

This free writing prospectus relates to the initial public offering of shares of common stock of Inozyme Pharma, Inc. (the "**Company**") and updates and supplements the preliminary prospectus dated July 22, 2020 (the "**Preliminary Prospectus**") that was included in Amendment No. 2 to the Registration Statement on Form S-1 for this offering. On July 23, 2020, the Company filed Amendment No. 3 to the Registration Statement on Form S-1 relating to this offering of common stock, which includes an update to the Preliminary Prospectus (the "**Updated Preliminary Prospectus**"). The Updated Preliminary Prospectus may be accessed through the following link:

https://www.sec.gov/Archives/edgar/data/1693011/000119312520197525/d919364ds1a.htm

The Updated Preliminary Prospectus reflects an increase in the number shares of common stock being offered by the Company in this offering from 5,000,000 to 6,500,000 shares, a corresponding increase in the number of shares of common stock subject to the option of the underwriters to purchase additional shares from 750,000 to 975,000 shares, an updated estimated price per share for the common stock being offered of \$16.00 per share and related changes to account for the share increase and updated estimated price per share for the offering. Please refer to the link above for all of the changes to the disclosure in the Updated Preliminary Prospectus.

The Company has filed a registration statement (including the Updated Preliminary Prospectus) with the Securities and Exchange Commission (the "SEC") for the offering to which this communication relates. Before you invest, you should read the Updated Preliminary Prospectus in that registration statement and the other documents the Company has filed with the SEC for more complete information about the Company and the offering. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, the Company or any underwriter or dealer participating in this offering will arrange to send you the prospectus if you request it from BofA Securities, NC1-004-03-43, 200 North College Street, 3rd floor, Charlotte, NC 28255-0001, Attn: Prospectus Department, or by email at dg.prospectus_requests@bofa.com; Cowen and Company, LLC, c/o Broadridge Financial Solutions, Attn: Prospectus Department, 1155 Long Island Avenue, Edgewood, NY 11717, by email at PostSaleManualRequests@broadridge.com or by telephone at (833) 297-2926; or Piper Sandler & Co., Attention: Prospectus Department, 800 Nicollet Mall, J12S03, Minneapolis, MN 55402, via telephone at (800) 747-3924 or via email at prospectus@psc.com.