Filed by Mast Therapeutics, Inc. Pursuant to Rule 425 under the Securities Act of 1933 Subject Company: Mast Therapeutics, Inc. Commission File No.: 001-32157



Dear Stockholders,

You recently received proxy materials in connection with the Special Meeting of Stockholders of Mast Therapeutics, Inc. to be held on April 21, 2017. According to our latest records, your **PROXY VOTE** for this meeting **HAS NOT YET BEEN RECEIVED**.

Mast Therapeutics, Inc. and Savara Inc. have entered into an Agreement and Plan of Merger and Reorganization. At the Special Meeting, you are being asked to adopt the merger agreement and approve an amended and restated Mast certificate of incorporation to effect a reverse stock split of Mast common stock and change the Mast corporate name to "Savara Inc.," and approve, on a non-binding advisory vote basis, compensation that will or may become payable by Mast to its named executive officers in connection with the merger, each as described in the proxy statement/prospectus/information statement you recently received. It is extremely important that Mast's stockholders vote in favor of all proposals.

THE MERGER WILL NOT GO FORWARD UNLESS THE MERGER, THE REVERSE STOCK SPLIT AND THE NAME CHANGE PROPOSALS ARE ALL APPROVED.

Consequences of The Merger Not Closing

If, for any reason, the merger does not close, the Mast board of directors may elect to, among other things, attempt to complete another strategic transaction like the merger, attempt to sell or otherwise dispose of the various assets of Mast or continue to operate the business of Mast. If Mast decides to dissolve and liquidate its assets, Mast would be required to pay all of its debts and contractual obligations, and to set aside certain reserves for potential future claims, and there can be no assurances as to the amount or timing of available cash left to distribute to stockholders after paying the debts and other obligations of Mast and setting aside funds for reserves.

What You Need to Do Now

You may provide your proxy instructions in one of two different ways. First, you can mail your signed proxy card in the enclosed return envelope. Second, you may also provide your proxy instructions via the Internet or telephone by following the instructions on your proxy card or voting instruction form. Please note that to vote via the Internet (<u>www.proxyvote.com</u>) or telephone you will need your control number which is located in the **box next to the arrow** on the proxy card or voting instruction form. Please provide your proxy instructions only once, unless you are revoking a previously delivered proxy instruction, and as soon as possible so that your shares can be voted at the Special Meeting of Mast stockholders.

We very much appreciate your patience throughout this process, and we sincerely hope to deliver the value you deserve from the merger with Savara.

Sincerely,

Brian M. Culley Chief Executive Officer Mast Therapeutics, Inc.

Regardless of the number of shares you own, it is important that they be represented at this Special Meeting of Stockholders. Mast stockholder approval must exceed 50% of Mast's outstanding common stock as of the record date to consummate the merger. This is a high threshold. Your vote matters!

YOUR PARTICIPATION IS IMPORTANT—PLEASE VOTE TODAY!

If you have any questions or need assistance with voting, please contact our proxy solicitation firm:

Advantage Proxy, Inc. Toll Free: 1-877-870-8565 Collect: 1-206-870-8565 Email: ksmith@advantageproxy.com

IF YOU HAVE RECENTLY MAILED YOUR PROXY OR CAST YOUR VOTE BY PHONE OR OVER THE INTERNET, PLEASE ACCEPT OUR THANKS AND DISREGARD THIS REQUEST.

IF YOUR SHARES ARE HELD IN A BROKERAGE ACCOUNT YOU SHOULD KNOW THAT YOUR BROKER WILL NOT VOTE YOUR SHARES IF THEY DON'T RECEIVE INSTRUCTIONS FROM YOU. PLEASE VOTE YOUR SHARES NOW SO YOUR VOTE CAN BE COUNTED WITHOUT DELAY.