

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-227248

Subject to Completion, dated February 9, 2021

PRELIMINARY PROSPECTUS SUPPLEMENT
(To Prospectus dated September 26, 2018)



VOLITIONRX LIMITED
Common Stock

We are offering _____ shares of our common stock.

Our common stock is listed on The NYSE American Market under the symbol “VNRX.” On February 8, 2021, the last reported sale price of our common stock on The NYSE American Market was \$6.50 per share.

The underwriter has agreed to purchase the common stock from us at a price of \$ _____ per share, which will result in approximately \$ _____ of proceeds to us, before offering expenses assuming no exercise by the underwriter of the option described below. The underwriter proposes to offer the shares of common stock from time to time for sale in one or more transactions on The NYSE American Market, the existing trading market for our common stock, in negotiated transactions or otherwise at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices, subject to receipt and acceptance by it and subject to its right to reject any order in whole or in part. See “Underwriting.”

We have granted the underwriter an option for a period of 30 days to purchase up to an additional _____ shares of our common stock at the price per share set forth above. If the underwriter exercises the option in full, the total proceeds to us, before expenses, will be \$ _____.

See “Underwriting” for details and information regarding the compensation to be paid to the underwriter.

Investing in our common stock involves risks. You should carefully consider all of the information set forth in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference in this prospectus supplement before deciding to invest in our common stock. Please see “Risk Factors” on page S-6 of this prospectus supplement and page 3 of the accompanying base prospectus and in the documents incorporated by reference in this prospectus supplement and the accompanying base prospectus to read about factors you should consider before buying shares of our common stock.

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

The underwriter expects to deliver the shares of common stock against payment on or about February _____, 2021.

Sole Book-Running Manager

Cantor

The date of this prospectus supplement is February , 2021.

TABLE OF CONTENTS

	Page
PROSPECTUS SUPPLEMENT	
ABOUT THIS PROSPECTUS SUPPLEMENT	S-1
PROSPECTUS SUPPLEMENT SUMMARY	S-3
RISK FACTORS	S-6
CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION	S-8
USE OF PROCEEDS	S-10
DIVIDEND POLICY	S-11
DILUTION	S-12
DESCRIPTION OF COMMON STOCK	S-13
UNDERWRITING	S-14
LEGAL MATTERS	S-21
EXPERTS	S-21
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	S-21
WHERE YOU CAN FIND MORE INFORMATION	S-22
PROSPECTUS	
ABOUT THIS PROSPECTUS	1
PROSPECTUS SUMMARY	2
RISK FACTORS	3
CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION	4
USE OF PROCEEDS	5
GENERAL DESCRIPTION OF SECURITIES	6
DESCRIPTION OF CAPITAL STOCK	7
DESCRIPTION OF THE WARRANTS	9
DESCRIPTION OF UNITS	10
PLAN OF DISTRIBUTION	11
LEGAL MATTERS	13
EXPERTS	13
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	14
WHERE YOU CAN FIND MORE INFORMATION	15

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is part of a registration statement that was filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process and consists of two parts. The first part is the prospectus supplement, including the documents incorporated by reference herein, which describes the specific terms of this offering. The second part, the accompanying prospectus, including the documents incorporated by reference therein, provides more general information. In general, when we refer only to the prospectus, we are referring to both parts of this document combined.

Before you invest, you should carefully read this prospectus supplement, the accompanying prospectus, all information incorporated by reference herein and therein, as well as the additional information described under the heading “Where You Can Find More Information.” These documents contain information you should carefully consider when deciding whether to invest in our common stock.

This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent there is a conflict between the information contained in this prospectus supplement and the accompanying prospectus, you should rely on information contained in this prospectus supplement, provided that if any statement in, or incorporated by reference into, one of these documents is inconsistent with a statement in another document having a later date, the statement in the document having the later date modifies or supersedes the 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.

You should rely only on the information contained in this prospectus supplement, the accompanying prospectus, any document incorporated by reference herein or therein, or any free writing prospectuses we may provide to you in connection with this offering. Neither we nor the underwriter has authorized anyone to provide you with any different information. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus supplement and the accompanying prospectus. 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 supplement, the accompanying prospectus, 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.

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 supplement and the accompanying prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the shares of common stock to which it relates, nor do this prospectus supplement and the accompanying prospectus 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.

