

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

VOLITIONRX LIMITED

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

91-1949078

(I.R.S. Employer
Identification No.)

**1489 West Warm Springs Road, Suite 110
Henderson, Nevada 89014
+1 (646) 650-1351**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Agents and Corporations, Inc.
1201 Orange Street, Suite 600
Wilmington, Delaware 19801
+1 (800) 759-2248**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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660 Newport Center Drive, Suite 1600
Newport Beach, California 92660
+1 (949) 725-4000**

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS

Subject to Completion, dated November 8, 2024



\$100,000,000

Common Stock
Warrants
Units

We may offer and sell, from time to time in one or more offerings, any combination of common stock, par value \$0.001 per share (“common stock”), warrants exercisable for shares of common stock, or units having an aggregate initial offering price not to exceed \$100,000,000. The units may consist of any combination of securities described in this prospectus.

This prospectus provides a general description of the securities we may offer. We will provide you with the specific terms of any offering in one or more supplements to this prospectus. The prospectus supplement may also add, update or change information in this prospectus. You should read this prospectus and any prospectus supplement, as well as the documents incorporated by reference or deemed to be incorporated by reference herein or therein, carefully before you invest in any of the securities offered pursuant to this prospectus. **This prospectus may not be used to offer or sell our securities unless accompanied by a prospectus supplement relating to the offered securities.**

These securities may be sold directly by us, through dealers or agents designated from time to time, to or through underwriters or dealers, or through a combination of these methods on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled “*Plan of Distribution*” in this prospectus. We will describe the plan of distribution for any particular offering of our securities in a prospectus supplement. If any agents, underwriters or dealers are involved in the sale of any securities with respect to which this prospectus is being delivered, we will set forth in a prospectus supplement the names of such agents, underwriters or dealers and any applicable fees, commissions, discounts and over-allotment options. We will also set forth in a prospectus supplement the price to the public of such securities and the net proceeds that we expect to receive from such sale.

Our common stock is currently listed on the NYSE American under the symbol “VNRX.” On November 7, 2024 the last reported sale price of our common stock on the NYSE American was \$0.6579 per share.

Investing in our securities involves a high degree of risk. See the section of this prospectus entitled “*Risk Factors*” beginning on page 4, and under similar headings in the documents incorporated by reference into this prospectus, any applicable prospectus supplement, or any related free writing prospectus for a discussion of the factors we urge you to consider carefully before deciding to purchase our securities.

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

The date of this prospectus is _____, 2024.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the “SEC”) using a “shelf” registration process. Under this shelf registration process, we may from time to time offer and sell any combination of the securities described in this prospectus in one or more offerings with an aggregate initial offering price not to exceed \$100,000,000. We have provided to you in this prospectus a general description of the securities we may offer. Each time we sell any of our securities under this prospectus, we will, to the extent required by law, provide a prospectus supplement that will contain specific information about the terms of the offering.

It is important for you to read and consider all of the information contained in or incorporated by reference into this prospectus and any applicable prospectus supplement before making any decision whether to invest in our securities. This prospectus does not contain all of the information included in the registration statement, and incorporates by reference important business and financial information about us that is not included in or delivered with this document. For a more complete understanding of the offering of our securities, you should refer to the registration statement, including its exhibits. You should also read and consider the additional information contained in the documents that we have incorporated into this prospectus by reference, as described in “*Incorporation of Certain Information by Reference*” and “*Where You Can Find More Information*” in this prospectus.

We may add, update or change any of the information contained in this prospectus or in any accompanying prospectus supplement we may authorize to be delivered to you. To the extent there is a conflict between the information contained in this prospectus and any accompanying prospectus supplement, you should rely on the information in the prospectus supplement, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date – for example, a document incorporated by reference in this prospectus or any prospectus supplement – the statement in the document having the later date shall modify or supersede such earlier statement. Any statement so modified will be deemed to constitute a part of this prospectus only as so modified, and any statement so superseded will be deemed not to constitute a part of this prospectus. This prospectus, together with any accompanying prospectus supplement, includes all material information relating to an offering pursuant to this registration statement.

You should rely only on the information contained in this prospectus, in any accompanying prospectus supplement, or in any document incorporated by reference herein or therein. We have not authorized anyone to provide you with any different information. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide to you. The information contained in this prospectus, in any applicable prospectus supplement, and in the documents incorporated by reference herein or therein is accurate only as of the date such information is presented. Our business, financial condition, results of operations and prospects may have changed since those respective dates. You should not assume that the information contained in this prospectus and any prospectus supplement is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus is delivered or the shares are sold on a later date.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus and any accompanying prospectus supplement does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor does this prospectus and any accompanying prospectus supplement constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. This prospectus may not be used to offer or sell our securities unless accompanied by a prospectus supplement relating to the offered securities.

Unless otherwise indicated, information contained in or incorporated by reference into this prospectus concerning our industry and the markets in which we operate, including market position and market opportunity, is based on information from our management’s estimates, as well as from industry publications and research, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, while we believe that information contained in industry publications, surveys and studies has been obtained from reliable sources, the accuracy and completeness of such information is not guaranteed, and we have not independently verified any of the data contained in these third-party sources.

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We may sell the securities to or through underwriters, dealers or agents or directly to purchasers. We and our agents reserve the sole right to accept or reject in whole or in part any proposed purchase of securities. The prospectus supplement, which we will provide to you each time we offer securities, will set forth the names of any underwriters, dealers or agents involved in the sale of the securities, and any applicable fee, commission or discount arrangements with them. See “*Plan of Distribution.*”

This prospectus and any accompanying prospectus supplement, including the documents incorporated by reference herein and therein, include statements that are based on various assumptions and estimates that are subject to numerous known and unknown risks and uncertainties. Some of these risks and uncertainties are described in the section entitled “*Risk Factors*” on page 4 of this prospectus and beginning on page 10 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, as well as the other documents we file with the SEC. These and other important factors could cause our future results to be materially different from the results expected as a result of, or implied by, these assumptions and estimates. You should read the information contained in, or incorporated by reference into, this prospectus and any accompanying prospectus supplement, and the documents incorporated by reference herein and therein, completely and with the understanding that future results may be materially different from and worse than what we expect. See the information included under the section entitled “*Cautionary Note Regarding Forward-Looking Statements*” in this prospectus.

