

Inside The NBI

A guide to performance drivers of the NASDAQ Biotech Index

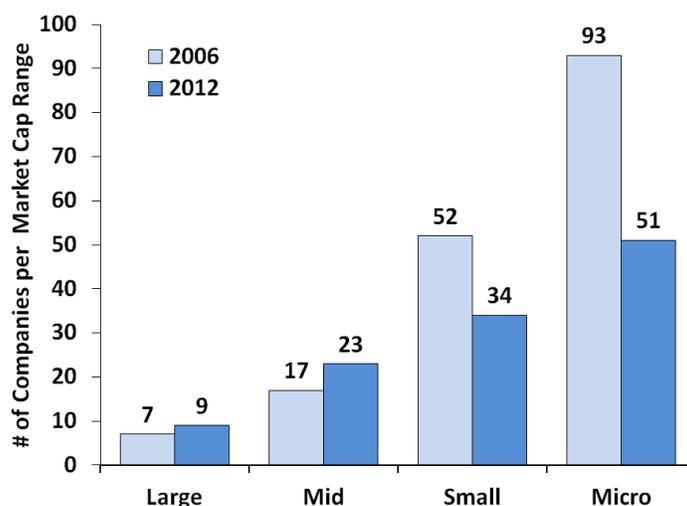
Introduction

The NASDAQ Biotechnology Index (NBI) is referenced by investors, CEOs, and industry leaders around the world to take the industry’s market pulse. But what is the index comprised of and is it really representative of the entire public sector? What does its changing composition tell us about the present – and future – state of the biopharmaceutical industry? This report provides insight into what drives the sector’s market performance, by analyzing the changing number, rankings, and composition of the NBI’s constituent companies. Historical holdings of the NBI are also reviewed to track how the index has changed over the years.

The number of NBI companies has fallen by a third in five years

As of March 30, 2012, the NBI housed 117 companies. Five years ago, there were 170 companies. The 31% reduction was driven in part by the 2007-2009 financial crisis which forced many companies out of the index as they could no longer meet inclusion criteria (market value at least \$100 million, minimum average share volume of 50,000 (see Methodology section below)). Acquisitions by pharmaceutical companies played a substantial role as well. The NBI isn’t alone in seeing its membership shrink though: when analyzing a wide range of exchanges, 35% of companies that traded in 2007 are no longer trading today, implying M&A and bankruptcy have been widespread over the last five years.

Figure 1. Number of NBI companies in each market capitalization size category for Dec 31, 2006 and March 30, 2012. Companies with market capitalization over \$10 billion are considered “Large”, \$2-10 billion “Mid”, \$0.5-\$2 billion “Small”, and under \$500 million “Micro”.



Source: BIO, Factset, NASDAQ

Small and Micro-Cap companies are most numerous

Only nine companies in the NBI had over \$10 billion market capitalization as of March 30, 2012, vs. 85 under \$2 billion (**Figure 1**). Amgen was the largest at \$53 billion, followed by Teva with a \$42 billion market cap and Gilead at \$37 billion. There are 23 companies in the \$2-\$10 billion “mid cap” range, and 34 biotechs in the “small cap”

range (under \$2 billion but above \$500 million). The smallest group, the “micro cap” range, had 51 companies with market caps of less than \$500 million. Despite their presence in numbers, these small companies drive very little of the index market performance.

Total market value for the NBI is relatively small

By aggregate market capitalization (the sum of all index company market caps), the NBI stood at \$389 billion as of March 30, 2012. To put this in perspective, a single company, Apple, had a market capitalization of \$559 billion. That is 30% higher than all 117 biotech companies combined. Exxon Mobil was also valued higher than the entire NBI, at \$408 billion. Comparing to the pharmaceutical industry, the NBI market value is just above the \$351 billion for the top two Big Pharmas by market cap: Pfizer and Johnson & Johnson.

