

## **Emerging Company Research**

### **Complete Genomics — Neutral (2)**

#### November 8, 2011

# Analysts Doug Schenkel (617) 946-3918 doug.schenkel@cowen.com

**Shaun Rodriguez, Ph.D.** (617) 946-3929 shaun.rodriguez@cowen.com

## Q3 Ahead of Expectations; Pacing Remains Unclear

**Summary:** The following are key observations from GNOM's Q3 update:

- **Cowen's GNOM Investment Thesis.** Complete Genomics utilizes its proprietary DNA sequencing platform and infrastructure to compete in the rapidly growing \$1B genetic sequencing industry as an "end-to-end" whole human genome sequencing (WGS) outsource service; this proprietary approach should afford the company cost and throughput advantages relative to other WGS service competitors. Unfortunately, excitement regarding the promise of Complete Genomics' approach has been tempered by a rapid drop in sequencing pricing, and demand for WGS developing more slowly than many expected. GNOM may have a sound "long term" strategy, but it remains unclear if "long term" means several quarters or several years. We remain enthused about the company's potential; however, given the lack of near term visibility and the likely need for additional financing in 2012, we remain at Neutral.
- **Key Observations from the Q3 Call.** Revenue of \$4.1MM exceeded consensus expectations by almost \$1MM; approximately 700 genomes were shipped in Q3, ~100 better than guided. 3,200 3,600 genomes are expected to be shipped in 2011 (previous guidance: 4,000); the reduction was attributed to a sample prep delay which will push 700 genomes into Q1 (Q1 capacity of 2,000-2,500 genomes will likely tested; a good thing). While ASPs continue to drop (we expect a drop to around \$2,500 by YE11), GNOM remains confident that demand is building. (Details in Quarterly Snapshot.)
- **How Does the Quarter Impact our Investment Thesis?** Largely affirms our view that (1) there is demand for GNOM's services, (2) predicting the pace at which demand will ramp remains difficult, (3) pricing will likely continue to drop. We increasingly believe exome sequencing will remain much more common than WGS for at least several quarters, if not years.

					,, 66 161		rar quarter	,	· <del>-</del>
GNOM (11/07)	\$5.05	Reve	enue \$MM						
Mkt cap	\$156.6MM	FY	<u>2010</u>	<u>201</u>	<u>1E</u>	<u>201</u>	<u>2E</u>	<u>201</u>	3E
Dil shares out	31.0MM	Dec	Actual	Prior	Current	Prior	Current	Prior	Current
Avg daily vol	372.9K	Q1	0.3	_	6.8A	7.1	9.5	_	_
52-wk range	\$4.7-18.6	Q2	1.1	_	5.9A	8.5	7.9	_	_
Dividend	Nil	Q3	4.2	_	4.2A	10.8	7.3	_	_
Dividend yield	Nil	Q4	3.8	6.9	4.9	11.6	8.3	_	
BV/sh	\$0.38	Year	9.4	22.9	21.7	38.0	33.0	50.0	40.0
Net cash/sh	\$3.97	EV/S	_	_	5.3x	_	3.5x	_	2.9x
Debt/cap	1.4%								
ROA (LTM)	NA								
5-yr fwd EPS	NA	EPS \$							
growth (Norm)		FY	<u>2010</u>	<u>201</u>	<u>1E</u>	<u>201</u>	<u>2E</u>	<u>201</u>	<u>3E</u>
		Dec	Actual	Prior	Current	Prior	Current	Prior	Current
		Q1	0.00	_	(0.48)A	(0.45)	(0.52)	_	_
		Q2	0.00	_	(0.56)A	(0.47)	(0.58)	_	_
		Q3	_	_	(0.65)A	(0.42)	(0.61)	_	_
S&P 500	1261.1	Q4	(0.69)	(0.50)	(0.64)	(0.41)	(0.60)	_	
		Year	(0.69)	(2.11)	(2.37)	(1.76)	(2.31)	(1.05)	(1.50)
		P/E	_	_	_	_	_	_	_

Q3:11E



Cowen vs. Consensus (\$MM, except EPS)

