

FOR IMMEDIATE RELEASE

Biotech closes out the year on a high

SAN FRANCISCO – January 3, 2011 – The biotech industry closed out the year on a high with the Burrill Biotech Select Index surging 4.5 percent in December and end the year up almost 17 percent.

“The biotech industry certainly benefited from a return of investor confidence in the second half of the year, particularly the final quarter, which saw the Select index climb 10.7 percent,” said G. Steven Burrill, CEO, Burrill & Company, a diversified global financial services firm focused on the life sciences industry. “Our prediction, at the beginning of the year, that the Select Index would outperform the Dow Jones industrial average in 2010 played out...with the Dow recording an 11 percent increase in value in 2010.”

“From a low point in July, fortunes for the biotech industry changed,” Burrill said. “This was fueled partly by an easing of concerns about a double-dip recession as well as hopes for a better economic outlook for the U.S. In addition, the continuing developments relating to Sanofi Aventis’ bid to acquire Genzyme...a saga that is still unresolved, and the pop in the shares of Dendreon on the announcement that its prostate cancer therapy Provenge had finally been approved by the FDA, as well as strong second quarter financial results from biotech’s large-cap companies put a spark back into biotech.”

“According to our *Burrill Report* only 55 percent of the 298 U.S. public biotech companies we are tracking finished the year with increases in share values,” added Burrill. “Driving the sector was the stellar stock performances of companies such as Questcor Pharmaceuticals (219 percent), Neurocrine Biosciences (183 percent), Pharmasset (112 percent) and Illumina (108 percent). However, many of biotech’s blue-chip companies, had sub-par years with Amgen, for example, down 2 percent, Vertex Pharmaceuticals was down 18 percent and Gilead Sciences down 17 percent for the same period.”

“Although the IPO window was open, investors were more skittish this year about buying into biotech’s newly minted public companies,” noted Burrill. “The 17 new biotech issues that debuted on the U.S. market were plagued by lackluster receptions (selling fewer shares well below the pricing range). Thanks to an improvement in the capital markets in the final quarter of the year, which saw the Dow increase over 7 percent and the Nasdaq Composite index jump 13 percent, the average market performance for the

group of new biotech IPOs strengthened and closed the year down marginally. The companies, however, only managed to generate the same amount of cash as three companies did in 2009.”

While companies in all sectors tested the market, it was interesting to note that there was a surge in investor interest in the genomics and biofuels sectors. Genomics company Pacific Biosciences, for example, successfully completed its initial public offering selling 12.5 million shares of its common stock at \$16 per share, in the middle of its expected range, to raise \$200 million. Complete Genomics, which has developed its own third-generation sequencing technology, also went public, raising \$54 million, after scaling back its deal price more than 30 percent to get it done.

Biofuels

Next-generation biofuels companies also found favor with investors because much of their underlying technology, such as genomics and synthetic biology, is shared with traditional biotechs. The first two companies out of the IPO chute in 2010 were Amyris Biotechnologies and Codexis [Burrill & Company is an investor in Codexis.]

Two alternative fuel and chemical companies also joined the IPO runway in 2010:

- PetroAlgae, which produces biocrude from duckweed, and
- Colorado-based Gevo, which produces isobutanol from biomass. The company is commercializing bio-based alternatives to petroleum-based products using a combination of synthetic biology and chemical technology to produce isobutanol that can then be converted into a variety of plastics and fuels. [Burrill & Company is an investor in Gevo.]

Performance of Biotech IPOs in 2010

Company	TICKER	IPO Price	Amount Raised (\$M)	Price 12/31/10	% Change	12/31/10 Market Cap(\$M)
Ironwood Pharmaceuticals	IRWD	\$11.25	215.6	\$10.33	-8.18%	1,020
Anthera Pharmaceuticals	ANTH	\$7.00	42.0	\$4.82	-31.14%	160
AVEO Pharmaceuticals	AVEO	\$9.00	89.7	\$14.60	62.22%	519
Alimera Sciences	ALIM	\$11.00	72.0	\$10.39	-5.55%	324
Tengion	TNGN	\$5.00	30.0	\$2.65	-47.00%	31
CorMedix	CRMD	\$3.25	12.5	\$1.82	-44.00%	21
Codexis	CDXS	\$13.00	78.0	\$10.62	-18.31%	363
GenMark Diagnostics	GNMK	\$6.00	28.0	\$4.20	-30.00%	48
Trius Therapeutics	TSRX	\$5.00	50.0	\$3.69	-26.20%	87
NuPathe	PATH	\$10.00	50.0	\$9.02	-9.80%	132
Amyris Biotechnologies	AMRS	\$16.00	85.0	\$26.67	66.69%	1,170
Pacific Biosciences	PACB	\$16.00	109.0	\$15.90	-0.62%	840
Aegerion Pharmaceuticals	AEGR	\$9.50	47.5	\$14.15	48.95%	249
Complete Genomics	GNOM	\$9.00	54.0	\$7.50	-16.67%	193
Anacor Pharmaceuticals	ANAC	\$5.00	60.0	\$5.35	7.00%	28
Zogenix	ZGNX	\$4.00	56.0	\$5.72	43.00%	190
Ventrus Biosciences	VTUS	\$6.00	27.4	\$6.57	9.50%	3

