinical trials around appropriate patient populations. In addition to the HyperAcute Pancreas (algenpantucel-L) Phase III trial, we expect the company to advance its non small cell lung cancer (NSCLC) program into a later-stage trial. Further, NLG8189 is at the forefront of the immunotherapeutic development, and this program, largely overlooked, could come into greater focus over the next year.
- **Trial design.** NewLink's Phase III trial of HyperAcute Pancreas is a large, randomized Phase III clinical trial consisting of over 700 patients. The company has vetted the trial design with the FDA, and it will be conducted with a Special Protocol Assessment (SPA), mitigating the risk that the Agency takes issue with the trial design or other elements once the trial has been completed. With three-year data from the Phase II trial very close to maturity, overall survival that is 100% greater than historical control is very suggestive of sustained durable response for HyperAcute Pancreas, which in turn, provides us with a greater level of comfort with the current Phase III program.
- **Manufacturing.** NewLink's HyperAcute technology consists of human pancreatic cell lines transduced with a retroviral vector expressing the murine α -GT. As such, there is no need to harvest patient cells, which is time-consuming and expensive, providing the company with a streamlined manufacturing process with attractive margins.
- **NLG8189 is upside, in our view.** This candidate is a novel immunotherapeutic that inhibits the ability of cancer cells to suppress T cell response. To date, management has been quite conservative about this program given its early stage of development. Data from a Phase I and Phase Ib trial, one in combination with docetaxel and the other with a dendritic cell vaccine, were disclosed at ASCO, demonstrating that this pathway and compound appear to be viable candidates for advancement. Early work has thus far been conducted by the NCI.
- **Milestones.** A key component of valuation building for biotechnology companies is derived from milestone events. Though major data releases are behind the company, we believe clinical news flow will stay strong. Our expectation is that the fully mature three-year data for HyperAcute Pancreas will be presented or published in a scientific journal and updates on other HyperAcute programs and their advancement into later-stage trials will be forthcoming, as will an update from the Phase III HyperAcute Pancreas trial. As the HyperAcute Phase III trial has passed the enrollment halfway mark, a scheduled (based on number of events) interim look could occur in 1Q:13.

Valuation

Our 12-month price target is \$18 based on our view that the Phase II data generated by HyperAcute Pancreas provide an element of de-risking to the Phase III trial. Hence, we now use a five-year discount rate of 45%. Our new price target is based on a 40x multiple on our 2017 EPS forecast of \$2.86 discounted by 45%. We have used a multiple on 2017 EPS consistent with valuation for early-stage biotechnology companies, which ranges from 30-50x forward EPS, reflecting opportunity for rapid growth. In arriving at this range, we explored historical data as well as forward consensus multiples for companies with newly launched products.

Risks

NewLink is a development-stage company, and investment is subject to risk. These risks include but are not limited to:

- Development of new drugs carries a high failure rate, either because the drug in question fails to show efficacy or significant safety issues arise during the clinical trial process. Additionally, regulatory authorities such as the Food & Drug Administration (FDA) may delay the approval process or reject NewLink's clinical findings. Because we can never dismiss such a possibility, we use a high discount rate in our valuation model to compensate for such risk. We note that NewLink's HyperAcute Pancreas program is being conducted under a Special Protocol Assessment (SPA), and while it is not a guarantee that the FDA will endorse NewLink's data, it mitigates risk against the FDA disputing the company's clinical trial design.
- Some of NewLink's clinical programs that are being co-sponsored by the NCI are in investigator-initiated clinical trials, which means that the company does not have full control over the conduct of the trials or the release of data, and this may impact trial results and/or milestones as it relates to public disclosure of clinical data.
- NewLink's manufacturing process has been validated in its early clinical trial work. However, we cannot exclude the possibility that this process may not be seamless from clinical trials to commercialization.
- The clinical landscape is crowded with hundreds of oncology clinical trials. It is possible that other technologies show greater benefit to patients than NewLink's product candidates, thus tendering products obsolete or non-competitive.
- NewLink has a large intellectual property estate protecting its technology, know-how, and applications of such. However, it is always possible that a party will bring forward infringement claims that would need to be heard by a court.
- NewLink has a history of net losses. We are forecasting profitability for NewLink in 2016 based on market acceptance of HyperAcute Pancreas, but profitability could be delayed or not reached at all, depending on a variety of clinical and regulatory factors.

Exhibit 1: Annual Income Statement
NewLink Genetics Corporation

<i>All figures in millions, Year Ended 31 December</i>	2017E	2016E	2015E	2014E	2013E	2012E	2011A
Revenue	\$391.54	\$270.00	\$28.95	\$0.65	\$1.01	\$1.12	\$1.87
Cost of Goods Sold	101.68	77.69	15.47	0.00	0.00	0.00	0.00
Gross Profit	\$289.86	\$192.31	\$13.48	\$0.65	\$1.01	\$1.12	\$1.87
<i>Gross Profit Margin</i>	<i>74.03%</i>	<i>71.23%</i>	<i>46.55%</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>
Operating Expenses							
SG&A	104.37	72.65	41.18	27.51	18.16	14.17	5.68
R&D	87.63	54.31	42.25	37.74	28.66	23.62	14.26
Total Operating Expenses	\$192.00	\$126.96	\$83.43	\$65.25	\$46.82	\$37.79	\$19.93
Profit (Loss) from Operations	\$97.86	\$65.35	(\$69.95)	(\$64.60)	(\$45.81)	(\$36.67)	(\$18.06)
<i>Operating Profit Margin</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>
Other Income (Expense)	\$2.35	\$1.15	\$0.75	(\$0.03)	(\$0.00)	(\$0.23)	(\$0.03)
Pretax Income	\$100.21	\$66.50	(\$69.20)	(\$64.63)	(\$45.81)	(\$36.90)	(\$18.09)
<i>Pretax Margin</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>
Net loss attributable to noncontrolling interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Income (Loss)	\$100.21	\$66.50	(\$69.20)	(\$64.63)	(\$45.81)	(\$36.90)	(\$18.09)
<i>Net Margin</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>
Basic & Diluted Net Loss Per Share	\$2.86	\$2.22	(\$2.52)	(\$2.62)	(\$2.07)	(\$1.77)	(\$2.98)
<i>Shares Outstanding</i>	<i>35.00</i>	<i>30.00</i>	<i>27.50</i>	<i>24.65</i>	<i>22.08</i>	<i>20.86</i>	<i>6.07</i>

