

Biotechnology

Biotech Balance Sheet - ASCO Data Largely Lives Up to Its Billing

Biotech Balance Sheet

INDUSTRY OVERVIEW

Our comments will be brief this week, as we are writing our weekly thoughts in between sessions at ASCO in Chicago. By and large, with the exception of the reaction of Bristol-Myers Squibb (BMY, NC) shares on Friday, May 29 (which we will address in this note), investors should leave ASCO with a positive perspective on the oncology space, in our view. Further, given that oncology constitutes such a large portion of the publicly traded biotech sector, we believe the rising ASCO tide should lift most (if not all) biotech boats. While the possibility of an ASCO hangover exists, we believe there was enough unexpected good news to mitigate any sizable sell-off.

To return to BMY, shares sold off nearly 6.5% on Friday in reaction to the outcome of the CheckMate-057 study results, although the stock recovered somewhat from the low of ~8%. Given that the study's data safety monitoring board had recommended halting the study due to compelling efficacy, expectations were no doubt high. When the final results were revealed, it seems to us the knee-jerk crowd took over, and focused on two main issues: the mean improvement in overall survival (OS), which increased from 9.4 months to 12.2 months; and, the correlation between OS benefit and the expression of PD-L1. While the mean improvement in OS was statistically significant, the separation of the Kaplan-Meier curves between Opdivo and docetaxel happened relatively late (~six months), and one-year OS rates were 51% for Opdivo and 39% for docetaxel. Certainly not as big a difference as was seen in the CheckMate-017 trial of 42% and 24%, respectively.

Furthermore, in the squamous cell cancer population, the presence or absence of PD-L1 didn't seem to matter. This opened up concern over competition from other immune checkpoint inhibitors, principally Merck's Keytruda. After all, if Opdivo needs help in the non-squamous population from a PD-L1 assay, perhaps it is not as differentiated from others as thought? However, we would beg to differ. In our view, Express Scripts (ESRX, NC) is going to want to ascertain PD-L1 status, no matter whose antibody they are being asked to pay more than \$100,000 for; second, as PD-L1 expression increased, so, too, did Opdivo's benefit over docetaxel. In our opinion, Opdivo's status as the lead of the immune checkpoint inhibitors is intact. Numerous investors we ran into at ASCO who were buying BMY on Friday seem to agree with us as well.

A lot of this has to do with the new data that came out over the weekend. We also saw some intriguing new data from Merck and Keytruda, that we believe catapults the IO antibodies even further ahead of where they are today. In addition, it happened in a way that investors least expected. Not only did the immune checkpoint inhibitors widen the purview of different tumor types that can potentially be addressed, the emergence of a potential new biomarker suggestive of activity in colorectal cancer (and potentially other tumor types) also generated excitement amongst investors, but seemed to electrify the physician community. First, Opdivo demonstrated activity in liver cancer (hepatocellular carcinoma, HCC), a tumor type with limited therapeutic options. It was also one that wasn't foremost in investors' thoughts when it came to their views on additional market opportunities. The fact that HCC is one of the world's leading killers doesn't hurt, either. Despite relatively low response rates, we believe Opdivo's safety profile should carry it a long way to commercial success, either as a single agent or in combination. Keytruda also surprised with activity in head and neck cancer (yet another tumor type with poor therapeutic options).

Michael G. King, Jr.
mking@jmpsecurities.com
(212) 906-3520

FOR DISCLOSURE AND FOOTNOTE INFORMATION, REFER TO JMP FACTS AND DISCLOSURES SECTION.

Perhaps the most significant upside surprise was Keytruda's compelling response rates in colorectal cancer patients with demonstrated defects in the tumor's mismatch repair mechanisms. This biomarker appeared to predict responses not only in colorectal cancer, but in endometrial and other cancers as well. This new avenue has investors, physicians, and patients excited about the immune checkpoint inhibitor class.

Our other brief thoughts over the past couple of days

PARP inhibitors distinguish themselves, particularly rucaparib from Clovis Oncology (CLVS, NC). Others include niraparib from Tesaro (TSRO, NC), olaparib (Lynparza) from Astra Zeneca, and talazoparib from BioMarin (BMRN, NC). We note that Tesaro and Merck announced on Saturday a link-up to explore the use of niraparib with Keytruda in triple-negative breast cancer and ovarian cancer.

In another victory for Imbruvica, the HELIOS study showed the addition of Imbruvica to bendamustine (Treanda) and Rituxan produced significant increases (hazard ratio of 0.203) in progression free survival vs. BR alone in previously treated CLL.

The competition will most certainly heat up in the third-generation EGF TKI space between Astra Zeneca (AZN, NC) and Clovis. In back-to-back presentations on Sunday morning, AZN presented data from the AURA study in a predominantly (~72%) Asian patient population, in which AZD9291 produced a 100% clinical benefit rate (CR+PR+SD) at a dose of 160mg. In contrast, CLVS's rociletinib put up a 60% ORR and 90% DCR at the 500mg RP2D dose, with a patient population that was predominantly Caucasian (TIGER-X did include as much as 20% of patients with Asian ethnicity). Clovis will be studying 500mg going forward, as it seems to provide the best compromise between efficacy and safety, with 35% of patients experiencing hyperglycemia. The Phase III trials have barely begun and these two companies are already competing over who is using the best assay (centralized or site-specific), studying the appropriate patient population, and the side effect profiles of the respective molecules. Ironically, the discussant for the lung cancer session, Greg Riley of Memorial Sloan Kettering, advocated against TKIs and in favor of checkpoint inhibitors.

We were impressed with the data from CTI BioPharma's (CTIC, NC) study of pacritinib for the treatment of myelofibrosis (MF). The drug appears to have robust efficacy, acceptable safety and tolerability, and works well in patients with platelet counts below 50,000/ml.

Also, in the hematologic malignancy space regarding non-covered companies, we were also impressed with Astellas Pharma's (ALPMY, NC) ASP2215, a dual inhibitor of the FLT-ITD and AXL kinases, in patients with relapsed or refractory AML. The compound was able to generate a composite CR (CR+CRp+CRi) rate of 47% at doses over 80mg (and was well tolerated at doses as high as 300mg), had durable effects and a suggestion of a benefit in overall survival. It would be great for AML patients to see a novel agent emerge, even if only for a subset of patients.

Other small cap winners, in our view (off the radar, admittedly) are Oncothyreon (ONTY, NC) and Calithera (CALA, MO, \$20 PT). We address CALA in a separate note. ONTY's small molecule HER2 kinase inhibitor, ONT-380, in-licensed from Array (ARRY, NC), looked interesting to us. While it was hard to determine how much additional activity the compound added to Kadcyla or Herceptin/Xeloda, it does appear to be active and doesn't add to toxicity. We will be keeping a close watch on this one going forward.

In anticipation of a robust ASCO, the BTK and NBI rallied strongly last week, with positive returns of 2.9% and 2.6%, respectively, and handily outperformed the broader averages that were generally lower (except the NASDAQ composite that gained a modest 0.4%). All market cap subsectors participated, although as has been the recent pattern, the sub-\$750MM sector was up 1.0% vs. gains well over 4% for all other market cap subsectors. Unsurprisingly, the JMP Immuno-Oncology index gained the most, 9.2%, with the JMP Small Cap Oncology subsector putting in a highly respectable 5.4% performance. All other JMP Therapeutic Categories were up as well, except, the JMP Large Cap Oncology Index. We will see if a reversal occurs next week, or if the oncology sectors continue their rally off the back of ASCO.

Despite the performance of the averages, the megacap profitable names remain reasonable at 28.0 and 22.2 times the aggregate consensus EPS numbers for FY15 and FY16, respectively, while the corresponding PEGs ended at 1.46 and 1.33, respectively.

FIGURE 1. Biotech Indices Performance vs. Market Benchmarks

Biotech Indices vs. Key Benchmarks					
	Performance over Various Time Periods				
	WK	MONTH	QTR	YTD	LTM
S&P 500 Index	(0.7%)	(0.0%)	(0.1%)	2.4%	11.4%
DJ Industrial Average	(1.4%)	(0.2%)	(0.7%)	1.1%	8.9%
NASDAQ Composite Average	0.4%	0.7%	2.3%	7.1%	22.0%
NASDAQ Biotech Index	2.6%	0.4%	8.7%	20.3%	56.3%
Amex Biotech Index	2.9%	1.8%	7.8%	20.8%	62.4%
Amex Pharma Index	0.3%	0.3%	4.4%	10.6%	15.8%

BTK Index and Other Benchmark Performance (Day over Day)					
	Monday	Tuesday	Wednesday	Thursday	Friday
	5/18/15	5/19/15	5/20/15	5/21/15	5/22/15
S&P 500 Index	0.3%	(0.1%)	(0.1%)	0.2%	(1.1%)
DJ Industrial Average	0.1%	0.1%	(0.1%)	0.0%	(1.5%)
NASDAQ Composite Average	0.6%	(0.2%)	0.0%	0.4%	(0.4%)
NASDAQ Biotech Index	1.2%	0.1%	0.8%	0.0%	0.4%
Amex Biotech Index	1.7%	(0.1%)	1.4%	(0.2%)	0.2%
Amex Pharma Index	0.2%	0.5%	0.0%	0.4%	(0.8%)

BTK Index and Other Benchmark Performance (Week over Week)					
	T-5	T-4	T-3	T-2	Week Ending
	4/24/15	5/1/15	5/8/15	5/15/15	5/22/15
S&P 500 Index	1.8%	(0.4%)	0.4%	0.3%	(0.7%)
DJ Industrial Average	1.4%	(0.3%)	0.9%	0.4%	(1.4%)
NASDAQ Composite Average	3.2%	(1.7%)	(0.0%)	0.9%	0.4%
NASDAQ Biotech Index	2.1%	(5.5%)	2.4%	1.1%	2.6%
Amex Biotech Index	1.1%	(5.2%)	2.7%	1.2%	2.9%
Amex Pharma Index	1.4%	(1.2%)	0.3%	0.5%	0.3%

Source: Thomson Reuters

FIGURE 2. Performance of JMP Therapeutic Indices and by Market Cap

Performance by Valuation Tiers					
	Performance over Various Time Periods				
	WK	MONTH	QTR	YTD	LTM
Mkt Cap > \$5bn	4.5%	7.9%	22.1%	48.6%	99.5%
Mkt Cap between \$1bn - \$5bn	4.9%	(0.6%)	3.0%	25.8%	87.1%
Mkt Cap > \$750MM	4.9%	0.3%	5.0%	28.2%	88.4%
Mkt Cap < \$750MM	1.0%	(13.7%)	(9.7%)	(8.7%)	(2.1%)
NASDAQ Biotech Index	2.6%	0.4%	8.7%	20.3%	56.3%
Amex Biotech Index	2.9%	1.8%	7.8%	20.8%	62.4%
Amex Pharma Index	0.3%	0.3%	4.4%	10.6%	15.8%

Performance by Therapeutic Area					
	Performance over Various Time Periods				
	WK	MONTH	QTR	YTD	LTM
Large Cap Oncology	(0.5%)	10.6%	9.7%	23.7%	74.1%
Small Cap Oncology	5.4%	10.8%	1.1%	15.4%	11.2%
Anti-Infectives	3.5%	14.9%	13.6%	30.2%	86.9%
Antivirals	1.1%	5.8%	(9.7%)	(3.5%)	46.0%
Orphan Disease	3.2%	22.6%	19.0%	39.6%	103.5%
Metabolic	1.6%	7.1%	(5.4%)	3.1%	12.0%
Oligonucleotide	3.1%	0.7%	(15.6%)	(3.0%)	31.1%
Immuno-Oncology	9.2%	13.2%	9.1%	21.6%	73.6%
NASDAQ Biotech Index	2.6%	0.4%	8.7%	20.3%	56.3%
Amex Biotech Index	2.9%	1.8%	7.8%	20.8%	62.4%
Amex Pharma Index	0.3%	0.3%	4.4%	10.6%	15.8%