Biotech Financings

Following from one of its best financing years in 2009, the biotech industry in the U.S. surpassed this total by a significant margin - 35% - by generating over US\$25 billion in public and private capital in 2010. While most instruments IPOs, follow-on financings, PIPEs and venture capital raised approximately the same amounts as in 2009, the outlier was debt financing, which saw a whopping 134% increase over the 2009 total raised by this route. Gilead Sciences (US\$2.2B), Life Technologies (US\$1.5B), Valeant Pharmaceuticals (US\$1.2B), Genzyme (US\$1B) and Mylan (US\$800M) all took advantage of the positive investor climate to issue debt during the year.

Partnering remains hot

Biotech partnering transactions were hot in 2010 with the US industry raising US\$30 billion through partnerships—about 10% less than the record total the previous year. Biotech companies continued to benefit from big pharma's willingness to pay for its innovation.

“Partnering revenues have now become a staple for many biotech companies,” said Burrill, “and this situation is likely to remain, if not accelerate, in the years ahead as drug companies look to broaden product lines, replace revenues lost to patent expiration and expand into emerging markets, where the industry growth rate is much higher in than in the developed nations.”

US Biotech Financings in 2010
(US \$ Billions)

	2008	2009	Q1 10	Q2 10	Q3 10	Q4 10	TOTAL 2010
Public							
IPO	\$6	\$1,112	\$365	\$208	\$185	\$435	\$1,193
Follow-on	\$1,726	\$5,691	\$1,030	\$1,209	\$211	\$1,195	\$3,645
PIPEs*	\$1,078	\$1,623	\$308	\$409	\$507	\$314	\$1,538
Debt	\$2,824	\$6,306	\$55	\$1,897	\$7,235	\$5,545	\$14,732
Private							
VC	\$4,469	\$4,224	\$1,044	\$1,336	\$1,328	\$805	\$4,513
Total Financings	\$10,103	\$18,956	\$2,802	\$5,059	\$9,466	\$8,294	\$25,621
Partnering	\$20,023	\$36,923	\$6,139	\$8,906	\$9,610	\$5,453	\$30,108
TOTAL	\$30,126	\$55,879	\$8,941	\$13,965	\$19,076	\$13,747	\$55,729

Burrill Indices

INDEX	12/31/2009	9/30/2010	11/30/2010	12/31/2010	% CHANGE (MONTH)	% CHANGE (QTR)	% CHANGE (YR)
Burrill Select	312.47	331.5	346.59	365.12	4.55%	10.14%	16.85%
Burrill Large Cap	461.85	498.38	500.87	526.55	0.50%	5.65%	14.01%
Burrill Mid-Cap	166.01	173.26	197.34	218.1	13.90%	25.88%	31.38%
Burrill Small Cap	88.12	84.27	87.68	94.97	4.05%	12.70%	7.77%
Burrill Genomics	159.87	171.68	154	163.44	-10.30%	-4.80%	2.23%
Burrill Diagnostics	147.96	133.15	139.48	158.05	4.75%	18.70%	6.82%
Personalized Medicine	91.71	90.45	97.02	106.26	7.26%	17.48%	15.87%
Canadian Biotech	40.35	53.72	51.49	55.68	-4.15%	3.65%	37.99%
BioGreentech	126.8	129.34	134.77	152.78	4.20%	18.12%	20.49%
NASDAQ	2269.15	2368.62	2498.23	2652.87	5.47%	12.00%	16.91%
DJIA	10428.05	10788.05	11006.02	11577.51	2.02%	7.32%	11.02%
Amex Biotech	941.92	1157.87	1142.17	1297.61	-1.36%	12.07%	37.76%
Amex Pharma	309.21	307.69	291.84	305.88	-5.15%	-0.59%	-1.08%

“The \$55 billion that was raised by the U. S. industry, in challenging times, demonstrates that the sector remains vibrant and in good shape going into 2011.

“The collapse of the financial markets and systems and subsequent slow recovery this year has been a major force in reshaping the landscape, but it is far from the only factor. “Rather, the financial crisis has helped accelerate the changes already underway, ranging from globalization, to healthcare reform, to climate change. Biotech executives are currently writing their new ‘play book’ in response.

“As I discuss in my upcoming book – *Biotech 2011-Life Sciences: Looking Back to See Ahead* - expect to see the biotech industry as a whole perform better in 2011 as the financing environment continues to improve. Investors will reward risk mitigated companies and those that are able to execute on their business plans. There will be no major slow down in big Pharma’s appetite for biotech partnering. Both big pharma and big biotech will again compete for companies with advanced product pipelines, as well as important land grabs of technology. Partnership deals will reflect ‘shared risk’ by smaller upfront payments and larger ones on achievement of milestones. Collaborations with emerging market players in China, India and Latin America will also increase.