<i>Percent Change, Year-Over-Year</i>	2016E	2016E	2015E	2014E	2013E	2012E	2011E
<i>Revenue</i>	<i>45.01%</i>	<i>832.61%</i>	<i>4354.09%</i>	<i>-35.64%</i>	<i>-9.90%</i>	<i>-40.12%</i>	<i>-9.96%</i>
<i>SG&A</i>	<i>43.66</i>	<i>76.42</i>	<i>49.69</i>	<i>51.49</i>	<i>28.15</i>	<i>149.53</i>	<i>(6.50)</i>
<i>R&D</i>	<i>61.35</i>	<i>28.54</i>	<i>11.95</i>	<i>31.68</i>	<i>21.34</i>	<i>65.70</i>	<i>12.55</i>
<i>Operating Expenses</i>	<i>51.23</i>	<i>52.18</i>	<i>27.86</i>	<i>39.36</i>	<i>23.89</i>	<i>89.58</i>	<i>6.37</i>
<i>Other Income, net</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>

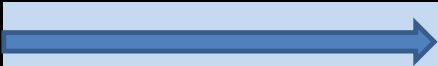




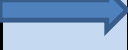
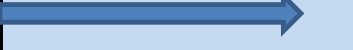

Source: NewLink Genetics, Cantor Fitzgerald estimates

Exhibit 2: Pancreatic Cancer Model

NewLink Genetics Corporation						
<i>(\$ in millions)</i>	2014E	2015E	2016E	2017E	2018E	2019E
Number of diagnoses (US)	45,769	46,341	46,341	46,920	47,507	48,101
% Stage I	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
<i>% treated</i>	<i>0.0%</i>	<i>1.2%</i>	<i>4.8%</i>	<i>7.0%</i>	<i>7.4%</i>	<i>7.5%</i>
# treated	0.00	556	2,224	3,303	3,497	3,617
% Stage II	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%
<i>% treated</i>	<i>0.0%</i>	<i>1.4%</i>	<i>5.9%</i>	<i>8.1%</i>	<i>12.4%</i>	<i>15.9%</i>
# treated	0.00	626	2,753	3,801	5,900	7,662
Total Treated	0.00	1,182	4,977	7,104	9,397	11,280
Average Injections/year/patient	0	7	15.5	15.7	16.1	16.4
Cost of injection	\$0	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500
Cost per year	\$0	\$24,500	\$54,250	\$55,118	\$56,275	\$57,514
Total sales	\$0.0	\$29.0	\$270.0	\$391.5	\$528.8	\$648.7
Percent Change, year-over-year						
Diagnoses	1.30%	1.30%	1.25%	1.25%	1.25%	1.25%
Stage I - % treated	NA	NA	300.00	48.50	5.85	3.45
Stage II - % treated	NA	NA	340.00	38.07	55.25	29.86
Total treated	NA	NA	321.18	42.73	32.28	20.04
Average Injections/year/patient	NA	NA	NA	1.60	2.10	2.20
Annual cost	NA	NA	NA	0.00	0.00	0.00
Total sales	NA	NA	832.61	45.01	35.06	22.68

Source: NewLink Genetics, American Cancer Society, CMS, Cantor Fitzgerald estimates

Exhibit 3: R&D Pipeline

Product Name	Description/Indication	Core Technology	Phase of Development				Comments
			PreClinical	Phase I	Phase II	Phase III	
HyperAcute Pancreas	Allogenic vaccine/resectable pancreatic cancer, Stage I & II patients	HyperAcute					722-patient trial, ~300 enrolled, interim look 4Q12/1Q13. Phase II 2 & 3 year data ASCO 2012.
HyperAcute Pancreas	Allogenic vaccine/resectable pancreatic cancer, locally advanced disease	HyperAcute					Will enter Phase II
HyperAcute Lung	Allogenic vaccine/NSCLC	HyperAcute					Data expected 1H12, Phase II/III expected shortly.
HyperAcute Melanoma	Allogeneic vaccine/non-visceral metastatic melanoma	HyperAcute					Data expected, likely next step is Phase II/III in 2H12
HyperAcute Prostate	Allogeneic vaccine/prostate cancer	HyperAcute					Possible partnering candidate
HyperAcute various	Exhibit 16: Pancreatic Cancer Model	HyperAcute					May explore NCI funding
D-1MT	Small molecule inhibitor of IDO/solid tumors	IDO pathway inhibitor					Two posters @ ASCO demonstrate feasibility for advancement.
2nd generation IDO	Small molecule inhibitor of IDO/solid tumors	IDO pathway inhibitor					Higher potency vs. D-1MT

Source: NewLink Genetics, Cantor Fitzgerald

Exhibit 4: Select Biotechnology Stocks (all market capitalization ranges)

