April 25, 2022

Vanessa Countryman
Secretary
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549-0609

Re: File No. S7-08-22: Short Position and Short Activity Reporting by Institutional Investment Managers, and Proposed Amendments to the National Market System Plan Governing the Consolidated Audit Trail for Purposes of Short Sale-related Data Collection

Dear Secretary Countryman,

The Biotechnology Innovation Organization (BIO) appreciates the opportunity to provide comments to the Securities and Exchange Commission's (SEC or Commission) proposed rule to require money managers to disclose within 14 calendar days after month-end any equity position that meets or exceeds either (1) a gross short position with a value of $10 million or more, or (2) a monthly average gross short position that constitutes 2.5% or more of shares outstanding.[1] As well as amendments to the National Market System's Consolidated Audit Trail to include broker-dealer reporting of "buy-to-cover" order marking information.[2]

BIO is the world's largest life sciences trade association representing nearly 1,000 biotechnology companies, academic institutions, state biotechnology centers and related organizations across the United States and in more than 30 other nations. BIO members are involved in the research and development of innovative biotechnology products that will help to solve some of society's most pressing challenges, such as managing the environmental and health risks of climate change, sustainably growing nutritious food, improving animal health, enabling manufacturing processes that reduce waste and minimize water use, and advancing the health of our families.

The biotechnology industry is instrumental in advancing society and is considered a critical technology for American economic security in the new era. It is necessary to understand the industry's market drivers and investor sentiment cycles to better develop strategies for efficient capital formation and capital planning.

[1] Short Position and Short Activity Reporting by Institutional Investment Managers
[2] NMS Amendments for the Purposes of Short Sale-related Data Collection

Chief among these imperatives is a thorough understanding of the role of short sellers in signaling impending market disruptions, deepening drawdowns, and prolonging recoveries as all of these have deleterious consequences for companies and patients. BIO contends that the Commission's proposed rule goes a long way to democratizing access to these data and supplementing existing short interest and short sale volume data that will enable a better understanding of these dynamics via mandatory monthly disclosure of daily positioning and hedging information coupled with buy-to-cover reporting from brokers to paint the full picture of market mechanics around selloffs.

BIO supports the proposed rule and recommends that the Commission finalize and implement the proposed rule without delay.

Overview

Throughout this comment letter, we will use the SPDR S&P Biotechnology ETF ("XBI") and iShares Biotechnology ETF ("IBB") as proxies for what our member companies experience with the understanding that short positioning in individual names is typically more extreme than what is experienced at the ETF-level. The reason for our using this proxy measurement is to illustrate for the Commission how short selling affects investor perceptions and economic realities for the biotechnology industry as a whole and why more short selling transparency, such as that proposed by the Commission in the proposed rule, is necessary to better understand these dynamics. This will allow companies to better manage their strategic plans and retail investors can more fully understand this market.

A structural short position in XBI implies a steep reassessment in the potential for the <u>whole</u> biotechnology industry to deliver on its promise to bring transformational medicines to patients. As we illustrate below, short sellers are present in the biotechnology sector before, during, and remain heavily positioned after a broader market correction. This market behavior exacerbates the drawdown, prolongs recoveries, and has economic consequences for the sector and the patients it serves.

What we do not understand is if these short positions were used for hedging long positions in individual names or positioning for mean reversion to more reasonable valuations after a multi-year bull market. We do not understand why companies with positive data in later stages of development also tend to fall by comparable amounts as early-stage companies with little clinical data.[3] We also do not have insight into the role options played in these market movements, such as understanding the extent to which options were used to cover shorts or increase gross exposures. Disclosure of short selling intention, via transparency into hedging data introduced by the proposed rule, would help all stakeholders better understand price and behavior dynamics.

These types of analysis, facilitated by the proposed rule when implemented, would help corporate managers better plan financing activities to fortify corporate resilience and ensure that therapeutic pipelines continue through clinical trials and approval pathways. We highlight below the reasons for our support for more robust and more frequent disclosure of short positions and why this proposed rule is particularly important for biotechnology companies.

A Technical History of Short Selling in Biotech

The biotechnology equity sector, which is largely present in the micro- and small-cap space as noted further below, has been a historical punching bag for opportunistic short sellers and malicious actors due to its business model, which begets significant share price volatility[4] and the corresponding outsized drawdowns in the sector relative to the rest of the market during corrections. The sector is consistently used as one of the most favored expressions for bearish inflections in aggregate market sentiment, which yields significant economic costs to an industry whose goal is to treat disease—from ultra-rare pediatric diseases to the common maladies of global society. The question is why.