Unless we state otherwise or the context indicates otherwise, references to the “Company,” “VolitionRx,” “we,” “us,” and “our” in this prospectus refer to VolitionRx Limited and its wholly owned subsidiaries, Singapore Volition Pte. Limited, Belgian Volition SRL, Volition Global Services SRL, Volition Diagnostics UK Limited, and Volition America, Inc., and its majority-owned subsidiary, Volition Veterinary Diagnostics Development LLC. Our fiscal year ends on December 31 of each calendar year. Nucleosomics[™], Capture-PCR[™], and Nu.Q[®] and their respective logos are trademarks and/or service marks of VolitionRx Limited and its subsidiaries. All other trademarks, service marks and trade names referred to in this prospectus are the property of their respective owners. Additionally, unless otherwise specified, all references to “\$” refer to the legal currency of the United States of America.

PROSPECTUS SUMMARY

This summary highlights selected information that is presented in greater detail elsewhere in this prospectus or incorporated by reference in this prospectus. Because it is only a summary, it does not contain all of the information you should consider before investing in our securities, and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information included elsewhere in this prospectus. Before you decide whether to purchase our securities, you should read this entire prospectus, the applicable prospectus supplement and any related free writing prospectus carefully, including the risks of investing in our securities discussed under the section entitled “Risk Factors” contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part.

Overview

VolitionRx is a multi-national epigenetics company. It has patented technologies that use chromosomal structures, such as nucleosomes, and transcription factors as biomarkers in cancer and other diseases. The tests in the Company’s product portfolio detect certain characteristic changes that occur from the earliest stages of disease, enabling early detection and offering a better way to monitor disease progression and a patient’s response to treatment.

The tests offered by VolitionRx and its subsidiaries are designed to diagnose and monitor a range of life-altering diseases, including certain cancers and diseases associated with NETosis, such as sepsis and COVID-19. Early diagnosis and monitoring have the potential to not only prolong the life of patients but also improve their quality of life.

The Company’s key pillars of focus are:

- **Nu.Q[®] Vet** – cost-effective, easy-to-use blood tests for dogs and other companion animals. The Nu.Q[®] Vet Cancer Test is commercially available as a cancer screening test in dogs.
- **Nu.Q[®] NETs** – monitoring the immune system to save lives.
- **Nu.Q[®] Discover** – a complete solution to profiling nucleosomes.
- **Nu.Q[®] Cancer** – monitoring disease progression, response to treatment and minimal residual disease.
- **Capture-PCR[™]** – isolating and capturing circulating tumor-derived DNA from plasma samples for early cancer detection.

The Company has grown from a single two-meter lab bench at the University of Namur in Belgium to a purpose-built 17,000 square foot lab and 10,000 square foot production facility in Gembloux, Belgium, an Innovation Lab in California, and offices in California, London, Singapore and Nevada.

Implications of Being a Smaller Reporting Company

We are a “smaller reporting company” and accordingly may provide less public disclosure than larger public companies. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

Corporate Information

We are a Delaware corporation. Our principal executive offices are located at 1489 West Warm Springs Road, Suite 110, Henderson, Nevada 89014, and our telephone number is +1 (646) 650-1351. We maintain a website at www.volition.com. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and all amendments to such reports are available to you free of charge through the “Investors” section of www.volition.com as soon as practicable after such materials have been electronically filed with, or furnished to, the SEC. The information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to be part of this prospectus or in deciding whether to purchase our securities. We have included our website address only as an inactive textual reference and do not intend it to be an active link to our website.

RISK FACTORS

Investing in our securities involves a high degree of risk and uncertainty. Before making an investment decision with respect to our securities, we urge you to carefully consider the risks, uncertainties and assumptions described in this prospectus, the applicable prospectus supplement and the documents incorporated by reference herein and therein, including the risks described on page 10 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 and in our subsequent Quarterly Reports on Form 10-Q filed with the SEC. You should also refer to the other information contained in this prospectus and the applicable prospectus supplement and the documents incorporated by reference into this prospectus and the applicable prospectus supplement, including our financial statements and the notes to those statements and the information set forth in the section entitled “*Cautionary Note Regarding Forward-Looking Statements.*”

If one or more of the adverse events relevant to those risks and uncertainties actually occurs, our business, financial condition, results of operations, cash flows or prospects could be materially adversely affected. This could cause the trading price of our securities to decline, and you could lose all or part of your investment. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may have similar adverse effects on us. For more information, see the information set forth in the section entitled “*Where You Can Find More Information.*”

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any accompanying prospectus supplement, and the documents incorporated by reference herein and therein, contain “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934 (the “Exchange Act”). These forward-looking statements are intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact included in this prospectus supplement, the accompanying base prospectus, or the documents incorporated by reference herein or therein, are forward-looking statements. Such statements are typically characterized by terminology such as “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “forecast,” “goal,” “intend,” “may,” “plan,” “potential,” “seek,” “should,” “strategy,” “will,” and similar expressions.

Forward-looking statements also include the assumptions underlying or relating to such statements. In particular, forward-looking statements contained in this prospectus and that may be included in any accompanying prospectus supplement or incorporated by reference relate to, among other things, our future or assumed financial condition, results of operations, liquidity, business forecasts and plans, research and product development plans, manufacturing plans, strategic plans and objectives, capital needs and financing plans, product launches, regulatory approvals, competitive environment, and the application of accounting guidance. We caution you that the foregoing list may not include all of the forward-looking statements made in this prospectus and in any accompanying prospectus supplement or documents incorporated by reference.

Our forward-looking statements are based on our management’s current assumptions and expectations about future events and trends, which affect or may affect our business, strategy, operations or financial performance. Although we believe that these forward-looking statements are based upon reasonable assumptions, they are subject to numerous known and unknown risks and uncertainties and are made in light of information currently available to us. Our actual financial condition and results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in the section entitled “*Risk Factors*” beginning on page 4 of this prospectus supplement and page 10 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, as well as those described in the other documents we file with the SEC. You should read this prospectus, any accompanying base prospectus, and the documents incorporated by reference herein and therein, completely and with the understanding that our actual future results may be materially different from and worse than what we expect.