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.

This prospectus supplement and the accompanying prospectus, 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” beginning on page S - 6 of this prospectus supplement and in the section entitled “Risk Factors” starting on page 9 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, or our Annual Report, 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 supplement and the accompanying prospectus, 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 heading “Cautionary Note Regarding Forward-Looking Information.”

This prospectus does not contain all of the information included in the registration statement of which this prospectus is a part. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. The registration statement, including the exhibits, can be read on the SEC's website or at the SEC's offices mentioned under the heading "Where You Can Find More Information." Securities offered pursuant to the registration statement to which this prospectus supplement relates may only be offered and sold if not more than three years have elapsed since September 28, 2018, the initial effective date of the registration statement, subject to the extension of this period in compliance with applicable SEC rules.

Unless otherwise stated in this prospectus supplement and the accompanying prospectus, references to "Company," "VolitionRx," "we," "us," or "our" refer to VolitionRx Limited and its wholly owned subsidiaries, Singapore Volition Pte. Limited, Belgian Volition SRL, Volition Diagnostics UK Limited, Volition America, Inc., Volition Germany GmbH, and its majority-owned subsidiary Volition Veterinary Diagnostics Development LLC. Our fiscal year ends on December 31 of each calendar year. NucleosomicsTM and Nu.QTM and their respective logos are trademarks and/or service marks of VolitionRx and its subsidiaries. All other trademarks, service marks and trade names referred to in this prospectus supplement and accompanying 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 SUPPLEMENT SUMMARY

This prospectus supplement summary discusses the key aspects of the offering and highlights certain information appearing elsewhere in this prospectus supplement, in the accompanying prospectus and in the documents we incorporate by reference herein and therein. However, as this is a summary, it does not contain all of the information that you should consider before deciding to invest in our common stock. You are encouraged to carefully read this entire prospectus, the accompanying prospectus, any free writing prospectus that we have been authorized to use and the documents incorporated by reference herein and in the accompanying prospectus. You should pay special attention to the information provided under the headings (i) "Risk Factors" in this prospectus supplement and in the accompanying prospectus and in our Annual Report as well as in the other documents we file with the SEC, and (ii) "Management's Discussion and Analysis of Financial Condition and Results of Operations" as well as our financial statements and the related notes thereto and the other documents incorporated by reference in this prospectus supplement and the accompanying prospectus.

Overview

VolitionRx is a multi-national epigenetics company that applies its Nucleosomics™ platform through its subsidiaries to develop simple, easy to use, cost-effective blood tests to help diagnose a range of cancers and other diseases. Our tests are based on the science of Nucleosomics™, which is the practice of identifying and measuring nucleosomes in the bloodstream or other bodily fluid - since changes in these parameters are an indication that disease is present.

Our approach is to investigate the epigenetic structure of chromatin and nucleosomes rather than investigating only the DNA sequence. We are continuously developing new technologies including:

- A suite of low cost Nu.Q™ immunoassays that can accurately measure nucleosomes containing numerous epigenetic signals or structure.
- Nu.Q™ Capture technology to isolate or enrich nucleosomes containing particular epigenetic signals or structures for a wide range of potential scientific and medical applications, such as the enrichment of nucleosomes of tumor origin in blood samples taken from cancer patients.
- We plan to develop an ability to produce synthetic (recombinant) nucleosomes containing exact defined epigenetic signals and structures. These are used to ensure exquisite accuracy of Nu.Q™ immunoassay tests but also have many other applications including as tools in epigenetic drug development.

In addition to human diagnostics we are also developing the use of the Nu.Q™ technology in veterinary applications and launched the Nu.Q™ Vet Cancer Screening Test in late 2020. Further studies are ongoing or planned to extend the range of cancers detected in dogs and then in other animals. Our extensive intellectual property portfolio includes coverage of veterinary applications.

Recent Developments

Certain Preliminary Financial Results as of December 31, 2020

Although we have not finalized our full financial results for the three months and the year ended December 31, 2020, we expect to report that we had approximately \$19.4 million in cash and cash equivalents as of December 31, 2020 and have additionally raised approximately \$1.2 million during January 2021 under our "at the market" offering program pursuant to our effective "shelf" registration statement on Form S-3 (File No. 333-227248).