While short selling is a necessary function of markets, often during short campaigns in the biotechnology sector stocks trade below cash values. Trading below cash value implies that markets assign no value to a product or pipeline. Trading below cash value can constitutes an overshoot versus most company fundamentals particularly when the short selling occurs between milestone reports. When stocks trade below cash for an extended period amid a backdrop of increasing days-to-cover (increasing amount of short positioning), the ability to raise new capital is severely impaired and jeopardizes the potential to continue clinical trials and bring novel therapeutics to patients.

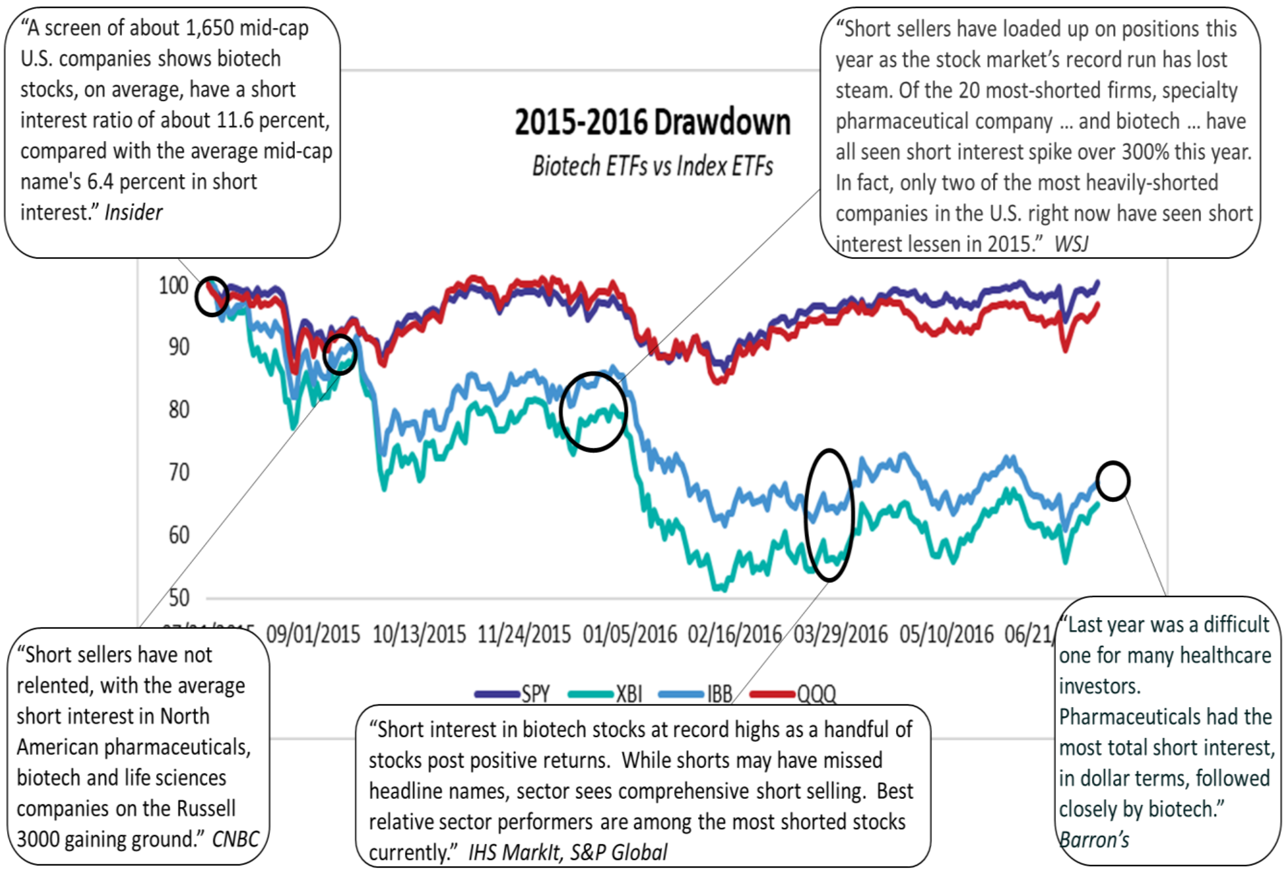
Admittedly, there are instances when short positioning is justified, such as when investors believe that a company's pipeline is not unique, has a high probability of failure given recent

[3] https://1zz10747jh9x3auhkivc05o5-wpengine.netdna-ssl.com/wp-content/uploads/2022/03/Post-IPO-Performance-By-Stage-of-Lead-Asset-at-IPO_V2.jpeg

[4] The biotechnology equity sector has roughly double the volatility as the S&P 500. This makes biotech equities subject to significant speculative positioning, particularly given that the event-driven nature of the business model.