Some significant factors that may impact our estimates and forward-looking statements include:

- Our inability to generate significant revenue or achieve profitability;
- Our need to raise additional capital in the future;
- Our expansion of our product development and sales and marketing capabilities could give rise to difficulties in managing our growth;
- Our dependence on third-party distributors;
- Our limited experience with sales and marketing;
- The possibility that we may not be able to continue to operate, as indicated by the “going concern” opinion from our auditors;
- Our ability to successfully develop, manufacture, market, and sell our future products;
- Our ability to timely obtain necessary regulatory clearances or approvals to distribute and market our future products;
- The acceptance by the marketplace of our future products;
- The highly competitive and rapidly changing nature of the diagnostics market;
- Protection of our patents, intellectual property and trade secrets;
- Our reliance on third parties to manufacture and supply our intended products, and such manufacturers’ dependence on third party suppliers;
- The material weaknesses in our internal control over financial reporting that we have identified;
- Pressures related to macroeconomic and geopolitical conditions; and
- Other risks identified elsewhere in this prospectus, as well as in our other filings with the SEC.

Moreover, we operate in an evolving environment. New risk factors and uncertainties emerge from time to time and it is not possible for our management to predict all risk factors and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. We qualify all of our forward-looking statements by these cautionary statements.

Forward-looking statements speak only as of the date they were made, and, except to the extent required by law or the rules of the NYSE American, we undertake no obligation to update or review any forward-looking statement because of new information, future events or other factors. You should, however, review the risks and uncertainties we describe in the reports we will file from time to time with the SEC, after the filing date of this prospectus. For additional information, refer to the section entitled “*Where You Can Find More Information*.”

Forward-looking statements involve risks and uncertainties and are not guarantees of future performance. As a result of such risks and uncertainties, including those described above, the forward-looking statements discussed in this prospectus supplement, the accompanying base prospectus, and the documents incorporated by reference herein and therein might not occur and our future results and our performance may differ materially from those expressed in these forward-looking statements due to, but not limited to, the factors mentioned above. Because of these uncertainties, you should not place undue reliance on these forward-looking statements when making an investment decision.

USE OF PROCEEDS

We intend to use the net proceeds, if any, we receive from the sale of our securities offered by us hereby for research and continued product development, clinical studies, product commercialization, working capital and other general corporate purposes, including potential strategic acquisitions.

We may set forth additional information regarding the use of proceeds from the sale of securities we offer under this prospectus in a prospectus supplement relating to the specific offering. We have not determined the amount of net proceeds to be used specifically for the foregoing purposes. As a result, our management will have broad discretion in the allocation of net proceeds.

DIVIDEND POLICY

We have not previously paid cash dividends on our common stock. It is our current intention to invest our cash flow and earnings in the growth of our business and, therefore, we have no plans to pay cash dividends for the foreseeable future. Additionally, our ability to pay dividends is limited by restrictions on our ability to pay dividends and make certain other restricted payments under the terms of our term loan. You should not invest in our securities with the expectation of receiving cash dividends.

GENERAL DESCRIPTION OF SECURITIES

We, directly or through agents, dealers or underwriters designated from time to time, may offer, issue and sell, together or separately, in one or more offerings, up to \$100,000,000 in the aggregate, inclusive of any exercise price thereof, of:

- shares of common stock;
- warrants to purchase shares of common stock;
- units comprised of one or more shares of common stock and warrants in any combination; or
- any combination of the foregoing, each on terms to be determined at the time of sale.

The common stock, warrants and units are collectively referred to herein as the securities. This prospectus provides you with a general description of the securities we may offer. Each time we offer securities under this prospectus, we will, to the extent required by law, provide you with a prospectus supplement that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information in this prospectus. The securities involve various risks that we will describe in the section entitled “*Risk Factors*” that will be included in each prospectus supplement. For more details, see the information included in the section entitled “*About this Prospectus*.”

DESCRIPTION OF CAPITAL STOCK

The following is a summary of all material characteristics of our capital stock as set forth in our second amended and restated certificate of incorporation and amended and restated bylaws, each as amended (respectively, our “Certificate of Incorporation” and our “Bylaws”). This summary does not purport to be complete and is qualified in its entirety by reference to our Certificate of Incorporation and Bylaws, copies of which have been filed as exhibits to our SEC filings. For more information, see the section entitled, “*Where You Can Find More Information.*”

Common Stock

General. We may issue shares of our common stock from time to time. We are currently authorized to issue 175,000,000 shares of common stock. As of November 7, 2024, there were 92,664,812 shares of our common stock outstanding. Our common stock is listed on the NYSE American and traded under the symbol “VNRX.” On November 7, 2024, the last reported sale price of our common stock on the NYSE American was \$0.6579.

As of November 7, 2024 there were approximately 167 holders of record of our common stock. The actual number of holders of our common stock is greater than the number of record holders, and includes stockholders who are beneficial owners, but whose shares are held in street name by banks, brokers, dealers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

Holders. Holders of shares of our common stock are entitled to one vote per share held of record on all matters submitted to a vote of stockholders, including the election of directors. The holders are entitled to receive dividends when, as and if declared by our board of directors, in its discretion, out of funds legally available therefor. In the event of our liquidation, dissolution or winding up, the holders of our common stock are entitled to share ratably in all of our assets remaining after payment of liabilities. The holders of our common stock have no preemptive or other subscription rights, and there are no conversion rights or redemption or sinking fund provisions with respect to such shares. All of the outstanding shares of our common stock are, and the shares of our common stock when issued will be, fully paid and non-assessable.

Registration Rights

Piggy-Back Registration. On June 1, 2023, in connection with an offering of 13,000,000 shares of our common stock underwritten by Prime Executions, Inc., doing business as Freedom Capital Markets (“Freedom”), we issued as compensation to Freedom certain underwriter warrants (the “Freedom Warrants”) to purchase up to 448,500 shares of common stock at an exercise price of \$2.00 per share (the shares of common stock issuable upon exercise of the Freedom Warrants, the “Warrant Shares”). The Freedom Warrants were issued pursuant to an underwriting agreement we entered into with Freedom, as representative of the underwriters named therein, on June 1, 2023. Pursuant to the Freedom Warrants, Freedom is entitled to certain “piggy-back” registration rights where, if at any time while the Freedom Warrants are outstanding, there is not an effective registration statement covering all of the Warrant Shares and we determine to prepare and file with the SEC a registration statement relating to an offering for our own account or the account of others under the Securities Act of any of our equity securities (subject to certain exceptions), Freedom can require us to register its Warrant Shares, provided we shall not be required to register any Warrant Shares that are eligible for resale pursuant to Rule 144 and certain other exceptions set forth in the Freedom Warrants. The Freedom Warrants and the Warrant Shares were registered pursuant to a Registration Statement on Form S-3, File No. 333-259783, initially declared effective by the SEC on November 8, 2021.