Source: Thomson Reuters and JMP Securities LLC

FIGURE 3. Large Cap Biotech and Big Pharma Comparable Analysis (1 of 2)

Company	Ticker	Price	Mkt Cap (\$ MM)	EPS				P/E				PEG (FY15)	PEG (FY16)	PEG (FY17)	CAGR (2015-7)
				2014A	2015E	2016E	2017E	2014A	2015E	2016E	2017E				
Alexion	ALXN	\$ 163.84	32,699	\$ 5.21	\$ 4.94	\$ 5.80	\$ 7.51	31.4x	33.2x	28.2x	21.8x	1.42	1.21	0.94	23.3%
Amgen	AMGN	\$ 156.26	118,808	\$ 8.70	\$ 9.59	\$ 10.54	\$ 12.08	18.0x	16.3x	14.8x	12.9x	1.33	1.21	1.06	12.3%
Biogen	BIIB	\$ 396.99	93,384	\$ 13.83	\$ 16.70	\$ 19.33	\$ 22.00	28.7x	23.8x	20.5x	18.0x	1.61	1.39	1.22	14.8%
Celgene	CELG	\$ 114.44	90,767	\$ 3.71	\$ 4.75	\$ 6.18	\$ 7.76	30.8x	24.1x	18.5x	14.7x	0.87	0.67	0.53	27.8%
Gilead	GILD	\$ 112.27	164,993	\$ 8.09	\$ 10.84	\$ 11.01	\$ 11.70	13.9x	10.4x	10.2x	9.6x	2.68	2.64	2.48	3.9%
Medivation	MDVN	\$ 132.05	10,392	\$ 3.42	\$ 2.63	\$ 3.92	\$ 5.52	38.6x	50.2x	33.7x	23.9x	1.12	1.12	0.53	44.9%
Regeneron	REGN	\$ 512.56	52,936	\$ 10.00	\$ 11.10	\$ 13.35	\$ 16.90	51.3x	46.2x	38.4x	30.3x	1.98	1.64	1.30	23.4%
Shire	SHPG	\$ 260.15	33,340	\$ 10.60	\$ 11.45	\$ 13.25	\$ 15.32	24.5x	22.7x	19.6x	17.0x	1.45	1.45	1.08	15.7%
United Ther	UTHR	\$ 183.72	8,492	\$ 6.28	\$ 7.38	\$ 12.02	\$ 13.76	29.3x	24.9x	15.3x	13.4x	0.68	0.68	0.37	36.5%
Large Cap Biotech Average			67,312	\$ 7.76	\$ 8.82	\$ 10.60	\$ 12.51	28.5x	28.0x	22.2x	18.0x	1.46	1.33	1.06	22.5%

Company	Ticker	Price	Mkt Cap (\$ MM)	EPS				P/E				PEG (FY15)	PEG (FY16)	PEG (FY17)	CAGR (2015-7)
				2014A	2015E	2016E	2017E	2014A	2015E	2016E	2017E				
Abbott	ABT	\$ 48.60	72,354	\$ 2.28	\$ 2.16	\$ 2.41	\$ 2.70	21.3x	22.5x	20.2x	18.0x	1.92	1.72	1.54	11.7%
AbbVie	ABBV	\$ 66.59	106,083	\$ 3.32	\$ 4.24	\$ 4.97	\$ 5.77	20.1x	15.7x	13.4x	11.5x	0.95	0.81	0.70	16.6%
AZ	AZN	\$ 67.55	55,250	\$ 4.28	\$ 4.21	\$ 4.08	\$ 3.82	15.8x	16.0x	16.6x	17.7x	(3.36)	(3.47)	(3.71)	-4.8%
Bristol	BMJ	\$ 64.60	107,693	\$ 1.85	\$ 1.76	\$ 2.31	\$ 2.96	34.9x	36.8x	28.0x	21.8x	1.23	0.94	0.73	29.9%
Glaxo	GSK	\$ 44.37	70,730	\$ 3.02	\$ 2.38	\$ 2.70	\$ 1.92	14.7x	18.7x	16.5x	23.1x	(1.86)	(1.64)	(2.30)	-10.0%
J&J	JNJ	\$ 100.14	277,693	\$ 5.97	\$ 6.14	\$ 6.41	\$ 6.78	16.8x	16.3x	15.6x	14.8x	3.23	3.10	2.93	5.0%
Eli Lilly	LLY	\$ 78.90	87,559	\$ 2.78	\$ 3.16	\$ 3.51	\$ 3.91	28.4x	25.0x	22.5x	20.2x	2.22	2.01	1.80	11.2%
Merck	MRK	\$ 60.89	172,028	\$ 3.49	\$ 3.44	\$ 3.81	\$ 3.98	17.4x	17.7x	16.0x	15.3x	2.35	2.12	2.03	7.5%
Novartis	NVS	\$ 102.73	258,330	\$ 5.23	\$ 5.17	\$ 5.49	\$ 6.27	19.6x	19.9x	18.7x	16.4x	1.97	1.85	1.62	10.1%
Pfizer	PFE	\$ 34.75	213,979	\$ 2.26	\$ 2.04	\$ 2.35	\$ 2.62	15.4x	17.1x	14.8x	13.2x	1.27	1.10	0.98	13.5%
Big Pharma Average			142,170	\$ 3.45	\$ 3.47	\$ 3.80	\$ 4.07	20.4x	20.6x	18.2x	17.2x	0.99	0.85	0.63	9.1%
Big Pharma (Excludes Co's with Neg Growth)				\$ 3.49	\$ 3.56	\$ 3.97	\$ 4.44	20.8x	20.8x	18.1x	15.9x	1.89	1.70	1.54	13%
S&P 500 Avg		\$ 2,107.39		\$ 117.65	\$ 120.18	\$ 130.83	\$ 141.00	17.9x	17.5x	16.1x	14.9x				

Source: Thomson Reuters, JMP Securities LLC

FIGURE 4. Large Cap Biotech and Big Pharma Comparable Analysis (2 of 2)

Company	Ticker	Price	Mkt Cap (\$ MM)	EV (\$ MM)	EBITDA (\$MM)			EV / EBITDA			EV / Sales		
					2014A	2015E	2016E	2014A	2015E	2016E	2014A	2015E	2016E
Alexion	ALXN	\$ 163.84	32,699	31,812	\$ 1,110	\$ 1,213	\$ 1,554	28.7x	26.2x	20.5x	20.7x	14.3x	12.1x
Amgen	AMGN	\$ 156.26	118,808	145,792	\$ 9,864	\$ 10,760	\$ 12,007	14.8x	13.6x	12.1x	7.9x	7.3x	6.9x
Biogen	BIIB	\$ 396.99	93,384	92,764	\$ 4,807	\$ 5,683	\$ 6,458	19.3x	16.3x	14.4x	13.5x	9.6x	8.4x
Celgene	CELG	\$ 114.44	90,767	93,517	\$ 4,188	\$ 5,091	\$ 6,461	22.3x	18.4x	14.5x	14.5x	12.2x	10.2x
Gilead	GILD	\$ 112.27	164,993	154,966	\$ 17,148	\$ 21,403	\$ 19,691	9.0x	7.2x	7.9x	14.2x	6.4x	5.1x
Medivation	MDVN	\$ 132.05	10,392	10,111	\$ 255	\$ 378	\$ 484	39.6x	26.7x	20.9x	40.7x	15.1x	12.1x
Regeneron	REGN	\$ 512.56	52,936	52,745	\$ 1,157	\$ 1,635	\$ 2,184	45.6x	32.3x	24.2x	25.4x	18.9x	14.2x
Shire	SHPG	\$ 260.15	33,340	31,207	\$ 2,730	\$ 2,846	\$ 3,372	11.4x	11.0x	9.3x	6.3x	5.2x	4.9x
United Ther	UTHR	\$ 183.72	8,492	8,221	\$ 570	\$ 675	\$ 995	14.4x	12.2x	8.3x	7.3x	6.4x	5.6x
Large Cap Biotech Average			67,312	\$ 69,015	\$ 4,648	\$ 5,520	\$ 5,912	20.7x	18.2x	14.7x	16.7x	10.6x	8.8x

Company	Ticker	Price	Mkt Cap (\$ MM)	EV (\$ MM)	EBITDA (\$MM)			EV / EBITDA			EV / Sales		
					2014A	2014E	2015E	2014A	2014E	2015E	2014A	2014E	2016E
Abbott	ABT	\$ 48.60	72,354	74,935	\$ 5,230	\$ 5,207	\$ 5,702	14.3x	14.4x	13.1x	3.4x	3.7x	3.6x
AbbVie	ABBV	\$ 66.59	106,083	112,746	\$ 7,630	\$ 9,987	\$ 11,804	14.8x	11.3x	9.6x	6.0x	5.7x	4.8x
AZ	AZN	\$ 67.55	55,250	58,993	\$ 8,743	\$ 8,649	\$ 8,302	6.7x	6.8x	7.1x	2.3x	2.3x	2.5x
Bristol	BMY	\$ 64.60	107,693	109,954	\$ 3,960	\$ 3,783	\$ 4,814	27.8x	29.1x	22.8x	6.8x	7.0x	7.2x
Glaxo	GSK	\$ 44.37	70,730	84,575	\$ 12,041	\$ 10,593	\$ 11,961	7.0x	8.0x	7.1x	1.9x	2.4x	2.3x
J&J	JNJ	\$ 100.14	277,693	263,353	\$ 25,788	\$ 24,213	\$ 25,806	10.2x	10.9x	10.2x	3.7x	3.5x	3.7x
Eli Lilly	LLY	\$ 78.90	87,559	88,900	\$ 4,894	\$ 5,442	\$ 5,965	18.2x	16.3x	14.9x	3.9x	4.5x	4.5x
Merck	MRK	\$ 60.89	172,028	181,467	\$ 20,419	\$ 20,534	\$ 20,989	8.9x	8.8x	8.6x	4.1x	4.3x	4.6x
Novartis	NVS	\$ 102.73	258,330	269,273	\$ 20,252	\$ 25,103	\$ 19,468	13.3x	10.7x	13.8x	4.6x	4.6x	5.2x
Pfizer	PFE	\$ 34.75	213,979	248,285	\$ 21,594	\$ 18,857	\$ 22,161	11.5x	13.2x	11.2x	5.0x	5.0x	5.4x
Big Pharma Average			142,170	\$ 149,248	\$ 13,055	\$ 13,237	\$ 13,697	13.3x	12.9x	11.8x	4.2x	4.3x	4.4x
Big Pharma (Excludes Co's with Neg Growth)					\$ 14,982	\$ 15,383	\$ 15,821	14.9x	14.3x	13.0x	4.7x	4.8x	4.9x