Biotechnology Cantor Fitzgerald															Mara Goldstein - 212.610.2215 mgoldstein@cantor.com						
------------------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Mkt Cap.				Price		Price		Market		52-Week		Performance		Earnings Per Share (a)			Revenue Per Share (a)			Per Share			
Range	Company	Ticker	Rating	6/18/12	1/3/12	4/2/12	4/17/11	Cap.	High	Low	YTD	QTD	1-Year	2011A	2012E	2013E	2011A	2012E	2013E	Cash (a)	BV (a)	EV (a)	
Small Cap	Agenus	AGEN	NC	\$5.26	\$2.00	\$7.04	\$4.68	\$119.8	\$7.41	\$1.92	163.0%	-25.3%	12.4%	(\$1.21)	(\$0.53)	(\$1.03)	\$0.12	\$0.68	\$0.16	\$1.08	(\$2.71)	\$166.0	
	Astex	ASTX	NC	2.01	\$1.89	\$1.84	\$2.90	187.2	3.21	1.51	6.3	9.2	(30.7)	0.07	(0.05)	0.19	0.72	0.73	0.66	1.32	2.36	64.7	
	Celldex	CLDX	BUY	4.43	\$2.60	\$5.19	\$3.16	260.2	5.66	2.05	70.4	(14.6)	40.2	(1.13)	(0.93)	(0.90)	0.16	0.16	0.05	1.57	1.17	183.8	
	Celsion	CLSN	NC	2.14	\$1.70	\$1.89	\$2.98	71.1	4.37	1.63	25.9	13.2	(28.2)	(1.11)	(0.80)	(0.70)	0.06	0.00	0.23	0.74	0.79	46.6	
	Curis	CRIS	NC	4.76	\$4.68	\$4.85	\$3.21	376.1	5.65	2.70	1.7	(1.9)	48.3	(0.13)	(0.13)	(0.17)	0.19	0.28	0.26	0.57	0.52	331.1	
	Endocyte	ECYT	NC	7.50	\$3.76	\$4.66	\$11.93	268.8	14.80	3.02	99.5	60.9	(37.1)	(1.40)	(0.87)	(0.96)	0.01	0.33	0.64	3.29	3.17	163.7	
	Galena Biopharma	GALE	BUY	1.29	\$0.39	\$1.73	\$0.81	84.7	3.54	0.36	234.6	(25.6)	60.1	(0.32)	(0.66)	(0.49)	0.00	0.00	0.00	0.35	0.21	61.7	
	Newlink Genetics	NLNK	BUY	16.73	\$7.04	\$9.51	\$7.00	345.8	17.47	6.25	137.6	75.9	139.0	(2.98)	(1.77)	(2.07)	0.09	0.06	0.05	1.73	1.79	311.2	
	Oncothyreon	ONTY	BUY	3.91	\$7.58	\$5.84	\$8.10	223.4	11.59	3.35	(48.4)	(33.0)	(51.7)	(1.12)	(0.63)	(0.32)	0.00	0.00	0.18	0.99	0.77	171.4	
	Sunesis Pharma	SNSS	BUY	2.68	\$1.17	\$2.85	\$1.92	125.5	3.19	1.01	129.1	(6.0)	39.6	(0.43)	(0.82)	(0.61)	0.11	0.00	0.00	0.74	0.60	100.1	
	Vical	VICL	NC	3.08	\$4.41	\$3.39	\$3.94	264.6	5.30	2.22	(30.2)	(9.1)	(21.8)	(0.10)	(0.30)	(0.51)	0.35	0.20	0.19	1.10	0.84	170.4	
Average								\$220.2			54.3%	-0.8%	2.1%	(0.76)	(0.63)	(0.61)	0.19	0.26	0.26	1.30	0.86	161.0	
Mid Cap	Ariad	ARIA	NC	\$17.59	\$2.10	\$7.04	\$5.58	\$2,915.17	\$17.91	\$7.55	43.6%	8.4%	88.7%	(\$0.93)	(\$1.29)	(\$1.19)	\$0.15	\$0.07	\$0.40	\$1.74	\$1.40	\$2,639.7	
	Dendreon	DNDN	HOLD	7.52	2.10	7.04	5.58	1,158.03	42.00	5.69	(1.1)	(26.5)	(80.3)	(2.31)	(1.89)	(1.76)	1.42	2.37	3.03	3.23	2.36	1,234.3	
	Exelixis	EXEL	NC	5.13	2.10	7.04	5.58	761.69	9.42	3.94	8.3	(1.5)	(45.1)	0.58	(1.06)	(1.21)	1.95	0.36	0.44	1.64	0.67	700.3	
	HGS	HGSI	NC	13.20	2.10	7.04	5.58	2,627.7	25.99	6.51	78.6	63.2	(47.5)	(1.97)	(1.51)	(0.98)	0.66	1.14	1.92	2.37	2.30	2,977.4	
	Immunogen	IMGN	HOLD	15.07	2.10	7.04	5.58	1,164.8	16.20	9.17	30.1	4.7	28.6	(0.85)	(0.96)	(0.73)	0.25	0.41	0.56	2.27	1.83	989.3	
	Incyte	INCY	NC	22.87	2.10	7.04	5.58	2,929.5	24.30	11.76	52.4	15.9	27.6	(1.49)	(0.68)	(0.06)	0.74	1.93	3.07	3.30	1.80	2,785.0	
	Medivation	MDVN	NC	86.13	2.10	7.04	5.58	3,135.1	89.46	14.32	86.8	13.7	328.3	(1.11)	(0.75)	(1.10)	1.66	3.92	4.55	10.44	0.04	2,942.5	
	ONYX Pharma	ONXX	NC	44.08	2.10	7.04	5.58	2,837.4	47.80	27.17	0.3	16.5	26.1	1.19	(2.76)	(2.50)	6.95	4.60	5.28	9.32	12.89	2,403.0	
	Pharmacyclics	PCYC	NC	41.29	2.10	7.04	5.58	2,851.0	41.86	8.59	178.6	45.0	345.9	(0.59)	0.17	(0.67)	0.12	1.22	1.30	3.11	1.50	2,636.0	