Demand Registration. Pursuant to the Freedom Warrants, Freedom is entitled to certain “demand” registration rights where, if there is not an effective registration statement covering all of the Warrant Shares, then from December 5, 2023 through June 5, 2028, Freedom is entitled to one “demand” registration right at our expense and one “demand” registration right at Freedom’s expense, pursuant to which Freedom can require us to register its Warrant Shares.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Certain provisions of Delaware law, our Certificate of Incorporation and our Bylaws could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids. These provisions are also designed, in part, to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging such proposals, including proposals that are priced above the then-current market value of our common stock, because, among other reasons, the negotiation of such proposals could result in an improvement of their terms.

Certificate of Incorporation and Bylaws. Our Certificate of Incorporation and Bylaws include provisions that:

- require that any action to be taken by our stockholders be effected at a duly-called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by the board of directors, the chairman of the board, or the chief executive officer (or the president if there is no chief executive officer);
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to the board of directors;
- provide that the number of directors on our board of directors is fixed exclusively by our board of directors;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- establish the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain derivative actions or proceedings brought on our behalf, any action asserting a claim of breach of fiduciary duty, any action asserting a claim against us arising pursuant to the General Corporation Law of the State of Delaware (the “DGCL”), or any action asserting a claim governed by the internal affairs doctrine; and
- provide that there is no right to cumulate votes with respect to any shares of capital stock.

Delaware Anti-takeover Statute. We are subject to the provisions of Section 203 of the DGCL regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- prior to the date of the transaction, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of our voting stock outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, those shares owned by (1) persons who are directors and also officers and (2) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to such time the business combination or transaction is approved by our board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3 % of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the “interested stockholder” and an “interested stockholder” is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation’s outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may discourage business combinations or other attempts that might result in a premium over the market price for the shares of common stock held by our stockholders. The provisions of DGCL, our Certificate of Incorporation and our Bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is VStock Transfer, LLC. The address of VStock Transfer, LLC is 18 Lafayette Place, Woodmere, New York 11598, and the telephone number is (212) 828-8436.

DESCRIPTION OF WARRANTS

We may offer, sell and issue, from time to time, warrants to purchase shares of our common stock. The warrants may be issued independently or together with shares of our common stock and may be attached to or separate from the shares of our common stock. If we issue warrants, they will be evidenced by warrant agreements or warrant certificates issued under one or more warrant agreements, which will be contracts between us and/or a bank or trust company, as warrant agent, and the holders of the warrants or an agent for the holders of the warrants, all as shall be set forth in the prospectus supplement relating to warrants being offered pursuant to such prospectus supplement. The forms of warrant agreements or warrant certificates, as applicable, relating to the warrants will be filed as exhibits to the registration statement of which this prospectus is part and/or will be incorporated by reference from reports that we file with the SEC.

The following summary of material provisions of the warrants and warrant agreements are subject to, and qualified in their entirety by reference to, all of the provisions of the warrant agreement and warrant certificate applicable to a particular series of warrants. We urge you to read the applicable prospectus supplement and any related free writing prospectus, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants.

Whenever warrants are to be issued and sold pursuant to this prospectus, we will file a prospectus supplement relating to that offer and sale which will specify (in each case as applicable):

- the number of shares of common stock purchasable upon exercise of the warrants and the exercise price at which such number of shares may be purchased upon exercise;
- the price or prices at which the warrants will be issued;
- the provisions, if any, for changes to or adjustments in the exercise price;
- the provisions, if any, for call rights or put rights relating to the warrants or the underlying shares of common stock;
- the date on which the right to exercise the warrants shall commence and the date on which the right will expire;
- if applicable, the number of warrants issued with each share of our common stock;
- if applicable, the date on and after which the warrants and the related common stock will be separately transferable; and
- any other terms of the warrants, including terms, procedures and limitations relating to the exchange, exercise and settlement of the warrants.

Until any warrants to purchase common stock are exercised, the holders of warrants will not be entitled, by virtue of being such holders, to vote, consent, receive dividends, receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter, or to exercise any rights whatsoever as our stockholders.

Each warrant will entitle the holder to purchase for cash such shares of our common stock at such exercise price as shall be in each case be set forth in, or be determinable as set forth in, the prospectus supplement relating to the warrants offered thereby. Warrants may be exercised at any time up to the close of business on the expiration date set forth in the prospectus supplement relating to the warrants offered thereby. After the close of business on the expiration date, unexercised warrants will become void.

The warrants may be exercised as set forth in the prospectus supplement relating to the warrants offered. Upon receipt of payment and the warrant certificate properly completed and duly executed at the Company or the corporate trust office of the warrant agent, as applicable, or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the shares of our common stock purchasable upon such exercise. If less than all of the warrants represented by such warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants.

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities described in this prospectus in any combination from time to time. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. If we issue units, they will be evidenced by unit agreements or unit certificates issued under one or more unit agreements, which will be contracts between us and the holders of the units or an agent for the holders of the units. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date. The forms of unit agreements or unit certificates, as applicable, relating to the units will be filed as exhibits to the registration statement that includes this prospectus, or as an exhibit to a filing with the SEC that is incorporated by reference into this prospectus.

PLAN OF DISTRIBUTION

We may sell our securities from time to time in any manner permitted by the Securities Act, including any one or more of the following ways:

- to investors through agents;
- directly to agents;
- to or through underwriters;
- to or through broker-dealers (acting as agent or principal);
- in a block trade;
- in ordinary brokerage transactions and transactions in which a broker solicits purchasers;
- in privately negotiated transactions;
- in “at the market” offerings, within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise; and/or
- directly to purchasers, through a specific bidding or auction process or otherwise.

The securities may be sold at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices relating to the prevailing market prices or at negotiated prices.

Offers to purchase offered securities may be solicited by agents designated by us from time to time. Any agent involved in the offer or sale of the offered securities in respect of which this prospectus is delivered will be named, and any commissions payable by us will be set forth, in the applicable prospectus supplement. Unless otherwise set forth in the applicable prospectus supplement, any agent will be acting on a reasonable best efforts basis for the period of its appointment. Any agent may be deemed to be an underwriter, as that term is defined in the Securities Act, of the offered securities so offered and sold.

We will set forth in a prospectus supplement the terms of the offering of our securities, including:

- the name or names of any agents, underwriters or dealers;
- the purchase price of our securities being offered and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and commissions and other items constituting agents’ or underwriters’ compensation;
- the public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchanges on which such securities may be listed.