CC
IV
IΡ
п
ΤĒ
G
F١
MO.
W
11
cs
1
G
Ν
0
IN
<b>1</b> :
Ν
13
U
П
W
۱L
١.
າເ
JΔ
R
Т
3
RI
Y
S
N
Δ
P
SI
Т
0
ī

		ų,			
	Q3:10A	Cowen	Consensus	Q3:11A	New guidance
Revenue	\$4.2	\$3.3	\$3.7	\$4.2	Expects to ship 3,200 - 3,600 genomes in 2011. Was 4,000. Shortfall due to changes made to sample prep process which
Gross Margin	-44.4%	-143.5%	-48.4%	-95.9%	delayed 700 genomes into Q1
Operating Margin	NM	NM	-451.7%	NM	
EPS	\$0.00	(\$0.50)	(\$0.55)	(\$0.65)	
Selected Revenue Met	vice				
Selected Revenue Met	ncs		Q3:11E	Q3:11A	Comments
# of Conomos		•	630	720	Management guided the Street to expect about 600 genomes will be shipped in Q3. With >200 orders in backlog as of the
# of Genomes					end of Q2 and 2 large orders early in the quarter, we thought this was a safe assumption. As it turned out, GNOM beat our foreca
Shipped					by almost 100 genomes.
Growth (Y/Y)					by difficult 200 genomes.
ASP per Genome			\$5.2	\$5.8	We believe that GNOM worked through proportionally more older genomes in the quarter which boosted ASPs on
Shipped (000's)			•		genomes shipped. For new genomes, if orders are large enough pricing is \$3-4K.
Growth (Y/Y)			-60.0%	-55.7%	8
Capacity (Genomes			2,520	2,520	We are currently projecting ~2,520 genomes per quarter through at least early 2012.
per Quarter)					
Growth (Y/Y)					
Deals Closed in the			4,015	3,360	GNOM received 2 new large orders (NCI and Innova during the quarter). Other than that about 600-700 orders were
Quarter			.,015	5,500	received. This was a bit light of our expectation (Q/Q fluctuations should be expected). We are forecasting that GNOM
Growth (Y/Y)					
Glowali (171)					closes orders for about 1,900 genome per quarter in 2012; this compares to about 1,700-1,800 per quarter in 2011
			6,215	4,840	Because new deals were light of our forecast, and # of genomes orders was higher than anticipated the backlog is a little
Backlog					lighter than forecast.
Income Statement (\$	MM, except E	PS)			
(,-	Q3:10A		Q3:11E	Q3:11A	Comments
Revenue	\$4.2	•	\$3.3	\$4.2	Consensus is \$3.4MM. We thought there was likely little risk to this forecast. GNOM beat by \$800K.
Growth (Y/Y)	NM		-20.7%	0.4%	
Gross Profit	(č1 o)		(¢4.7)	(¢4.0)	COCC was higher than anticipated. This is likely about the new years
	(\$1.8)		(\$4.7)	(\$4.0)	COGS were higher than anticipated. This is likely about the new run rate.
Margin	-44.4%		-143.5%	-95.9%	
R&D	\$5.0		\$6.5	\$9.5	R&D was \$3MM higher than anticipated. This is likely the new run rate.
% of sales	119.1%		196.9%	228.5%	
5C9 A	ća a		ćr -	ćr r	This was in line with any forecast. We are forecasting that CCOA increases as the company to continue to the c
SG&A	\$3.3		\$5.5 166.0%	\$5.5	This was in line with our forecast. We are forecasting that SG&A increases as the company to continue to ramp the sales
% of sales	79.3%		166.0%	131.2%	force throughout 2011.
Operating Profit	(\$11.1)		(\$17.2)	(\$20.8)	Operating burn (cash) is likely to approximate \$15-20MM for several quarters.
Margin	NM		NM	NM	
Non-Operating Items	\$9.7		\$0.4	\$0.8	

We expect Complete Genomics to utilize NOL's through 2013.

#### **Key Focus Areas**

Pre-Tax Income

Taxes

Rate

Net Income

Growth (Y/Y)

**Earnings Per Share** 

Share Count(MM)

Margin

NIH Funding Not An Issue: Management indicated they didn't see any notable funding-related pressures

Pacing of New Orders: Tough to forecast, but management expects 2012 orders to be far greater than 2011.

(\$17.6)

\$0.0

0.0%

(\$18)

(\$0.50)

NM

NM

35

(\$21.6)

\$0.0

0.0%

(\$22)

(\$0.65)

NM

NM

33

Competition: There was little commentary on competitive dynamics in the marketplace? (BGI launching U.S. sites, Illumina genome network, Life Technologies collaborations, etc.)

