WASATCH
GLOBAL INVESTORS

Strands of DNA

WASATCH SMALL CAP GROWTH AND SMALL CAP ULTRA GROWTH STRATEGIES

Biotech: Lively Growth Prospect Or Financial Health Hazard?

Navigating an exciting and volatile industry.

SEPTEMBER 24, 2019

WHAT IS BIOTECHNOLOGY?

Decidedly few corners of the investing world are capable of engaging the imagination like biotechnology ("biotech"). With all due respect to companies within the utilities sector, for example, even the most electrifying power company cannot compete with the heady optimism surrounding companies promising to apply the power of science and discovery to change humanity for the better.

Broadly speaking, biotechnology entails harnessing cellular and molecular processes to create and manufacture biologic-based technologies and products

Key Considerations for Potential Biotech Investors

1. Biotechnology is a rapidly expanding field offering much promise to potential investors.
2. Biotech has been a positive contributor for the Wasatch strategies containing biotech holdings.
3. Wasatch's success in biotech is largely attributable to strong stock selection, which is perhaps more important in this industry compared to others, given its volatile nature.
4. While the industry promises prospective growth, it also carries the risk of significant volatility.
5. Biotech companies have unique needs and face unique risks of which investors must be aware.
6. Successful investing in biotech requires simultaneously getting both the science and the markets right.

that help improve lives and the health of the planet. To some extent, the growth of the industry has been so dramatic that scientific marvels have become almost commonplace.

In 1997, the successful cloning of Dolly the Sheep was an international sensation, sparking a global conversation about new frontiers in biotechnology, while seemingly blurring the lines between science fiction and scientific fact. Following the previously inconceivable conception, Dolly became a bona fide celebrity, her face adorning the front page of *Time* magazine, while commentators and decision-makers opined on how man's revolutionary dominion over DNA would play out. Six years later would mark another milestone—the completion of the Human Genome Project, a global scientific endeavor that took roughly 13 years and $3 billion to successfully complete.

The intervening years have seen related technologies dramatically exit the exclusive realm of PhDs and enter the average home. Today, armed with a pittance and a postage stamp, one can secure personal, on-demand genotyping in the same shopping trip, and with the same ease as securing a bundle of carrots from the produce department. The manipulation of DNA has become a rather common consumer-discretionary good, as it were.

This incredible acceleration of innovation is clear in the data and has coincided with a corresponding explosion of investor interest in the growing number of companies involved in these innovative developments. In 2001, according to the National Human Genome Institute at the National Institutes of Health, the cost of DNA sequencing per genome was roughly $100 million. As of 2019, the cost of DNA sequencing had come down to just over $1,000 per genome. As shown in ***Figure 2*** on page 3, the drop in cost has outpaced even Moore's Law, which was revised in 1975 to correctly predict that the number of transistors within a circuit (and, by rough conjunction, computer processing power) would double every two years or so.

WHY INVEST IN BIOTECH?

At Wasatch Global Investors, biotechnology has been a meaningful component of our Small Cap Growth and Small Cap Ultra Growth strategies over the past 10 years. Presented in ***Figure 1*** are the average annual total returns as of June 30, 2019 for the two mutual funds that represent these strategies. As you can see, both Wasatch funds

