Issuer Free Writing Prospectus
Filed Pursuant to Rule 433
Dated October 8, 2024
Relating to Preliminary Prospectus Supplement Dated October 7, 2024
Registration Statement No. 333-282530



Common stock Pre-funded warrants to purchase common stock

This free writing prospectus relates only to the offering described below and should be read together with the preliminary prospectus supplement dated October 7, 2024, or the Preliminary Prospectus Supplement, including the documents incorporated by reference therein, and the accompanying base prospectus. This free writing prospectus supplements the Preliminary Prospectus Supplement primarily to reflect the addition of certain pre-funded warrants, and the shares of common stock issuable upon the exercise of such pre-funded warrants, to the securities being offered by Scholar Rock Holding Corporation. Except as otherwise indicated, all information in this free writing prospectus and the Preliminary Prospectus Supplement assumes no exercise of outstanding options or warrants, no settlement of outstanding restricted stock units, no exercise of the underwriters' option to purchase additional shares of our common stock and no exercise of the pre-funded warrants included in this offering.

This free writing prospectus is qualified in its entirety by reference to the Preliminary Prospectus Supplement, including the documents incorporated by reference therein, and the accompanying base prospectus. Financial information and other information presented in the Preliminary Prospectus Supplement or incorporated by reference therein is deemed to have changed to the extent affected by the changes described herein. This free writing prospectus should be read together with the Preliminary Prospectus Supplement, including the documents incorporated by reference therein, and the accompanying base prospectus, before making a decision in connection with an investment in the securities. Capitalized terms used in this free writing prospectus but not defined have the meanings given to them in the Preliminary Prospectus Supplement.

Issuer:

Scholar Rock Holding Corporation

Common stock offered by us:

shares of our common stock.

Pre-funded warrants offered by us:

We are also offering to each purchaser the opportunity to purchase, if the purchaser so chooses, prefunded warrants to purchase up to shares of common stock, in lieu of shares of common stock. Each pre-funded warrant will be exercisable for one share of our common stock. The purchase price of each pre-funded warrant will equal the price per share at which the shares of common stock are being sold to the public in this offering, minus \$0.0001, and the exercise price of each prefunded warrant will be \$0.0001 per share. This offering also relates to the shares of common stock issuable upon exercise of any pre-funded warrants sold in this offering. The exercise price and number of shares of common stock issuable upon exercise will be subject to certain further adjustments as described herein. See "Description of pre-funded warrants" for additional information.

Each pre-funded warrant is exercisable for one share of our common stock (subject to adjustment as provided therein) at any time at the option of the holder, provided that the holder will be prohibited from exercising its pre-funded warrant for shares of our common stock if, as a result of such exercise, the holder, together with its affiliates, would own more than 9.99% (or, at the election of the purchaser, 4.99%, 14.99% or 19.99%) of the total number of shares of our common stock then issued and outstanding. However, any holder may increase or decrease such percentage to any other percentage not in excess of 19.99%, provided that any increase or decrease in such percentage shall not be effective until the sixty-first (61st) day after such notice to us.

Underwriters' option to purchase additional shares: We have granted the underwriters an option, for a period of 30 days, to purchase up to an additional shares of our common stock. The number of shares subject to the underwriters' option equals 15% of the total number of shares of common stock we are offering plus the shares of common stock underlying the pre-funded warrants.

Common stock to be outstanding immediately after this offering:

shares, or shares if the underwriters exercise their option to purchase additional shares in full, in each case assuming no exercise of any pre-funded warrants offered and sold by us.

Use of Proceeds

We estimate that our net proceeds from this offering will be approximately \$\ \million\$, or \$\ \million\$ if the underwriters exercise their option to purchase additional shares in full, in each case assuming no exercise of any pre-funded warrants offered and sold by us, after deducting underwriting discounts, commissions and estimated offering expenses payable by us.

We intend to use the net proceeds we receive from this offering, together with our existing cash, cash equivalents and investments, to support commercialization of apitegromab, to advance our ongoing and future clinical programs, to further develop our technology platform to continue to advance our clinical and preclinical pipeline, and for working capital and other general corporate purposes. See "Use of Proceeds" for additional information.

Risk Factors

Your investment involves a high degree of risk. See "Risk factors" below, as well as "Risk factors" beginning on page S-9 of the Preliminary Prospectus Supplement and other information included and incorporated by reference in the Preliminary Prospectus Supplement and the accompanying prospectus, for a discussion of factors that you should carefully consider before deciding to invest in our securities.

Nasdaq Global Select Market symbol and trading

"SRRK"

There is no established trading market for the pre-funded warrants and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the pre-funded warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the pre-funded warrants will be limited.

Risk Factors

If you purchase securities in this offering, you will incur immediate and substantial dilution in the book value of your shares.