Customer Concentration: 2 customers accounted for 52% of Q1 sales; 2 customers accounted for 43% of Q2 sales. Management signaled Q3 was similar.

Pricing: On the Q1 call, the volume pricing range was \$5,000-7,500. On June 14th, pricing was said to range between \$4-5K. At Consumer Genetics 2011, pricing had decreased >\$4K in some instances. Pricing now seems to be in the \$3-4K range for volume customers.

Source: Company reports and Cowen and Company

(\$20.9)

\$0.0

0.0%

(\$21)

NM

NM

\$0.00



					CC	OMPLETE G	ENOMICS -	- Revenue l	Forecast								
	Q1:11	Q2:11	Q3:11	Q4:11E	Q1:12E	Q2:12E	Q3:12E	Q4:12E	Q1:13E	Q2:13E	Q3:13E	Q4:13E	2011E	2012E	2013E	2014E	2015E
Revenue (\$MM)	\$6.8	\$5.9	\$4.2	\$4.9	\$9.5	\$7.9	\$7.3	\$8.3	\$8.7	\$9.0	\$9.3	\$12.4	\$21.7	\$33.0	\$40.0	\$47.5	\$62.5
Growth					39%	35%	75%	71%	-8%	14%	27%	49%		52%	21%	19%	32%
Beginning Backlog	1,000	2,050	2,200	4,840	4,825	4,030	3,650	3,575	3,560	3,610	3,715	3,850	1,000	4,825	3,560	2,810	3,675
Genomes Sequenced	650	950	720	1,025	2,055	2,020	2,205	2,785	3,190	3,625	4,155	5,970	3,345	9,065	16,940	25,525	38,795
New Orders	1,700	1,100	3,360	1,010	1,260	1,640	2,130	2,770	3,240	3,730	4,290	4,930	7,170	7,800	16,190	26,390	39,603
Ending Backlog	2,050	2,200	4,840	4,825	4,030	3,650	3,575	3,560	3,610	3,715	3,850	2,810	4,825	3,560	2,810	3,675	4,484
ASP on genomes shipped	\$10,512	\$6,174	\$5,801	\$4,739	\$4,608	\$3,932	\$3,313	\$2,982	\$2,731	\$2,490	\$2,229	\$2,070	\$6,497	\$3,643	\$2,361	\$1,861	\$1,611
Ending Backlog - \$ value (MM)	\$15.0	\$12.0	\$24.0	\$22.7	\$17.0	\$13.6	\$11.6	\$10.2	\$9.6	\$9.0	\$8.3	\$5.8	\$22.7	\$10.2	\$5.8	\$6.5	\$6.7
Backlog ASP	\$7,317	\$5,455	\$4,959	\$4,710	\$4,228	\$3,728	\$3,252	\$2,878	\$2,668	\$2,422	\$2,159	\$2,070	\$4,710	\$2,878	\$2,070	\$1,757	\$1,503
New Order Growth (Q/Q)	183%	-35%	205%	-70%	25%	30%	30%	30%	17%	15%	15%	15%					
New Order Growth (Y/Y)					-26%	49%	-37%	174%	157%	127%	101%	78%					
New Order ASP	\$7,000	\$4,000	\$3,750	\$3,550	\$3,000	\$2,750	\$2,500	\$2,500	\$2,500	\$2,250	\$2,000	\$2,000					
% of backlog sequenced	31%	36%	10%	18%	40%	40%	40%	50%	55%	58%	61%	68%					
# of backlog sequenced	310	730	216	871	1,930	1,612	1,460	1,788	1,958	2,094	2,266	2,618					
% of new orders sequenced	20%	20%	15%	15%	10%	25%	35%	36%	38%	41%	44%	68%					
# of new orders sequenced	340	220	504	152	126	410	746	997	1,231	1,529	1,888	3,352					
NCI Order		\$1.0															
Productivity:																	
Sequencers Installed	16	16	24	24	24	24	24	26	24	26	28	32					
Genomes Per Day	1	1.2	1.5	1.5	1.5	1.5	2	2	3.0	3.0	3.0	3.2					
Installed Capacity: Genomes per period	1,440	1,728	2,520	2,520	2,520	2,520	3,360	3,640	5,040	5,460	5,880	7,168					
Genomes Shipped	650	950	720	1,025	2,055	2,020	2,205	2,785	3,190	3,625	4,155	5,970					
Capacity Utilization	45%	55%	29%	41%	82%	80%	66%	77%	63%	66%	71%	83%					

