

Dear [XXXX]

I am contacting you ahead of Bicycle Therapeutics plc's ("Bicycle") Annual General Meeting to be held on June 28, 2021.

As you may have seen, we filed our proxy statement with the SEC and commenced mailing it to shareholders on April 30, 2021, and you may access our proxy statement and related materials at https://investors.bicycletherapeutics.com/Annual_General_Meeting. I would like to bring proposals 8 and 9 of the proxy statement to your attention and have summarized the background and rationale for these proposals below.

- As a general housekeeping matter, it is critical that Bicycle's board of directors has the flexibility to raise capital and undertake equity offerings when the board of directors deems it in the best interests of shareholders to do so.
- Unlike the boards of directors of U.S. incorporated companies, and because Bicycle is a U.K.-incorporated company, Bicycle's board of directors can only allot shares if authorized by shareholders. Further, new shares need to be offered on a pre-emptive basis (i.e., offered first to all existing shareholders pro rata to their existing holdings) unless such pre-emption rights are disapplied.
- Prior to our 2019 IPO, Bicycle shareholders granted the directors a share allotment authority and disapplied pre-emption rights in respect of such allotments. A substantial portion of the approved allotment was utilized during the IPO and in the subsequent two years.
- Bicycle is currently seeking a new authority at our Annual General Meeting this year, which would give the board of directors flexibility in the future. Importantly, this would put Bicycle on an even footing with peer U.S./Delaware-incorporated biotech companies, which are not subject to similar share issuance restrictions that we face by virtue of our U.K. incorporation.
- This approach will be consistent with U.S. capital markets practice and governance standards and is compliant with Nasdaq corporate governance and related requirements, including those limiting share issuances that are not specifically approved by the shareholders. As a reminder, Bicycle is considered a U.S. domestic reporting company under SEC rules and is subject to the same governance and share issuance requirements as U.S.-incorporated companies listed on Nasdaq.

For the reasons given above, our board of directors recommends a vote in favor of each of proposals 8 and 9. We would ask you to vote as soon as possible. Holders of our ordinary shares may vote by proxy either over the Internet or by returning a form of proxy in the envelope previously provided by mail by no later than 1:00 p.m. London time (8:00 a.m. Eastern Daylight Time) on June 24, 2021. In addition, institutional investors may be able to appoint a proxy electronically via the Proxymity platform. Holders of our American Depositary Shares may vote by following the voting instructions they received with the proxy statement mailed to them. Please note that ADS proxy cards must be received by Citibank, N.A. no later than 10:00 a.m. EDT on Wednesday, June 23, 2021. For further information regarding voting, please see the Q&A section in the proxy statement or consult the materials you received by mail.

We look forward to receiving your vote. If you have any questions we would be happy to schedule a call; in which case please contact David Borah, VP Capital Markets & Investor Relations (david.borah@bicycletx.com).

Best regards

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