	Seattle Genetics	SGEN	NC	25.40	2.10	7.04	5.58	2,973.1	26.02	12.29	52.0	21.9	30.3	(1.34)	(0.54)	(0.45)	0.81	1.81	2.26	2.64	1.89	2,664.3	
	Spectrum Pharm	SPPI	NC	13.17	2.10	7.04	5.58	783.9	16.00	6.94	(10.0)	4.5	49.7	0.84	1.45	1.30	3.24	3.81	4.05	3.13	3.19	597.8	
Average								\$2,194.3			47.6%	15.7%	66.3%	(\$0.73)	(\$0.89)	(\$0.85)	\$1.63	\$1.97	\$2.44	\$3.93	\$2.71	\$2,051.8	
Large Cap	Alexion	ALXN	NC	\$94.06	\$2.10	\$7.04	\$5.58	\$18,068.1	\$95.01	\$43.78	31.6%	1.1%	110.8%	\$0.91	\$1.80	\$2.54	\$4.11	\$5.68	\$7.34	\$1.87	\$6.12	\$18,063.7	
	Amgen	AMGN	NC	72.02	2.10	7.04	5.58	56,010.5	72.14	47.66	12.2	5.7	24.2	4.04	6.16	6.80	20.04	21.76	24.91	23.92	58,045.5		
	Biogen Idec	BIIB	NC	141.96	2.10	7.04	5.58	34,008.4	142.67	83.83	29.0	11.2	49.8	5.04	6.20	7.23	21.07	22.44	24.66	5.33	26.54	33,813.8	
	Celgene	CELG	BUY	65.93	2.10	7.04	5.58	29,042.0	80.42	51.70	(2.5)	(15.7)	13.9	3.79	4.76	5.68	10.93	12.73	14.29	5.15	12.60	28,197.0	
	Gilead	GILD	NC	50.21	2.10	7.04	5.58	38,025.1	56.50	34.45	22.7	2.9	27.0	3.55	3.78	4.37	11.07	12.13	13.16	1.92	8.95	46,052.5	
	Regeneron	REGN	NC	116.93	2.10	7.04	5.58	10,878.3	145.04	42.83	111.0	(2.7)	116.5	(2.45)	0.97	2.86	4.79	11.46	15.61	4.65	5.42	10,606.7	
	Vertex	VRTX	NC	57.77	2.10	7.04	5.58	12,193.0	66.10	26.50	74.0	42.7	28.3	0.14	2.49	2.51	6.68	9.08	9.51	4.92	3.76	11,729.2	
	Average								\$28,317.9			35.2%	6.3%	37.1%	\$2.15	\$3.74	\$4.57	\$11.24	\$13.51	\$15.19	\$6.96	\$12.47	\$21,182.2
Indices	S&P 500	SP50	NA	1,344.8	1277.6	1419.04	1314.16		1,422.38	1,074.77	6.9%	-5.2%	5.8%										
	Dow Jones Ind	DJII	NA	12,741.8	12,397.38	13,264.49	12,263.58		13,359.62	10,362.26	4.3	(3.9)	6.1										
	NASDAQ Comp	COMP	NA	2,895.3	2648.72	3119.7	2744.79		3,134.17	2,298.89	11.1	(7.2)	10.7										
	Amex Biotech Index	BTK	NA	1,462.6	1,104.30	1,407.16	1,383.13		1,519.49	1,001.33	34.0	3.9	4.9										
	NASDAQ Biotech	NBI	NA	1,312.2	1094.71	1300.4	1058.73		1,317.92	873.05	21.0	1.5	24.2										
Mkt Cap.				Price		Price		Market		P/E		5-Year		P/E		Price/Sales		EV/		Price/			
Range	Company	Ticker	Rating	5/13/12	1/3/12	4/2/12	4/17/11	Cap.	2011A	2012E	2013E	CAGR	Growth	2011A	2012E	2013E	EBITDA	Cash	Debt	BV	ROE	ROA	
Mid	Spectrum Pharm	SPPI	NC	\$11.01	\$2.10	\$7.04	\$5.58	\$783.9	15.7	9.1	10.2	116.55%	0.08	4.06	3.45	3.25	NM	\$3.52	\$0.00	\$3.45	37.0%	21.8%	
Large	Alexion	ALXN	NC	84.34	2.10	7.04	5.58	18,068.1	103.4	52.2	37.0	130.94	0.40	22.87	16.57	12.82	67.3	64.13	0.00	13.79	17.58	13.97	
Large	Amgen	AMGN	NC	69.62	2.10	7.04	5.58	56,010.5	17.8	11.7	10.6	111.36	0.11	3.59	3.42	3.31	9.2	44.39	2.53	2.91	17.14	7.98	
Large	Biogen Idec	BIIB	NC	132.51	2.10	7.04	5.58	34,008.4	28.2	22.9	19.6	114.26	0.20	6.74	6.33	5.76	15.5	179.02	29.41	4.99	20.88	14.40	
Large	Celgene	CELG	BUY	70.42	2.10	7.04	5.58	29,042.0	17.4	13.9	11.6	122.43	0.11	6.03	5.18	4.61	17.0	123.54	21.78	5.59	22.93	13.06	
Large	Gilead	GILD	NC	50.64	2.10	7.04	5.58	38,025.1	14.1	13.3	11.5	116.78	0.11	4.53	4.14	3.82	11.0	15.39	4.36	5.66	44.49	19.41	
Large	Regeneron	REGN	NC	129.40	2.10	7.04	5.58	10,878.3	NM	NM	40.9	NM	NM	24.40	10.21	7.49	NM	74.81	74.95	23.88	NM	NM	
Large	Vertex	VRTX	NC	60.35	\$2.10	\$7.04	\$5.58	12,193.0	412.6	23.2	23.0	NM	NM	8.64	6.36	6.08	45.7	61.18	31.84	16.05	4.58	1.51	
Large Cap Only (b)								\$24,876.2	34.0	22.8	16.5	119.2%	0.17	11.0	7.5	6.3	27.6	70.75	20.61	9.54	16.0%	8.8%	