The information above is based on preliminary unaudited information and estimates for the year ended December 31, 2020, is not a comprehensive statement of our financial results for this period, and is subject to change pending completion of our financial closing procedures, final adjustments, completion of the audit of our financial statements and other developments that may arise between now and the time the audit of our financial statements is completed. This preliminary estimate may change and the change may be material. Our expectation with respect to our cash and investments at December 31, 2020, is based upon management estimates and is the responsibility of management. Our independent registered public accounting firm has not conducted an audit or review of, and does not express an opinion or any other form of assurance with respect to, these preliminary estimates. Our actual results for the three months and the year ended December 31, 2020, will not be available until after this offering is completed.

Corporate Information

We are a Delaware corporation. Our executive offices are located at 13215 Bee Cave Parkway, Suite 125, Galleria Oaks B, Austin, Texas 78738, 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.

The Offering

Issuer:	VolitionRx Limited
Offering price:	\$ per share
Common Stock offered by us:	shares (or shares if the underwriter exercises in full its option to purchase additional shares).
Common Stock to be outstanding immediately after this offering:	shares (or shares if the underwriter exercises in full its option to purchase additional shares).
Option to purchase additional shares:	The underwriter has an option to purchase a maximum of additional shares of common stock from us. The underwriter can exercise this option at any time within 30 days from the date of this prospectus supplement.
Use of proceeds:	We intend to use the net proceeds from this offering for continued product development, clinical studies, product commercialization, working capital and other general corporate purposes, including potential strategic acquisitions. See the information included under the heading "Use of Proceeds" on page S-10.
Risk factors:	Investing in our common stock involves a high degree of risk. Before deciding to invest in our common stock you should review and carefully consider the risks and uncertainties described under the heading "Risk Factors" beginning on page S-6 of this prospectus supplement and page 9 of our Annual Report, as well as the risks and uncertainties described in the other documents we file with the SEC.
NYSE American Market symbol:	VNRX

Unless otherwise indicated, the number of shares of our common stock to be outstanding immediately after this offering is based on 48,064,575 shares of our common stock outstanding as of September 30, 2020, but excludes the following as of such date:

- 215,000 shares of our common stock issuable upon the exercise of common stock purchase warrants outstanding as of September 30, 2020, with a weighted average exercise price of approximately \$3.08 per share;
- 4,283,619 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2020, with a weighted average exercise price of approximately \$4.00 per share;
- 52,500 restricted stock units of shares of our common stock issued pursuant to our 2015 Plan outstanding as of September 30, 2020, with a weighted average share price of \$3.52 per share; and
- 261,867 additional shares of common stock reserved for future issuance under our 2015 Stock Incentive Plan.

Unless otherwise indicated, this prospectus reflects and assumes the following:

- no additional issuances, exercises or forfeitures of options and warrants, other than as described above;
- no exercise of the outstanding options and warrants described above; and
- no exercise by the underwriter of its option to purchase additional shares of our common stock.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described below, together with all of the other information included in this prospectus supplement, the accompanying prospectus, and the information incorporated by reference herein and therein, including the risks described under the heading "Risk Factors" beginning on page 9 of our Annual Report, as well as in the other documents we file with the SEC.

If any of the risks described below, or those incorporated by reference into this prospectus, actually occur, our business, financial condition or results of operations could suffer. In that case, the trading price of our common stock may decline and you may 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 may also affect our business, financial condition, results of operations and future prospects. Certain statements below are forward-looking statements. See the information included under the heading "Cautionary Note Regarding Forward-Looking Information."

Risks Related to Our Common Stock and this Offering

Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment. You may experience further dilution if we issue additional common stock in the future.

The public offering price of our common stock is substantially higher than the net tangible book value per share of our common stock before giving effect to this offering. Our net tangible book value as of September 30, 2020 was approximately \$18.6 million, or \$0.39 per share. After giving effect to the sale of _____ shares of our common stock at the assumed public offering price of \$ _____ per share and after deducting the underwriting fees and estimated offering expenses payable by us, if you purchase our common stock in this offering, you will incur immediate substantial dilution of approximately \$ _____ per share. Furthermore, if outstanding options or warrants are exercised, you could experience further dilution. See the information included under the heading "Dilution."

