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March 30, 2023

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

Re: File No. S7-30-22: Minimum Pricing Increments, Access Fees, and Transparency of Better Priced Orders

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 amend Regulation National Market System ("Regulation NMS") to adapt a variable minimum pricing increments for the quoting and trading of NMS stocks, reduce access fee caps, and enhance transparency of better priced orders.¹

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.

BIO strongly supports the reduction of market access fees and enhanced transparency in public markets. BIO has long been a supporter of the Commission's initiatives in this regard, including the SEC's proposed rule on Short Selling Disclosure Transparency (S7-08-22)² which we hope will be implemented in its original form sometime very soon.

However, BIO has serious concerns with Commission's proposal to alter the minimum pricing increments for the quoting and trading of NMS stocks. BIO is most concerned that the SEC is implementing one of the most significant changes to equity market microstructure in decades for a small, highly liquid segment of the market without addressing the needs and possible unintended consequences for small and mid-sized stocks, which constitute the vast majority of public markets

¹ <https://www.sec.gov/rules/proposed/2022/34-96494.pdf>

² <https://www.sec.gov/rules/proposed/2022/34-94313.pdf> and <https://www.sec.gov/rules/proposed/2022/34-94314.pdf>

segments. Furthermore, the Commission has not yet studied the implications of changing the microstructure of equity markets in this manner and further recommends that the Commission not take any action until such time as a pilot has been launched and its effects studied and verified by a committee of market participants and academics.

BIO is concerned about the potentially harmful impact of new regulations on small companies. These known and unknown consequences could be avoided if pilot programs were launched to understand how new regulations shift incentives and market behaviors before proceeding with broader proposed regulations. These pilot programs are not without precedent as the Commission launched the Tick Size Pilot program in 2016 and was dedicated to understanding the effects of raising tick sizes for small cap stocks, one of the largest segments of the U.S. equity market.

According to Barardehi et al., tick-constrained stocks comprise roughly 25 percent of dollar trading value.³ It seems inadvisable to implement significant systemic changes to accommodate trading in the 25 percent of stocks that the Commission claims should have sub-penny quotations and settlement while not considering the tick-size requirements for the largest constituents of the U.S. stock market, which are small capitalization stocks that characterize the biotechnology equity sector.

As BIO has stated on several occasions, biotechnology public market securities are an inherently volatile segment of the market as the outcome probabilities and long R&D timelines make share price stability a difficult proposition. However, the SEC's prior research indicated that increasing tick-sizes for small capitalization stocks increase price stability yet no changes to reduce volatility in small stocks has been proposed. Instead, the Commission has focused on increasing liquidity in the most liquid part of the market.

Our segment of the market faces challenges attracting stable equity holders and we are concerned that the proposed rule, much like the Commission's proposal on order competition rules (S7-31-22)⁴, will lead to deleterious consequences for liquidity and order matching for small capitalization stocks.

Much of the biotechnology sector trades above \$1.00 but does so with a highly variable bid-ask spread. According to FactSet data, the constituents of the most liquid and tradable benchmark for the industry, the SPDR S&P Biotechnology Sector ETF ("XBI"), have a median bid-ask spread of \$0.09 while the average bid-ask spread is \$0.20.

According to Barardehi et al., these stocks would have greatly benefited from the Commission's Tick-Size Pilot program, which increased the minimum tick size from \$0.01 to \$0.05. BIO was a proponent of the Commission's pilot program and interpreted the results as decidedly positive for the industry and the small stock market segment.

The Commission's final report⁵ on the Tick-Size Pilot illustrated that increasing these tick sizes had several benefits but the Commission ultimately decided it was not beneficial to the overall market at the time of drafting.

³ Barardehi et al., "Tick Sizes and Market Quality: Revisiting the Tick Size Pilot," November 2022

⁴ <https://www.sec.gov/rules/proposed/2022/34-96495.pdf>

⁵ Assessment of the Plan to Implement a Tick Size Pilot Program, July 3, 2018

Notably, according to the Commission's final report, the Tick-Size Pilot increase liquidity displayed at the national best bid offer (NBBO) as well as at other prices throughout the inter-market order book. Further, while the stocks generally saw less volume and wider quoted spreads, orders were executed in larger transactions with less messaging traffic, fewer order cancellations, and less quote variability.

Another consequence cited was the higher tick size and liquidity clustering in the order book as there was less off-exchange trading. Notably, increasing the tick size of smaller capitalization stocks seems to also tackle the Commission's concerns with order competition.

The SEC's final report went on to specify that while the number of market-makers per security in the Pilot fell, the five-cent quoting increment led to a statistically significant increase in market-maker share volume, increased realized profits for parties participating in the transactions, and increased the value of positions held overnight (thus reducing overnight risk). These results can be interpreted to suggest that the larger tick size led to price stability and market stability.

These findings were corroborated by Baradehi et al. who found that increasing tick size led to a simpler trading environment. This corroborates the Commission's results from the Tick Size Pilot. More specifically, Baradehi et al. found that stocks that trade with wide spreads, characterized by \$0.15 or more (as is found in the constituency of the XBI), stood to benefit from increasing the tick size from \$0.01 to \$0.05 as this led to narrower spreads by \$0.04.

BIO urges the Commission to reconsider their proposal to alter the minimum pricing increments for the quoting and trading of NMS stocks into sub-penny increments. BIO is concerned that the proposal will erode liquidity in small and mid-sized stocks. The Commission should first study the liquidity impacts on small stocks before going forward with finalizing and implementing the proposed rule. Further, this policy is limited to a small segment of the market and does nothing to address the problems of trading in small capitalization stocks, which constitute a much larger market segment than those that are tick constrained. BIO urges the Commission to thoroughly analyze the expected effects of this proposed change on small companies before proceeding.

A properly functioning market requires all segments to trade with the best possible execution and in a manner that provides market participants, such as market-makers, the incentive to provide liquidity. As we have seen in academic studies and in the results of the Commission's own Pilot study, increasing the tick-size for small stocks increases price stability and market stability as every actor in the segment is incentivized correctly and adequately.

BIO looks forward to working with the SEC on these important issues. If we can provide further information regarding these comments, please contact me at cpasseri@bio.org.

Sincerely,

Carlo Passeri
Vice President, Capital Markets and Financial Services Policy
Biotechnology Innovation Organization