(a) NewLink Genetics as of first day of trading post-IPO

(a) All figures consensus estimates except for rated companies. Rated companies are Cantor Fitzgerald estimates. EPS and revenue per share exclude option expense and other one-time items.

(b) Excludes Spectrum Pharmaceuticals (SPPI)

Source: Cantor Fitzgerald, FactSet

Exhibit 5: Companies Mentioned

Company Name	Ticker	Exchange	Cantor Rating
Agenus	AGEN	NASDAQ	NC
Alexion	ALXN	NASDAQ	NC
Amgen	AMGN	NASDAQ	NC
Ariad	ARIA	NASDAQ	NC
Astex	ASTX	NASDAQ	NC
Biogen Idec	BIIB	NASDAQ	NC
Celgene	CELG	NASDAQ	BUY
Celldex	CLDX	NASDAQ	BUY
Celsion	CLSN	NASDAQ	NC
Curis	CRIS	NASDAQ	NC
Dendreon	DNDN	NASDAQ	HOLD
Endocyte	ECYT	NASDAQ	NC
Exelixis	EXEL	NASDAQ	NC
Galena Biopharma	GALE	NASDAQ	BUY
Gilead	GILD	NASDAQ	NC
Human Genome Sciences	HGSI	NASDAQ	NC
Immunogen	IMGN	NASDAQ	HOLD
Incyte	INCY	NASDAQ	NC
Medivation	MDVN	NASDAQ	NC
Newlink Genetics	NLNK	NASDAQ	BUY
Oncothyreon	ONTY	NASDAQ	BUY
ONYX Pharma	ONXX	NASDAQ	NC
Pharmacyclics	PCYC	NASDAQ	NC
Regeneron	REGN	NASDAQ	NC
Seattle Genetics	SGEN	NASDAQ	NC
Spectrum Pharm	SPPI	NASDAQ	NC
Sunesis Pharmaceuticals	SNSS	NASDAQ	BUY
Vertex	VRTX	NASDAQ	NC
Vical	VICL	NASDAQ	NC

Source: FactSet, Cantor Fitzgerald

Disclosures Appendix

Analyst Certification

The analyst primarily responsible for this research report, and whose name appears on the front cover, certifies that: (i) all of the views expressed in this research report accurately reflects his or her personal views about any and all of the subject securities or issuers featured in this report; and (ii) no part of any of the research analyst's compensation was, is, or will be, directly or indirectly related to the specific recommendations or views expressed by the research analyst in this report.

Legal Disclosures

Cantor Fitzgerald and/or its affiliates and/or its officers, directors and employees may be a market maker or hold a position in any instrument or related instrument discussed in this report.

Lead or Co-manager: Cantor Fitzgerald and/or its affiliates, has acted as lead or co-manager in a public offering of equity and/or debt securities for NewLink Genetics Corporation within the last 12 months

Investment banking (last 12 months): Cantor Fitzgerald and/or its affiliates has received compensation for investment banking services in the last 12 months from NewLink Genetics Corporation.

Investment banking (next 3 months): Cantor Fitzgerald and/or its affiliates, expect to receive, or intend to seek, compensation for investment banking services within the next three months from all of the companies referenced within this report.

Lead or Co-manager: Cantor Fitzgerald and/or its affiliates, has not acted as lead or co-manager in a public offering of equity and/or debt securities for Celgene Corporation within the last 12 months

Cantor Fitzgerald and/or its affiliates has not received compensation for investment banking services in the last 12 months from Celgene Corporation.

Cantor Fitzgerald and/or its affiliates is a market maker in Celgene Corporation.

Investment banking (last 12 months): Cantor Fitzgerald and/or its affiliates has received compensation for investment banking services in the last 12 months from Celldex Therapeutics, Inc..

Lead or Co-manager: Cantor Fitzgerald and/or its affiliates, has not acted as lead or co-manager in a public offering of equity and/or debt securities for Celldex Therapeutics, Inc. within the last 12 months

Cantor Fitzgerald and/or its affiliates is not a market maker in Celldex Therapeutics, Inc..

Lead or Co-manager: Cantor Fitzgerald and/or its affiliates, has not acted as lead or co-manager in a public offering of equity and/or debt securities for Dendreon Corporation within the last 12 months

Cantor Fitzgerald and/or its affiliates has not received compensation for investment banking services in the last 12 months from Dendreon Corporation.

Cantor Fitzgerald and/or its affiliates is a market maker in Dendreon Corporation.