FIGURE 1: AVERAGE ANNUAL TOTAL RETURNS AND CUMULATIVE PERFORMANCE ENHANCEMENT OF BIOTECH AND PHARMA

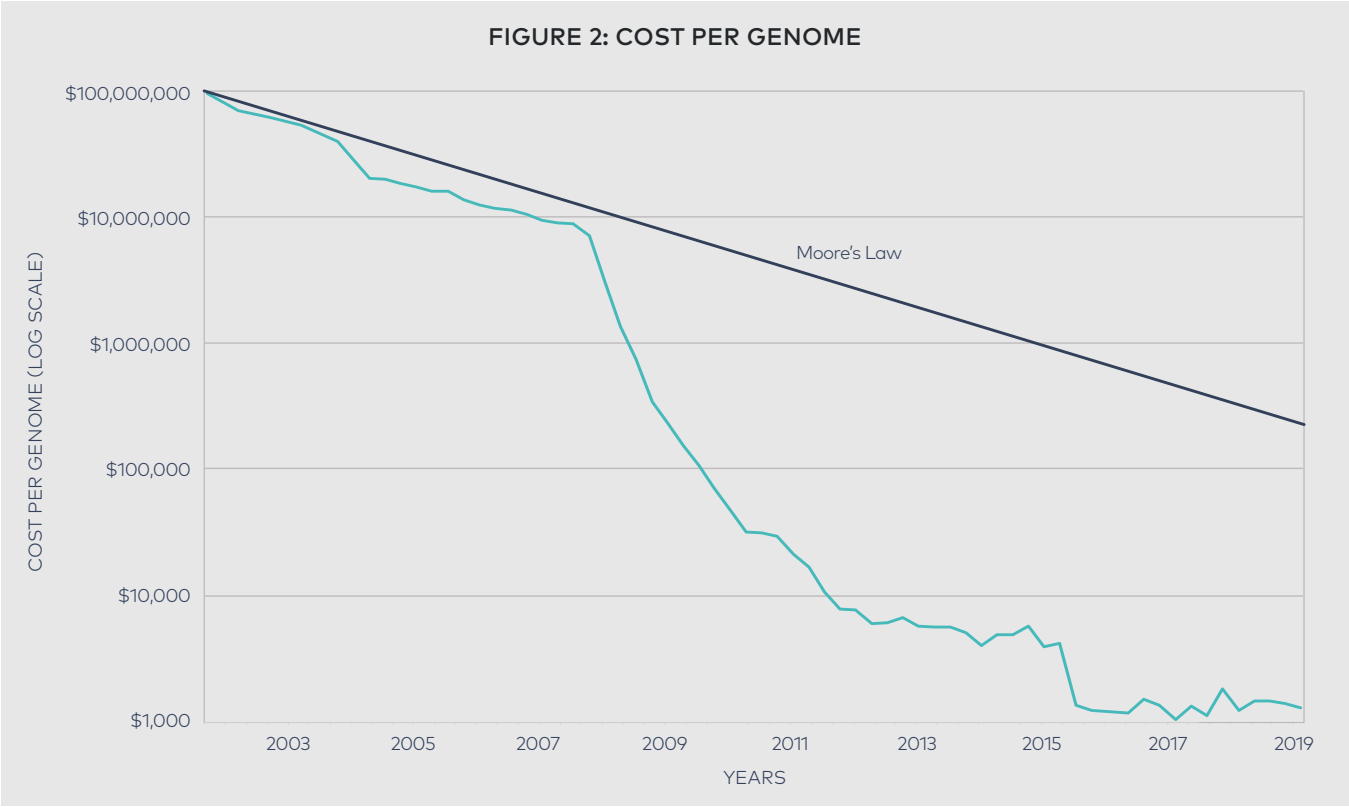
	AVERAGE ANNUAL TOTAL RETURNS			***CUMULATIVE*** (NOT ANNUALIZED) PERFORMANCE ENHANCEMENT OF BIOTECH AND PHARMA OVER 10 YEARS
	1 YEAR	5 YEARS	10 YEARS	
Wasatch Small Cap Growth Fund	17.61%	12.08%	15.66%	**16.19%**
Wasatch Ultra Growth Fund	13.01%	15.05%	17.56%	**26.93%**
Russell 2000® Growth Index	-0.49%	8.63%	14.41%	**2.87%**

Source: Wasatch Global Investors. As of June 30, 2019. All data and information are gathered from sources believed to be reliable but are not warranted to be correct, complete or accurate.

Inception: December 6, 1986 for the Wasatch Small Cap Growth Fund; August 16, 1992 for the Wasatch Ultra Growth Fund. Data shows past performance. Past performance is not indicative of future performance, and current performance may be lower or higher than the data quoted. For the most recent month-end performance data, visit www.WasatchGlobal.com. *Investment returns and principal value will fluctuate; and shares, when redeemed, may be worth more or less than their original cost. The Advisor may absorb certain Fund expenses, leading to higher total shareholder returns.* ***Total Expense Ratio for the Wasatch Small Cap Growth Fund's Investor Class: 1.20%. Total Expense Ratio for the Wasatch Ultra Growth Fund: 1.25%****.*

Total Annual Fund Operating Expenses include direct expenses paid to the Advisor as well as indirect expenses incurred by the Fund as a result of its investments in other investment companies (each an "Acquired Fund"), before any expense reimbursements by the Advisor. ***The Advisor has contractually agreed to limit certain expenses of the Small Cap Growth Fund's Investor Class to 1.50% through at least January 31, 2020. The Advisor has contractually agreed to limit certain expenses of the Ultra Growth Fund to 1.50% until at least January 31, 2020****. See the prospectus for additional information regarding Fund expenses.*

Wasatch Funds will deduct a 2.00% redemption proceeds fee on Fund shares held 60 days or less. Performance data does not reflect the deduction of fees or taxes, which if reflected, would reduce the performance quoted. For more complete information including charges, risks and expenses, read the prospectus carefully.



Source: National Human Genome Research Institute (National Institutes of Health). As of July 10, 2019.

performed very well against their benchmark Russell 2000 Growth Index.

To get a sense of biotechnology's role in performance over 10 years, we did an analysis in which we stripped out the returns of biotechnology and pharmaceutical stocks in the two Wasatch mutual funds and in the Index. For the analysis, we assumed that biotech and pharma stocks were instead invested across all the other positions. The reason we stripped out both biotech *and* pharma stocks is that, especially among small caps, *pharma* companies tend to operate in the biotechnology space and have risk/reward characteristics similar to those of biotechs.