FDA announcements, or market potential is too small to justify clinical costs. In these instances, the intrinsic value of the company should approach zero as the market discounts a higher probability of failure. This is the quintessential role of short selling in the market. However, this is often not the case in biotechnology as companies with both positive and negative data tend to trade below their cash value until extended selling pressures abate and allow for prices to return to trading closer to fundamentals. Moreover, this market-derived mechanism of capital allocation, in the end, stifles product market diversity.

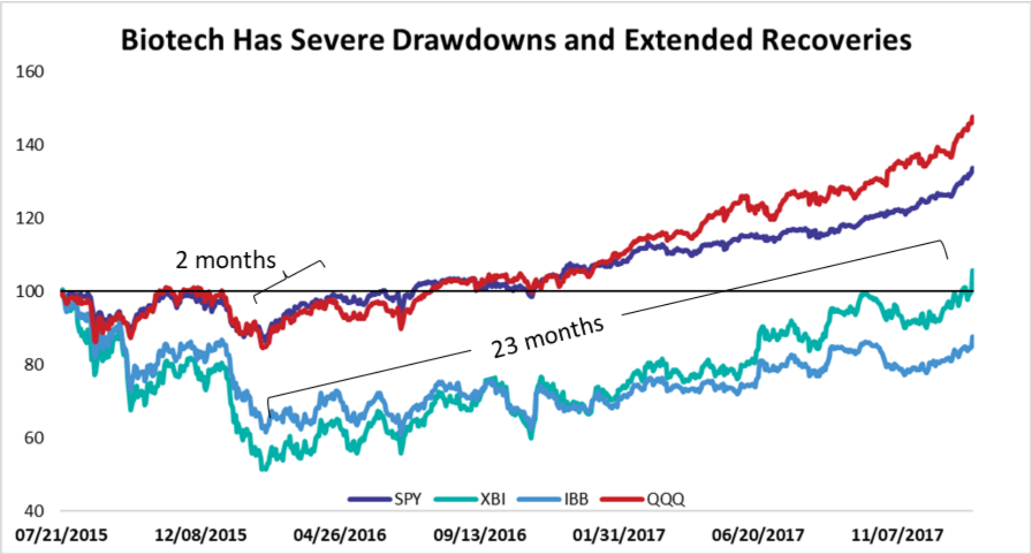
There is a myriad of examples of the outsized influence of short sellers in the biotechnology industry over time, which we endeavor to highlight in the following pages and begin with a price and reported narrative analysis during the 2015-2016 drawdown.



[5]

[5] Insider, CNBC, WSJ, IHS Markit, Barron's, FactSet

The key lesson learned from the figure above is that the biotechnology industry is a favorite short position before, during, and after market episodes. The XBI ETF and its constituents were heavily shorted before the market narrative soured and remained that way even after the broader market recovered. In fact, as noted in the chart below, while the S&P 500 and Nasdaq-100 recovered in a few months, the biotechnology sector required almost two years to fully recover.

