

## XENON PHARMACEUTICALS INC.

## NOTICE OF ANNUAL MEETING OF SHAREHOLDERS

NOTICE IS HEREBY GIVEN that the annual meeting (the "**Meeting**") of the shareholders of Xenon Pharmaceuticals Inc. ("**Xenon**" or the "**Corporation**") will be held at the Corporation's principal office at 200 - 3650 Gilmore Way, Burnaby, British Columbia, V5G 4W8, Canada, on Monday, June 1, 2020 at 11:30 a.m. (PDT) for the following purposes:

- 1. to receive the financial statements of the Corporation for the financial year ended December 31, 2019 and the report of the Corporation's auditor thereon;
- 2. to elect as directors of the Corporation the nine nominees named in the accompanying Proxy Statement and Management Information Circular to hold office until the next annual meeting of the Corporation or until their successors are duly elected:
- 3. to approve, on an advisory basis, the compensation of the Corporation's named executive officers;
- 4. to approve, on an advisory basis, the frequency of future shareholder advisory votes to approve the compensation of the Corporation's named executive officers;
- 5. to approve the amendment and restatement of the Corporation's 2014 Equity Incentive Plan;
- 6. to appoint KPMG LLP as the Corporation's auditor to hold office until the next annual meeting of the Corporation;
- 7. to authorize the Audit Committee of the board of directors of the Corporation to fix the remuneration to be paid to the auditors of the Corporation; and
- 8. to conduct such other business as may properly be brought before the Meeting or any adjournment thereof.

The accompanying Proxy Statement and Management Information Circular provides additional information as to the matters to be dealt with at the Meeting and is deemed to form a part of this Notice. The holders of the common shares of the Corporation (the "Common Shares") of record at the close of business on April 6, 2020 (the "Record Date") are entitled to receive notice of and to vote at the Meeting. The holders of the Series 1 preferred shares of the Corporation (the "Preferred Shares") of record at the close of business on the Record Date are entitled to receive notice of and to vote at the Meeting, subject to certain voting limitations set forth in the rights, privileges, restrictions and conditions attached to the Preferred Shares.

In view of the current and rapidly evolving COVID-19 outbreak, Xenon encourages shareholders and proxyholders to vote by proxy well in advance of the Meeting instead of attending the Meeting in person. Xenon will host a live webcast of the Meeting so that shareholders can listen to the Meeting live. The webcast will be broadcast live on the "Investors" section of Xenon's website at <a href="https://www.xenon-pharma.com">https://www.xenon-pharma.com</a>. No shareholder will be able to vote or otherwise participate in the Meeting through the live webcast and as a result, shareholders are encouraged to vote by proxy prior to the Meeting. Access to the Meeting will, subject to Xenon's by-laws, be limited to essential personnel and shareholders and proxyholders entitled to attend and vote at the Meeting.

Xenon may take additional precautionary measures in relation to the Meeting in response to further developments with the COVID-19 outbreak. In the event it is not possible or advisable to hold the Meeting in person, Xenon will announce alternative arrangements for the Meeting via press release and filing of additional proxy materials with the Securities and Exchange Commission as promptly as practicable, which may include holding the Meeting entirely by electronic means, telephone or other communication facilities.

A shareholder may attend the Meeting in person or may be represented by proxy. Shareholders who are unable to attend the Meeting in person and who wish to ensure that their Common Shares and Preferred Shares, as applicable, will be voted at the Meeting are requested to complete, date and execute the enclosed forms of proxy, as applicable, and deliver it in accordance with the instructions set out in the forms of proxy and in the Proxy Statement and Management Information Circular.

Proxies for Common Shares to be used at the Meeting must be received by American Stock Transfer & Trust Company, LLC, not later than 11:59 p.m. (EDT) on Friday, May 29, 2020 (or, if the Meeting is adjourned, not later than 48 hours, excluding Saturdays, Sundays and holidays, preceding the time of such adjourned Meeting). Proxies may be submitted by one of the following alternative methods:

By Internet: http://www.voteproxy.com and follow the on-screen instructions or scan the QR code provided on the form of proxy;

- **By Telephone:** 1-800-PROXIES (1-800-776-9437) (toll-free in the United States and Canada) or 1-718-921-8500 and enter the 11 digit control number printed on the form of proxy;
  - By Email: Complete, date and sign your proxy and email a scanned copy to proxy@amstock.com;
  - By Fax: Complete, date and sign your proxy and fax a copy to 718-765-8730; or
- *By Mail:* Complete, date and sign your proxy and mail a copy to American Stock Transfer & Trust Company, LLC, at 6201 15th Avenue, Brooklyn, NY 11219, United States.

Proxies for Preferred Shares to be used at the Meeting must be received by the Corporation, not later than 11:59 p.m. (EDT) on Friday, May 29, 2020 (or, if the Meeting is adjourned, not later than 48 hours, excluding Saturdays, Sundays and holidays, preceding the time of such adjourned Meeting). Proxies may be submitted by one of the following alternative methods:

- By Email: Complete, date and sign your proxy and email a scanned copy to legalaffairs@xenon-pharma.com; or
- *By Mail:* Complete, date and sign your proxy and mail a copy to the Corporation, at 200-3650 Gilmore Way, Burnaby, British Columbia V5G 4W8, Canada, Attention: Corporate Secretary.

If you hold your Common Shares or Preferred Shares in a brokerage account, you are not a registered shareholder. Non-registered shareholders who plan to attend the Meeting must follow the instructions set out in the voting instruction form provided to them by their broker or other intermediary to ensure that their Common Shares or Preferred Shares, as applicable, will be voted at the Meeting.

DATED at Burnaby, British Columbia this 28th day of April, 2020.

By order of the board of directors

/s/ Simon N. Pimstone

Simon N. Pimstone Chief Executive Officer