Lead or Co-manager: Cantor Fitzgerald and/or its affiliates, has acted as lead or co-manager in a public offering of equity and/or debt securities for Galena Biopharma within the last 12 months

Investment banking (last 12 months): Cantor Fitzgerald and/or its affiliates has received compensation for investment banking services in the last 12 months from Galena Biopharma.

Cantor Fitzgerald and/or its affiliates is not a market maker in Galena Biopharma.

Lead or Co-manager: Cantor Fitzgerald and/or its affiliates, has not acted as lead or co-manager in a public offering of equity and/or debt securities for ImmunoGen, Inc. within the last 12 months

Cantor Fitzgerald and/or its affiliates has not received compensation for investment banking services in the last 12 months from ImmunoGen, Inc..

Cantor Fitzgerald and/or its affiliates is a market maker in ImmunoGen, Inc..

Investment banking (last 12 months): Cantor Fitzgerald and/or its affiliates has received compensation for investment banking services in the last 12 months from Oncothyreon Inc..

Lead or Co-manager: Cantor Fitzgerald and/or its affiliates, has not acted as lead or co-manager in a public offering of equity and/or debt securities for Oncothyreon Inc. within the last 12 months

Cantor Fitzgerald and/or its affiliates is a market maker in Oncothyreon Inc..

Investment banking (last 12 months): Cantor Fitzgerald and/or its affiliates has received compensation for investment banking services in the last 12 months from Sunesis Pharmaceuticals, Inc..

Lead or Co-manager: Cantor Fitzgerald and/or its affiliates, has not acted as lead or co-manager in a public offering of equity and/or debt securities for Sunesis Pharmaceuticals, Inc. within the last 12 months

Cantor Fitzgerald and/or its affiliates is not a market maker in Sunesis Pharmaceuticals, Inc..

Cantor Fitzgerald's rating system

BUY: We have a positive outlook on the stock based on our expected 12 month return relative to its risk. The expected return is based on our view of the company and industry fundamentals, catalysts, and valuation. We recommend investors add to their position.

HOLD: We have a neutral outlook on the stock based on our expected 12 month return relative to its risk. The expected return is based on our view of the company and industry fundamentals, catalysts, and valuation.

SELL: We have a negative outlook on the stock based on our expected 12 month return relative to its risk. The expected return is based on our view of the company and industry fundamentals, catalysts, and valuation. We recommend investors reduce their position.

NC: Not Covered. Cantor Fitzgerald does not provide an investment opinion or does not provide research coverage on this stock.

Prior to September 12, 2006, Cantor Fitzgerald had the below ratings:

BUY - denotes stocks that we expect will provide a total return (price appreciation plus yield) of 15% or more over a 12-month period. a BUY rated stock is expected to outperform the total average return of analyst's industry coverage universe on a risk adjusted basis.

HOLD - denotes stocks that we suggest will provide a total return or total negative return of up to 15% over 12-month period. A HOLD rated stock is expected to perform in-line with the total average return of the analyst's industry coverage universe on a risk adjusted basis.

SELL - denotes stocks that we expect to provide a total negative return of more than 15% over a 12 month period. A SELL rated stock is expected to underperform the total average return of the analyst's industry coverage universe on a risk adjusted basis.

NC - Not Covered. Cantor Fitzgerald does not provide research coverage on this company.

Other Disclosures

This report is for informational purposes only and is based on publicly available data believed to be reliable, but no representation is made that such data are accurate or complete. Opinions and projections contained herein reflect our opinion as of the date of this report and are subject to change. Pursuant to Cantor Fitzgerald's policy, the author of this report does not own shares in any company he/she covers.

Additional material for UK investors

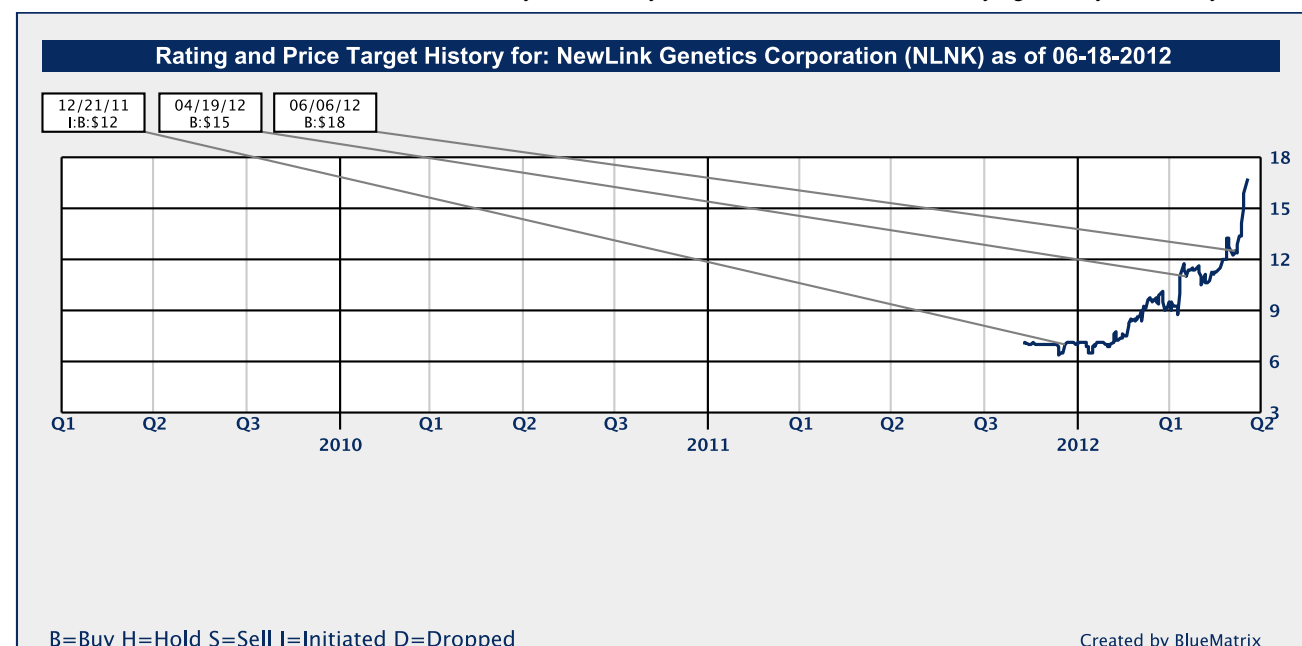
This material is approved for distribution in the United Kingdom by Cantor Fitzgerald Europe, regulated by the Financial Services Authority (FSA). While we believe this information and the materials upon which this information was based is accurate, except for any obligations under the rules of the FSA, we do not guarantee its accuracy. This material is only intended for use by professionals or institutional investors who fall within articles 19 or 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2001 and not the general investing public. None of the investments or investment services mentioned or described herein are available to other persons in the U.K and in particular are not available to "private customers" as defined by the rules of the FSA.