Source: Thomson Reuters, JMP Securities LLC

FIGURE 5. Performance of King Coverage, Market Cap Weighted

Performance of King Coverage Cap-Weighted					
	Market Cap (\$MM)	Performance Over Various Time Periods			
		1 YR	6 MTH	3 MTH	1 MTH
AGEN	674.9	0.8%	0.8%	0.3%	0.1%
ALNY	11048.6	9.2%	2.3%	2.2%	2.0%
ARDX	204.2		(0.1%)	(0.0%)	(0.0%)
ARGS	165.7		(0.0%)	(0.0%)	(0.0%)
ARIA	1731.0	0.5%	0.3%	0.2%	(0.0%)
BIND	121.5	(0.0%)	(0.0%)	(0.0%)	(0.0%)
CALA	187.9				(0.0%)
CELG	90767.4	31.1%	0.4%	(3.7%)	0.7%
CERU	162.3		0.0%	(0.0%)	(0.0%)
CGEN	354.6	(0.0%)	0.0%	(0.0%)	0.0%
CNCE	347.3	0.2%	0.1%	0.0%	0.0%
CYCC	25.0	(0.0%)	(0.0%)	(0.0%)	(0.0%)
EPZM	781.7	(0.1%)	(0.1%)	(0.1%)	0.0%
FLKS	320.1				(0.0%)
INFI	635.6	0.1%	(0.1%)	(0.1%)	(0.0%)
KBIO	20.9	(0.0%)	(0.0%)	0.0%	0.0%
KERX	1077.4	(0.2%)	(0.3%)	(0.1%)	(0.1%)
KPTI	960.9	0.0%	(0.2%)	(0.0%)	(0.0%)
LOXO	205.9			(0.0%)	0.0%
MDGN	187.6			(0.0%)	(0.0%)
MDVN	10391.6		1.0%	0.9%	0.4%
NAVB	188.4	(0.0%)	0.0%	(0.0%)	(0.0%)
OMED	748.1		0.1%	(0.0%)	(0.0%)
OVAS	922.7	2.3%	0.2%	(0.2%)	0.2%
PCYC	20136.9	27.0%	12.2%	2.9%	0.3%
PRTO	278.0				0.1%
SNTA	287.7	(0.1%)	(0.1%)	(0.0%)	(0.0%)
VBLT	160.3				0.1%
VSTM	316.0	(0.0%)	(0.0%)	0.0%	(0.0%)
VTAE	267.6				(0.0%)
XLRN	1106.7	0.1%	(0.1%)	(0.1%)	0.1%
Total	144784.8	70.9%	16.5%	2.1%	3.8%
S&P 500		9.6%	1.9%	0.1%	0.0%
Dow Jones		7.7%	1.0%	(0.7%)	(0.1%)
NASDAQ		19.5%	5.8%	2.1%	0.9%
NASDAQ Biotech Index		52.6%	20.2%	8.3%	5.9%
Amex Biotech Index		60.7%	20.9%	7.0%	7.1%
Amex Pharma Index		15.3%	7.0%	4.1%	1.3%

Source: Thomson Reuters and JMP Securities LLC

FIGURE 6. Performance of King Coverage Universe

Performance of King Coverage					
	Market Cap (\$MM)	Performance Over Various Time Periods			
		1 YR	6 MTH	3 MTH	1 MTH
AGEN	674.9	170.9%	176.4%	66.9%	16.0%
ALNY	11048.6	121.1%		29.1%	26.0%
ARDX	204.2		(59.1%)	(30.5%)	(3.7%)
ARGS	165.7		(4.6%)	(11.2%)	(5.2%)
ARIA	1731.0	42.1%	29.1%	12.9%	(0.5%)
BIND	121.5	(29.9%)	(8.3%)	(1.7%)	(0.2%)
CALA	187.9		(1.9%)	(1.9%)	(3.1%)
CELG	90767.4	49.6%	0.7%	(5.8%)	1.1%
CERU	162.3		4.2%	(27.7%)	(0.7%)
CGEN	354.6	(12.6%)	1.6%	(15.3%)	6.3%
CNCE	347.3	80.9%	26.9%	11.1%	10.1%
CYCC	25.0	(77.6%)	(75.4%)	(51.5%)	(18.2%)
EPZM	781.7	(20.9%)	(17.0%)	(19.3%)	7.5%
FLKS	320.1				(0.3%)
INFI	635.6	28.3%	(13.7%)	(14.7%)	(4.0%)
KBIO	20.9	(66.4%)	(64.9%)	15.9%	28.7%
KERX	1077.4	(21.2%)	(34.6%)	(14.5%)	(7.5%)
KPTI	960.9	2.6%	(35.7%)	(1.2%)	(5.5%)
LOXO	205.9			(3.9%)	1.8%
MDGN	187.6			(3.7%)	(7.2%)
MDVN	10391.6		13.9%	12.4%	5.1%
NAVB	188.4	(21.4%)	0.8%	(22.8%)	(13.8%)
OMED	748.1		13.1%	(0.2%)	(3.2%)
OVAS	922.7	368.0%	34.3%	(25.4%)	26.3%
PCYC	20136.9	194.1%	87.4%	21.0%	2.3%
PRTO	278.0				39.7%
SNTA	287.7	(47.8%)	(32.5%)	(10.8%)	(10.1%)
VBLT	160.3			99.3%	114.1%
VSTM	316.0	(6.8%)	(7.0%)	16.3%	(3.4%)
VTAE	267.6			5.5%	(12.1%)
XLRN	1106.7	13.6%	(12.9%)	(17.0%)	12.4%
Total	144784.8	763.4%	71.7%	11.1%	198.8%
S&P 500		9.6%	1.9%	0.1%	0.0%
Dow Jones		7.7%	1.0%	(0.7%)	(0.1%)
NASDAQ		19.5%	5.8%	2.1%	0.9%
NASDAQ Biotech Index		52.6%	20.2%	8.3%	5.9%
Amex Biotech Index		60.7%	20.9%	7.0%	7.1%
Amex Pharma Index		15.3%	7.0%	4.1%	1.3%

Source: Thomson Reuters and JMP Securities LLC

FIGURE 7. Upcoming PDUFA Dates

Expected Date	Company	Symbol	Drug	Disease Group	Indication
Now-05/15/2015	Ferring BV		Nocurna	Urology	Urinary Symptoms (eg nocturia, polyuria)
5/18/2015	Johnson & Johnson	JNJ	Paliperidone Palmitate Three-Month Formulation	Psychiatry	Schizophrenia
Now-05/31/2015	Mallinckrodt plc	MNK	MNK-155	Neurology	Postsurgical Pain
Now-05/31/2015	Mallinckrodt plc	MNK	MNK-155	Neurology	Chronic Pain
6/8/2015	Celltrion, Inc.		Remsima	Autoimmune/ immunology	Rheumatoid Arthritis (RA)
6/8/2015	Celltrion, Inc.		Remsima	Autoimmune/ immunology	Ankylosing Spondylitis
6/8/2015	Celltrion, Inc.		Remsima	Autoimmune/ immunology	Ulcerative Colitis (UC)
6/8/2015	Celltrion, Inc.		Remsima	Autoimmune/ immunology	Crohn's Disease
6/8/2015	Celltrion, Inc.		Remsima	Autoimmune/ immunology	Psoriasis
6/8/2015	Celltrion, Inc.		Remsima	Autoimmune/ immunology	Psoriatic Arthritis (PA)
6/23/2015	The Medicines Company	MDCO	Kengreal	Cardiovascular	Acute Coronary Syndrome (ACS)
6/29/2015	Purdue Pharma LP		Immediate-Release Oxycodone HCl	Neurology	Chronic Pain
Now-06/30/2015	Actavis plc	ACT	Cariprazine	Psychiatry	Schizophrenia
Now-06/30/2015	Actavis plc	ACT	Cariprazine	Psychiatry	Bipolar Disorder
Now-06/30/2015	Actavis plc	ACT	MuDelta	Gastroenterology (non inf)	Irritable Bowel Syndrome (IBS)
Now-06/30/2015	Clarus Therapeutics Inc.		Rextoro	Endocrine	Hypogonadism
06/05/2015-07/05/2015	Boehringer Ingelheim GmbH		Tiotropium/Olodaterol	Respiratory	Chronic Obstructive Pulmonary Disease (COPD)
7/5/2015	Vertex Pharmaceuticals Incorporated	VRTX	Orkambi	Respiratory	Cystic Fibrosis (CF)
7/10/2015	Otsuka Holdings Co., Ltd.	4768:JP	Brexpirazole	Psychiatry	Schizophrenia
7/10/2015	Otsuka Holdings Co., Ltd.	4768:JP	Brexpirazole	Psychiatry	Major Depressive Disorder (MDD)
7/24/2015	Johnson & Johnson	JNJ	Yondelis	Oncology	Sarcoma
7/24/2015	Regeneron Pharmaceuticals, Inc.	REGN	Praluent	Cardiovascular	Dyslipidemia / Hypercholesterolemia
8/11/2015	Roche Holding AG	ROG:VX	Cobimetinib	Oncology	Melanoma
8/16/2015	Hospira, Inc.	HSP	Retacrit	Hematology	Anemia Due to Chronic Renal Failure, Dialysis-Independent
8/17/2015	Sprout Pharmaceuticals, Inc.		Girosa	Urology	Female Sexual Arousal Disorder
8/21/2015	Alkermes plc	ALKS	Aripiprazole Lauroxil (monthly)	Psychiatry	Schizophrenia
8/21/2015	Boehringer Ingelheim GmbH		Empagliflozin/Metformin IR FDC	Endocrine	Diabetes Mellitus, Type II

Source: BioMedTracker

FIGURE 8. Upcoming PDUFA Dates (continued)

Expected Date	Company	Symbol	Drug	Disease Group	Indication
8/17/2015	Sprout Pharmaceuticals, Inc.		Girosa	Urology	Female Sexual Arousal Disorder
8/21/2015	Alkermes plc	ALKS	Aripiprazole Lauroxil (monthly)	Psychiatry	Schizophrenia
8/21/2015	Boehringer Ingelheim GmbH		Empagliflozin/Metformin IR FDC	Endocrine	Diabetes Mellitus, Type II
8/27/2015	Amgen, Inc.	AMGN	Repatha	Cardiovascular	Dyslipidemia / Hypercholesterolemia
8/28/2015	Alexion Pharmaceuticals, Inc.	ALXN	Strensiq	Endocrine	Hypophosphatasia
Now-08/31/2015	Eagle Pharmaceuticals, Inc.	EGRX	EP-3101	Oncology	Chronic Lymphocytic Leukemia (CLL)/Small Cell Lymphocytic Non-Small Cell Lung Cancer (NSCLC)
08/01/2015-08/31/2015	Eli Lilly & Company	LLY	Necitumumab	Oncology	Non-Small Cell Lung Cancer (NSCLC)
08/01/2015-08/31/2015	Novartis AG	NVS	LCZ696	Cardiovascular	Congestive Heart Failure (CHF)
9/4/2015	New Haven Pharmaceuticals Inc.		Durlaza	Cardiovascular	Cardiovascular Disease
9/4/2015	Tesaro, Inc.	TSRO	Rolapitant	Oncology	Chemotherapy Induced Nausea and Vomiting (CINV)
08/06/2015-09/05/2015	Merck & Co., Inc.	MRK	V419	Infectious disease	Hepatitis B Prevention (Vaccines, Antiviral)
9/8/2015	Synageva BioPharma Corp.	GEVA	Kanuma	Metabolic	Lysosomal Acid Lipase Deficiency
08/07/2015-09/09/2015	AbbVie Inc.	ABBV	Paritaprevir	Infectious disease	Hepatitis C (HCV) (Antiviral)
08/07/2015-09/09/2015	AbbVie Inc.	ABBV	Ombitasvir	Infectious disease	Hepatitis C (HCV) (Antiviral)
9/11/2015	Bristol-Myers Squibb Company	BMJ	Daclatasvir	Infectious disease	Hepatitis C (HCV) (Antiviral)
9/21/2015	Inspirin Delivery Technologies, LLC		MorphaBond ER	Neurology	Chronic Pain
09/18/2015-09/30/2015	AstraZeneca PLC	AZN	Iressa	Oncology	Non-Small Cell Lung Cancer (NSCLC)
Now-09/30/2015	Neos Therapeutics, Inc.		NT0202	Psychiatry	Attention Deficit Hyperactivity Disorder (ADHD)
09/01/2015-09/30/2015	Novartis AG	NVS	LDE225	Oncology	Skin Cancer - Basal Cell Carcinoma (BCC)
10/7/2015	Novo Nordisk A/S	NVO	Ryzodeg	Endocrine	Diabetes Mellitus, Type II
10/7/2015	Novo Nordisk A/S	NVO	Tresiba	Endocrine	Diabetes Mellitus, Type II
10/15/2015	Collegium Pharmaceutical, Inc.		Xtampza ER	Neurology	Chronic Pain
08/17/2015-10/16/2015	Apotex Inc.		Biosimilar Pegfilgrastim (Apotex)	Hematology	Neutropenia / Leukopenia
10/16/2015	Hospira, Inc.	HSP	Retacrit	Hematology	Anemia Due to Chronic Renal Failure, Dialysis-Dependent
10/21/2015	Relypsa, Inc.	RLYP	Patiomer	Endocrine	Hyperkalemia
10/23/2015	BioDelivery Sciences International, Inc.	BDSI	Belbuc	Neurology	Chronic Pain
10/23/2015	Shire Pharmaceuticals Group PLC	SHPG	Lifitegrast	Ophthalmology	Dry Eye (Ophthalmology)