The nine largest NBI companies contribute \$252 billion, or 65%, of the index’s total value. Conversely, the 85 small and micro companies make up only 12% of the total market capitalization. A similar dynamic plays out when we look at what drives NBI performance, in that the larger companies exert the majority of influence.

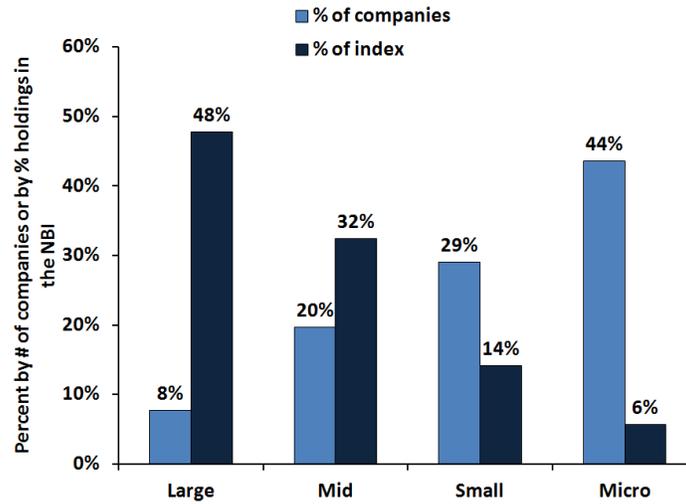
Large companies with marketed drugs drive NBI performance

NBI performance is driven by the larger companies with the heftiest market caps, since the index is market cap-weighted.¹ Today, the top 20 companies by weight account for 72% of the index, up from 55% prior to the financial crisis – a result of the net reduction in the total number of companies. Combined, small and micro cap companies make up 73% of the 117 companies. However, as a percent of the index weight, they make up only 20% (**Figure 2**). This means that many smaller company stocks could climb several hundred percent and have no meaningful impact on the index.

Mainly due to the large company bias, the NBI is driven by product driven companies. In fact, 94% of the index’s weight is in companies with marketed drugs. Interestingly, 15% of the weight is actually in generics companies, Despite its name, and the fact that most biotechs are young start-ups, NBI performance is not representative of ‘traditional’, emerging, pipeline-stage biotechs. Rather, its composition and performance lean toward the more established groups.

¹ The NBI is market capitalization weighted as opposed to giving equal weight to each company. To derive the weight of each company, the total market value of each company is summed, and each company is assigned a weight equal to its % of the total. For a simplified example: if the market cap of a biotech was \$40 billion, and the total market cap of the NBI added to \$400 billion, a biotech would have a 10% weighting. Thus, we see large companies dominating the portfolio as they garner the majority of the weight. For further details, see the methodology section at the end of this report.

Figure 2. Percentage of NBI components by company count (light blue) or by % weight in the index (dark blue), as of March 30, 2012.



Source: BIO, FactSet, NASDAQ

In **Table 1**, the top 10 holdings are shown for year end 2006-2011. The top 10 have accounted for 41-55% of the index weight at year-end for these six years, and five of the large companies have remained in the top 10 throughout this period (Amgen, Teva, Gilead, Celgene, Biogen Idec). Two of the 10 have been generic companies each year since 2007, and tools companies have moved in and out of the top 10 over that period. The only pipeline company to land in the top 10 position by 2011 year end was Pharmasset.²

Table 1. Top companies held in the index as of Dec 31st of each year 2006-2011.