If we issue additional shares of common stock, or securities exercisable for shares of common stock, including under our Equity Distribution Agreement, our stockholders, including investors who purchase shares of common stock in this offering, may experience additional dilution, and any such issuances may result in downward pressure on the price of our common stock. We also cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering.

A substantial number of shares of common stock may be sold in the market following this offering, which may depress the market price for our common stock.

Sales of a substantial number of shares of our common stock in the public market following this offering, or the perception that such sales might occur, could cause the market price of our common stock to decline. A substantial number of the outstanding shares of our common stock are, and the shares of common stock sold in this offering upon issuance will be, freely tradable without restriction or further registration under the Securities Act of 1933, as amended, or the Securities Act.

Upon the completion of this offering, approximately 5,946,817 shares of our outstanding common stock beneficially owned by our executive officers and directors will be subject to lock-up agreements with the underwriter of this offering that restrict the sale of shares of our common stock by those parties for a period of 60 days after the date of this prospectus supplement. However, all of the shares sold in this offering and the remaining shares of our common stock outstanding prior to this offering (which include certain shares that are held by our affiliates other than our officers and directors) will not be subject to lock-up agreements with the underwriter and, except to the extent such shares are subject to lock-up agreements, will be freely tradable without restriction under the Securities Act. The market price of our common stock could decline as a result of sales by our stockholders in the market following completion of this offering or the perception that these sales could occur.

We have broad discretion to determine how to use the funds raised in this offering, and may use them in ways that may not enhance our operating results or the price of our common stock.

Our management will have broad discretion over the use of proceeds from this offering, and we could spend the proceeds from this offering in ways our stockholders may not agree with or that do not yield a favorable return. We intend to use the net proceeds of this offering for continued product development, clinical studies, product commercialization, working capital and other general corporate purposes, including potential strategic acquisitions. However, our use of these proceeds may differ substantially from our current plans. If we do not invest or apply the proceeds of this offering in ways that improve our operating results, we may fail to achieve expected financial results, which could have a material adverse effect on our business, financial condition, operating results and cash flow, and which could cause our stock price to decline.

Because we do not currently intend to declare cash dividends on our shares of common stock in the foreseeable future, stockholders must rely on appreciation of the value of our common stock for any return on their investment.

We have never paid cash dividends on our common stock. We currently intend to retain any future earnings to fund the development and growth of our business. 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. Accordingly, while payment of dividends rests within the discretion of our board of directors, no cash dividends on our common shares have been declared or paid by us and we have no intention of paying any such dividends in the foreseeable future. Any return to investors is expected to come, if at all, only from potential increases in the price of our common stock.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This prospectus supplement, the accompanying prospectus, and the documents incorporated by reference herein and therein, contain “forward-looking statements” within the meaning of Section 27A of the Securities Act and Section 21 of 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 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(s),” “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 supplement and the accompanying prospectus 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 supplement and the accompanying prospectus.

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 S-6 of this prospectus and page 9 of our Annual Report, as well as those described in the other documents we file with the SEC. You should read this prospectus supplement, the accompanying 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 ability to generate any significant revenue or achieve profitability;
- Our need to raise additional capital in the future;
- Our ability to expand our product development, along with our research and sales and marketing capabilities, could give rise to difficulties in managing our growth;
- Our limited experience with direct sales and marketing;
- The material weaknesses in our internal control over financial reporting that we have identified;
- 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 cancer diagnostics market;
- Our reliance on third parties to manufacture and supply our intended products, and such manufacturers’ dependence on third party suppliers;
- Our dependence on third party distributors;
- Our ability to protect our patents, intellectual property and trade secrets; and
- Business disruptions and economic and other uncertainties surrounding the COVID-19 pandemic.

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 date of this prospectus supplement. See the information included under the heading “Where You Can Find More Information.”

Forward-looking statements involve risks and uncertainties and are not guarantees of future performance. As a result of the risks and uncertainties described above, the forward-looking statements discussed in this prospectus supplement, the accompanying 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 estimate that the net proceeds from this offering will be approximately \$ _____ million, or approximately \$ _____ million if the underwriter fully exercises its option to purchase additional shares, after deducting the underwriting discounts and estimated offering expenses payable by us.