The results of the analysis are presented in the right-hand column of ***Figure 1***. As you can see, over 10 years, biotechnology (as defined by biotech and pharma) significantly enhanced the *cumulative* performance of the Wasatch funds/strategies. By comparison, biotechnology had a much smaller role in enhancing Index performance.

Another important point is that the *cumulative* biotechnology enhancement in the Wasatch funds/strategies was not the same as the total contribution from biotechnology—which was significantly larger. The enhancement showed that our biotechnology names performed even better than the already-strong returns of our other positions.

Biotechnology stocks (as defined above) now make up about 9% of the Russell 2000 Index and approximately 15% of the Russell 2000 Growth Index. According to a 2019 Deloitte study, biotech is expected to represent 31% of the global health-care market by 2024. And six of the 10 largest tech companies have plans to diversify into the life-sciences field. In short, biotechnology as an industry has simply become too big to be ignored out of hand. To this end, we agree with those investors who see biotech as an industry ripe with prospective growth.

Yet unsurprisingly, investments aimed at capitalizing on biotech's explosive growth and innovation carry not only corresponding degrees of risk and volatility, but also a diverse array of unique challenges rarely present in other investments. In part, picking winners in biotech can be more difficult precisely because the field is filled with world-class scientists pursuing grandiose goals based on routinely persuasive-seeming scientific claims. The promise and intrigue can make it especially easy to succumb to biases that may see an investor buy into a company's world-changing vision, while failing to recognize fundamental flaws in the company's approach.

Given this reality, Wasatch is proud to note that our biotech outperformance has been driven largely by consistently good stock selection, and we aim to outline below both the challenges presented by biotech investing as well as the particular considerations that have allowed Wasatch to successfully navigate a field that is at once exciting and daunting.

The demand for biotech is not likely to slow, fueled in part by an aging population. Globally, the number of people over 65 is now nearly 12% of the population and growing. In the United States, the so-called "silver tsunami" will see that same segment of the population nearly double to include 95 million Americans by 2060, according to the Population Reference Bureau. Those companies that can successfully address such a large market will be poised for incredible growth.

Exact Sciences Corporation is an example of a company that has managed to do just that. Exact Sciences developed a non-invasive, at-home, mail-in screening test for colorectal cancer—simultaneously among the least diagnosed, yet most treatable major forms of cancer. The product, called Cologuard, has a total addressable market of 80 million people. The simplicity, affordability and broad market base for Cologuard, combined with Exact Sciences' strong financials, helped drive the company's stock price over the past decade.

But for every once-in-a-lifetime investment, there are numerous promising breakthroughs that never break through. Due to the volatility of the industry, an ability to separate the wheat from the chaff becomes especially vital. To invest successfully in biotechnology companies is to simultaneously navigate two complex fields: One must not only get the market right, one must also get the science right.

CHALLENGE 1: GETTING THE MARKET RIGHT

Much as Dolly the Sheep set off a global conversation that quickly prompted action from then-President Bill Clinton and British Parliament, among other decision makers, so too biotech companies today find themselves entangled in unpredictable macro realities to a greater degree than many companies in other industries.

Consider the current election cycle. Partisan considerations aside, health care is often seen as an issue that wins elections. With the political football of health care solidly in play, candidates on one side of the aisle have floated proposals to fundamentally change the patent process governing drugs, while candidates on the other side have floated proposals to intervene on drug pricing, to cite just a couple of examples. Neither idea is new, nor likely to see the light of day in the polarized forms presented on the campaign trail. Yet the feeling of a nebulous threat looming on the horizon has contributed to investors' uncertainty and to a general lull across the industry that has helped push biotech stocks broadly sideways.

Election jitters notwithstanding, the path to the next blockbuster drug is a long one, even in best-case scenarios. And the increased pace of innovation has not necessarily translated to increased speed for drug approvals, with various analyses showing the average time it takes to get a drug to market is between eight to 12 years, and failure remains a distinct possibility throughout the process.

An average of just 38 new drugs were approved annually from 2011 to 2018. This is a stark figure, given the number of companies with active pipelines, as show in ***Figure 3***.

This is particularly notable for investors perusing the broadening biotech universe, given that more than half of new drug applications for novel drugs are sponsored by top pharmaceutical companies, while a recent report from the IQVIA Institute showed that 64% of all FDA-approved drugs in 2018 originated from emerging biopharma companies. In keeping with this trend of "big pharma" snapping up the work of smaller biotech companies, licensing deals made up an estimated 93% of all biotech deals in 2018, while only one-third of biotech manufacturing (across all stages) was conducted in-house.