Year-End Holdings	2006	2007	2008	2009	2010	2011
# companies	173	169	136	125	130	119
% weighting of the top 10	44%	41%	54%	49%	44%	55%
1	Amgen	Amgen	Amgen	Amgen	Amgen	Pharmasset
2	Gilead	Gilead	Gilead	Teva	Teva	Amgen
3	Celgene	Teva	Celgene	Gilead	Celgene	Alexion
4	Teva	Celgene	Teva	Celgene	Gilead	Celgene
5	Biogen Idec	Genzyme	Genzyme	Vertex	Alexion	Gilead
6	Genzyme	Biogen Idec	Biogen Idec	Biogen Idec	illumina	Biogen Idec
7	Vertex	Onyx	Vertex	Alexion	Vertex	Teva
8	Sepracor	BioMarin	Alexion	Warner Chilcott	Genzyme	Perrigo
9	Shire	Shire	illumina	Genzyme	Mylan	Regeneron
10	MedImmune	Perrigo	Perrigo	Life Tech.	Biogen Idec	Vertex

Orange denotes Generics, Green denotes tools/Diagnostics, yellow is for pipeline stage company, and blue indicates established therapeutic biotech. Source: BIO, FactSet, NASDAQ

² One of the largest public biotechs during the first years shown in Table 5 was Genentech. However, Genentech was not part of the NASDAQ index as it was NYSE listed prior to the 2009 Roche acquisition.

The weight rankings by type of company illustrates the dynamic mix of what can influence the performance of the index, much like sector weighting for the S&P 500. For the S&P 500, we have seen this shift in weight can be both a boost to and a burden on performance. For example, one reason the S&P 500 did so poorly during the financial crisis was that financial groups made up nearly 22% of the index in market cap terms. Depending on performance and rebalancing, the NBI can shift from being more heavily weighted towards a single company type (generics, tools, cancer biologics, etc.) or even a single company. The index rebalancing methodology, however, does have controls in place to prevent this from swinging too far in one direction (see the Methodology section).

Not just a drug company index

Roughly 9% of the NBI companies are classified as diagnostics/tools are engaged in DNA sequencing, clinical testing, laboratory assays and equipment that support the broader R&D of biotechnology worldwide. This segment is dominated by the large tools companies, Life Technologies and Qiagen, with market caps of \$8.3 and \$4.0 billion respectively. The major diagnostic companies include Illumina, Gen-Probe, and Myriad Genetics. Gen-Probe is currently in the process of being acquired by Hologic for \$3.7 billion.

Past performance beats the broader market

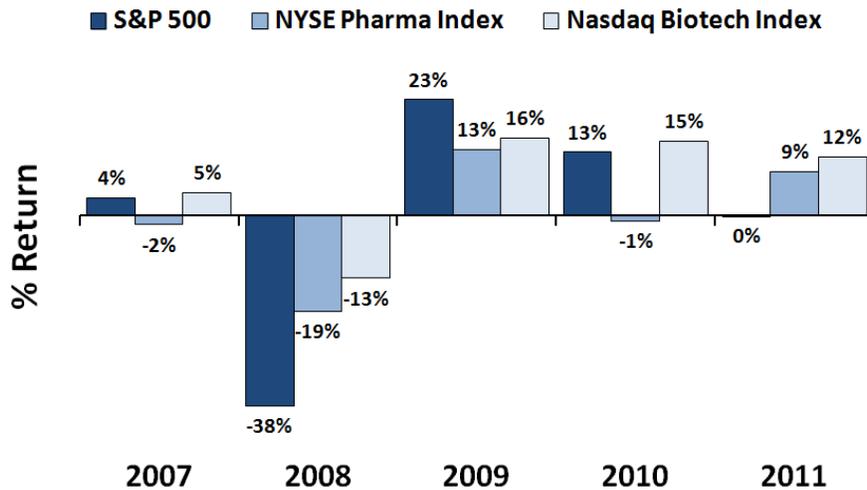
Over the past 10 years, 5 years, and 1 year, the NBI has outperformed the Amex Pharmaceutical Index and the broader stock market by a wide margin as shown in **Table 3**. The NBI cumulative outperformance vs. the S&P 500 over the last 10 years is 10x, and over the last five years it is 6x. In the last year alone, the NBI's performance has been more than three times stronger than that of the S&P 500. Also included in **Table 3** are the NYSE Amex Pharmaceuticals Index and the NYSE AMEX Biotechnology Index. The first is a market weighted index that tracks the major Big Pharma stocks, and the latter is an equal weight, concentrated index of 20 large biotech stocks, the "BTK".