Source: Company reports and Cowen and Company

November 8, 2011 3



						со	MPLETE G	ENOMICS	- Statement o	of Operatio	ns								
\$MM, except per share data	Q1:10	Q2:10	Q3:10	Q4:10	Q1:11	Q2:11	Q3:11	Q4:11E	Q1:12E	Q2:12E	Q3:12E	Q4:12E	2010	2011E	2012E	2013E	2014E	2015E	5-yr CAGR
Revenues	\$0.3	\$1.1	\$4.2	\$3.8	\$6.8	\$5.9	\$4.2	\$4.9	\$9.5	\$7.9	\$7.3	\$8.3	\$9.4	\$21.7	\$33.0	\$40.0	\$47.5	\$62.5	46.1%
Growth	NM	NM	NM	NM	NM	NM	0%	28%	39%	35%	75%	71%	NM	132%	52%	21%	19%	32%	
Cost of sales	\$3.2	\$3.6	\$6.0	\$4.9	\$6.6	\$6.1	\$8.2	\$7.9	\$8.5	\$8.5	\$8.8	\$9.1	\$17.7	\$28.7	\$34.8	\$14.0	\$16.6	\$18.8	1.2%
Gross Profit	-\$2.8	-\$2.5	-\$1.8	-\$1.1	\$0.3	-\$0.3	-\$4.0	-\$3.0	\$1.0	-\$0.5	-\$1.5	-\$0.8	-\$8.3	-\$7.0	-\$1.8	\$26.0	\$30.9	\$43.8	NM
% of sales	-848%	-231%	-44%	-29%	3.7%	-4.4%	-95.9%	-61.8%	10.7%	-6.6%	-20.9%	-9.2%	-88.5%	-32.3%	-5.5%	65.0%	65.0%	70.0%	
Growth	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	19%	42%	
Sales & Marketing	\$1.3	\$1.5	\$2.0	\$2.5	\$2.7	\$3.1	\$3.5	\$4.1	\$4.0	\$4.1	\$4.1	\$4.1	\$7.3	\$13.4	\$16.3	\$18.9	\$20.8	\$22.5	25.2%
% of sales	386.9%	138.0%	48.1%	65.8%	39.5%	53.5%	82.7%	84.5%	42.0%	51.4%	56.0%	49.4%	77.8%	61.7%	49.2%	47.2%	43.8%	35.9%	
Growth	204.7%	677.2%	446.4%	207.9%	108.0%	109.2%	72.8%	64.2%	47.2%	30.0%	18.4%	0.0%	306.1%	83.6%	21.3%	16.3%	10.0%	8.0%	
General & Administrative	\$2.0	\$1.7	\$2.3	\$2.2	\$2.8	\$3.5	\$3.8	\$3.8	\$3.9	\$4.0	\$4.0	\$4.2	\$8.2	\$13.9	\$16.1	\$17.3	\$18.6	\$19.7	19.3%
% of sales	596.1%	154.1%	56.0%	56.7%	40.7%	59.1%	91.2%	78.2%	41.1%	50.2%	54.8%	50.3%	86.9%	63.8%	48.6%	43.4%	39.1%	31.5%	
Growth	54.0%	104.0%	72.3%	45.4%	39.0%	107.0%	63.5%	76.5%	40.0%	15.0%	5.0%	10.0%	64.7%	69.9%	15.9%	8.0%	7.0%	6.0%	
Research & Development	\$6.1	\$6.5	\$5.0	\$5.6	\$6.8	\$8.0	\$9.5	\$9.5	\$9.5	\$9.6	\$9.8	\$10.0	\$23.2	\$33.9	\$39.0	\$40.9	\$42.6	\$43.8	13.6%
% of sales	NM	599%	119%	148%	100%	137%	228.5%	195.6%	100.7%	121.3%	134.6%	120.1%	247.4%	155.9%	118.0%	102.3%	89.6%	70.1%	25.570
Growth	-9.5%	75.9%	-12.1%	-11.0%	11.5%	23.3%	92.7%	68.4%	40.0%	20.0%	3.0%	5.0%	3.5%	46.0%	15.0%	5.0%	4.0%	3.0%	
Total Operating Expenses	\$9.4	\$9.7	\$9.3	\$10.3	\$12.3	\$14.6	\$16.8	\$17.4	\$17.4	\$17.7	\$17.9	\$18.3	\$38.7	\$61.1	\$71.3	\$77.2	\$81.9	\$86.0	
% of sales	NM	891%	223%	271%	180%	250%	402%	358%	184%	222.9%	245.3%	219.9%	412%	281%	215.9%	192.9%	172.4%	137.5%	
Growth	14141	031/0	223/0	2/1/0	10070	250%	402/0	33070	10470	222.570	243.370	215.570	412/0	20170	213.570	132.570	172.470	137.370	
Operating Profit	-\$12.3	-\$12.2	-\$11.1	-\$11.4	-\$12.0	-\$14.9	-\$20.8	-\$20.4	-\$16.4	-\$18.2	-\$19.5	-\$19.0	-\$47.0	-\$68.2	-\$73.1	-\$51.2	-\$51.0	-\$42.2	NM