“Overall the upcoming year will be a good one for the biotechnology industry,” concludes Burrill.

Predictions for 2011

- *Biotech and the Capital Markets:* The biotech industry did benefit from the return of investor confidence in the second half of the year...with the **Burrill Biotech Select Index** outperforming the Dow Jones Industrial Average on an annual basis. Expect to see the biotech industry continue to outperform the general markets as the financing environment continues to improve in 2011.
- *Biotech IPOs:* The biotech IPO window will remain open despite the fact that the 17 new biotech issues that debuted on the U.S. market in 2010 were plagued by lackluster receptions (selling fewer shares well below the pricing range) and their average annual market performance was down by 13 percent. By the end of 2011, I predict that at least 25 biotech IPOs, possibly more, in the US will be completed.
- *Capital:* The industry has achieved a “steady state” in terms of financing...raising about \$15 billion annually. This situation will continue in 2011. The industry's collective market cap will also remain at its present \$360 billion level as market value growth will be offset by acquisitions.
- *Partnering:* There will be no major slow down in big Pharma’s appetite for biotech partnering. Both big pharma and big biotech will again compete for companies with advanced product pipelines. The deal structures will embrace “shared risk”. The days when biotech enjoyed major upfront payments for pharma

companies to access their technologies are over. Collaborations with emerging market players in China, India and Latin America will also increase.

- *Mergers & Acquisitions:* The predicted surge in big Pharma acquisitions of biotech companies did not happen in 2010. It will in 2011. Sanofi will finally seal the deal and acquire Genzyme and this will usher in several other marquee acquisitions of blue chip biotech companies.
- *Pharma Restructuring:* Pharma companies will continue to make job cuts and restructuring their businesses ahead of loss of patents protection on major blockbusters.
- *Increased government involvement on healthcare:* The federal government, through Medicare and Medicaid, will continue to play a greater role in the delivery and reimbursement of healthcare. This trend will create an array of new regulatory and compensatory rules, issues, and challenges for healthcare providers.
- *Biosimilars:* Healthcare reform carries provision instructing the FDA to create a pathway for biosimilars and expect to see both biotech and pharma companies take a keen interest in the discussions on the drafting of new regulations governing the development of biosimilars.
- *Converging technologies impact healthcare:* Expect to see a greater emphasis on prevention and wellness. A greater understanding of human genomics and the advent of molecular diagnostics, and the convergence of information, wireless, and medical technology promises to make personalized medicine an ever present reality in the way doctors and patients approach healthcare.
- *Regulatory environment:* The industry will continue to adjust to a regulatory environment that includes comparative effectiveness research (CER). Payors will be looking at CER as a way to gather the necessary data on whether to reimburse for genomically guided medicines. With PDUFA expiring in 2012 there will be a major battleground over drug safety and review issues in Congress in 2011.
- *Science and Technology:* The evolving legal battle over the patentability of genes will heat up; uncertainty will continue to swirl around stem cells but regenerative medicine will be hot.
- *Clean tech will boom:* The clean tech boom in non-food crops will continue as major investments in solar power, wind power, and next generation biofuels gets attention. The market will not only embrace green, but technologies that improve energy efficiency and environmental “friendliness”—less polluting and less consuming.

- *Global markets:* Expect emerging markets, particularly in Brazil, Chile, China, India, Malaysia and Russia, to continue to be a dominant factor. Increasing affluence, a growing middle class, and government policies will make healthcare big business in these countries.

About Biotech 2011

Biotech 2011-Life Sciences: Looking Back to See Ahead is G. Steven Burrill's 25th annual publication on the state of the biotechnology industry. This special anniversary edition, to be published early in 2011, examines how the industry has developed into the global enterprise it is today. It describes what companies will need to do in order to remain competitive in a world being reshaped by technology, globalization and emerging markets. In addition, it provides comprehensive analysis on the global industry's performance in 2010. Details: www.burrillandco.com/resources

About Burrill & Company

Founded in 1994, Burrill & Company is a diversified global financial services firm focused on the life sciences industry. With more than \$1 billion in assets under management, the firm's businesses include venture capital, private equity, merchant banking and media. By leveraging the scientific and business networks of its investment team, Burrill & Company has established unrivaled access and visibility in the life sciences industry. This unique combination of resources and capabilities enables the company to provide life sciences companies with capital, management expertise, insight, market intelligence and analysis through its investments, conferences, and publications. Headquartered in San Francisco, the company oversees a global network of offices throughout the United States, Latin America, Europe and Asia. For more information visit: www.burrillandco.com.

Contact: Peter Winter, Managing Director, Editorial, Burrill & Company
Editor, Burrill Report pwinter@b-c.com tel: 415-591-5474

##