The public offering price will be substantially higher than the pro forma net tangible book value per share of our common stock after this offering. Based on the public offering price of \$ per share of our common stock and \$ per pre-funded warrant, purchasers of common stock or pre-funded warrants in this offering will experience immediate dilution of \$ per share in net tangible book value of the common stock. In addition, we have a significant number of stock options, warrants and unvested restricted stock units outstanding. The exercise of any of these outstanding options and warrants and vesting and settlement of these restricted stock units will result in further dilution to investors. For a further description of the dilution that you will experience immediately after this offering, see "Dilution."

The sale of our common stock in this offering, including any shares issuable upon exercise of any pre-funded warrants, and any future sales of our common stock, or the perception that such sales could occur, may depress our stock price and our ability to raise funds in new stock offerings.

We may from time to time issue additional shares of common stock at a discount from the current trading price of our common stock. As a result, our stockholders would experience immediate dilution upon the purchase of any shares of our common stock sold at such discount. In addition, as opportunities present themselves, we may enter into financing or similar arrangements in the future, including the issuance of debt securities, preferred stock or common stock. Sales of shares of our common stock in this offering, including any shares issuable upon the exercise of the pre-funded warrants offered in this offering and in the public market following this offering, or the perception that such sales could occur, may lower the market price of our common stock and may make it more difficult for us to sell equity securities or equity-related securities in the future at a time and price that our management deems acceptable, or at all.

There is no public market for the pre-funded warrants being offered in this offering.

There is no established public trading market for the pre-funded warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the pre-funded warrants on any securities exchange or nationally recognized trading system, including the Nasdaq Global Select Market. Without an active market, the liquidity of the pre-funded warrants will be limited.

We will not receive any meaningful amount of additional funds upon the exercise of the pre-funded warrants.

Each pre-funded warrant will be exercisable until it is fully exercised and by means of payment of the nominal cash purchase price upon exercise or by means of a "cashless exercise" according to a formula set forth in the pre-funded warrant. Accordingly, we will not receive any meaningful additional funds upon the exercise of the pre-funded warrants.

Significant holders or beneficial holders of our common stock may not be permitted to exercise pre-funded warrants that they hold.

A holder of a pre-funded warrant will not be entitled to exercise any portion of any pre-funded warrants which, upon giving effect to such exercise, would cause (i) the aggregate number of shares of our common stock beneficially owned by the holder (together with its affiliates) to exceed 9.99% (or, at the election of the purchaser, 4.99%, 14.99% or 19.99%) of the number of shares of our common stock outstanding immediately after giving effect to the exercise, or (ii) the combined voting power of our securities beneficially owned by the holder (together with its affiliates) to exceed 9.99% of the combined voting power of all of our securities then outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. Such percentage may be increased or decreased by written notice by the holder of the pre-funded warrants to any other percentage not in excess of 19.99%. Such increase or decrease will not be effective until the sixty-first (61st) day after such notice is delivered to us. As a result, you may not be able to exercise your pre-funded warrants for shares of our common stock at a time when it would be financially beneficial for you to do so. In such circumstance you could seek to sell your pre-funded warrants to realize value, but you may be unable to do so in the absence of an established trading market for the pre-funded warrants.

Holders of pre-funded warrants purchased in this offering will have no rights as common stockholders until such holders exercise their pre-funded warrants and acquire our common stock.

Until holders of pre-funded warrants acquire shares of our common stock upon exercise of such warrants, holders of pre-funded warrants will have no rights with respect to the shares of our common stock underlying such pre-funded warrants. Upon exercise of the pre-funded warrants, the holders will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

Use of Proceeds

We estimate that the net proceeds from this offering will be approximately \$\\$\ \text{million}, or approximately \$\\$\ \text{million} if the option to purchase additional shares is exercised in full by the underwriters, based on an aggregate of \text{shares of our common stock and rep-funded warrants to purchase \text{shares of our common stock being sold at a public offering price of \text{per per-funded warrant after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We will receive nominal proceeds, if any, upon exercise of the pre-funded warrants.

Based on our current plans, we believe our existing cash, cash equivalents and marketable securities, together with the net proceeds from this offering, will be sufficient to fund our operations into the fourth quarter of 2026. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we expect.

We intend to use the net proceeds we receive from this offering, together with our existing cash, cash equivalents and investments, to support commercialization of apitegromab, to advance our ongoing and future clinical programs, to further develop our technology platform to continue to advance our clinical and preclinical pipeline, and for working capital and other general corporate purposes. We may temporarily invest the net proceeds in a variety of capital preservation instruments, including investment grade, interest bearing instruments and U.S. government securities, until they are used for their stated purpose. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds.