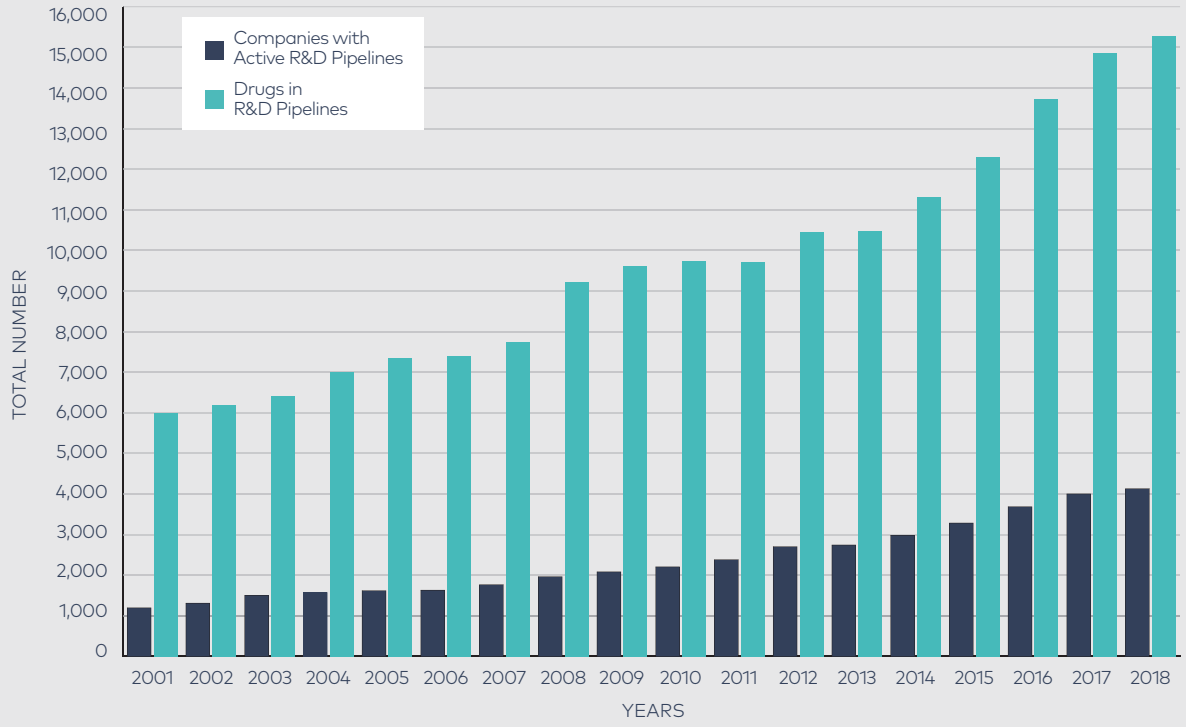
Biotech companies generally require significant amounts of capital from the very start of their lifecycles. The drug-approval process is not merely long, it is costly. The average cost of developing a drug has been estimated at more than $2 billion.

The nimble nature of smaller biotech companies allows for the potential of much greater effectiveness with significantly lower outlays. For example, Esperion Therapeutics, Inc., a company we hold, has spent roughly $442 million since inception through June 30, 2019, but is already on the cusp of having three approved products—all variations of bempedoic acid, which is intended for the treatment of hypercholesterolemia. However, independence (and its corresponding cost-savings potential) comes with added risks, as well. This is doubly true for companies with only one or two drug candidates in their pipelines.

While smaller biotech companies are more likely to struggle in the face of these odds, even the big players are not immune to the inherent risks. Consider Opdivo, a drug intended to address non-small-cell lung cancer. After successfully making it through much of the arduous approval process, Opdivo unexpectedly failed one of its Phase III clinical trials. The drug was ultimately approved for treating melanoma and metastatic lung cancer, but not before Bristol Myers Squibb saw $20 billion in market capitalization erased over the failed non-small-cell lung cancer trial.

As a result of the R&D-heavy, frontloaded nature of the business, biotech companies are likely to remain unprofitable for longer periods than the average investor is accustomed. According to Raphael Rottgen, "almost

FIGURE 3: GROWTH OF DRUG PIPELINES



Sources: Pharmaprojects®, Pharma Intelligence. As of March 2019.

80% of the constituent companies of the Nasdaq Biotech Index (NBI) have no earnings." That's more than "150 companies representing over $250 billion in market capitalization." Seattle Genetics, Inc., a Wasatch holding that performed very well for us, is just one example. The company went public in 2001 and has become a major player in the biotech sphere. However, despite 18 years of consistent groundbreaking success and a share price that has skyrocketed, the company projects its first profitable year will come in 2021, fully two decades after its initial public offering.

