

Up to \$19,950,000 Common Stock

This prospectus supplement updates and supplements certain information in the prospectus, dated December 11, 2020, or the 2020 prospectus, filed with the Securities and Exchange Commission as a part of our registration statement on Form S-3 (File No. 333-251151) relating to the offer and sale of our common stock, \$0.0001 par value per share, through Jefferies LLC, or Jefferies, as our sales agent for an "at the market offering" program of up to \$50,000,000, in accordance with the terms of the Open Market Sale AgreementSM, dated December 4, 2020, or sales agreement, we previously entered into with Jefferies. This prospectus supplement should be read in conjunction with the 2020 prospectus, and is qualified by reference to the 2020 prospectus, except to the extent that the information presented herein supersedes the information contained in the 2020 prospectus. This prospectus supplement is not complete without, and may only be delivered or utilized in connection with, the 2020 prospectus, including any amendments or supplements thereto.

Through April 6, 2022, we have sold an aggregate of 781,311 shares of our common stock through Jefferies in accordance with the sales agreement under the 2020 prospectus for aggregate gross proceeds of approximately \$5.45 million. We are filing this prospectus supplement to supplement the 2020 prospectus because we are now subject to General Instruction I.B.6 of Form S-3, which limits the amounts that we may sell under the registration statement of which this prospectus supplement and the 2020 prospectus are a part. As a result of these limitations and the current public float of our common stock, and in accordance with the terms of the sales agreement, we may currently offer and sell common stock having an aggregate offering price of up to \$19,978,443 from time to time through Jefferies under the sales agreement, which amount is in addition to the common stock that we have sold to date in accordance with the sales agreement under the 2020 prospectus. If our public float increases such that we may sell additional amounts under the sales agreement and the registration statement of which this prospectus supplement and the 2020 prospectus are a part, we will file another prospectus supplement prior to making additional sales.

Our common stock is quoted on the NYSE American Stock Market, or NYSE American, under the symbol "PHGE" and is also traded on the Tel Aviv Stock Exchange Ltd. under the symbol "PHGE." On April 6, 2022, the last reported sale price of our common stock on NYSE American was \$1.67 per share.

The aggregate market value of our common stock held by non-affiliates pursuant to General Instruction I.B.6 of Form S-3 is \$59,935,331, which was calculated based on 29,094,821 shares of common stock outstanding held by non-affiliates and at a price of \$2.06 per share, the closing price of our common stock on February 10, 2022, a date that is within 60 days of filing this prospectus supplement. As of the date hereof, we have not offered or sold any securities pursuant to General Instruction I.B.6 of Form S-3 during the prior 12 calendar month period that ends on and includes the date hereof. As a result of the limitations of General Instruction I.B.6 of Form S-3, and in accordance with the terms of the sales agreement, we are registering the offer and sale of shares of our common stock having an aggregate offering price of up to \$19,950,000 from time to time through Jefferies.

Investing in our common stock involves significant risks. See "Risk Factors" beginning page 10 of the 2020 prospectus and under the heading "Risk Factors" included in our most recent annual report on Form 10-K, which is incorporated by reference into the 2020 prospectus, and under similar headings in the other documents that are filed after the date hereof and incorporated by reference into this prospectus supplement and the 2020 prospectus for a discussion of the factors you should carefully consider before deciding to purchase our common stock.

Neither the Securities and Exchange Commission, the Israeli Securities Authority, nor any state or other securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the 2020 prospectus. Any representation to the contrary is a criminal offense.

Jefferies

The date of this prospectus supplement is April 8, 2022

The prospectus supplement to which this Exhibit is attached is a final prospectus for the related offering. The maximum aggregate offering price of that offering is \$19,950,000.