Source: BioMedTracker

FIGURE 9. Upcoming PDUFA Dates (continued)

Expected Date	Company	Symbol	Drug	Disease Group	Indication
10/27/2015	Amgen, Inc.	AMGN	T-VEC	Oncology	Melanoma
10/27/2015	Merrimack Pharmaceuticals, Inc.	MACK	MM-398	Oncology	Pancreatic Cancer
09/30/2015-10/30/2015	Apotex Inc.		Biosimilar Filgrastim (Apotex)	Hematology	Neutropenia / Leukopenia
10/01/2015-10/31/2015	Teva Pharmaceutical Industries Ltd.	TEVA	CEP-33237	Neurology	Chronic Pain
11/2/2015	Boehringer Ingelheim GmbH		Idarucizumab	Not Specified	Drug Toxicity
11/5/2015	Gilead Sciences, Inc.	GILD	Emtricitabine/Cobicistat/Elvitegravir/Tenofovir Alafenamide	Infectious disease	HIV / AIDS
11/5/2015	GlaxoSmithKline plc	GSK	Bosatria	Respiratory	Asthma
11/12/2015	Neos Therapeutics, Inc.		NT0102	Psychiatry	Attention Deficit Hyperactivity Disorder (ADHD)
10/01/2015-11/30/2015	Iroko Pharmaceuticals, LLC		Meloxicam SoluMatrix	Neurology	Arthritis Pain
11/30/2015	Repros Therapeutics, Inc.	RPRX	Androxal	Endocrine	Hypogonadism
12/1/2015	Baxter International Inc.	BAX	BAX 855	Hematology	Hemophilia A
11/07/2015-12/07/2015	UCB SA	UCB:BB	Rikelta	Neurology	Partial Seizures (Epilepsy)
12/16/2015	CSL Limited	CSL:AU	PROLONG-9	Hematology	Hemophilia B
12/17/2015	Bayer AG	BAYRY	BAY 81-8973	Hematology	Hemophilia A
12/17/2015	Teva Pharmaceutical Industries Ltd.	TEVA	EP-3102	Oncology	Indolent Non-Hodgkin's Lymphoma - NHL
12/17/2015	Teva Pharmaceutical Industries Ltd.	TEVA	EP-3102	Oncology	Chronic Lymphocytic Leukemia (CLL)/Small Cell Lymphocytic
12/18/2015	Otsuka Holdings Co., Ltd.	4768:JP	TAS-102	Oncology	Colorectal Cancer (CRC)
12/22/2015	Actelion Pharmaceuticals Ltd.	ALIOF	Uptravi	Cardiovascular	Pulmonary Arterial Hypertension (PAH)
12/22/2015	Baxter International Inc.	BAX	BAX 111	Hematology	Von Willebrand Disease
12/23/2015	Otonomy, Inc.	OTIC	AuriPro	Infectious disease	Ear Infections (Antibacterial)
12/24/2015	BioMarin Pharmaceutical Inc.	BMRN	Drisapersen	Metabolic	Muscular Dystrophy
12/29/2015	Newron Pharmaceuticals SpA	NWRN:SW	Xadago	Neurology	Parkinson's Disease (PD)
10/01/2015-12/31/2015	AstraZeneca PLC	AZN	SaxaDapa FDC	Endocrine	Diabetes Mellitus, Type II

Source: BioMedTracker

FIGURE 10. Upcoming PDUFA Dates (continued)

Expected Date	Company	Symbol	Drug	Disease Group	Indication
11/5/2015	GlaxoSmithKline plc	GSK	Bosatria	Respiratory	Asthma
11/12/2015	Neos Therapeutics, Inc.		NT0102	Psychiatry	Attention Deficit Hyperactivity Disorder (ADHD)
10/01/2015-11/30/2015	Iroko Pharmaceuticals, LLC		Meloxicam SoluMatrix	Neurology	Arthritis Pain
11/30/2015	Repros Therapeutics, Inc.	RPRX	Androxal	Endocrine	Hypogonadism
12/1/2015	Baxter International Inc.	BAX	BAX 855	Hematology	Hemophilia A
11/07/2015-12/07/2015	UCB SA	UCB:BB	Rikelta	Neurology	Partial Seizures (Epilepsy)
12/16/2015	CSL Limited	CSL:AU	PROLONG-9	Hematology	Hemophilia B
12/17/2015	Bayer AG	BAYRY	BAY 81-8973	Hematology	Hemophilia A
12/17/2015	Teva Pharmaceutical Industries Ltd.	TEVA	EP-3102	Oncology	Indolent Non-Hodgkin's Lymphoma - NHL
12/17/2015	Teva Pharmaceutical Industries Ltd.	TEVA	EP-3102	Oncology	Chronic Lymphocytic Leukemia (CLL)/Small Cell Lymphocytic
12/18/2015	Otsuka Holdings Co., Ltd.	4768:JP	TAS-102	Oncology	Colorectal Cancer (CRC)
12/22/2015	Actelion Pharmaceuticals Ltd.	ALIOF	Uptravi	Cardiovascular	Pulmonary Arterial Hypertension (PAH)
12/22/2015	Baxter International Inc.	BAX	BAX 111	Hematology	Von Willebrand Disease
12/23/2015	Otonomy, Inc.	OTIC	AuriPro	Infectious disease	Ear Infections (Antibacterial)
12/24/2015	BioMarin Pharmaceutical Inc.	BMRN	Drisapersen	Metabolic	Muscular Dystrophy
12/29/2015	Newron Pharmaceuticals SpA	NWRN:SW	Xadago	Neurology	Parkinson's Disease (PD)
10/01/2015-12/31/2015	AstraZeneca PLC	AZN	SaxaDapa FDC	Endocrine	Diabetes Mellitus, Type II
12/01/2015-12/31/2015	AstraZeneca PLC	AZN	Lesinurad	Autoimmune/ immunology	Gout
11/01/2015-12/31/2015	Novartis AG	NVS	Fluad	Infectious disease	Seasonal Influenza Vaccines
12/01/2015-12/31/2015	Novartis AG	NVS	QVA149	Respiratory	Chronic Obstructive Pulmonary Disease (COPD)
12/01/2015-12/31/2015	Novartis AG	NVS	NVA237	Respiratory	Chronic Obstructive Pulmonary Disease (COPD)
07/01/2015-12/31/2015	RedHill Biopharma Ltd.	RDHL	VersaFilm	Neurology	Migraine and Other Headaches
1/27/2016	Immune Response BioPharma, Inc.		Remune	Infectious disease	HIV / AIDS
2/5/2016	Dr. Reddy's Laboratories	RDY	DFD-01	Autoimmune/ immunology	Psoriasis
2/5/2016	Dr. Reddy's Laboratories	RDY	DFD-09	Dermatology	Rosacea
2/5/2016	Dr. Reddy's Laboratories	RDY	DFN-11	Neurology	Migraine and Other Headaches
01/01/2016-03/31/2016	Eli Lilly & Company	LLY	Ixekizumab	Autoimmune/ immunology	Psoriasis
4/7/2016	Gilead Sciences, Inc.	GILD	Emtricitabine/tenofovir alafenamide	Infectious disease	HIV / AIDS
5/2/2016	Actavis plc	ACT	Rosuvastatin Zinc	Cardiovascular	Dyslipidemia / Hypercholesterolemia

Source: BioMedTracker

FIGURE 11. Upcoming Medical Conferences, Congresses, and Meetings**Medical Conferences and Meetings**

Dates	Event
May 29 - Jun 2	ASCO Annual Meeting 2015 (Chicago) http://am.asco.org/
June 5-9	ADA - American Diabetes Association - 75th Scientific Sessions (Boston) http://professional.diabetes.org/Congress_Display.aspx?TYP=9&CID=95010
Jun 6 - 10	Society of Nuclear Medicine - Annual Meeting (Baltimore, MD) http://www.snmml.org/AM?navItemNumber=581
Jun 7 - 10	AACR Metabolism and Cancer (Bellevue, Washington) http://www.aacr.org/Meetings/Pages/MeetingDetail.aspx?EventItemID=32&DetailItemID=131#.VMwHU0fF809
Jun 10 - 13	European League Against Rheumatism (Rome) http://congress.eular.org/
Jun 11-14	American Diabetes Association (ADA) (San Francisco) http://scientificsessions.diabetes.org/
Jun 11-14	20th Congress of European Hematology Association (EHA) (Vienna, Austria) http://www.ehaweb.org/congress-and-events/20th-congress/
Jun 12 -15	European Hematology Association (Milan) http://www.ehaweb.org/congress-and-events/20th-congress/19th-congress/words-of-welcome/
Jun 24 - 27	International Society for Stem Cell Research (Stockholm) http://www.isscr.org/home/annual-meeting/isscr2015
Jun 20 - 23	1st Congress of the European Academy of Neurology (EAN) (Berlin, Germany) http://www.eaneurology.org/berlin2015/
Jul 18 - 23	Alzheimer's Association International Conference (Washington, DC) http://www.alz.org/aaic/
Jul 30 - Aug 1	16th Annual International Lung Cancer Congress® (Huntington Beach, CA) http://www.gotoper.com/conferences/ilc/meetings/16th-international-lung-cancer-congress
Aug 29 - Sep 2	European Society of Cardiology Congress 2015 (London) http://www.escardio.org/congresses/esc-2015/Pages/welcome.aspx?hit=dontmiss
Sep 1 - 4	Society for the Study of Inborn Errors of Metabolism (Lyon, France) http://www.ssiem2015.org/
Sep 6 - 9	16th World Conference on Lung Cancer (Denver, CO) https://www.iaslc.org/events/16th-world-conference-lung-cancer

Source: Meeting websites

FIGURE 12. Upcoming Medical Conferences, Congresses, and Meetings (continued)
Medical Conferences and Meetings

Dates	Event
Sep 14 - 18	26th International Complement Workshop (Kanazawa, Japan) http://www.complement.org/
Sep 16-19	High Blood Pressure Research (Washington, DC) http://my.americanheart.org/professional/Sessions/HBPR/HBPR_UCM_316905_SubHomePage.jsp
Sep 17 - 19	ASH Meeting on Hematologic Malignancies (Chicago) http://www.hematology.org/Malignancies/
Sep 25 - 27	ASCO Breast Cancer Symposium (San Francisco) http://breastcasym.org/
Sep 25-29	The European Cancer Congress 2015 (Vienna) http://www.europeancancercongress.org/
Sep 26-29	Heart Failure Society Annual Meeting (National Harbor, Maryland) http://www.hfsa.org/hfsa-wp/wp/upcoming-meetings/
Oct 6 - 10	American Society of Human Genetics 2015 (Baltimore, MD) http://www.ashg.org/2015meeting/
Oct 18-21	American Society for Radiation Oncology (San Antonio) https://www.astro.org/Meetings-and-Events/2015-Annual-Meeting/Index.aspx
Nov 3 - Nov 8	SITC's 30th Anniversary Annual Meeting (National Harbor, MD) http://www.sitcancer.org/sitc-meetings/sitc2015
Dec 8 - Dec 12	38th Annual San Antonio Breast Cancer Symposium (San Antonio, TX) http://www.sabcs.org/