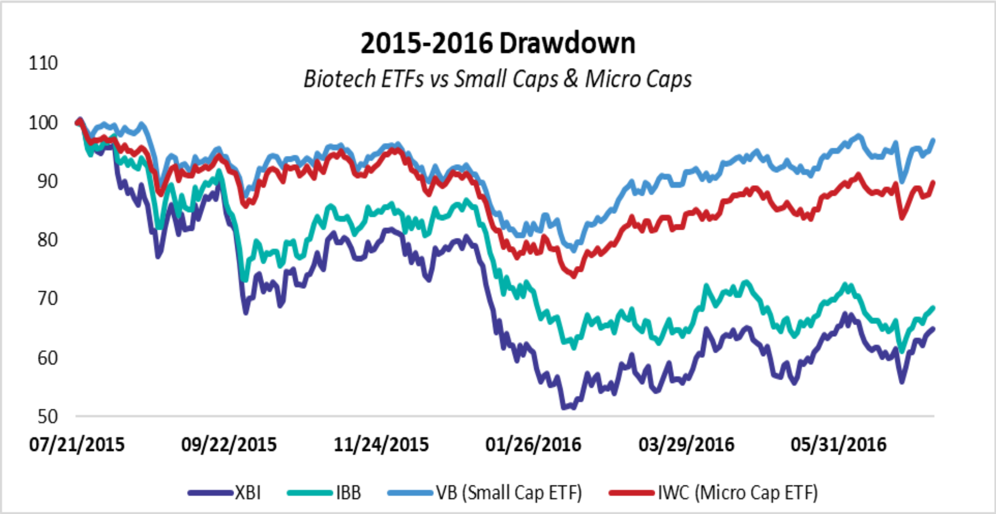


FactSet

However, what is not known is the structure of the short positioning in the industry, root causes, and fundamental perspectives driving this extended positioning. The proposed rule takes a giant step in the right direction to providing markets and registrants with public access to more transparency into hedging and whether options were used to increase gross exposure.

More frequent and more comprehensive reporting on short positioning would allow corporate planners to better understand inflection points in investor sentiment and better plan financing activities to support R&D programs that advance treatments for serious diseases. This level of information would also add transparency for retail investors to better understand market dynamics throughout a market cycle.

It is worth noting, however, that most listed biotechnology companies are not part of the S&P 500 but rather to the micro- and small-capitalization sectors. In fact, of the 857 biotechnology companies listed in the United States, 90% have market capitalizations less than $2 billion, which is the upper limit to be included in Vanguard's Small Cap ETF ("VB"). And 75% have market capitalizations less than $535 million,[6] which is the weighted average market capitalization of the Russell Microcap Index that underlies the iShares Microcap ETF ("IWC"). As the chart below illustrates, even among the correct cohort of comparators biotechnology companies still experience more significant drawdowns.



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Notably, the pattern of short interest and underperformance is not just isolated to 2015-2016, but a common theme at least over the last decade, including both the 2018-2019 drawdown as well as the current market correction.[7]

The question is why biotech?

What capital excesses need to be worked out of the sector if the majority of funding goes to advance pipeline R&D? What underlying factors are driving the repricing that requires almost two years to fulfill? Do biotechnology investors concentrate positioning into one leading product at the consequence of product market diversity? Why is it that short sellers feel comfortable enough to maintain concentrated short positions in biotech even after indices have

[6] All data provided by FactSet

[7] We acknowledge that the current market environment is a confluence of factors working against the sector, including the end of an eight-year bull market in biotech, less positive clinical data being reported, and the consequent increase in FDA clinical holds related to the flood of biotechs that entered public markets at various stages of development.

recovered? Essentially, is there a fundamental thesis behind the shorting of biotechnology companies and the industry, or is it driven by opportunistic hands?

More public data is needed to fully understand this dynamic for financial stability, stakeholder transparency, and corporate planning purposes.

The Economic Impact of Manipulative Short Selling

BIO acknowledges the important and critical role of fundamental and technical short sellers in the market. The efficiency of price discovery and price formation in the U.S. market is unique in the world, and short sellers have a central role in ensuring that mispricings are quickly arbitraged out of the market and that accounting malfeasance is found and rooted out. There are ample examples of how short sellers have improved markets and found bad actors. However, because the industry is event-driven with extended periods of no information, this draws malicious actors. This exacerbates an already difficult operating environment, which translates into real economic costs for corporate managers.

A hallmark example is social media-fueled short-and-distort campaigns that have roiled our sector for years, such as the case of Lemelson Capital Management who was recently found liable[8] for making false statements to drive down the price of Ligand Pharmaceuticals in 2018.[9] These types of campaigns represent the information asymmetry disadvantages present in the biotechnology space; companies cannot disclose interim data until validated. The gap between milestone announcements makes these stocks targets for these types of campaigns.

A more nefarious short campaign strikes at the heart of the industry, which occurs when traders enter into short positions and then challenge patent claims.[10] Patent challenges by short sellers rarely have a purpose other than to drive share prices lower. Deliberate misuse of the Inter Partes Review administrative process of the U.S. Patent and Trademark Office to bring dubious challenges to patents, while holding short positions in those targeted companies,[11] causes significant economic costs and exacerbates share price volatility.