% of sales	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
Growth	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
Other Expense (Income)	\$0.0	\$0.0	\$8.8	-\$1.4	\$0.1	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7.4	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	
Interest Expense (Income)	\$0.0	\$0.0	\$0.9	\$0.8	\$0.3	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$1.7	\$2.7	\$3.2	\$1.5	\$1.5	\$1.5	
Earnings Before Taxes	-\$12.3	-\$12.2	-\$20.9	-\$10.8	-\$12.5	-\$16.0	-\$21.6	-\$21.2	-\$17.2	-\$19.0	-\$20.3	-\$19.8	-\$56.1	-\$71.2	-\$76.3	-\$52.7	-\$52.5	-\$43.7	NM
% of sales	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	-110.6%	-69.9%	
Growth	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
Taxes	\$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	
Rate	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	0.0%	0.0%	0.0%	
Net Income	-\$12.3	-\$12.2	-\$20.9	-\$10.8	-\$12.5	-\$16.0	-\$21.6	-\$21.2	-\$17.2	-\$19.0	-\$20.3	-\$19.8	-\$56.1	-\$71.2	-\$76.3	-\$52.7	-\$52.5	-\$43.7	NM
% of sales Growth	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM NM	NM	NM NM	NM NM	-252.7% NM	-194.7% NM	
Growth													INIVI	NM	IVIVI	INIVI	INIVI	INIVI	
EPS				-\$0.73	-\$0.48	-\$0.56	-\$0.65	-\$0.64	-\$0.52	-\$0.58	-\$0.61	-\$0.60	-	-\$2.37	-\$2.31	-\$1.50	-\$1.40	-\$1.13	NM
Share Count (MM)				14.8	26.0	28.3	33.1	33.0	33.0	33.0	33.0	33.0		30.1	33.0	35.0	37.5	38.7	
Growth																			
	01:10	Q2:10	Q3:10	Q4:10	01:11	02:11	Q3:11	04:115	O1:12E	Q2:12E	Q3:12E	Q4:12E	2010	2011E	2012E	2013E	2014E	2015E	
Consensus Revenue	Q1:10	Q2:10	Q3:10	\$3.1	\$5.5	\$7.7	\$3.7	Q4:11E \$7.6	\$8.8	\$9.6	\$10.8	\$13.4	\$8.7	\$24.0	\$43.6	\$86.3	\$86.0	\$189.5	
Growth				<b>70.1</b>	NM	NM	NM	NM	NM	64%	158%	176%	<b>40.7</b>	177%	81%	98%	0%	120%	
Actual /Cowen				\$4	\$6.8	\$5.9	\$4.2	\$4.9	\$9.5	\$7.9	\$7.3	\$8.3	\$9.4	\$21.7	\$33.0	\$40.0	\$47.5	\$62.5	
Consensus Gross Margin				NM	NM	NM	-48.4%	-4.7%	6.7%	18.1%	19.6%	29.2%	NM	-7.6%	22.4%	62.0%	65.0%	70.0%	
Actual /Cowen				-29.0%	4%	-4%	-96%	-62%	10.7%	-6.6%	-20.9%	-9.2%	-88.5%	-32.3%	-5.5%	65.0%	65.0%	70.0%	
Consensus Op. Margin				NM	NM	NM	-452%	-206%	-166%	-148%	-119%	-85%	NM	NM	-128%	-31%	-11%	10%	
Actual /Cowen	_		, i	NM	NM	NM	NM	NM	NM 60.46	NM	NM	NM	NM	NM	NM	NM	NM	NM	
Consensus EPS				-\$0.73	-\$0.48	-\$0.56	-\$0.55 -\$0.65	-\$0.51 -\$0.64	-\$0.46 -\$0.52	-\$0.44 -\$0.58	-\$0.40 -\$0.61	-\$0.36 -\$0.60	-\$2.46 \$0.00	- <b>\$2.11</b> - <i>\$2.37</i>	-\$1.61 -\$2.31	-\$0.53 -\$1.50	\$0.33 -\$1.40	<b>\$0.44</b> -\$1.13	
Actual /Cowen				-3U./3	->∪.48	-50.50	-\$0.05	-şu.04	-30.52	-\$0.58	-30.01	00.00-	ŞU.UU	-32.37	-52.51	-\$1.50	40.4¢-	-\$1.13	