If offered securities are sold to the public by means of an underwritten offering, either through underwriting syndicates represented by managing underwriters or directly by the managing underwriters, we will execute an underwriting agreement with an underwriter or underwriters, and the names of the specific managing underwriter or underwriters, as well as any other underwriters, will be set forth in the applicable prospectus supplement. In addition, the terms of the transaction, including commissions, discounts and any other compensation of the underwriters and dealers, if any, will be set forth in the applicable prospectus supplement, which prospectus supplement will be used by the underwriters to make resales of the offered securities. If underwriters are utilized in the sale of the offered securities, the offered securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including:

- transactions on the NYSE American or any other organized market where the securities may be traded;
- in the over-the-counter market;
- in negotiated transactions; or
- under delayed delivery contracts or other contractual commitments.

We may grant to the underwriters options to purchase additional offered securities to cover over-allotments, if any, at the public offering price with additional underwriting discounts or commissions, as may be set forth in the applicable prospectus supplement. If we grant any over-allotment option, the terms of the over-allotment option will be set forth in the applicable prospectus supplement.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may indemnify agents, underwriters and dealers against specified liabilities, including liabilities incurred under the Securities Act, or to contribution by us to payments they may be required to make in respect of such liabilities. Agents, underwriters or dealers, or their respective affiliates, may be customers of, engage in transactions with or perform services for us or our respective affiliates, in the ordinary course of business.

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Unless otherwise specified in the applicable prospectus supplement, each class or series of securities will be a new issue with no established trading market, other than our common stock, which is traded on the NYSE American. We may elect to list any other class or series of securities on any exchange and, in the case of our common stock, on any additional exchange. However, unless otherwise specified in the applicable prospectus supplement, we will not be obligated to do so. It is possible that one or more underwriters may make a market in a class or series of securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for any of the offered securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

To comply with the securities laws of certain states, if applicable, the securities offered by this prospectus will be offered and sold in those states only through registered or licensed brokers or dealers.

In compliance with guidelines of the Financial Industry Regulatory Authority ("FINRA"), the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

LEGAL MATTERS

Certain legal matters, including the validity of the issuance of the securities offered by this prospectus, will be passed upon for us by Stradling Yocca Carlson & Rauth LLP, Newport Beach, California.

EXPERTS

The consolidated financial statements of VolitionRx Limited as of December 31, 2023 and 2022 and for each of the years in the two-year period ended December 31, 2023, have been incorporated by reference herein and in the registration statement in reliance upon the reports of Sadler, Gibb & Associates, LLC, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate” into this prospectus information that we file with the SEC in other documents. This means that we can disclose important information to you by referring to other documents that contain that information. Any information that we incorporate by reference into this prospectus is considered part of this prospectus.

Information contained in this prospectus and information that we file with the SEC in the future and incorporate by reference in this prospectus automatically modifies and supersedes previously filed information, including information in previously filed documents or reports that have been incorporated by reference in this prospectus, to the extent the new information differs from or is inconsistent with the old information. Any statement so modified will be deemed to constitute a part of this prospectus only as so modified, and any statement so superseded will be deemed not to constitute a part of this prospectus. For more information, see the section entitled, “*About this Prospectus.*”

We incorporate by reference, as of their respective dates of filing, the documents listed below that we have filed with the SEC and any additional documents that we may file in the future with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including any documents filed after the date on which the registration statement of which this prospectus is a part is initially filed until the offering of the security covered by this prospectus has been completed, other than, in each case, documents or information deemed to have been “furnished” and not “filed” in accordance with SEC rules:

- our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2023, as filed with the SEC on March 25, 2024;
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended [March 31, 2024](#) and [June 30, 2024](#), as filed with the SEC on May 13, 2024 and August 14, 2024, respectively;
- our Current Reports on Form 8-K as filed with the SEC on each of [January 2, 2024](#), [March 19, 2024](#), [April 26, 2024](#), [July 3, 2024](#), [August 12, 2024](#), [September 27, 2024](#), [September 30, 2024](#) and [November 6, 2024](#); and
- the description of our common stock contained in our registration statement on [Form 8-A](#), as filed with the SEC on February 3, 2015, [Exhibit 4.1](#) to our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, as filed with the SEC on February 20, 2020, and any other amendments or reports filed for the purpose of updating such description.

These filings have not been included in or delivered with this prospectus. We hereby undertake to provide without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, a copy of any or all documents that are incorporated by reference into this prospectus, but not delivered with the prospectus, other than exhibits to such documents unless such exhibits are specifically incorporated by reference into this prospectus. To request such materials, please contact Mr. Rodney Rootsart, our Corporate Secretary at c/o Corporate Secretary, VolitionRx Limited, 1489 West Warm Springs Road, Suite 110, Henderson, Nevada 89014 by telephone at +1 (646) 650-1351 or by email at notice@volition.com. These documents are also available free of charge through the “*Investors*” section on our website at www.volition.com as soon as practicable after such materials have been electronically filed with, or furnished to, the SEC.

You should rely only on the information contained in this prospectus, in any accompanying prospectus supplement, or in any document incorporated by reference herein or therein. We have not authorized anyone to provide you with any different information. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide to you.

The information contained in this prospectus, in any applicable prospectus supplement, and in the documents incorporated by reference herein or therein is accurate only as of the date such information is presented. Our business, financial condition, results of operations and future prospects may have changed since those respective dates.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports and other information with the SEC. The SEC maintains an internet website at www.sec.gov that contains periodic and current reports, proxy and information statements, and other information regarding registrants that are filed electronically with the SEC.

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities offered by this prospectus. This prospectus, filed as part of the registration statement, does not contain all the information set forth in the registration statement and its exhibits and schedules, portions of which have been omitted as permitted by the rules and regulations of the SEC. For further information about us, we refer you to the registration statement and to its exhibits and schedules. You can obtain a copy of the registration statement from the SEC's website.

These documents are also available, free of charge, through the "Investors" section of our website, which is located at www.volition.com. Information contained on our website is not incorporated by reference into this prospectus and you should not consider information on our website to be part of this prospectus.



\$100,000,000

**Common Stock
Warrants
Units**

PROSPECTUS

, 2024

PART II:
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the various costs and expenses, other than underwriting discounts and commissions, payable by us in connection with the sale of the securities being registered hereunder. All such costs and expenses shall be borne by us. Except for the Securities and Exchange Commission registration fee, which payment will be offset by \$4,361.36 of fees that were previously paid, all the amounts shown are estimates.