We currently anticipate that we will use the net proceeds received by us for continued product development, clinical studies, product commercialization, working capital and other general corporate purposes, including potential strategic acquisitions. Our expected use of the net proceeds from this offering is based upon our present plans and business condition. As of the date of this prospectus supplement, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual use of proceeds will vary depending on numerous factors, including the factors described under the heading "Risk Factors" beginning on page S-6 of this prospectus supplement and page 9 of our Annual Report, as well as the other documents we file with the SEC. As a result, management will retain broad discretion over the allocation of the net proceeds from this offering, and investors will be relying on the judgment of our management regarding the application of the 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. Investors should not purchase our common stock with the expectation of receiving cash dividends.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the public offering price per share of our common stock and the “as adjusted” net tangible book value per share of our common stock upon the closing of this offering.

Net tangible book value per share of our common stock is determined by subtracting our total liabilities from the amount of our total tangible assets (total assets less intangible assets) and then dividing the difference by the number of shares of our common stock deemed to be outstanding at that date. As of September 30, 2020, we had a net tangible book value of \$18.6 million, or \$0.39 per share of common stock.

Our pro forma net tangible book value as of September 30, 2020 was approximately \$21.9 million, or \$0.45 per share after giving effect to our receipt of net proceeds of \$3.3 million from our sale of 851,051 shares of our common stock to pursuant to our prior equity distribution agreement subsequent to September 30, 2020.

After giving effect to the sale of shares of our common stock in this offering at an offering price of \$ _____ per share, and after deducting estimated offering commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of September 30, 2020 would have been approximately \$ _____, or \$ _____ per share. This represents an immediate increase in pro forma as adjusted net tangible book value of \$ _____ per share to existing stockholders and an immediate dilution of \$ _____ per share to new investors purchasing securities in this offering.

The following table illustrates this dilution on a per share basis:

Assumed Public offering price per share		\$ _____
Pro Forma net tangible book value per share as of September 30, 2020	\$ 0.45	
Increase in pro forma net tangible book value per share attributable to this offering	_____	
Pro forma as adjusted net tangible book value per share after this offering		_____
Dilution per share to new investors purchasing in this offering		\$ _____

If the underwriter fully exercises its option to purchase additional shares of our common stock, the pro forma as adjusted net tangible book value per share after giving effect to this offering would be \$ _____ per share, which amount represents an immediate increase in the pro forma as adjusted net tangible book value of \$ _____ per share of our common stock to existing stockholders, and an immediate dilution to new investors purchasing in this offering of \$ _____ per share.

The table and discussion are based on 48,064,575 shares of our common stock outstanding as of September 30, 2020, but excludes the following as of such date:

- 215,000 shares of our common stock issuable upon the exercise of common stock purchase warrants outstanding as of September 30, 2020, with a weighted average exercise price of approximately \$3.08 per share;
- 4,283,619 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2020, with a weighted average exercise price of approximately \$4.00 per share;
- 52,500 restricted stock units of shares of our common stock issued pursuant to our 2015 Plan outstanding as of September 30, 2020, with a weighted average share price of \$3.52 per share;
- 261,867 additional shares of common stock reserved for future issuance under our 2015 Stock Incentive Plan, as of September 30, 2020; and
- any shares issued upon the exercise by the underwriter of its option to purchase up to _____ additional shares of common stock from us, if any.

DESCRIPTION OF COMMON STOCK

General

We may issue shares of our common stock from time to time. We are currently authorized to issue 100,000,000 shares of common stock, par value \$0.001 per share.

As of December 31, 2020, there were 48,607,017 shares of our common stock outstanding.

Common Stock

Our common stock is listed on the NYSE American market and traded under the symbol “VNRX.” On February 8, 2020, the last reported sale price of our common stock on the NYSE American market was \$6.50.

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.

The material terms of our common stock are further described under the heading “Description of Capital Stock” in the accompanying prospectus.

Holders

As of December 31, 2020, there were approximately 142 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.

UNDERWRITING

We have entered into an underwriting agreement with Cantor Fitzgerald & Co., as underwriter, with respect to the common stock being offered hereby. Subject to the terms and conditions of the underwriting agreement, the underwriter has agreed to purchase from us the shares of common stock offered by this prospectus supplement.

The underwriting agreement provides that the obligations of the underwriter are subject to certain conditions precedent and that the underwriter has agreed to purchase all of the shares of common stock sold under the underwriting agreement if any of these shares are purchased.