CHALLENGE 2: GETTING THE SCIENCE RIGHT

The difficulty of understanding the scientific claims behind a company's offerings can lead to increased, sometimes illogical complications in a market that does not always seek the same level of understanding. Consider the case of ChemoCentryx, Inc. The company currently has a pipeline of four drug candidates. Its leading candidate is called Avacopan and is intended to address numerous indications, including a skin condition known as hidradenitis suppurativa.

In early June 2019, ChemoCentryx saw its stocks drop by more than 20% in a day. The reason? A competing company, InflaRX, which was also working on a rival drug (IFX-1) to target hidradentis suppurativa, failed its Phase II clinical trial in dramatic fashion. After the trial indicated that placebo outperformed IFX-1 (with IFX-1 in some cases leading to worse outcomes than placebo), InflaRX's stock plummeted by more than 90%.

Unfortunately, to quote one analyst, ChemoCentryx found itself "caught in the smash up." The market saw two drugs that were similar on the surface level. Media coverage following the drop in valuations consistently lumped the two drugs into the same category. Few analysts apparently bothered to understand the difference between IFX-1's inhibition of C5a—a protein fragment found in the body and involved in various immune responses—and Avacopan's inhibition of C5aR—a receptor for the C5a protein.

Yet scientifically speaking, the two drugs' functions are fundamentally different. To use a highly technical analogy: One is attempting to fix the rickety door on the barn, while the other is attempting to round up the livestock after they've staged their successful jailbreak. As it turns out, what may otherwise seem like academic nitpicking may well mean the difference between loss of capital in a biotech investment and a promising long-term growth prospect.

Similarly, Intra-Cellular Therapies, Inc., another of our holdings, has faced a somewhat uphill battle, particularly given what we believe to be a promising long-term growth outlook. Intra-Cellular's leading drug

candidate, lumateperone, has shown promise in addressing schizophrenia, as well as potential applications in bipolar disorders and other traditionally difficult-to-treat neuropsychiatric conditions. Perhaps even more impressively, lumateperone's safety profile is intriguing, as it barely differs from placebo, despite its often dramatically positive results. This is especially notable in a category of drugs typically marked by significant, sometimes even debilitating side effects, including substantial weight gains, increased breast development in males, and Parkinsonian-type tremors.

In July 2019, Intra-Cellular saw its stock fall by 32% after a planned FDA Advisory Committee meeting regarding lumateperone was canceled. The company said the cancelation occurred because it "provided additional information to the FDA in response to information requests relating to non-clinical studies." This announcement followed closely on the heels of two Phase III studies into the drug's potential use for bipolar depression, one of which showed "impressive, statistically significant results" and another which showed little separation from placebo "due to high placebo effects." Subsequent coverage declared "disaster" for the company and its investors, with one financial reporter concluding, "Intra-Cellular looks unlikely to recover, in the short term at least…"

Yet as the FDA noted in its April 2016 review of pimavanserin, a different drug from the same family of atypical antipsychotics: "Roughly half of the studies of the currently approved antidepressant medications failed and on average produce a two to four point difference on…efficacy scales." The same review says, the "FDA has a history of approving drugs with what might be viewed as possessing only a minimal clinical effect and that likewise have a background of multiple failed trials," before noting "three previously failed trials" and stating that pimavanserin's "application relies on the evidence of [a] single positive clinical trial." Pimavanserin's application was successful and is available for patient use today.

Still, Intra-Cellular's doom was foretold across the financial headlines following lumateperone's failed trial, with yet another analyst decrying "bipolar results from bipolar studies, as mixed data maintains hope but shows continued inconsistency."

Clever headlines notwithstanding, it is an instructive exercise to peruse the public comments submitted to the Food and Drug Administration prior to the same canceled hearing said to spell the company's doom. Of the seven respondents who provided comments, six were practicing physicians offering glowing endorsements (while the seventh was a general appeal to expand development of medication targeted at schizophrenia and related disorders).

One excerpt that captures the general theme: "I am the Director of the Lieber Schizophrenia Research Clinic at the New York State Psychiatric Institute. I have served as a principal investigator for over 20 experimental medication studies sponsored by the NIMH and/or pharmaceutical companies. Thus, I have significant first-hand experience with the difficulty of drug development in schizophrenia." The letter goes on to note that lumateperone "appears to be effective in treating schizophrenia symptoms in its registration trials, and moreover, has a potentially unique mechanism of action," concluding, "I support its approval."

Another submission came from a physician and investigator who has "conducted over 150 clinical trials in Phase I to IV, for a variety of CNS indications." The respondent calls it his "privilege to recommend the approval of this treatment approach."

The most striking letter came from a North Carolina physician who shares a tragic personal account of a young man in his early 20s whose battle with schizophrenia saw the former valedictorian and star athlete take his own life following years of struggling with ineffective medication options and unbearable side effects. The letter pulls no punches, stating outright, "lumateperone might have been able to save his life," calling it a "moral imperative" to approve drugs that show such promise in addressing schizophrenia.