Table 3. Index performance.

Index	1 year	5 years	10 years
S&P 500	6.0%	-0.9%	22.8%
NYSE Pharma (DRG)	11.0%	0.0%	-9.4%
NYSE Biotech (BTK)	3.6%	84.9%	182.4%
Nasdaq Biotech (NBI)	23.8%	64.9%	65.8%

Source: BIO, Factset

Figure 3. Index performance.



Source: BIO, Factset

2011 performance and the story of Pharmasset

The story of biotech firm Pharmasset made 2011 an exceptional one for NBI. Typically, a five- or even ten-fold increase in a biotech stock would have very little impact on the overall index because of the company's small size. But that changes if the biotech stock rises far and fast enough: Pharmasset rose to 6.5% of the index weight by late October after the stock climbed 223%. Then, in November, Gilead announced it would purchase the company, and its weighting went up almost two-fold. Moving almost 100% in November following the acquisition bid, this single stock significantly contributed to the NBI's 2011 gains.

Table 3 shows the top 20 stocks held in the index, all above 1% at the start of 2011, and their performance. Pharmasset's share of the index rose from a tiny 1.8% to over 11% during the course of 2011. Other major contributors to the performance in 2011 were Alexion, Biogen Idec, and Regeneron, each with its own, different, story. Alexion's marketed Solaris antibody is expanding its indication base beyond the paroxysmal nocturnal hemoglobinuria and into atypical hemolytic uremic syndrome patients, Biogen's late-stage BG-12 filed for approval with great data, Regeneron's newly-approved macular degeneration drug Eylea enjoyed strong sales. Offsetting these gains were disappointing returns for Dendreon, Illumina and Teva. Dendreon fell in 2011 as its new, much-anticipated cell-based vaccine for prostate cancer, Provenge, did not meet launch expectations. Diagnostics and tools company Illumina fell in part due to slowing academic and government spending on R&D tools, which impacted top line projections. Teva was hit by manufacturing problems, and upcoming competition to top-selling Copaxone. Although Teva's fall wasn't as large in percentage terms as Illumina's or Dendreon's, Teva's size and NBI weighting means it had a significant impact on the index.

Table 3. Stock performance for the top 20 companies by weight in the NBI at the start of a) 2011 and b) 2012.

Top 20 by index holdings Dec 31, 2011			Return	Top 20 by index holdings Dec 31, 2012			Return
Company	Percent of Index		2011	Company	Percent of Index		1Q12
	Dec 31 2010	Dec 31 2011			Dec 31 2011	Mar 30 2012	
Pharmasset	1.8	11.2	488.6%	Regeneron	3.3	6.7	110.4%
Alexion	3.6	6.1	77.5%	illumina	1.5	2.5	72.6%
Regeneron	1.8	3.3	68.8%	Alexion	6.1	7.7	29.9%
Biogen Idec	2.9	4.6	64.1%	Incyte	1.0	1.2	28.6%
Perrigo	2.7	3.9	53.6%	Life Technologies	1.3	1.6	25.5%
Shire	1.6	2.1	43.5%	Vertex	2.9	3.5	23.5%
BioMarin	1.6	2.1	27.7%	Gilead Sciences	4.7	5.5	19.4%
Onyx	1.5	1.7	19.2%	Celgene	5.8	6.3	14.7%
Amgen	7.8	7.9	17.0%	Biogen Idec	4.6	4.9	14.5%
Celgene	5.8	5.8	14.3%	Teva	4.3	4.6	11.6%
Gilead Sciences	4.9	4.7	12.9%	Warner Chilcott	1.1	1.1	11.1%
Genzyme	3.1	M&A	7.1%	Salix	1.4	1.5	9.7%
Mylan Inc.	3.1	2.9	1.6%	Mylan	2.9	3.0	9.3%
Vertex	3.2	2.9	-5.2%	Cubist	1.3	1.4	9.2%
Teva	6.1	4.3	-22.6%	Perrigo	3.9	4.0	6.2%
United Therapeutics	2.0	1.4	-25.3%	Amgen	7.9	7.2	5.9%
Life Technologies	2.1	1.3	-29.9%	United Therapeutics	1.4	1.2	-0.3%
Warner Chilcott	1.7	1.1	-32.9%	BioMarin	2.1	2.0	-0.4%
illumina	3.4	1.5	-51.9%	Shire	2.1	2.0	-8.8%
Dendreon	2.4	0.5	-78.2%	Onyx	1.7	1.4	-14.3%