Securities and Exchange Commission registration fee	\$ 15,310
FINRA filing fee	*
Printing fees and expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent fees and expenses	*
Miscellaneous fees and expenses	*
Total	<u>\$ *</u>

* These fees and expenses are calculated based on the securities offered and the number of issuances and, accordingly, cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers

We are incorporated under the laws of the State of Delaware. Section 102(b)(7) of the DGCL permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duties as a director, except for liability for any:

- breach of a director's duty of loyalty to the corporation or its stockholders;
- act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payment of dividends or redemption of shares (DGCL Section 174); or
- transaction from which the director derives an improper personal benefit.

Section 145 of the DGCL provides, in general, that a Delaware corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than a derivative action by or in the right of the corporation), by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. In the case of a derivative action, a Delaware corporation may indemnify any such person against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification will be made in respect of any claim, issue or matter as to which such person will have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or any other court in which such action was brought determines such person is fairly and reasonably entitled to indemnity for such expenses. To the extent that a present or former director or officer of a Delaware corporation is successful on the merits or otherwise in defense of any action, suit or proceeding referred to above, or in defense of any claim, issue or matter therein, Section 145 of the DGCL provides that such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with such action, suit or proceeding.

Section 174 of the DGCL provides, among other things, that a director, who willfully or negligently approves of an unlawful payment of dividends or an unlawful stock purchase or redemption, may be held liable for such actions. A director who was either absent when the unlawful actions were approved or dissented at the time, may avoid liability by causing his or her dissent to such actions to be entered in the books containing minutes of the meetings of the board of directors at the time such action occurred or immediately after such absent director receives notice of the unlawful acts.

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Regarding indemnification for liabilities arising under the Securities Act which may be permitted for directors or officers pursuant to the foregoing provisions, we are informed that, in the opinion of the SEC, such indemnification is against public policy, as expressed in the Securities Act and is therefore unenforceable.

Our Certificate of Incorporation authorizes us to, and our Bylaws provide that, we shall, indemnify our directors and officers to the fullest extent permitted by the DGCL and also pay expenses incurred in defending any such proceeding in advance of its final disposition upon delivery of an undertaking, by or on behalf of an indemnified person, to repay all amounts so advanced if it should be determined ultimately that such person is not entitled to be indemnified under our Bylaws or the DGCL.

As permitted by the DGCL, we have entered into indemnification agreements with each of our directors and certain of our officers. These agreements require us to indemnify these individuals to the fullest extent permitted under Delaware law against liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified.

We have an insurance policy covering our officers and directors with respect to certain liabilities, including liabilities arising under the Securities Act, or otherwise.

Any underwriting agreement or similar agreement that we enter into in connection with an offer of securities pursuant to this registration statement may provide for indemnification by any underwriters of us, our directors, our officers who sign the registration statement and our controlling persons for some liabilities, including liabilities arising under the Securities Act.

Item 16. Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference			Filing Date	Filed Herewith
		Form	File No.	Exhibit		
1.1*	Form of Underwriting Agreement.					
3.1	Second Amended and Restated Certificate of Incorporation, as amended and currently in effect.	S-8	333-280974	4.2	7/24/24	
3.2	Amended and Restated Bylaws, as amended and currently in effect.	10-Q	001-36833	3.2	5/13/24	
4.1	Specimen Common Stock Certificate.	10-SB	000-30402	3(A)	12/6/99	
4.2*	Form of Common Stock Warrant Agreement and Warrant Certificate.					
4.3*	Form of Unit Agreement.					
5.1	Opinion of Stradling Yocca Carlson & Rauth LLP.					X
23.1	Consent of Independent Registered Public Accounting Firm.					X
23.2	Consent of Stradling Yocca Carlson & Rauth LLP (included in Exhibit 5.1).					X
24.1	Power of Attorney (included on the signature page of this registration statement).					X
107	Filing Fee Table.					X

* To be filed by amendment or as an exhibit to a report pursuant to Section 13(a) or 15(d) of the Exchange Act and incorporated herein by reference, if applicable.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

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(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that:

Paragraphs (1)(i), (1)(ii) and (1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(6) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Dubai, United Arab Emirates, on November 8, 2024.

VOLITIONRX LIMITED

By: /s/ Cameron Reynolds
Cameron Reynolds
President and Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Cameron Reynolds and Rodney Rootsart as his or her true and lawful attorneys-in-fact and agents, each acting alone, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any or all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by this registration statement that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and all post-effective amendments thereto, and to file the same, with all exhibits thereto, and all documents in connection therewith, making such changes in this registration statement as such attorneys-in-fact and agents so acting deem appropriate, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in with respect to the offering of securities contemplated by this registration statement, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, each acting alone, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Cameron Reynolds</u> Cameron Reynolds	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	November 8, 2024
<u>/s/ Terig Hughes</u> Terig Hughes	Chief Financial Officer and Treasurer <i>(Principal Financial and Accounting Officer)</i>	November 8, 2024
<u>/s/ Rodney Gerard Rootsart</u> Rodney Gerard Rootsart	Secretary	November 8, 2024
<u>/s/ Guy Innes</u> Guy Innes	Director	November 8, 2024
<u>/s/ Dr. Alan Colman</u> Dr. Alan Colman	Director	November 8, 2024
<u>/s/ Dr. Phillip Barnes</u> Dr. Phillip Barnes	Director	November 8, 2024
<u>/s/ Kim Nguyen</u> Kim Nguyen	Director	November 8, 2024
<u>/s/ Mickie Henshall</u> Mickie Henshall	Director	November 8, 2024
<u>/s/ Dr. Ethel Rubin</u> Dr. Ethel Rubin	Director	November 8, 2024
<u>/s/ Timothy I. Still</u> Timothy I. Still	Director	November 8, 2024



Stradling Yocca Carlson & Rauth LLP
660 Newport Center Drive, Suite 1600
Newport Beach, CA 92660-6422
949 725 4000
stradlinglaw.com

November 8, 2024

VolitionRx Limited
1489 West Warm Springs Road, Suite 110
Henderson, Nevada 89014

Re: *Registration Statement on Form S-3*

Ladies and Gentlemen:

In connection with the registration statement on Form S-3 (the "**Registration Statement**") to be filed by VolitionRx Limited, a Delaware corporation (the "**Company**"), with the Securities and Exchange Commission (the "**Commission**") on November 8, 2024 under the Securities Act of 1933, as amended (the "**Securities Act**"), you have requested our opinion with respect to the matters set forth below.