Source: Meeting websites

FIGURE 13. Companies Trading Between 1 – 2x Cash (Cash, Cash Equivalents, and Marketable Securities)

Company	JMP Rating	Ticker	Price	Mkt Cap (\$ MM)	Cash & STI (\$ MM)	Mkt Cap to Cash
BIND Therapeutics Inc	MO	BIND-O	\$ 5.96	\$ 121.55	\$ 62.54	1.94
Rigel Pharmaceuticals Inc	NR	RIGL-O	\$ 3.49	\$ 307.62	\$ 161.16	1.91
Onconova Therapeutics Inc	NR	ONTX-O	\$ 2.74	\$ 59.47	\$ 33.70	1.76
Achaogen Inc	NR	AKAO-O	\$ 5.92	\$ 106.86	\$ 61.65	1.73
Ocera Therapeutics Inc	MO	OCRX-O	\$ 3.73	\$ 73.66	\$ 43.95	1.68
Enzon Pharmaceuticals Inc	NR	ENZN-O	\$ 1.31	\$ 57.88	\$ 34.80	1.66
Celsion Corp	NR	CLSN-O	\$ 2.47	\$ 49.41	\$ 30.01	1.65
Endocyte Inc	NR	ECYT-O	\$ 6.07	\$ 254.51	\$ 160.18	1.59
TETRALOGIC PHARMACEUTICALS CORP	NR	TLOG-O	\$ 2.32	\$ 66.32	\$ 45.66	1.45
OncoGenex Pharmaceuticals Inc	NR	OGXI-O	\$ 2.12	\$ 50.38	\$ 40.37	1.25
OXiGENE Inc	NR	OXGN-O	\$ 1.44	\$ 38.22	\$ 35.74	1.07
Palatin Technologies Inc	NR	PTN-A	\$ 0.88	\$ 37.25	\$ 36.73	1.01

Source: Thomson Reuters, JMP Securities LLC

FIGURE 14. Companies Trading Below 1x Cash (Cash, Cash Equivalents, and Marketable Securities)

Company	JMP Rating	Ticker	Price	Mkt Cap (\$ MM)	Cash (\$ MM)	Mkt Cap to Cash
Vivus Inc	MP	VVUS-O	\$ 2.53	\$ 262.65	\$ 287.25	0.91
Targacept Inc	NR	TRGT-O	\$ 2.75	\$ 93.15	\$ 104.76	0.89

Source: Thomson Reuters, JMP Securities LLC

FIGURE 15. Companies with Highest Short Interest

Company	JMP Rating	Ticker	Price	Mkt Cap (\$ MM)	S/O	Short-Interest	% Short
Myriad Genetics Inc	MP	MYGN-O	\$ 33.95	\$ 2,357.87	69.45	28.98	41.73%
Sarepta Therapeutics Inc	MO	SRPT-O	\$ 25.62	\$ 1,062.36	41.47	15.83	38.18%
Vivus Inc	MP	VVUS-O	\$ 2.53	\$ 262.65	103.82	36.08	34.75%
Spectrum Pharmaceuticals Inc	NR	SPPI-O	\$ 6.27	\$ 420.06	67.00	22.68	33.85%
Exact Sciences Corp	MO	EXAS-O	\$ 27.01	\$ 2,401.53	88.91	29.72	33.42%
Keryx Biopharmaceuticals Inc	MO	KERX-O	\$ 10.40	\$ 1,077.40	103.60	33.46	32.30%
Mannkind Corp	MP	MNKD-O	\$ 5.18	\$ 2,121.61	409.58	112.95	27.58%
Orexigen Therapeutics Inc	MO	OREX-O	\$ 4.90	\$ 613.58	125.22	32.80	26.19%
Exelixis Inc	NR	EXEL-O	\$ 3.15	\$ 617.15	195.92	50.75	25.90%
ARIAD Pharmaceuticals Inc	MO	ARIA-O	\$ 9.18	\$ 1,731.00	188.56	46.53	24.68%
Albany Molecular Research Inc	NR	AMRI-O	\$ 20.15	\$ 667.34	33.12	8.14	24.58%
Omeros Corp	NR	OMER-O	\$ 19.85	\$ 750.97	37.83	9.23	24.40%
Arrowhead Research Corp	NR	ARWR-O	\$ 6.30	\$ 374.84	59.50	14.44	24.28%
Aegerion Pharmaceuticals Inc	NR	AEGR-O	\$ 19.48	\$ 556.58	28.57	6.87	24.05%
Ligand Pharmaceuticals Inc	NR	LGND-O	\$ 88.11	\$ 1,732.84	19.67	4.68	23.77%
Theravance Inc	NR	THRX-O	\$ 16.90	\$ 1,975.15	116.87	27.45	23.49%
Vanda Pharmaceuticals Inc	MO	VNDA-O	\$ 10.09	\$ 421.75	41.80	9.57	22.89%
AMAG Pharmaceuticals Inc	NR	AMAG-O	\$ 69.58	\$ 2,124.46	30.53	6.96	22.79%
PDL BioPharma Inc	NR	PDLI-O	\$ 6.68	\$ 1,096.14	164.09	37.13	22.63%
AcelRx Pharmaceuticals Inc	MO	ACRX-O	\$ 3.50	\$ 155.17	44.34	9.99	22.53%
Rockwell Medical Inc	NR	RMTI-O	\$ 11.07	\$ 556.48	50.27	11.03	21.93%
ZIOPHARM Oncology Inc	MP	ZIOP-O	9.48	1215.6443	128.233	27.63	0.215438
Pacira Pharmaceuticals Inc	MP	PCRX-O	\$ 78.21	\$ 2,850.22	36.44	7.65	20.98%
CytRx Corp	NR	CYTR-O	\$ 4.11	\$ 229.02	55.72	11.18	20.07%
Depomed Inc	MO	DEPO-O	\$ 20.86	\$ 1,250.84	59.96	11.88	19.82%
Cerus Corp	NR	CERS-O	\$ 4.98	\$ 474.95	95.37	18.72	19.63%
Insys Therapeutics Inc	MO	INSY-O	\$ 59.60	\$ 2,128.50	35.71	6.88	19.27%
Quidel Corp	MP	QDEL-O	\$ 21.67	\$ 747.47	34.49	6.61	19.16%
Array Biopharma Inc	NR	ARRY-O	\$ 7.65	\$ 1,079.12	141.06	26.93	19.09%
Navidea Biopharmaceuticals Inc	NR	NAVB-A	\$ 1.25	\$ 188.41	150.73	28.31	18.78%
Acorda Therapeutics Inc	NR	ACOR-O	\$ 30.48	\$ 1,304.27	42.79	8.01	18.71%
Synergy Pharmaceuticals Inc	NR	SGYP-O	\$ 4.30	\$ 432.50	100.28	18.38	18.33%
Progenics Pharmaceuticals Inc	NR	PGNX-O	\$ 5.63	\$ 392.10	69.65	12.58	18.07%
Inovio Pharmaceuticals Inc	NR	INO-O	8.41	602.71143	71.666	12.93	0.180408
Raptor Pharmaceutical Corp	MO	RPTP-O	\$ 12.31	\$ 990.71	80.48	14.40	17.89%
XOMA Corp	NR	XOMA-O	3.520001	414.71021	117.815	20.95	0.177816
Enanta Pharmaceuticals Inc	MP	ENTA-O	\$ 40.88	\$ 764.13	18.69	3.32	17.77%
Merrimack Pharmaceuticals Inc	NR	MACK-O	\$ 11.80	\$ 1,298.29	110.02	18.85	17.13%
Geron Corp	NR	GERN-O	\$ 3.86	\$ 610.22	158.09	27.06	17.12%
Zogenix Inc	NR	ZGNX-O	1.7	260.71802	153.364	26.13	0.170388

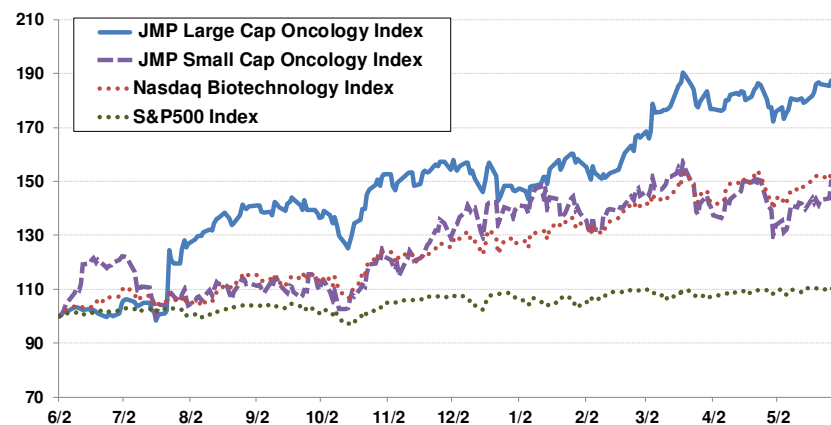
Source: Thomson Reuters, JMP Securities LLC

FIGURE 16. JMP Oncology Large Cap Index

Company	JMP Rating	Ticker	Price	Mkt Cap (\$ MM)	Performance				
					Week	Month	Qtr	YTD	LTM
Amgen Inc	NR	AMGN	\$ 156.26	\$ 118,808.13	-4.6%	-1.0%	-0.9%	-1.9%	32.0%
Bristol-Myers Squibb	NR	BMJ	\$ 64.60	\$ 107,692.57	-6.2%	1.4%	6.0%	9.4%	33.2%
Celgene Corp	MO	CELG	\$ 114.44	\$ 90,767.38	-1.5%	5.9%	-5.8%	2.3%	33.3%
Celldex Therapeutics	NR	CLDX	\$ 28.87	\$ 2,843.14	6.4%	20.3%	13.0%	58.2%	76.9%
Incyte Corp	MO	INCY	\$ 110.15	\$ 19,721.55	1.6%	13.4%	28.3%	50.7%	95.2%
Medivation Inc	MO	MDVN	\$ 132.05	\$ 10,391.55	0.6%	9.4%	12.4%	32.6%	71.3%
Puma Biotechnology	NR	PBYI	\$ 195.45	\$ 6,283.90	2.0%	8.2%	-8.2%	3.3%	196.1%
Pharmacyclics Inc	MO	PCYC	\$ 261.25	N/A	0.7%	2.0%	21.0%	113.7%	191.2%
Regeneron Pharmac	NR	REGN	\$ 512.56	\$ 52,935.85	-0.7%	12.0%	23.9%	24.9%	81.5%
Seattle Genetics Inc	NR	SGEN	\$ 43.09	\$ 5,381.37	-1.5%	25.5%	18.9%	34.1%	12.7%
JMP Large Cap Oncology Index			\$ 167.93	\$ 85,893.90	-0.5%	10.6%	9.7%	23.7%	74.1%
Nasdaq Biotechnology Index		NBI-O	\$ 3,821.68		2.6%	0.4%	8.7%	20.3%	56.3%
S&P500 Index		.SPX-UT	\$ 2,107.39		-0.7%	0.0%	-0.1%	2.4%	11.4%