Disclosure for Canadian Institutional Investors

This research report was prepared by analysts of Cantor Fitzgerald & Co. and not by Cantor Fitzgerald Canada Corporation. As a result this report has not been prepared subject to Canadian Disclosure requirements. Cantor Fitzgerald Canada Corporation itself does not issue research reports but may distribute research reports prepared by its affiliates.

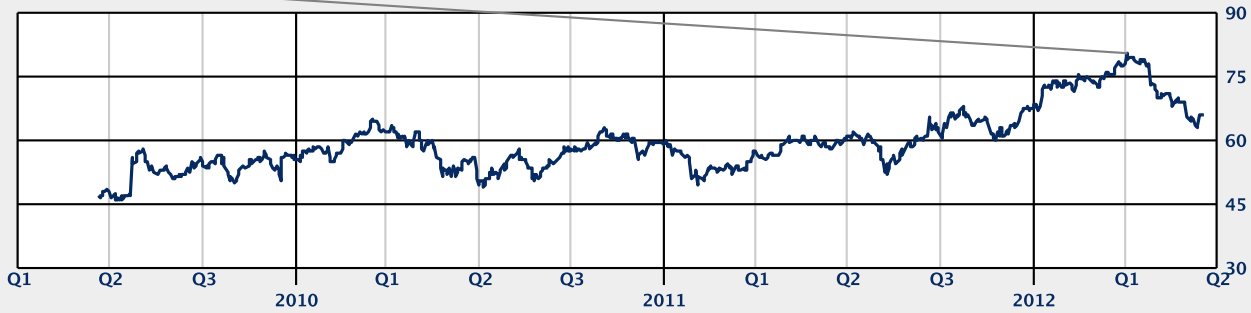
Risks

The financial instruments discussed in this report may not be suitable for all investors and investors must make their own investment decisions based on their specific investment objectives. Past performance should not be taken as an indication or guarantee of future performance. The price, value of and income from, any of the financial instruments featured in this report can rise as well as fall and be affected by changes in economic, financial and political factors. If a financial instrument is denominated in a currency other than the investor's currency, a change in exchange rates may adversely affect the price or value of, or income derived from, the financial instrument, and such investors effectively assume currency risk. In addition, investors in securities such as ADRs, whose value is affected by the currency of the home market of the underlying security, effectively assume currency risk.



Rating and Price Target History for: Celgene Corporation (CELG) as of 06-18-2012

04/03/12
I:B:\$90



B=Buy H=Hold S=Sell I=Initiated D=Dropped

Created by BlueMatrix

Rating and Price Target History for: Celldex Therapeutics, Inc. (CLDX) as of 06-18-2012

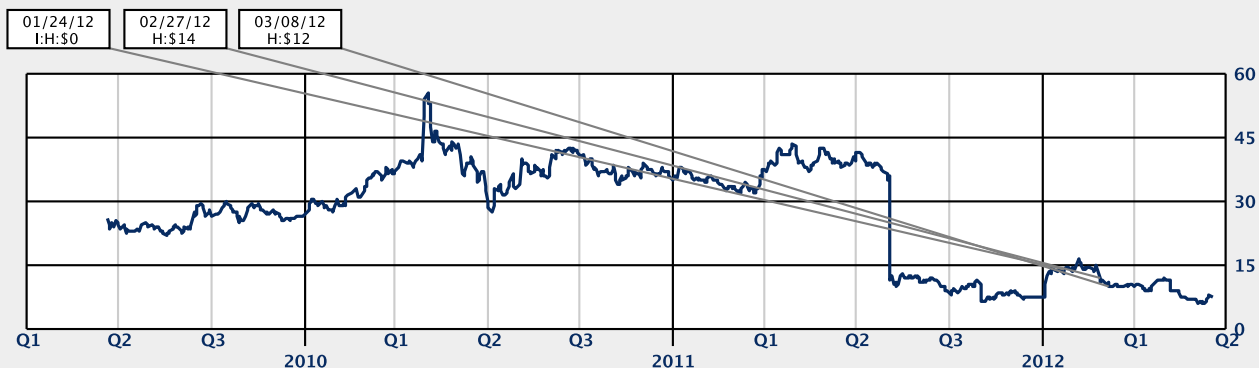
04/03/12
I:B:\$7



B=Buy H=Hold S=Sell I=Initiated D=Dropped

Created by BlueMatrix

Rating and Price Target History for: Dendreon Corporation (DNDN) as of 06-18-2012