One biotech CEO, Michael French of Marina Biotech, Inc., succinctly summed up this sadly ironic disconnect between medical efficacy and market excitement when he said, "You can't save your way to success in this business."

Even for those companies that have successfully run the regulatory gamut, reaping the investment benefits required not only conviction in the underlying science, but a patient eye toward longer-term growth. In the case of Exact Sciences, whose stunning growth we noted above, the company's stock plummeted in 2015 following news that the company's Cologuard product was not listed as a top option in a report from the U.S. Preventative Services Task Force. The news that Cologuard was cited as useful only in "select clinical circumstances" was seen as a potential death knell for Exact Sciences. It took nearly two years following the stock slide for the company to again touch its previous highs. But the lukewarm forecasts for Cologuard were proven to be misguided. As of May 2019, the screening product had been ordered by more than 160,000 health-care providers and used by more than 2.2 million Americans.

MITIGATING RISK: SOUND SCIENCE

When approaching investments in such an exciting field, it is helpful to remember one of Warren Buffett's sage witticisms: "Beware the investment activity that produces applause; the great moves are usually greeted by yawns." Buffett also said his "favorite holding period is forever."

In this sense, Wasatch seeks to make its biotech investments as "boring" as possible. That starts with an initial step away from the daily market buzz—rarely a helpful barometer for long-term investments, and doubly so within the biotech industry—and toward an understanding of the dry, utterly essential science behind a company's claims.

We pride ourselves on our deep due diligence and cross-team collaboration. Included among Wasatch's 34 analysts are a PhD in Biology and a PhD in Chemistry. As such, our analysts prefer the conferences attended by doctors and scientists over those attended by the Street.

Key to this commitment is understanding that not all diseases are created equally, from an investment perspective. For example, in a 2018 study published in the journal Biostatistics, Dr. Andrew W. Lo and Dr. Susan T. Harris studied the "aggregate clinical trial success rates and durations by indication, using a sample of 406,038 entries of clinical trial data for more than 21,143 compounds from January 1, 2000 to October 31, 2015." Their findings indicated that the highest success rates were 32.6%, 25.5% and 25.2% for ophthalmology, cardiovascular and infectious disease drug candidates, respectively. Meanwhile, "the lowest percentage came from oncology trials, at just 3.4%."

The long-term value of a drug is also not always immediately intuitive. While products such as the aforementioned Cologuard and bempedoic acid benefit from immense addressable markets in the tens of millions, we remain very optimistic regarding the prospects of ChemoCentryx's Avacopan, despite an addressable market likely closer to 100,000 patients in the United States. However, an understanding of Avacopan's positioning in the market, combined with pricing models based on similar offerings, suggests that a new treatment of hidradenitis suppurativa may present a $2 billion market opportunity.

MITIGATING RISK: STRONG FUNDAMENTALS

Once we are convinced of the soundness of the science, we apply the same exacting standard as we would for any non-biotech investment. Included in that process are the application of tools for evaluating risk, the creation of models for estimating a product's revenue potential, and meetings with the management teams of prospective investments.

Much as we look for unique, high-quality companies, our biotech investments tend to favor companies whose drug candidates are well-positioned to be either first-in-class offerings or otherwise paradigm-shifting products. We are also cognizant of the many financial considerations unique to biotech companies.

For example, given biotech companies' typically cash-hungry natures, as well as the potentially long stretches of unprofitability often inherent to the industry, we tend to favor companies that can demonstrate three or more years of cash reserves. And consistent with the theme of digging well beyond the latest headlines, we are aware of the illusory valuations sometimes underlying the latest, greatest billion-dollar biotech success stories.

As new biotech companies begin to show promise, they may find themselves tempting acquisition targets. But the splashy headlines surrounding these deals occasionally gloss over the devil in the details. While many biotech companies do find their path to profitability through the mergers, acquisitions and licensing deals that constitute so much of the activity within the industry, the term "biobucks" (or "biodollars") was coined to reference the huge, promised sums offered by large pharmaceutical companies when acquiring smaller biotech firms. Even as headlines tout the possible value of the total deal, they often simultaneously fail to note that huge portions of the funds are frequently contingent on certain milestones—such as the successful completion of clinical trials—that are far from a foregone conclusion.

MITIGATING RISK: A BASKET APPROACH

Understanding these two elements—the science and the market—is non-negotiable in approaching biotech investing. By getting both right, Wasatch can be ideally positioned to ignore short-term ebbs and flows and take advantage of inefficiencies arising from a market that occasionally fails to apply the same scientific and financial rigor.

Still, even were truly perfect understanding possible, unique risks such as sentiment-driven volatility remain. In seeking to further mitigate our exposure to risk within biotech, Wasatch is generally underweight in biotech compared to the Russell 2000 Growth Index across our strategies, even as we believe biotech is a growth sector and feel strong conviction in those companies we hold.