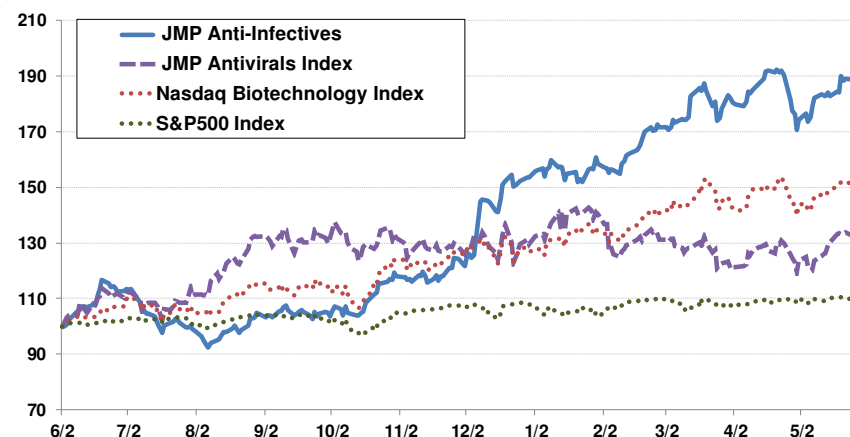
Source: Thomson Reuters, JMP Securities LLC

FIGURE 17. JMP Oncology Indices



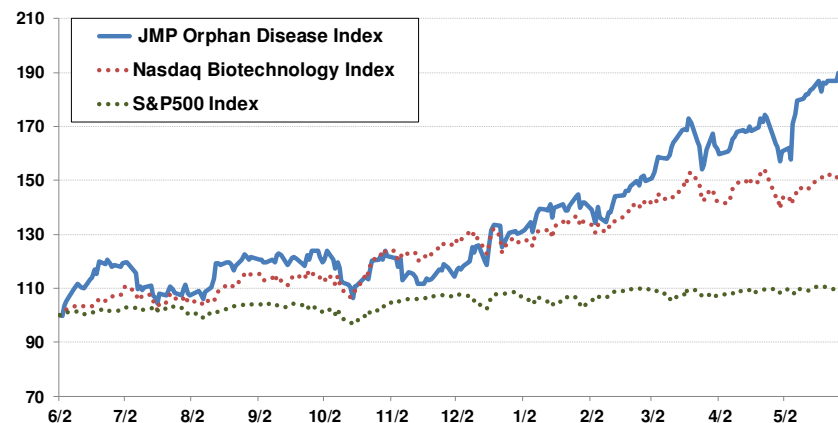
Source: Thomson Reuters, JMP Securities LLC

FIGURE 18. JMP Infectious Disease Indices



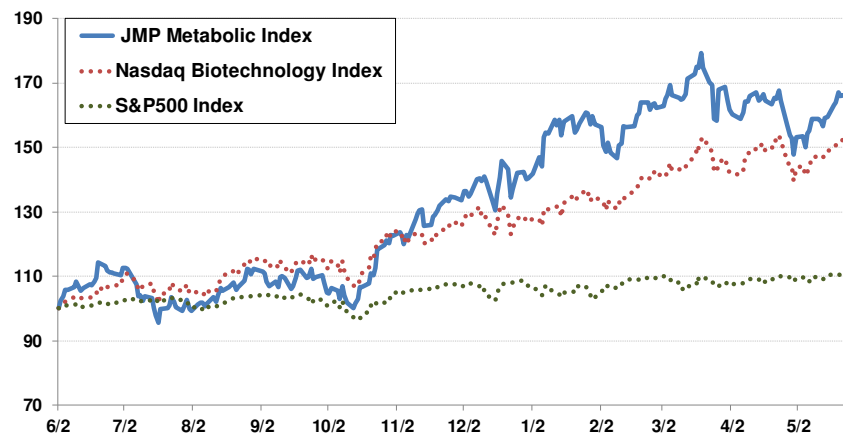
Source: Thomson Reuters, JMP Securities LLC

FIGURE 19. JMP Orphan Disease Index



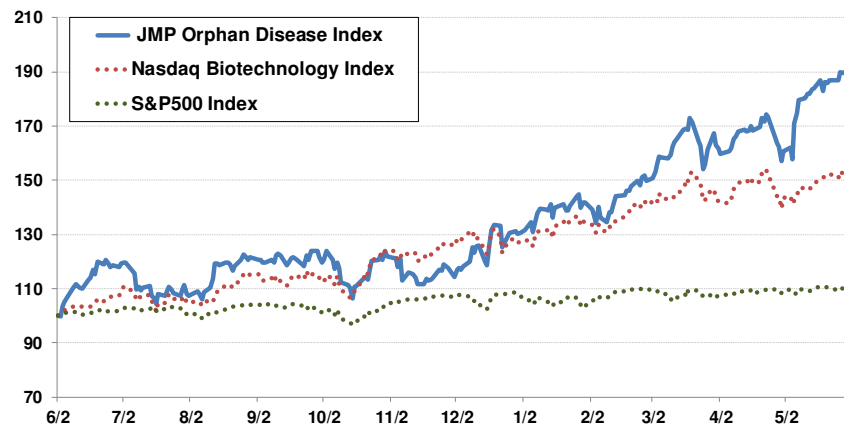
Source: Thomson Reuters, JMP Securities LLC

FIGURE 20. JMP Metabolic Index



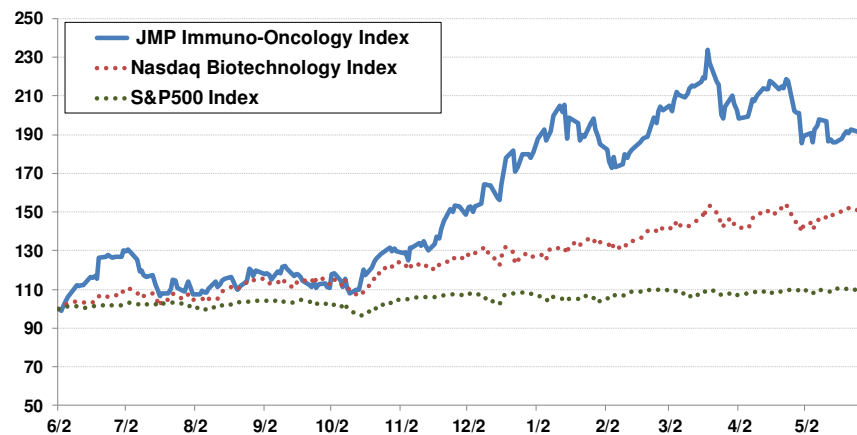
Source: Thomson Reuters, JMP Securities LLC

FIGURE 21. JMP Oligonucleotide Therapy Index



Source: Thomson Reuters, JMP Securities LLC

FIGURE 22. JMP Immuno-Oncology Index



Source: Thomson Reuters, JMP Securities LLC

FIGURE 23. JMP Oncology Small Cap Index

Company	JMP Rating	Ticker	Price	Mkt Cap (\$ MM)	Performance				
					Week	Month	Qtr	1-YEAR	LTM
Agenus Inc	MO	AGEN	\$ 8.18	\$ 674.91	23.4%	23.8%	66.9%	106.0%	154.0%
Agiros Pharmaceuticals	NR	AGIO	\$ 122.02	\$ 4,551.12	6.0%	32.1%	13.7%	8.9%	166.3%
ARIAD Pharmaceuticals	MO	ARIA	\$ 9.18	\$ 1,731.00	3.8%	5.9%	12.9%	33.6%	44.1%
Compugen Ltd	MO	CGEN	\$ 7.08	N/A	12.4%	10.5%	-15.3%	-15.0%	-21.2%
Curis Inc	NR	CRIS	\$ 3.37	\$ 432.50	8.7%	31.1%	9.4%	124.7%	81.2%
CTI BioPharma Corp	NR	CTIC	\$ 1.94	\$ 349.67	11.5%	9.0%	-17.1%	-17.8%	-31.0%
Cyclacel Pharmaceu	MO	CYCC	\$ 0.73	\$ 26.99	-11.2%	-15.4%	-51.5%	3.9%	-76.3%
Dendreon Corp	NR	DNDN	\$ 0.04	\$ 5.79	14.1%	-1.4%	-34.8%	-50.0%	-98.4%
Endocyte Inc	NR	ECYT	\$ 6.07	\$ 254.51	-3.0%	4.7%	4.7%	-3.5%	-7.9%
Epizyme Inc	MO	EPZM	\$ 18.97	\$ 781.65	-0.2%	16.3%	-19.3%	0.5%	-39.0%
Exelixis Inc	NR	EXEL	\$ 3.15	\$ 617.15	0.3%	22.6%	7.5%	118.8%	-7.1%
Five Prime Therapeu	NR	FPRX	\$ 25.64	\$ 657.94	28.3%	27.8%	-0.4%	-5.0%	64.9%
Galena Biopharma Ir	MO	GALE	\$ 1.57	\$ 253.89	18.0%	16.3%	-12.8%	4.0%	-48.7%
Geron Corp	NR	GERN	\$ 3.86	\$ 610.22	-4.0%	6.6%	27.8%	18.8%	27.3%
Immunogen Inc	NR	IMGN	\$ 8.98	\$ 773.94	1.8%	8.6%	18.2%	47.2%	-24.2%
Infinity Pharmaceutic	MP	INFI	\$ 12.96	\$ 635.59	0.7%	2.3%	-14.7%	-23.3%	1.7%
Karyopharm Therape	MO	KPTI	\$ 26.92	\$ 960.90	2.5%	-0.9%	-1.2%	-28.1%	-42.2%
Merrimack Pharmace	NR	MACK	\$ 11.80	\$ 1,298.29	-5.3%	6.3%	10.1%	4.4%	61.9%
Mirati Therapeutics I	NR	MRTX	\$ 36.66	\$ 593.17	41.9%	N/A	-11.1%	97.9%	83.3%
NEKTAR THERAPEUTIC	NR	NKTR	\$ 11.50	\$ 1,512.16	-0.7%	20.8%	-12.0%	-25.8%	-10.3%
OncoGenex Pharma	NR	OGXI	\$ 2.12	\$ 50.38	12.2%	5.5%	-7.6%	-7.4%	-43.2%
OncoMed Pharmace	NR	OMED	\$ 24.92	\$ 748.05	9.2%	3.9%	-0.2%	14.5%	7.0%
Onconova Therapeu	NR	ONTX	\$ 2.74	\$ 59.47	0.0%	18.1%	19.7%	-16.7%	-49.5%
Sunesis Pharmaceut	NR	SNSS	\$ 2.37	\$ 172.92	-2.5%	1.3%	6.8%	-7.1%	-63.7%
Synta Pharmaceuticals	MO	SNTA	\$ 2.14	\$ 287.66	-6.6%	-4.9%	-10.8%	-19.2%	-47.7%
Stemline Therapeuti	NR	STML	\$ 13.77	\$ 246.57	3.9%	-0.9%	-9.3%	-19.3%	-6.1%
TG Therapeutics Inc	NR	TGTX	\$ 15.74	\$ 796.98	-1.6%	12.8%	8.5%	-0.6%	67.6%
Threshold Pharmace	NR	THLD	\$ 3.89	\$ 277.49	-0.5%	9.9%	-11.0%	22.3%	-1.8%
TESARO Inc	NR	TSRO	\$ 58.76	\$ 2,350.48	5.3%	7.9%	10.2%	58.0%	88.9%
Verastem Inc	MO	VSTM	\$ 8.65	\$ 316.04	2.7%	4.2%	16.3%	-5.4%	-4.5%
Acceleron Pharma Ir	MO	XLRN	\$ 33.73	\$ 1,106.75	2.1%	22.0%	-17.0%	-13.4%	-0.7%
ZIOPHARM Oncolog	MP	ZIOP	\$ 9.48	\$ 1,215.64	0.4%	7.6%	-15.8%	87.0%	135.2%
JMP Small Cap Oncology Index			\$ 38.11	\$ 1,717.63	5.4%	10.8%	1.1%	15.4%	11.2%
Nasdaq Biotechnology Index	NBI-O		\$ 3,821.68		2.6%	0.4%	8.7%	20.3%	56.3%
S&P500 Index	.SPX-UT		\$ 2,107.39		-0.7%	0.0%	-0.1%	2.4%	11.4%