Source: BIO, NASDAQ (holdings for the date shown), Factset (performance data)

2012 1st quarter performance: the best since 2005

2012 has started well for NBI, with 70% of its companies up during the first quarter, and the index up 18%, its best quarterly performance since 2005. Acquisition activity continues to drive performance – Roche’s bid for illumina triggered a 72% rise in that stock, reversing the company’s 2011 fortunes. Regeneron rose 110% during the same period as it reported its first profitable quarter, thanks to sales of new ophthalmology drug Eylea. It overtook Celgene in terms of index weighting. Meanwhile, GSK’s ongoing interest in acquiring Human Genome Sciences – its partner on lupus drug Benlysta – has pushed that company’s shares up by over 90% so far this year.

M&A alters the NBI composition

As mentioned, acquisitions can have a substantial impact on the index composition and performance. Since the start of 2011, twelve companies in the NBI have been acquired. The two most impactful for the index were Genzyme (acquired by Sanofi) and the aforementioned Pharmasset (acquired by Gilead). The other 10 acquisitions, listed by weighting in the index at the start of 2011, include: Talecris (acquired by Grifols), Cephalon (acquired by Teva), Inspire (acquired by Merck), Micromet (acquired by Amgen), Eurand (acquired by Axcan Pharma Holdings B.V.), Celera (acquired by Quest Diagnostics), BMP Sunstone (acquired by Sanofi), Caliper (acquired by Perkin Elmer), Crucell (acquired by J&J), and Cypress (acquired by Ramius LLC and Royalty Pharma). Note that four of the twelve acquisitions were acquisitions made by NBI components, so these products portfolios and market valuations should still be reflected in the index. The companies acquired by large Pharma or private equity groups

are no longer reflected in the index. For example, no longer represented in the index are two diagnostics/tools companies (Celera and Caliper) and two international companies (Eurand, Crucell), slightly changing the diversity within the index.

Conclusion

Inside the NBI provides a snapshot of the top publicly-traded biotech companies driving the NASDAQ Biotechnology Index. For investors, this sector has offered diversity and outperformance to their portfolios over the last ten years. Although the index today is concentrated in larger companies, this could change in the future should markets participants become more comfortable with pipeline risk and the number of public companies increases with a healthier IPO market.

Key Takeaways:

- **NBI Performance Outperforms Pharma and Broader Market:** The NBI has outperformed the S&P 500, and the S&P Drug Index (DRG) over the last 10 years, 5 years, and 1 year, by large margins.
- **Large, Commercial Companies Drive NBI Performance.** The top 20 companies in the NBI account for 70% of the index market weight, and 94% of the index weight is in companies with marketed products. Index performance does not reflect that of emerging, pipeline-driven biotechnology stocks.
- **The NBI contains generics companies.** About 15% of the index is weighted in generics.
- **The NBI is not just a drug company index.** Almost 10% of the index is composed of diagnostic and tools companies.

NBI Methodology

Source: Nasdaq, adapted from the https://indexes.nasdaqomx.com/docs/methodology_NBI.pdf

The NASDAQ Biotechnology Index® (NBI) is a modified market capitalization-weighted index created on November 1, 1993.