Moreover, we tend to take a "basket" approach, in at least two senses:

First, we generally prefer companies that have more than one "shot on goal"—a pipeline consisting of several promising drug candidates, each of which has its own solid medical and market case. We believe this general investment preference provides an added buffer against the risks inherent to the arduous drug research and approval process.

Second, in determining as a firm how to invest within a given strategy, we find it beneficial to hold smaller weights in multiple companies. For example, our Small Cap Ultra Growth strategy has an almost 13% weighting in biotechnology (as defined on page 3) spread across more than a dozen companies. Despite the smaller weighting compared to the Index, our focus on quality within that smaller weighting has seen our biotech investments tend to outperform.

CASE STUDY: BRIDGING THE MARKET/SCIENCE DIVIDE

Consider a hypothetical investor in 2017, faced with the prospect of purchasing a stake in Juno Therapeutics. Juno's research focuses on treatments that promise potentially groundbreaking results in programming T-cells to attack certain cancers. At the time, the company was coming off a tumultuous 2016 that saw its program put on clinical hold due to the death of five patients. This tragic news sent the then-three-year-old company's stock plummeting.

Surely, the investment should have been an immediate non-starter, given the company's relative immaturity in a long-term-oriented industry, its focus on a research branch (oncology) with alarmingly high clinical trial failure rates, and what appeared to be potentially catastrophic failures by Juno's products.

On the other hand, the science behind Juno's two underlying technologies—chimeric antigen receptor T-cell (CAR-T) technology and T-cell receptor (TCR) technology—appeared to be sound. Indeed, Deloitte's 2019 life-sciences report projects the market for CAR-T therapies will continue to grow at an annualized rate of more than 51% through 2030, based on the technology's rapid move toward the clinic and its demonstrated efficacy in giving remissions to roughly 50% of patients treated.

Furthermore, as of 2017, Juno had not only two promising technologies behind its products, but had at least eight different products undergoing clinical trials. Finally, on the organizational and financial side, Juno's solid fundamentals seemed to reflect a capable management team, and the company appeared to pose no risk of struggling for funding through the drug-development process.

Juno was bought out by Celgene for $9 billion in January 2018. Juno's strong financials and sound science (as well as its diversified drug pipeline) seemingly meant the difference between ruin and long-term success, ultimately allowing Juno to weather a tumultous period and overcome its significant setbacks.

CONCLUSION

Biotechnology is a field of almost unparalleled opportunity for the investor possessing both the necessary patience and the willingness to put in the considerable research work. It can also be a field of unparalleled risk for the investor who gets blindly caught up in the prospective growth and routinely revolutionary promises.

For the successful biotech investor, science and markets are inextricably linked. Both are mandatory. Companies based on sound science but lacking financial fundamentals face failure, as do companies with an incredible ability to raise capital but questionable scientific bases supporting their offerings.

Consistent with our more than 40-year history, Wasatch Global Investors has opted to take a staunchly research-driven, measured approach to the biotech industry. We believe our world-class research team, combined with our proven track record as growth-oriented investors, uniquely positions us to sensibly and effectively navigate this exciting and volatile industry.

ABOUT THE INVESTMENT TEAM

JOHN MALOOLY, CFA

Portfolio Manager

23 Years of Experience / 21 Years at Wasatch

Mr. Malooly is the Portfolio Manager of the U.S. small cap ultra growth strategy. He joined Wasatch Global Investors as an Analyst in 1997.

Prior to joining Wasatch, Mr. Malooly was an investment specialist at UMB Fund Services (formerly Sunstone Financial Group), the transfer agent for Wasatch Funds.

Mr. Malooly graduated from Marquette University, earning a Bachelor of Science in Business Administration. He is also a CFA charterholder.

John is a Wisconsin native. He enjoys skiing, trekking vacations and reading nonfiction. He also admits to having way too many cookbooks.

JB TAYLOR

Portfolio Manager

23 Years of Experience / 23 Years at Wasatch

Mr. Taylor is Chief Executive Officer of Wasatch Global Investors and serves on the Board of Directors. He is also a Portfolio Manager, the head of U.S. small cap investing and a member of the global research team. He joined Wasatch as an Analyst in 1996.

Mr. Taylor graduated from Stanford University, earning a Bachelor of Science in Industrial Engineering.

JB is a California native who speaks Hungarian. He enjoys cycling and coaching youth lacrosse.

JILL WAHLEITHNER, PHD

Senior Analyst

13 Years of Experience / 6 Years at Wasatch

Dr. Wahleithner joined Wasatch Global Investors in 2013. She was the founder of Type III Research, a biotech-consulting firm, which was under contract with Wasatch Global Investors from 2006 until 2013, when she was brought on at Wasatch full-time.