This expected use of the net proceeds from this offering and our existing cash, cash equivalents and marketable securities represents our intentions based upon our current plans and business conditions. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress with respect to regulatory approval and commercialization of apitegromab, the progress of our development, the status of and results from clinical trials, any collaborations that we may enter into with third parties for our product candidates and any unforeseen cash needs. We have no current agreements, commitments or understandings for any material acquisitions or licenses of any products, businesses or technologies.

Dilution

If you invest in our common stock or pre-funded warrants in this offering, your ownership interest will be diluted immediately to the extent of the difference between the public offering price per share you will pay in this offering and the as adjusted net tangible book value per share of our common stock after this offering.

Our net tangible book value as of June 30, 2024 was approximately \$133.6 million, or approximately \$1.67 per share of common stock. Net tangible book value per share represents the amount of total tangible assets (total assets less intangible assets) less total liabilities, divided by the number of shares of our common stock outstanding as of June 30, 2024.

Net tangible book value dilution per share to investors participating in this offering represents the difference between the public offering price per share paid by purchasers of securities in this offering and the as adjusted net tangible book value per share of our common stock immediately after this offering. After giving effect to the sale of (i) shares of our common stock in this offering at a public offering price of \$ per share, and (ii) pre-funded warrants to purchase up to shares of our common stock in this offering at a public offering price of \$ per pre-funded warrant (which equals the public offering price of the common stock at which shares of our common stock are being sold to the public in this offering less the \$0.0001 per share exercise price of each such prefunded warrant), and after deducting underwriting discounts and commissions and estimated offering expenses payable by us and excluding the proceeds, if any, from the exercise of the pre-funded warrants issued pursuant to this offering or any resulting accounting associated with the pre-funded warrants, our as adjusted net tangible book value as of June 30, 2024 would have been approximately \$ million, or \$ per share. This represents an immediate increase in net tangible book value of \$ per share to existing stockholders and immediate dilution of \$ per share to investors purchasing our common stock in this offering. Dilution per share to investors purchasing shares of our common stock in this offering is determined by subtracting as adjusted net tangible book value per share after this offering from the public offering price per share paid by investors purchasing shares of our common stock in this offering. The following table illustrates this dilution on a per share basis:

Public offering price per share	\$
Historical net tangible book value per share as of June 30, 2024	\$ 1.67
Increase in net tangible book value per share attributable to this offering	
As adjusted net tangible book value per share after giving effect to this offering	
Dilution per share to investors participating in this offering	\$

The discussion and table above assumes (i) no exercise of the pre-funded warrants sold in this offering and (ii) that the underwriters do not exercise their option to purchase additional shares of common stock.

If the underwriters exercise their option to purchase shares of common stock in full (and excluding shares of our common stock issued and any proceeds received upon exercise of the pre-funded warrants or any resulting accounting associated with the pre-funded warrants), the as adjusted net tangible book value after this offering would be \$ per share, representing an immediate increase in as adjusted net tangible book value of \$ per share to existing stockholders and immediate dilution in as adjusted net tangible book value of \$ per share to investors purchasing common stock in this offering

The information above and in the foregoing table is based upon 79,992,068 shares of our common stock outstanding as of June 30, 2024. The information above and in the foregoing table excludes as of June 30, 2024:

- 17,008,164 pre-funded warrants to purchase shares of common stock outstanding as of June 30, 2024 with an exercise price of \$0.0001 per share;
- 9,157,496 common warrants to purchase shares of common stock outstanding as of June 30, 2024 with a weighted-average exercise price of \$7.35 per share;
- 196,217 shares of common stock issuable upon the exercise of stock options outstanding as of June 30, 2024 under our 2017 Stock Option and Incentive Plan at a weighted-average exercise price of \$6.24 per share;
- 6,757,243 shares of common stock issuable upon the exercise of stock options outstanding as of June 30, 2024 under our 2018 Stock Option and Incentive Plan at a weighted-average exercise price of \$16.86 per share;
- · 2,476,520 shares of common stock issuable upon the vesting and settlement of restricted stock units outstanding as of June 30, 2024 issued under our 2018 Stock Option and Incentive Plan;
- 2,214,092 shares of common stock issuable upon the exercise of stock options outstanding as of June 30, 2024 under our 2022 Inducement Equity Plan with a weighted-average exercise price of \$9.94 per share;
- 508,143 shares of common stock issuable upon the vesting and settlement of restricted stock units as of June 30, 2024 issued under our 2022 Inducement Equity Plan;
- · 2,009,488 shares of common stock reserved for the future issuance under our 2018 Stock Option and Incentive Plan as of June 30, 2024;
- · 2,196,691 shares of our common stock available for future issuance under our 2018 Employee Stock Purchase Plan as of June 30, 2024; and
- · 1,221,272 shares of our common stock available for future issuance under our 2022 Inducement Equity Plan as of June 30, 2024.