Eligibility

To be eligible for inclusion in the Index, a security must be listed on The NASDAQ Global Select Market or the NASDAQ Global Market and meet the following criteria:

- The issuer of the security must be classified according to the Industry Classification Benchmark (IC) as either biotechnology or pharmaceutical;
- The initial market capitalization of at least **\$200 million**; and must meet the maintenance criteria of **\$100 million** in market capitalization;
- The initial average daily trading volume of at least **100,000 shares**; and must meet the maintenance criteria of **50,000 shares** average daily trading volume
- The security may not be issued by an issuer currently in **bankruptcy** proceedings;
- The issuer of the security may not have **entered into a definitive agreement** or other arrangement which would likely result in the security no longer being Index eligible;
- The issuer of the security may not have annual financial statements with an audit opinion that is currently withdrawn; and
- The listed security must have “seasoned” on a recognized market (generally, **at least three full months**).

Index Evaluated Semi-Annually

Generally, the list of **semi-annual additions and deletions** is publicly announced via a press release in the early part of **May and November**. Replacements are made effective after the close of trading on the third Friday in May and November. Moreover, if at any time during the year other than the Evaluation, an Index Security no longer meets the Eligibility Criteria, or is otherwise determined to have become ineligible for continued inclusion in the Index, the security is removed from the Index and will not be replaced. The data used in the rankings include end of March and September market data and is updated for total shares outstanding submitted in a publicly filed SEC document via EDGAR through the end of April and October, respectively.

Index Rebalanced Quarterly

On a **quarterly** basis coinciding with the quarterly scheduled Index Share adjustment procedures, the Index will be rebalanced if it is determined that: (1) the current weight of the single largest market capitalization Index Security is greater than 24.0% and (2) the “collective weight” of those Index Securities whose individual current weights are in excess of 4.5%, when added together, exceed 48.0% of the Index.