You have provided us with a draft of the Registration Statement in the form in which it will be filed, which includes the prospectus (the "**Prospectus**"). The Prospectus provides that it may be supplemented by one or more supplements to the Prospectus (each, a "**Prospectus Supplement**"). The Registration Statement, including the Prospectus, as supplemented by one or more Prospectus Supplements, will provide for the registration by the Company of up to \$100,000,000 initial aggregate offering price of (i) shares of common stock, par value \$0.001 per share (the "**Common Stock**"); (ii) warrants to purchase shares of Common Stock (the "**Warrants**"); and/or (iii) units comprised of one or more shares of Common Stock and/or Warrants (the "**Units**"), or any combination of the foregoing, plus any additional Common Stock, Warrants and/or Units that may be registered pursuant to any subsequent registration statement that the Company may hereafter file with the Commission pursuant to Rule 462(b) under the Securities Act (collectively, the "**Securities**"). The Securities will be offered and sold, either individually or collectively, pursuant to one or more definitive purchase agreements, subscription agreements, underwriting agreements, indentures, warrant agreements, unit agreements or similar agreements (any such agreement, a "**Purchase Agreement**").

In our capacity as your counsel in connection with such registration, we are familiar with the proceedings taken and proposed to be taken by the Company in connection with the preparation and filing of the Registration Statement (including the Prospectus), the preparation and filing of the Prospectus Supplement(s), and the authorization, issuance and sale of the Securities. For the purposes of this opinion, with your consent, we have assumed that (i) at the time any Securities are sold pursuant to the Registration Statement (any such time, the "**Relevant Time**"), the Registration Statement and any supplements and amendments thereto (including any post-effective amendments) will be effective and will comply with all applicable laws; (ii) at the Relevant Time, one or more Prospectus Supplements will have been prepared and filed describing the Securities offered thereby and will comply with all applicable laws; (iii) at the time of execution, each of the parties to any Purchase Agreement other than the Company (a) will be duly organized, validly existing and in good standing under the laws of its jurisdiction of organization, (b) will have the requisite power and authority to execute, deliver and perform its obligations under each Purchase Agreement to which it is a party, and (c) will have duly authorized, executed and delivered each Purchase Agreement; and (iv) with respect to each of the parties to each Purchase Agreement (other than the Company), such Purchase Agreement to which it is a party will constitute its legally valid and binding agreement, enforceable against it in accordance with its terms.

In connection with the preparation of this opinion, we have examined such documents and considered such questions of law as we have deemed necessary or appropriate. We have assumed the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies thereof and the genuineness of all signatures.

We are opining herein as to the effect on the subject transaction only of the General Corporation Law of the State of Delaware, and we express no opinion with respect to the applicability thereto, or the effect thereon, of the laws of any other jurisdiction.

Subject to the foregoing and the other matters set forth herein, it is our opinion that as of the date hereof:

1. When the Registration Statement and any required post-effective amendments thereto have all become effective under the Securities Act and (i) any and all Prospectus Supplement(s) required by applicable laws have been delivered and filed as required by such laws; (ii) any applicable Purchase Agreement covering the offer and sale of the shares of Common Stock has been duly authorized, executed and delivered by the Company; (iii) the issuance and delivery of the shares of Common Stock have been duly authorized in accordance with applicable laws, including, without limitation, by the adoption of resolutions of the Board of Directors of the Company (the "**Board**") (or an authorized committee thereof); and (iv) payment of legal consideration for the shares of Common Stock, in the manner contemplated by the Registration Statement, the Prospectus, the related Prospectus Supplement(s), and any applicable Purchase Agreement, has been received by the Company, and assuming that (a) the terms of such shares of Common Stock, as issued and delivered, are materially consistent with the description thereof in the Registration Statement, the Prospectus, and the related Prospectus Supplement(s); (b) at the time of the issuance of such shares of Common Stock, the Company has a sufficient number of authorized but unissued shares of Common Stock under the Company's Second Amended and Restated Certificate of Incorporation, as amended; (c) such shares of Common Stock, as issued and delivered, comply with all requirements and restrictions, if any, applicable to the Company, whether imposed by any court, governmental agency or regulatory body having jurisdiction over the Company or otherwise; (d) such shares of Common Stock are issued and sold as contemplated in the Registration Statement, the Prospectus, the related Prospectus Supplement (s), any applicable Purchase Agreement, and such resolutions of the Board (or of an authorized committee thereof), such shares of Common Stock, including any shares of Common Stock duly issued upon the exercise of any Warrants that are exercisable for shares of Common Stock, will be validly issued, fully paid and nonassessable.

2. When the Registration Statement and any required post-effective amendments thereto have all become effective under the Securities Act and (i) any and all Prospectus Supplement(s) required by applicable laws have been delivered and filed as required by such laws; (ii) the applicable Purchase Agreement covering the offer and sale of the Warrants has been duly authorized, executed and delivered by the Company; (iii) the Warrants have been duly established in accordance with the terms of the applicable Purchase Agreement; (iv) the issuance and delivery of the Warrants have been duly authorized in accordance with applicable laws including, without limitation, by the adoption of resolutions of the Board (or an authorized committee thereof); (v) the Warrants have been duly executed, authenticated and/or countersigned (as applicable) in accordance with the applicable Purchase Agreement; and (vi) payment of legal consideration for the Warrants (if any) in the manner contemplated by the Registration Statement, the Prospectus, the related Prospectus Supplement(s), and any applicable Purchase Agreement, has been received by the Company, and assuming that (a) the terms of the Warrants, as executed and delivered, are materially consistent with the description thereof in the Registration Statement, the Prospectus and the related Prospectus Supplement(s); (b) the Warrants, as executed and delivered, do not violate any law applicable to the Company or result in a default under or breach of any agreement or instrument then binding upon the Company; (c) the Warrants as executed and delivered comply with all requirements and restrictions, if any, applicable to the Company, whether imposed by any court, governmental agency or regulatory body having jurisdiction over the Company or otherwise; and (d) the Warrants are issued and sold as contemplated by the Registration Statement, the Prospectus and the related Prospectus Supplement(s), any applicable Purchase Agreement and such resolutions of the Board (or of an authorized committee thereof), such Warrants will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