To the extent that outstanding options as of June 30, 2024 have been or may be exercised, unvested restricted stock units have settled or other shares issued, investors purchasing our securities in this offering may experience dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

Description of pre-funded warrants

The following summary of certain terms and provisions of pre-funded warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the pre-funded warrant, the form of which will be filed as an exhibit to a Current Report on Form 8-K in connection with this offering and incorporated by reference into the registration statement of which this prospectus supplement forms a part. Prospective investors should carefully review the terms and provisions of the form of pre-funded warrant for a complete description of the terms and conditions of the pre-funded warrants.

Pre-funded warrants will be issued in certificated form only.

Term

The pre-funded warrants will not expire.

Duration and exercise price

Each pre-funded warrant offered hereby will have an initial exercise price per share equal to \$0.0001. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price.

Exercisability

The pre-funded warrants will be exercisable at any time on or after the original issuance date. The pre-funded warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of such holder's pre-funded warrant to the extent that the holder would own more than 9.99% (or, at the election of the purchaser, 4.99%, 14.99% or 19.99%) of the outstanding shares of common stock immediately after exercise, except that upon at least 61 days' written prior notice from the holder to us, the holder may increase or decrease the amount of ownership of outstanding shares of common stock after exercising the holder's pre-funded warrants up to 19.99% of the number of shares of common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the prefunded warrants. No fractional shares of common stock will be issued in connection with the exercise of a pre-funded warrant. In lieu of fractional shares, we will either pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price or round up to the next whole share.

Cashless exercise

In lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the pre-funded warrants.

Fundamental transactions

In the event of any fundamental transaction, as described in the pre-funded warrants and generally including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our shares of common stock, then upon any subsequent exercise of a pre-funded warrant, the holder will have the right to receive as alternative consideration, for each share of common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of shares of common stock of the successor or acquiring corporation or of our company, if it is the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of shares of common stock for which the pre-funded warrant is exercisable immediately prior to such event.

Transferability

Subject to applicable laws, the pre-funded warrants may be offered for sale, sold, transferred or assigned without our consent. The pre-funded warrants will be held in definitive form by the warrant agent. The ownership of the prefunded warrants and any transfers of the pre-funded warrants will be registered in a warrant register maintained by the warrant agent. We will initially act as warrant agent.

Exchange listing

There is no established trading market for the pre-funded warrants. We do not intend to list the pre-funded warrants on any securities exchange or nationally recognized trading system.

Right as a stockholder

Except as otherwise provided in the pre-funded warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the pre-funded warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until such pre-funded warrant holders exercise their pre-funded warrants.

Certain U.S. federal income tax considerations

Although it is not entirely free from doubt, a pre-funded warrant should be treated as a share of our common stock for U.S. federal income tax purposes and a holder of a pre-funded warrant should generally be taxed in the same manner as a holder of common stock. Accordingly, no gain or loss should be recognized upon the exercise of a pre-funded warrant and, upon exercise, the holding period of a pre-funded warrant should carry over to the share of common stock received. Similarly, the tax basis of a pre-funded warrant should carry over to the share of common stock received upon exercise, increased by the exercise price (if applicable). Each holder of pre-funded warrants should consult his, her or its own tax advisor regarding the risks associated with the acquisition of pre-funded warrants pursuant to this offering (including potential alternative characterizations).

Underwriting

The underwriters will purchase the pre-funded warrants pursuant to the underwriting agreement described in the Preliminary Prospectus Supplement on terms generally consistent with those applicable to the shares of common stock being sold in the offering. The underwriting discounts and commissions per pre-funded warrant will be equal to the underwriting discounts and commissions per share of common stock sold in the offering.

General

Additional conforming changes are hereby made to the Preliminary Prospectus Supplement to reflect the changes described in this free writing prospectus. All terms of the Preliminary Prospectus Supplement applicable to our common stock will be applicable to the shares underlying the pre-funded warrants upon issuance.

Scholar Rock Holding Corporation has filed a registration statement (including a preliminary prospectus supplement dated October 7, 2024 and the accompanying base prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the preliminary prospectus supplement and the accompanying base prospectus and other documents the Issuer has filed with the SEC for more complete information about the Issuer and the offering. You may obtain these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, copies may be obtained from: J.P. Morgan Securities LLC, c/o: Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, NY 11717, or by email at prospectus-eq_fi@jpmchase.com and postsalemanualrequests@broadridge.com; Jefferies LLC, Attention: Equity Syndicate Prospectus Department, 520 Madison Avenue, New York, NY 10022, by telephone at 877-821-7388, or by email at prospectus_department@jefferies.com; or Piper Sandler & Co., 800 Nicollet Mall, J12S03, Minneapolis, MN 55402, Attention: Prospectus Department, by telephone at 800-747-3924, or by email at prospectus@psc.com.