Source: Thomson Reuters, JMP Securities LLC

FIGURE 24. JMP Anti-Infective Index

Company	JMP Rating	Ticker	Price	Mkt Cap (\$ MM)	Performance				
					Week	Month	Qtr	1-YEAR	LTM
Achaogen Inc	NR	AKAO	\$ 5.92	\$ 106.86	0.0%	5.9%	-47.0%	-54.6%	-57.6%
Anacor Pharmaceuticals II	NR	ANAC	\$ 71.22	\$ 3,116.10	12.3%	35.2%	63.7%	120.8%	301.7%
Cubist Pharmaceuticals Inc	NR	CBST	\$ 101.94	N/A	0.0%	0.0%	0.0%	1.3%	46.0%
Cempra Inc	NR	CEMP	\$ 36.71	\$ 1,600.14	0.2%	16.6%	10.8%	56.1%	242.1%
Dipexium Pharmaceuticals	NR	DPRX	\$ 12.79	\$ 109.54	11.2%	7.6%	-10.1%	12.3%	31.9%
Genocea Biosciences Inc	NR	GNCA	\$ 10.61	\$ 256.23	-3.3%	3.6%	22.9%	51.6%	-43.4%
Insmed Inc	MO	INSM	\$ 21.94	\$ 1,349.35	-3.6%	9.5%	18.3%	41.8%	9.8%
KaloBios Pharmaceuticals	MP	KBIO	\$ 0.63	\$ 20.85	14.5%	30.4%	15.9%	-63.5%	-72.3%
NovaBay Pharmaceuticals	NR	NBY	\$ 0.77	\$ 47.43	12.3%	23.0%	43.5%	23.0%	-1.9%
PolyMedix Inc	NR	PYMX	\$ 0.01	\$ 0.03	0.0%	0.0%	-3.4%	0.0%	-30.0%
Soligenix Inc	NR	SNGX	\$ 1.60	\$ 41.14	-5.3%	-5.9%	-1.2%	63.3%	-24.9%
Titan Pharmaceuticals Inc	NR	TTNP	\$ 0.80	\$ 88.26	3.2%	15.9%	24.2%	73.2%	2.0%
Tetraphase Pharmaceuticals	MO	TTPH	\$ 42.88	\$ 1,549.25	-2.8%	21.5%	8.7%	8.0%	217.9%
JMP Anti-Infectives			\$ 73.12	\$ 1,032.99	3.5%	14.9%	13.6%	30.2%	86.9%
Nasdaq Biotechnology Index			NBI-O	\$ 3,821.68	2.6%	0.4%	8.7%	20.3%	56.3%
S&P500 Index			.SPX-UT	\$ 2,107.39	-0.7%	0.0%	-0.1%	2.4%	11.4%

Source: Thomson Reuters, JMP Securities LLC

FIGURE 25. JMP Antiviral Index

Company	JMP Rating	Ticker	Price	Mkt Cap (\$ MM)	Performance				
					Week	Month	Qtr	1-YEAR	LTM
Achillion Pharmaceuticals	MO	ACHN	\$ 9.89	\$ 1,162.66	8.6%	13.0%	-18.5%	-19.3%	30.6%
Arrowhead Research Corp	NR	ARWR	\$ 6.30	\$ 374.84	2.3%	-8.7%	-16.3%	-14.6%	-56.0%
Biota Pharmaceuticals Inc	NR	BOTA	\$ 2.20	\$ 77.27	-0.9%	-3.1%	-12.7%	-1.8%	-22.8%
Chimerix Inc	NR	CMRX	\$ 41.85	\$ 1,729.10	-0.9%	23.1%	3.4%	3.9%	90.7%
Enanta Pharmaceuticals II	MP	ENTA	\$ 40.88	\$ 764.13	0.9%	19.4%	14.1%	-19.6%	-5.1%
Gilead Sciences Inc	NR	GILD	\$ 112.27	\$ 164,992.50	0.9%	11.7%	8.4%	19.1%	35.4%
NanoViricides Inc	NR	NNVC	\$ 1.55	\$ 88.58	-3.1%	-9.9%	-41.3%	-43.0%	-63.4%
Novavax Inc	NR	NVAX	\$ 9.00	\$ 2,412.27	1.6%	16.4%	-1.6%	51.8%	94.8%
Tekmira Pharmaceuticals	NR	TKMR	\$ 13.97	\$ 757.51	0.6%	-9.7%	-23.1%	-7.8%	7.0%
JMP Antivirals Index			\$ 108.34	\$ 158,007.52	1.1%	5.8%	-9.7%	-3.5%	46.0%
Nasdaq Biotechnology Index			NBI-O	\$ 3,821.68	2.6%	0.4%	8.7%	20.3%	56.3%
S&P500 Index			.SPX-UT	\$ 2,107.39	-0.7%	0.0%	-0.1%	2.4%	11.4%

Source: Thomson Reuters, JMP Securities LLC

FIGURE 26. JMP Orphan Disease Index

Company	JMP Rating	Ticker	Price	Mkt Cap (\$ MM)	Performance				
					Week	Month	Qtr	1-YEAR	LTM
Aegerion Pharmaceuticals	NR	AEGR	\$ 19.48	\$ 556.58	-5.5%	-16.3%	-28.4%	-7.0%	-39.3%
Agios Pharmaceuticals Inc	NR	AGIO	\$ 122.02	\$ 4,551.12	6.0%	32.1%	13.7%	8.9%	166.3%
Applied Genetic Technology	NR	AGTC	\$ 20.05	\$ 330.34	4.6%	4.8%	-1.2%	-4.6%	-13.2%
Alnylam Pharmaceuticals	MO	ALNY	\$ 131.09	\$ 11,048.61	5.0%	28.7%	29.1%	35.1%	107.5%
Anthera Pharmaceuticals	NR	ANTH	\$ 5.58	\$ 199.86	17.5%	30.1%	10.5%	253.2%	64.6%
Auspex Pharmaceuticals Inc	NR	ASPX	\$ 100.96	N/A	0.0%	0.1%	50.1%	92.4%	353.3%
BioCryst Pharmaceuticals	MO	BCRX	\$ 11.21	\$ 812.96	-0.8%	20.7%	9.9%	-7.8%	-12.1%
bluebird bio Inc	NR	BLUE	\$ 194.25	\$ 6,377.12	12.3%	45.8%	103.8%	111.8%	403.6%
BioMarin Pharmaceutical Inc	NR	BMRN	\$ 125.57	\$ 20,133.49	-1.0%	12.1%	17.3%	38.9%	101.8%
Catalyst Pharmaceutical Inc	NR	CPRX	\$ 3.95	\$ 323.94	0.3%	25.0%	5.1%	33.0%	56.1%
Cytokinetics Inc	MO	CYTK	\$ 6.37	\$ 246.63	1.6%	1.3%	-17.4%	-20.5%	33.3%
Dicerna Pharmaceuticals Inc	NR	DRNA	\$ 16.54	\$ 340.34	1.4%	-17.6%	-32.3%	0.4%	-26.7%
Fate Therapeutics Inc	NR	FATE	\$ 6.26	\$ 166.75	6.1%	28.3%	25.7%	24.5%	-0.8%
Amicus Therapeutics Inc	NR	FOLD	\$ 12.31	\$ 1,186.94	8.1%	22.4%	40.5%	48.0%	268.6%
Synageva Biopharma Corp	NR	GEVA	\$ 213.41	\$ 7,930.96	-1.1%	132.1%	116.2%	130.0%	103.6%
Horizon Therapeutics Inc	MO	HPTX	\$ 45.99	N/A	0.0%	0.1%	55.6%	91.6%	76.2%
Intercept Pharmaceuticals	MO	ICPT	\$ 255.20	\$ 6,143.13	-4.0%	0.9%	15.3%	63.6%	7.8%
Isis Pharmaceuticals Inc	NR	ISIS	\$ 67.32	\$ 8,059.10	0.2%	18.7%	-1.8%	9.0%	95.4%
Ocera Therapeutics Inc	MO	OCRX	\$ 3.73	\$ 73.66	3.9%	10.4%	-33.9%	-41.4%	-51.2%
Protilix Biotherapeutics Inc	NR	PLX	\$ 1.94	\$ 181.59	-12.6%	-11.8%	1.0%	5.4%	-46.8%
Prothena Corporation PLC	NR	PRTA	\$ 39.44	\$ 1,233.92	17.7%	21.7%	48.4%	90.0%	74.9%
PTC Therapeutics Inc	NR	PTCT	\$ 58.09	\$ 1,966.25	5.2%	-1.1%	-18.6%	12.2%	122.2%
Uniqure NV	NR	QURE	\$ 28.74	\$ 615.90	7.8%	14.7%	23.7%	94.1%	111.5%
Ultragenyx Pharmaceuticals	NR	RARE	\$ 87.00	\$ 3,123.53	2.5%	54.2%	60.3%	98.3%	93.8%
Raptor Pharmaceutical Corp	MO	RPTP	\$ 12.31	\$ 990.71	3.4%	21.6%	32.8%	17.0%	6.6%
SHIRE PLC	NR	SHPG	\$ 260.15	\$ 33,339.57	0.8%	6.8%	7.5%	22.4%	10.5%
Sarepta Therapeutics Inc	MO	SRPT	\$ 25.62	\$ 1,062.36	5.6%	110.0%	84.3%	77.1%	-14.0%
Vanda Pharmaceuticals Inc	MO	VNDA	\$ 10.09	\$ 421.75	-1.7%	10.3%	-6.2%	-29.5%	-37.6%
Vertex Pharmaceuticals Inc	MO	VRTX	\$ 128.29	\$ 31,270.96	2.6%	4.1%	7.4%	8.0%	35.5%
JMP Orphan Disease Index			\$ 168.96	\$ 26,469.80	3.2%	22.6%	19.0%	39.6%	103.5%
Nasdaq Biotechnology Index		NBI-O	\$ 3,821.68		2.6%	0.4%	8.7%	20.3%	56.3%
S&P500 Index		.SPX-UT	\$ 2,107.39		-0.7%	0.0%	-0.1%	2.4%	11.4%