3. When the Registration Statement and any required post-effective amendments thereto have all become effective under the Securities Act and (i) any and all Prospectus Supplement(s) required by applicable laws have been delivered and filed as required by such laws; (ii) the applicable Purchase Agreement covering the offer and sale of the Units has been duly authorized, executed and delivered by the Company; (iii) the Units have been duly established in accordance with the terms of the applicable Purchase Agreement; (iv) the issuance and delivery of the Units have been duly authorized in accordance with applicable laws including, without limitation, by the adoption of resolutions of the Board (or resolutions of an authorized committee thereof); (v) the Units have been duly executed, authenticated and/or countersigned (as applicable) in accordance with the Purchase Agreement relating to such Units; and (vi) payment of legal consideration for the Units, in the manner contemplated by the Registration Statement, the Prospectus, the related Prospectus Supplement(s), and any applicable Purchase Agreement, has been received by the Company, and assuming that (a) the terms of the Units, as executed and delivered, are materially consistent with the description thereof in the Registration Statement, the Prospectus and the related Prospectus Supplement(s); (b) the Units, as executed and delivered, do not violate any law applicable to the Company or result in a default under or breach of any agreement or instrument then binding upon the Company; (c) the Units as executed and delivered comply with all requirements and restrictions, if any, applicable to the Company, whether imposed by any court or governmental or regulatory body having jurisdiction over the Company or otherwise; and (d) the Units are issued and sold as contemplated by the Registration Statement, the Prospectus and the related Prospectus Supplement(s), any applicable Purchase Agreement and such resolutions of the Board (or of an authorized committee thereof), such Units will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

The opinions set forth in Paragraphs 2 and 3 relating to the enforceability of the Warrants and Units, respectively, are subject to the following exceptions, limitations and qualifications: (i) the effect of bankruptcy, insolvency, reorganization, preference, fraudulent transfer, moratorium or other similar laws relating to or affecting the rights and remedies of creditors; (ii) the effect of general principles of equity, whether enforcement is considered in a proceeding in equity or at law (including the possible unavailability of specific performance or injunctive relief), concepts of materiality, reasonableness, good faith and fair dealing, and the discretion of the court before which any proceeding therefor may be brought; (iii) the unenforceability under certain circumstances under law or court decisions of provisions providing for the indemnification of, or contribution to, a party with respect to a liability where such indemnification or contribution is contrary to public policy; and (iv) the unenforceability of any provision requiring the payment of attorneys' fees, where such payment is contrary to law or public policy.

This opinion is for your benefit in connection with the Registration Statement, and may be relied upon by you and by persons entitled by law to rely upon it pursuant to the applicable provisions of the U.S. federal securities laws. We hereby consent to the use of this opinion as Exhibit 5.1 to the Registration Statement, and further consent to the use of our name under the caption "Legal Matters" in the Prospectus which is part of the Registration Statement. In giving such consent, we do not hereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

This opinion is rendered as of the date hereof and based solely on our understanding of facts in existence as of such date after the examination described in this opinion. We assume no obligation to advise you of any fact, circumstance, event or change in the law or the facts that may hereafter be brought to our attention whether or not such occurrence would affect or modify the opinions expressed herein.

Very truly yours,

/s/ STRADLING YOCCA CARLSON & RAUTH LLP

STRADLING YOCCA CARLSON & RAUTH LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

As independent registered public accountants, we hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of VolitionRx Limited of our report dated March 25, 2024, with respect to the consolidated financial statements of VolitionRx Limited for the years ended December 31, 2023 and 2022, included in its Annual Report (Form 10-K) filed with the Securities and Exchange Commission.

We also consent to the reference of our firm under the caption “Experts” in this Registration Statement.

/s/ Sadler Gibb & Assoc.

Draper, UT
November 8, 2024

CALCULATION OF FILING FEE TABLE

Form S-3
(Form Type)

VolitionRx Limited
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered(1) (2)	Proposed Maximum Offering Price Per Unit(2)	Maximum Aggregate Offering Price(3)	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to Be Paid	Equity	Common stock, par value \$0.001 per share	—	—	—	—	—	—				
	Other	Warrants	—	—	—	—	—	—				
	Other	Units ⁽⁴⁾	—	—	—	—	—	—				
	Unallocated (Universal) Shelf	—	457(o)	—	—	\$100,000,000	0.00015310	\$15,310				
Fees Previously Paid	—	—	—	—	—	—	—	—				
Carry Forward Securities												
Carry Forward Securities	Unallocated (Universal) Shelf	—	Rule 415(a)(6)	(5)	(5)	\$39,975,771.57 ⁽⁵⁾			S-3	333-259783	November 8, 2021	\$4,361.36
	Total Offering Amounts					\$100,000,000		\$15,310				
	Total Fees Previously Paid							—				
	Total Fee Offsets							\$4,361.36				
	Net Fee Due							\$10,948.64				

- In accordance with Rule 416 under the Securities Act of 1933, as amended (the “Securities Act”), the securities being registered hereunder shall be deemed to include an indeterminate number of shares of common stock, warrants, and units to be issued or issuable with respect to the securities registered hereunder as a result of any stock splits, stock dividends or similar transactions.
- Pursuant to Instruction 2.A.iii.b. of Item 16(b) of Form S-3, this information is not specified as to each class of securities to be registered. There is being registered hereby such indeterminate number of the securities of each identified class as may from time to time be issued at indeterminate prices. Securities registered hereunder may be sold separately, or in combination with other securities registered hereunder.
- The proposed maximum aggregate offering price has been estimated solely to calculate the registration fee in accordance with Rule 457(o) under the Securities Act. In no event will the aggregate offering price of all securities issued from time to time pursuant to this registration statement exceed \$100,000,000.
- Each unit will be issued under a unit agreement and will represent an interest in two or more equity securities, which may or may not be separable from one another.
- Pursuant to Rule 415(a)(6) under the Securities Act, this registration statement includes \$39,975,771.57 aggregate principal offering price of unsold securities (the “Unsold Securities”) that were previously registered for sale under a Registration Statement initially filed on September 24, 2021 on Form S-3 (File No. 333-259783) and declared effective on November 8, 2021 (the “Prior Registration Statement”). The Prior Registration Statement registered securities for a proposed maximum aggregate offering price of \$100,000,000, \$60,024,228.44 of which have been sold. The Registrant previously paid at various times filing fees in the aggregate of \$4,361.36 relating to the Unsold Securities. Pursuant to Rule 415(a)(6) under the Securities Act, the filing fees previously paid with respect to the Unsold Securities will continue to be applied to such Unsold Securities. Pursuant to Rule 415(a)(6) under the Securities Act, the offering of Unsold Securities under the Prior Registration Statement will be deemed terminated as of the date of effectiveness of this registration statement.