Source: Company reports and Cowen and Company



#### **Positives**

1. Complete Genomics utilizes its proprietary DNA sequencing platform to compete in the rapidly growing \$1B genetic sequencing industry as an "end-to-end" whole human genome sequencing outsource service targeting the life science research, clinical, and consumer genetics markets. The company enables customers to offload the complex processes of sample preparation, sequencing, computing, and data storage and management at a cost per genome below that currently available on competitive platforms sold by instrument vendors. The company is positioned to opportunistically use its first-mover advantage in the sequencing outsourcing market and the cost-advantages unique to its proprietary instrumentation to expand and capitalize on this highly-elastic market opportunity.

## **Negatives**

1. While we remain enthused about the company's potential, the combination of continued falling average selling prices, the company's inherent lumpiness and a lack of visibility on new orders keep us at Neutral.

**November 8, 2011** 5



#### **Addendum**

#### STOCKS MENTIONED IN IMPORTANT DISCLOSURES

Ticker	Company Name
GNOM	Complete Genomics

#### **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 GNOM securities.

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

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

GNOM 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.

GNOM has been client(s) of Cowen and Company, LLC in the past 12 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, including required disclosures, can be obtained on the Firm's client website, www.cowenresearch.com.

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.

**Notice to UK Investors:** This publication is produced by Cowen and Company, LLC, which is regulated in the United States by FINRA and is disseminated in the United Kingdom by Cowen International Limited ("CIL"). In the United Kingdom, 'Cowen and Company' is a Trading Name of CIL. It is 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 the consent of CIL.

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

© 2011 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



prior to any public dissemination by Cowen of the research report or information or opinion contained therein. 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 Dallas (214) 978-0107 London (affiliate) 44-207-071-7500 Geneva (affiliate) 41-22-707-6900

#### **COWEN AND COMPANY RATING DEFINITIONS (a)**

Rating	Definition
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

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

#### **COWEN AND COMPANY RATING ALLOCATION (a)**

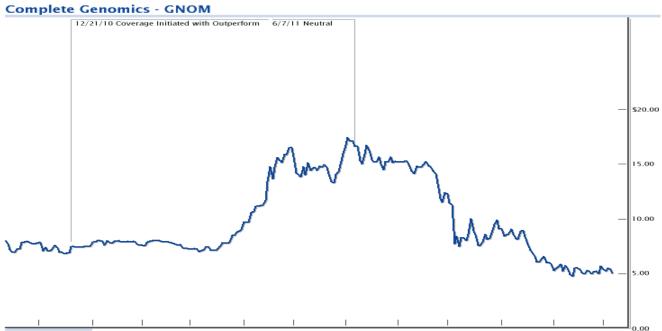
	Pct of companies under	Pct for which Investment Banking services
Rating	coverage with this rating	have been provided within the past 12 months
Buy (b)	51.3%	7.7%
Hold (c)	46.4%	2.3%
Sell (d)	2.3%	0.0%

(a) As of 09/30/2011. (b) Corresponds to "Outperform" rated stocks as defined in Cowen and Company, LLC's rating definitions (see above). (c) Corresponds to "Neutral" as defined in Cowen and Company, LLC's ratings definitions (see above). (d) Corresponds to "Underperform" as defined in Cowen and Company, LLC's ratings definitions (see above). 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 NASD and NYSE regulations.

November 8, 2011 7



Cowen and Company Price and Ratings History



Pricing data provided by Reuters America. Chart as of 11/7/11 in USD.