Some of Dr. Wahleithner's responsibilities with Type III Research included identifying emerging biotech companies, building financial models of private and public companies to assess market capitalization, and interacting with venture capital firm partners to assess company and product potential.

Dr. Wahleithner earned a PhD in Biology from the University of Utah, also where she received a Bachelor of Science. She gained vast experience following her education, which included performing postdoctoral research at CSIRO in Canberra, Australia and the University of California, Davis. She also was a research scientist for Novo Nordisk in Davis, California and a senior research associate for the Department of Biochemistry, Medical School at Dartmouth College.

Jill is a Wisconsin native, and has lived in a dozen states and two foreign countries. She loves gardening and having dogs that outweigh her.

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ABOUT WASATCH GLOBAL INVESTORS

Wasatch Global Investors pursues a disciplined approach to investing, focused on bottom-up, fundamental analysis to develop a deep understanding of the investment potential of individual companies. In making investment decisions, the portfolio managers employ a uniquely collaborative process to leverage the knowledge and skill of the entire Wasatch research team.

Wasatch Global Investors is an employee-owned investment advisor founded in 1975 and headquartered in Salt Lake City, Utah. The firm had $18.5 billion in assets under management as of June 30, 2019. Wasatch Global Investors is registered with the Securities and Exchange Commission under the Investment Advisers Act of 1940.

RISKS AND DISCLOSURES

Investing in small cap funds will be more volatile and loss of principal could be greater than investing in large cap or more diversified funds.

Diversification does not eliminate the risk of experiencing investment losses.

An investor should consider investment objectives, risks, charges, and expenses carefully before investing. To obtain a prospectus, containing this and other information, visit* www.WasatchGlobal.com *or call 800.551.1700. Please read it carefully before investing.

Information in this document regarding market or economic trends or the factors influencing historical or future performance reflects the opinions of management as of the date of this document. These statements should not be relied upon for any other purpose. ***Past performance is no guarantee of future results, and there is no guarantee that the market forecasts discussed will be realized.***

The primary investment objective of both the Wasatch Small Cap Growth Fund and the Wasatch Ultra Growth Fund is long-term growth of capital. Income is a secondary objective, but only when consistent with long-term growth of capital.

Portfolio holdings are subject to change at any time. References to specific securities should not be construed as recommendations by Wasatch Global Investors. Current and future holdings are subject to risk.

ALPS Distributors, Inc. is not affiliated with Wasatch Global Investors.

As of June 30, 2019, the percentage of net assets the Wasatch Small Cap Growth Fund had invested in Exact Sciences Corp. was 1.7%, ChemoCentryx, Inc. was 0.6%, Esperion Therapeutics, Inc. was 0.6%, and Intra-Cellular Therapies, Inc. was 0.5%

As of June 30, 2019, the percentage of net assets the Wasatch Ultra Growth Fund had invested in Exact Sciences Corp. was 1.5%, Esperion Therapeutics, Inc. was 1.3%, Seattle Genetics, Inc. was 0.5%, ChemoCentryx, Inc. was 1.0%, and Intra-Cellular Therapies, Inc. was 1.0%.

As of June 30, 2019, the Wasatch Small Cap Growth Fund was not invested in Bristol Myers Squibb, Seattle Genetics, Inc., Marina Biotech, Inc., Celgene Corporation, or Juno Therapeutics.

As of June 30, 2019, the Wasatch Ultra Growth Fund was not invested in Bristol Myers Squibb, Celgene Corporation, Marina Biotech, Inc., or Juno Therapeutics.

DEFINITIONS

An **initial public offering (IPO)** *is a company's first sale of stock to the public.*

Valuation *is the process of determining the current worth of an asset or company.*

The **Russell indexes** *are a family of equity indexes that allow investors to track the performance of distinct market segments. For example, the Russell 3000 Index seeks to track the entire U.S. stock market. The Russell 1000, Russell Midcap and Russell 2000 indexes are sub-segments of the Russell 3000 Index. The Russell 1000 Index tracks the performance of large company stocks (the Russell 1000 Growth and Russell 1000 Value indexes are sub-segments that track large cap growth and large cap value stocks, respectively), the Russell Midcap Index tracks the performance of mid cap stocks (the Russell Midcap Growth and Russell Midcap Value indexes are sub-segments that track mid cap growth and mid cap value stocks, respectively), and the Russell 2000 Index tracks the performance of small company stocks (the* **Russell 2000 Growth** *and Russell 2000 Value indexes are sub-segments that track small cap growth and small cap value stocks, respectively).*

The **Russell 2000 Index** *is an unmanaged total return index of the smallest 2,000 companies in the Russell 3000 Index. The Russell 2000 is widely used in the industry to measure the performance of small company stocks. You cannot invest directly in this or any index.*

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