B=Buy H=Hold S=Sell I=Initiated D=Dropped

Created by BlueMatrix

Rating and Price Target History for: Galena Biopharma (GALE) as of 06-18-2012



B=Buy H=Hold S=Sell I=Initiated D=Dropped

Created by BlueMatrix

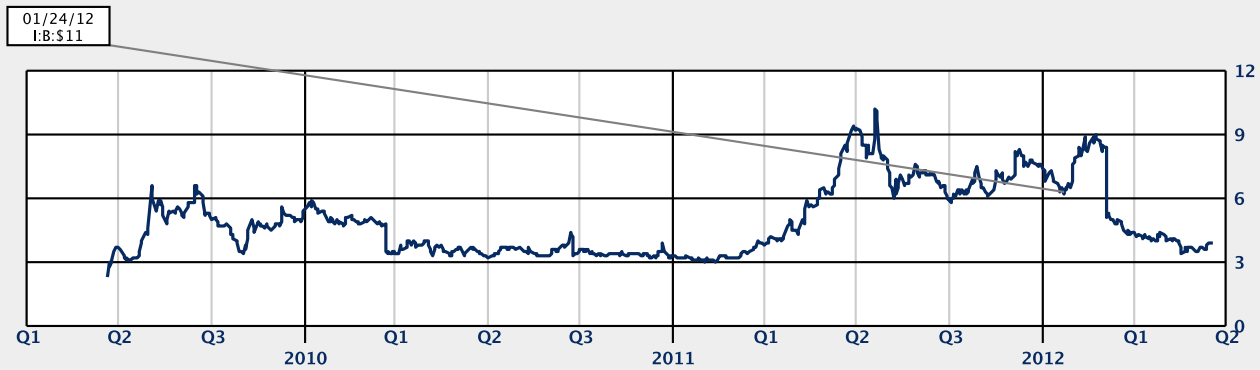
Rating and Price Target History for: ImmunoGen, Inc. (IMGN) as of 06-18-2012



B=Buy H=Hold S=Sell I=Initiated D=Dropped

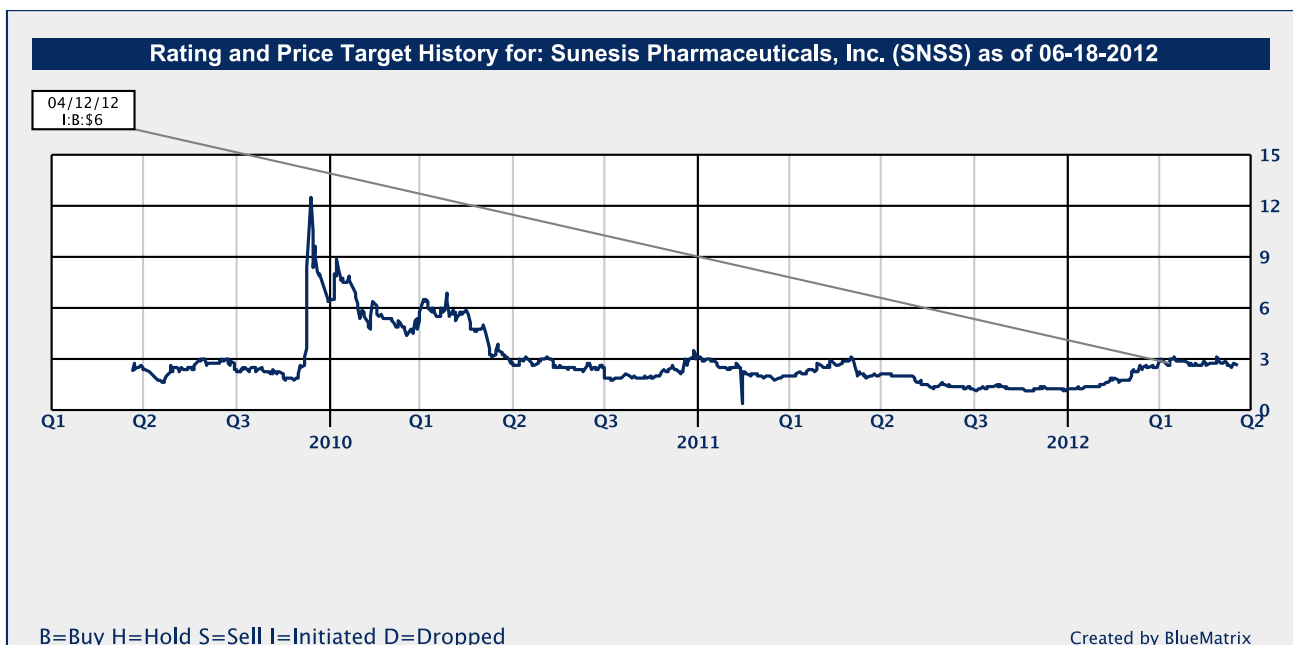
Created by BlueMatrix

Rating and Price Target History for: Oncothyreon Inc. (ONTY) as of 06-18-2012



B=Buy H=Hold S=Sell I=Initiated D=Dropped

Created by BlueMatrix



Distribution of Ratings/Investment Banking Services (IB) as of 06/19/12

Cantor

Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [B]	69	57.02	13	18.84
HOLD [H]	40	33.06	3	7.50
SELL [S]	12	9.92	0	0.00