Company listing

NASDAQ Biotechnology Holdings as of March 30, 2012.³

Company Name	NASDAQ Ticker	Index Weight (%)	Market Cap (\$M)	Company Name	NASDAQ Ticker	Index Weight (%)	Market Cap (\$M)
Alexion Pharmaceuticals Inc.	ALXN	7.56%	\$17,271	Optimer Pharmaceuticals Inc.	OPTR	0.27%	\$650
Amgen Inc.	AMGN	7.14%	\$53,180	Rigel Pharmaceuticals Inc.	RIGL	0.27%	\$575
Regeneron Pharmaceuticals Inc.	REGN	6.61%	\$10,703	Alnylam Pharmaceuticals Inc.	ALNY	0.25%	\$574
Celgene Corp.	CELG	6.33%	\$34,017	NPS Pharmaceuticals Inc.	NPSP	0.23%	\$589
Gilead Sciences Inc.	GILD	5.35%	\$37,039	Affymax Inc.	AFFY	0.23%	\$420
Biogen Idec Inc.	BIIB	4.97%	\$30,079	AVEO Pharmaceuticals Inc.	AVEO	0.22%	\$541
Teva Pharmaceutical ADS	TEVA	4.55%	\$42,463	Hi-Tech Pharmacal Co. Inc.	HITK	0.21%	\$469
Perrigo Co.	PRGO	4.01%	\$9,639	Sagent Pharmaceuticals Inc.	SGNT	0.21%	\$499
Vertex Pharmaceuticals Inc.	VRTX	3.48%	\$8,626	Sequenom Inc.	SQNM	0.20%	\$466
Mylan Inc.	MYL	2.96%	\$10,012	MannKind Corp.	MNKD	0.20%	\$414
Illumina Inc.	ILMN	2.48%	\$6,484	MAP Pharmaceuticals Inc.	MAPP	0.19%	\$438
Shire PLC ADS	SHPGY	2.13%	\$17,767	Avanir Pharmaceuticals Inc.	AVNR	0.19%	\$454
BioMarin Pharmaceutical Inc.	BMRN	2.04%	\$3,960	Enzon Pharmaceuticals Inc.	ENZN	0.19%	\$330
Life Technologies Corp.	LIFE	1.60%	\$8,703	Arena Pharmaceuticals Inc.	ARNA	0.19%	\$555
Salix Pharmaceuticals Ltd.	SLXP	1.47%	\$3,120	Santarus Inc.	SNTS	0.17%	\$358
Onyx Pharmaceuticals Inc.	ONXX	1.42%	\$2,414	Progenics Pharmaceuticals Inc.	PGNX	0.16%	\$335
Cubist Pharmaceuticals Inc.	CBST	1.36%	\$2,723	Curis Inc.	CRIS	0.16%	\$374
United Therapeutics Corp.	UTHR	1.25%	\$2,527	Ligand Pharmaceuticals Inc.	LGND	0.16%	\$313
Incyte Corp.	INCY	1.24%	\$2,458	AMAG Pharmaceuticals Inc.	AMAG	0.15%	\$338
Medivation Inc.	MDVN	1.17%	\$2,691	Ista Pharmaceuticals Inc.	ISTA	0.15%	\$378
Questcor Pharmaceuticals Inc.	QCOR	1.14%	\$2,393	SciClone Pharmaceuticals Inc.	SCLN	0.15%	\$365
Warner Chilcott Plc	WCRX	1.11%	\$4,191	Depomed Inc.	DEPO	0.13%	\$348
Ariad Pharmaceuticals Inc.	ARIA	1.06%	\$2,540	Cadence Pharmaceuticals Inc.	CADX	0.13%	\$316
Endo Pharmaceuticals	ENDP	0.94%	\$4,520	QLT Inc.	QLTI	0.13%	\$343
Seattle Genetics Inc.	SGEN	0.94%	\$2,371	Vical Inc.	VICL	0.13%	\$292
Qiagen N.V.	QGEN	0.93%	\$3,647	Immunomedics Inc.	IMMU	0.12%	\$274
Alkermes PLC	ALKS	0.89%	\$2,414	Geron Corp.	GERN	0.12%	\$224
ViroPharma Inc.	VPHM	0.88%	\$2,127	Neurocrine Biosciences Inc.	NBIX	0.12%	\$528
Gen-Probe Inc.	GPRO	0.88%	\$3,004	Affymetrix Inc.	AFFX	0.12%	\$301
Myriad Genetics Inc.	MYGN	0.80%	\$1,994	Synta Pharmaceuticals Corp.	SNTA	0.12%	\$248
Impax Laboratories Inc.	IPXL	0.78%	\$1,642	Obagi Medical Products Inc.	OMPI	0.11%	\$250
Theravance Inc.	THRX	0.76%	\$1,686	ARQule Inc.	ARQL	0.11%	\$377
VIVUS Inc.	VVUS	0.73%	\$2,191	Sangamo BioSciences Inc.	SGMO	0.11%	\$258
Amylin Pharmaceuticals Inc.	AMLN	0.73%	\$4,014	GTx Inc.	GTXI	0.11%	\$242
Teche Corp.	TECH	0.72%	\$2,584	China Biologic Products Inc.	CBPO	0.10%	\$238
Dendreon Corp.	DNDN	0.68%	\$1,639	BioCryst Pharmaceuticals Inc.	BCRX	0.10%	\$239
Halozyne Therapeutics Inc.	HALO	0.62%	\$1,430	AVI BioPharma Inc.	AVII	0.09%	\$209
InterMune Inc.	ITMN	0.60%	\$958	Array BioPharma Inc.	ARRY	0.08%	\$278
Grifols S.A. ADS	GRFS	0.55%	\$1,750	SIGA Technologies Inc.	SIGA	0.08%	\$174
Akorn Inc.	AKRX	0.52%	\$1,112	Pacific Biosciences of California Inc.	PACB	0.08%	\$187
Amarin Corp. PLC	AMRN	0.52%	\$1,534	Targacept Inc.	TRGT	0.08%	\$171
Nektar Therapeutics	NKTR	0.50%	\$907	Osiris Therapeutics Inc.	OSIR	0.08%	\$168
Acorda Therapeutics Inc.	ACOR	0.44%	\$1,054	Astex Pharmaceuticals Inc.	ASTX	0.08%	\$173
Exelixis Inc.	EXEL	0.44%	\$769	Oncothyreon Inc.	ONTY	0.08%	\$241
Luminex Corp.	LMNX	0.42%	\$976	Dyax Corp.	DYAX	0.08%	\$154
Idenix Pharmaceuticals Inc.	IDIX	0.42%	\$1,053	Endocyte Inc.	ECYT	0.07%	\$178
Genomic Health Inc.	GHDX	0.41%	\$918	XenoPort Inc.	XNPT	0.07%	\$160
Ironwood Pharmaceuticals Inc.	IRWD	0.41%	\$903	Maxygen Inc.	MAXY	0.07%	\$159
Isis Pharmaceuticals Inc.	ISIS	0.38%	\$878	Novavax Inc.	NVAX	0.06%	\$153
Lexicon Pharmaceuticals Inc.	LXRX	0.38%	\$894	Savient Pharmaceuticals Inc.	SVNT	0.06%	\$156
Auxilium Pharmaceuticals Inc.	AUXL	0.37%	\$897	Vanda Pharmaceuticals Inc.	VNDA	0.06%	\$135
Human Genome Sciences Inc.	HGSI	0.36%	\$1,640	Cytori Therapeutics Inc.	CYTX	0.06%	\$144
Momenta Pharmaceuticals Inc.	MNTA	0.36%	\$786	Pain Therapeutics Inc.	PTIE	0.05%	\$162
Immunogen Inc.	IMGN	0.34%	\$1,104	Sinovac Biotech Ltd.	SVA	0.05%	\$111
Ardea Biosciences Inc.	RDEA	0.34%	\$799	BioSante Pharmaceuticals Inc.	BPAX	0.03%	\$82
Medicines Co.	MDCO	0.34%	\$1,091	Durect Corp.	DRRX	0.03%	\$70
Spectrum Pharmaceuticals Inc.	SPPI	0.32%	\$749	Columbia Laboratories Inc.	CBRX	0.03%	\$62
Achillion Pharmaceuticals Inc.	ACHN	0.30%	\$676	Cardiome Pharma Corp.	CRME	0.02%	\$43
PDL BioPharma Inc.	PDLI	0.29%	\$890				