Because volatility is higher, price swings tend to be large (by definition) which are exacerbated on the downside by the structurally higher presence of short sellers. These large moves to the

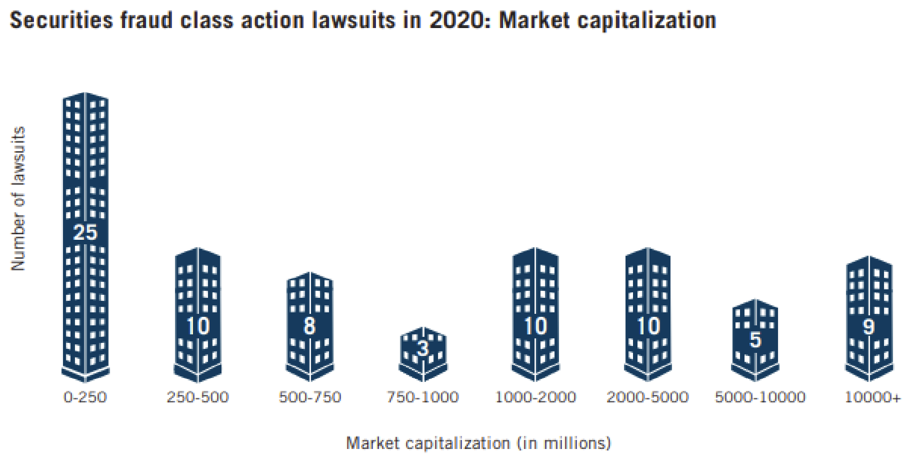
[8] https://www.sec.gov/litigation/litreleases/2021/lr25258.htm
[9] https://www.sec.gov/news/press-release/2018-190
[10] New Hedge Fund Strategy: Dispute the Patent, Short the Stock, WSJ 2015
[11] https://www.wsj.com/articles/hayman-capitals-kyle-bass-vows-to-continue-drug-patent-challenges-1441320971

downside, in turn, attract litigious actors who do not seek protracted court battles on the merits of the complaint but rather seek quick settlements.

As explained by law firm Dechert LLP,

> "Though life sciences companies and their investors would prefer that all clinical trials succeed from the outset, many products in development underperform or outright fail during clinical trials. When this happens, plaintiffs' firms around the country pursue securities fraud class actions to recover for the alleged harm to investors, typically by alleging that the defendant company somehow misled the public.[12]"

As noted in the chart below from the *Dechert 2020 Survey Report*, microcap biotechnology companies (75% of the biotechnology sector) face the most amount of securities fraud class action lawsuits.



Notably, according the Dechert LLP Report, about two-thirds of the 80 securities lawsuits filed against life sciences companies in 2020 were filed by the same handful of law firms alleging misrepresentations regarding the product efficacy and safety, FDA approval timing, or transaction details.

[12] Dechert Survey: Developments in the Securities Fraud Class Actions Against Life Sciences Companies Report 2020

The high chance of litigation following the probability distribution of biotechnology clinical trial successes means that microcap biotechnology companies, with limited resources, face high operating costs associated with these litigation risks. These costs are not limited to legal costs but also to the costs of insuring executives and the company from these legal risks. Given this already inhospitable operating environment, malicious short sellers add an unnecessary additional challenge for small biotechnology companies by exacerbating and extending price declines that draw these actors into the space.

As we previously noted, these companies with significant R&D intensity require constant capital raising. The presence of short sellers and extended underperformance make these plans more difficult to achieve, which puts in jeopardy the entire point for their existence: bringing medicine to patients.

Deep and protracted price declines worsened by opportunistic short sellers muddy the outlook for companies and therefore for their ability to raise money needed to advance clinical trials, seek final FDA approval, and, if possible, market the medicine. If funds are diverted to other parts of the company, e.g. in legal defense, or market dynamics make it difficult to raise equity capital (as noted previously), then programs get delayed or canceled.

The proposed rule is a great step to further understanding the market dynamics of the biotechnology industry, why it consistently faces deeper and prolonged drawdowns, and the economic costs these drawdowns have on companies and patients. More frequent disclosure of short positions for those with short interest more than 2.5% published by the Commission for public use will serve as an excellent, free resource for companies and investors to leverage. The ability to understand intention, via disclosure of hedging position, and the broker-dealer "buy-to-cover" to understand the full life cycle of short positioning in the biotechnology industry will go a long way to understanding the trading environment for small biotechnology companies.

Conclusion

BIO contends that the Commission should implement the proposed rule without delay. The biotechnology sector faces an inhospitable trading environment, influenced by a number of factors as outlined above. Investors and registrants need to better understand the short selling dynamics that are ever present in our market and which have been known to deepen drawdowns and prolong recoveries. BIO thanks the Commission for the opportunity to comment on the proposed rule and remains encouraged by the Commission's progress in bringing more transparency to our market system.