Source: Thomson Reuters, JMP Securities LLC

FIGURE 27. JMP Metabolic Disease Index

Company	JMP Rating	Ticker	Price	Mkt Cap (\$ MM)	Performance				
					Week	Month	Qtr	1-YEAR	LTM
Alkermes Plc	NR	ALKS	\$ 61.10	\$ 9,104.67	-1.1%	10.3%	-13.0%	4.3%	21.4%
Arena Pharmaceuticals Inc	MP	ARNA	\$ 3.93	\$ 950.01	-6.5%	-10.0%	-13.0%	13.1%	-33.0%
Biodel Inc	MO	BIOD	\$ 1.16	\$ 72.06	1.8%	0.9%	-14.7%	-12.8%	-46.3%
BioMarin Pharmaceutical Inc	NR	BMRN	\$ 125.57	\$ 20,133.49	-1.0%	12.1%	17.3%	38.9%	101.8%
Isis Pharmaceuticals Inc	NR	ISIS	\$ 67.32	\$ 8,059.10	0.2%	18.7%	-1.8%	9.0%	95.4%
Mannkind Corp	MP	MNKD	\$ 5.18	\$ 2,121.61	11.9%	20.7%	-20.6%	-0.7%	-52.7%
Orexigen Therapeutics Inc	MO	OREX	\$ 4.90	\$ 613.58	-2.0%	-25.4%	-13.1%	-19.1%	-20.7%
Transition Therapeutics Inc	MO	TTHI	\$ 7.70	\$ 359.84	11.3%	12.9%	12.6%	12.6%	14.6%
Vivus Inc	MP	VVUS	\$ 2.53	\$ 262.65	-1.9%	13.5%	-3.1%	-12.2%	-52.4%
XOMA Corp	NR	XOMA	\$ 3.52	\$ 414.71	3.8%	17.3%	-4.6%	-1.9%	-23.3%
JMP Metabolic Index			\$ 86.84	\$ 13,309.49	1.6%	7.1%	-5.4%	3.1%	12.0%
Nasdaq Biotechnology Index		NBI-O	\$ 3,821.68		2.6%	0.4%	8.7%	20.3%	56.3%
S&P500 Index		.SPX-UT	\$ 2,107.39		-0.7%	0.0%	-0.1%	2.4%	11.4%

Source: Thomson Reuters, JMP Securities LLC

FIGURE 28. JMP Oligonucleotide Therapy Index

Company	JMP Rating	Ticker	Price	Mkt Cap (\$ MM)	Performance				
					Week	Month	Qtr	1-YEAR	LTM
Alnylam Pharmaceuticals	MO	ALNY	\$ 131.09	\$ 11,048.61	5.0%	28.7%	29.1%	35.1%	107.5%
Regulus Therapeutics Inc	NR	RGLS	\$ 14.12	\$ 720.37	10.7%	12.5%	-23.8%	-12.0%	75.6%
Arrowhead Research Corp	NR	ARWR	\$ 6.30	\$ 374.84	2.3%	-8.7%	-16.3%	-14.6%	-56.0%
Dicerna Pharmaceuticals	NR	DRNA	\$ 16.54	\$ 340.34	1.4%	-17.6%	-32.3%	0.4%	-26.7%
Tekmira Pharmaceuticals	NR	TKMR	\$ 13.97	\$ 757.51	0.6%	-9.7%	-23.1%	-7.8%	7.0%
Sangamo BioSciences Inc	MO	SGMO	\$ 12.25	\$ 852.39	-1.6%	-1.0%	-27.2%	-19.5%	-19.8%
JMP Oligonucleotide Therapy Index			\$ 105.54	\$ 8,808.50	3.1%	0.7%	-15.6%	-3.0%	31.1%
Nasdaq Biotechnology Index		NBI-O	\$ 3,821.68		2.6%	0.4%	8.7%	20.3%	56.3%
S&P500 Index		.SPX-UT	\$ 2,107.39		-0.7%	0.0%	-0.1%	2.4%	11.4%

Source: Thomson Reuters, JMP Securities LLC

FIGURE 29. JMP Immuno-Oncology Therapy Index

Company	JMP Rating	Ticker	Price	Mkt Cap (\$ MM)	Performance				
					Week	Month	Qtr	1-YEAR	LTM
Celldex Therapeutics Inc	NR	CLDX	\$ 28.87	\$ 2,843.14	6.4%	20.3%	13.0%	58.2%	76.9%
Fate Therapeutics Inc	NR	FATE	\$ 6.26	\$ 166.75	6.1%	28.3%	25.7%	24.5%	-0.8%
Agenus Inc	MO	AGEN	\$ 8.18	\$ 674.91	23.4%	23.8%	66.9%	106.0%	154.0%
Xencor Inc	NR	XNCR	\$ 18.14	\$ 732.11	8.0%	27.6%	16.3%	13.1%	56.1%
Five Prime Therapeutic	NR	FPRX	\$ 25.64	\$ 657.94	28.3%	27.8%	-0.4%	-5.0%	64.9%
Lion Biotechnologies Inc	NR	LBIO	\$ 11.19	\$ 503.88	4.9%	-6.2%	24.6%	42.2%	74.8%
MacroGenics Inc	NR	MGNX	\$ 32.35	\$ 972.04	3.9%	13.1%	-6.4%	-7.8%	48.9%
NewLink Genetics Corp	NR	NLNK	\$ 43.15	\$ 1,233.93	2.8%	-3.3%	0.2%	8.6%	62.5%
Stemline Therapeutics	NR	STML	\$ 13.77	\$ 246.57	3.9%	-0.9%	-9.3%	-19.3%	-6.1%
Kite Pharma Inc	NR	KITE	\$ 55.15	\$ 2,374.73	5.4%	9.5%	-15.7%	-4.4%	90.7%
Compugen Ltd	MO	CGEN	\$ 7.08	N/A	12.4%	10.5%	-15.3%	-15.0%	-21.2%
TESARO Inc	NR	TSRO	\$ 58.76	\$ 2,350.48	5.3%	7.9%	10.2%	58.0%	88.9%
JMP Immuno-Oncology Index			\$ 36.92	\$ 1,790.99	9.2%	13.2%	9.1%	21.6%	73.6%
Nasdaq Biotechnology Index		NBI-O	\$ 3,821.68		2.6%	0.4%	8.7%	20.3%	56.3%

Source: Thomson Reuters, JMP Securities LLC

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Market Outperform (MO): JMP Securities expects the stock price to outperform relevant market indices over the next 12 months.

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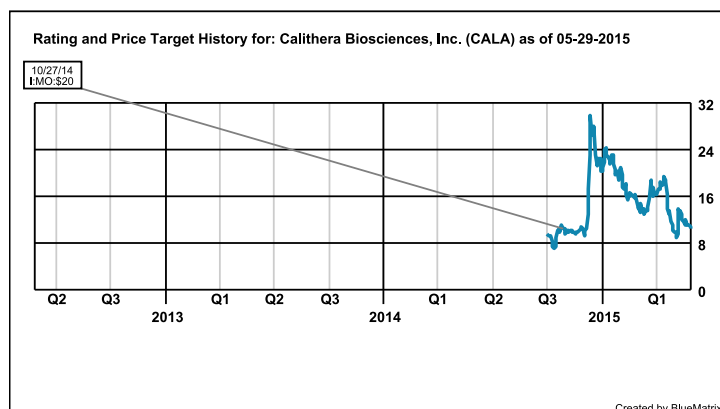
Market Underperform (MU): JMP Securities expects the stock price to underperform relevant market indices over the next 12 months.

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JMP Rating	Regulatory Equivalent	# Co's Under Coverage	% of Total	Regulatory Equivalent	# Co's Under Coverage	% of Total	# Co's Receiving IB Services in Past 12 Months	% of Co's With This Rating
MARKET OUTPERFORM	Buy	281	62.31%	Buy	281	62.31%	90	32.03%
MARKET PERFORM	Hold	140	31.04%	Hold	140	31.04%	17	12.14%
MARKET UNDERPERFORM	Sell	9	2.00%	Sell	9	2.00%	0	0%
COVERAGE IN TRANSITION		21	4.66%		21	4.66%	4	19.05%
TOTAL:		451	100%		451	100%	111	24.61%

Stock Price Chart of Rating and Target Price Changes:

Note: First annotation denotes initiation of coverage or 3 years, whichever is shorter. If no target price is listed, then the target price is N/A. In accordance with NASD Rule 2711, the chart(s) below reflect(s) price range and any changes to the rating or price target as of the end of the most recent calendar quarter. The action reflected in this note is not annotated in the stock price chart. Source: JMP Securities.



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Jeffrey H. Spurr
Director of Research
(415) 835-3903

RESEARCH PROFESSIONALS

FINANCIAL SERVICES

Alternative Asset Managers

Devin Ryan	(212) 906-3578
Brian McKenna	(212) 906-3545

Commercial & Specialty Finance

Christopher York	(415) 835-8965
Andrius Ellner	(415) 835-8962

Consumer Finance

David M. Scharf	(415) 835-8942
Douglas Greiner	(212) 906-3525

Financial Processing & Outsourcing

David M. Scharf	(415) 835-8942
Douglas Greiner	(212) 906-3525

Insurance

Matthew J. Carletti	(312) 768-1784
Christine Worley	(312) 768-1786
Solomon Mindlin	(212) 768-1788

Investment Banks & Brokers

Devin Ryan	(212) 906-3578
Brian McKenna	(212) 906-3545

Mortgage Operating Companies

REITs: Agency, Hybrid, & Commercial Mortgage

Steven C. DeLaney	(404) 848-7773
Trevor Cranston, CFA	(415) 869-4431
Charter Robinson	(757) 613-8955
Benjamin Zucker	(212) 906-3529

HEALTHCARE

Animal Health

J. T. Haresco, III, PhD	(415) 869-4477
-------------------------	----------------

Biotechnology

Liisa A. Bayko	(312) 768-1785
Masha Chapman	(415) 835-8944
Bhumika Sharma, PhD	(312) 768-1795
Jason N. Butler, PhD	(212) 906-3505
Harry Jenq, PhD	(212) 906-3509
Nazibur Rahman	(212) 906-3519
Michael G. King, Jr.	(212) 906-3520
Bryan Czyzewski, PhD	(212) 906-3577
Eric Ekland	(212) 906-3540
Naureen Quibria, PhD	(212) 906-3514

Healthcare Services & Facilities

Peter L. Martin, CFA	(415) 835-8904
Aaron Hecht	(415) 835-3963
Brian Riley	(415) 835-8908

Life Science Tools & Diagnostics

J. T. Haresco, III, PhD	(415) 869-4477
-------------------------	----------------

Medical Devices & Supplies

David Turkaly	(212) 906-3563
John Gillings	(212) 906-3564

Specialty Pharmaceuticals

REAL ESTATE

Housing & Land Development

Peter L. Martin, CFA	(415) 835-8904
Aaron Hecht	(415) 835-3963
Bharathwajan Iyengar	(415) 835-3902

Lodging & Leisure

Robert A. LaFleur	(212) 906-3510
Whitney Stevenson	(212) 906-3538

Property Services

Mitch Germain	(212) 906-3546
Peter Lunenburg	(212) 906-3537

REITs: Healthcare, Residential, & Specialty

Peter L. Martin, CFA	(415) 835-8904
Aaron Hecht	(415) 835-3963
Brian Riley	(415) 835-8908

REITs: Office, Industrial, & Diversified

Mitch Germain	(212) 906-3546
Peter Lunenburg	(212) 906-3537

Residential Services

Peter L. Martin, CFA	(415) 835-8904
Aaron Hecht	(415) 835-3963
Bharathwajan Iyengar	(415) 835-3902

TECHNOLOGY

Internet Security & Communications Infrastructure

Erik Suppiger	(415) 835-3918
John Lucia	(415) 835-3920

Internet & Digital Media

Ronald V. Josey III	(212) 906-3528
Ignatius Njoku	(415) 835-8960
Andrew Boone, CFA	(415) 835-3957
Shweta Khajuria	(415) 835-8916

Software

Patrick Walravens	(415) 835-8943
Peter Lowry	(415) 869-4418
Mathew Spencer	(415) 835-8930
Greg McDowell	(415) 835-3934
Rishi Jaluria	(415) 835-3961

Wireless & Cloud Computing Technologies

Alex Gauna	(415) 835-8998
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ADDITIONAL CONTACTS

Thomas R. Wright
Director of Equities
(212) 906-3599

Thomas Healy
Head of Institutional Sales
(212) 906-3533

600 Montgomery Street, Suite 1100
San Francisco, CA 94111
www.jmpsecurities.com