³ As of May 21, 2012, the Nasdaq semi-annual rebalancing resulted in the addition of ten securities and the removal of five, for a net 122 companies. The ten added securities are: Cerus Corporation (CERS), Celldex Therapeutics, Inc. (CLDX), Amicus Therapeutics, Inc. (FOLD), Infinity Pharmaceuticals, Inc. (INFI), Jazz Pharmaceuticals plc (JAZZ), Omeros Corporation (OMER), Orexigen Therapeutics, Inc. (OREX), Pacira Pharmaceuticals, Inc. (PCRX), Raptor Pharmaceutical Corp. (RPTP) and Trius Therapeutics, Inc. (TSRX). The five removed are: BioSante Pharmaceuticals, Inc. (BPAX), China Biologic Products, Inc. (CBPO), Columbia Laboratories, Inc. (CBRX), Cardiome Pharma Corp (CRME) and DURECT Corporation (DRRX). Source: NASDAQ



About BIO

BIO represents more than 1,100 biotechnology companies, academic institutions, state biotechnology centers and related organizations across the United States and in more than 30 other nations. BIO members are involved in the research and development of innovative healthcare, agricultural, industrial and environmental biotechnology products. BIO also produces the BIO International Convention, the world's largest gathering of the biotechnology industry, along with industry-leading investor and partnering meetings held around the world. BIO produces BIOtechNOW, a multiblog platform and monthly newsletter that aims to create an online biotech community where the the industry can connect to discuss the latest news.

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