We have agreed to indemnify the underwriter against specified liabilities, including liabilities under the Securities Act of 1933, as amended (the “Securities Act”), and to contribute to payments the underwriter may be required to make in respect thereof.

The underwriter is offering the shares of common stock, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriter reserves the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Underwriting Discounts and Commissions and Offering Expenses

The underwriter is purchasing the shares of common stock from us at \$ _____ per share (representing approximately \$ _____ in aggregate proceeds to us, before offering expenses). The underwriter may offer the shares of common stock from time to time to purchasers directly or through agents, or through brokers in brokerage transactions on The NYSE American Market, or to dealers in negotiated transactions or in a combination of such methods of sale, or otherwise, at a fixed price or prices, which may be changed, or at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices subject to receipt and acceptance by it and subject to its right to reject any order in whole or in part. The difference between the price at which the underwriter purchases shares from us and the price at which the underwriter resells such shares may be deemed underwriting compensation. If the underwriter effects such transactions by selling shares of common stock to or through dealers, such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriter and/or purchasers of shares of common stock for whom they may act as agents or to whom they may sell as principal.

We estimate that the total expenses of the offering payable by us, other than the underwriting discounts and commissions, will be approximately \$ _____.

We have also granted to the underwriter a right of first refusal for a period of six (6) months to act book-running manager, lead underwriter, placement agent or the like for certain future public offerings or private placements of equity securities, subject to customary caveats.

Option to Purchase Additional Shares

We have granted the underwriter an option, exercisable for 30 days from the date of this prospectus supplement, to purchase, from time to time, in whole or in part, up to _____ additional shares from us at the price set forth on the cover page of this prospectus supplement.

Listing

Our common stock is listed on The NYSE American Market under the trading symbol “VNRX.”

No Sales of Similar Securities

We, our executive officers and our directors have agreed, subject to certain specified exceptions, not to directly or indirectly, for a period of 60 days after the date of the underwriting agreement:

- sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer, establish an open “put equivalent position” within the meaning of Rule 16a-1(h) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise dispose of, any shares of common stock, options or warrants to acquire shares of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock currently or hereafter owned either of record or beneficially,
- enter into any swap, hedge or other agreement or transaction that transfers, in whole or in part, the economic consequence of ownership of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock, or

- publicly announce an intention to do any of the foregoing for a period of 60 days after the date of this prospectus supplement without the prior written consent of Cantor Fitzgerald & Co.

In addition, we and each such person agrees that, without the prior written consent of Cantor Fitzgerald & Co., we or such other person will not, during the restricted period, make any demand for, or exercise any right with respect to, the registration of any shares of common stock or any security convertible into or exercisable or exchangeable for common stock.

Cantor Fitzgerald & Co. may, in its sole discretion and at any time or from time to time before the termination of the 60-day period release all or any portion of the securities subject to lock-up agreements.

Stabilization

In connection with this offering, the underwriter may engage in stabilizing transactions, overallotment transactions, syndicate covering transactions and purchases to cover positions created by short sales in accordance with Regulation M under the Exchange Act.

- Stabilizing transactions permit bids to purchase shares of common stock so long as the stabilizing bids do not exceed a specified maximum, and are engaged in for the purpose of preventing or retarding a decline in the market price of the common stock while the offering is in progress.
- Overallotment transactions involve sales by the underwriter of shares of common stock in excess of the number of shares of common stock the underwriter is obligated to purchase. This creates a short position which may be either a covered short position or a naked short position. In a covered short position, the number of shares of common stock overallotted by the underwriter, if any, is not greater than the number of shares of common stock that it may purchase in the option to purchase additional shares. In a naked short position, the number of shares of common stock involved is greater than the number of shares of common stock in the option to purchase additional shares, if any. The underwriter may close out any short position by exercising its option to purchase additional shares, if any, and/or purchasing shares of common stock in the open market.
- Syndicate covering transactions involve purchases of common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares of common stock to close out the short position, the underwriter will consider, among other things, the price of shares of common stock available for purchase in the open market as compared with the price at which the underwriter may purchase shares of common stock through exercise of the option to purchase additional shares, if any. If the underwriter sells more shares of common stock than could be covered by exercise of the option to purchase additional shares, if any, and, therefore, has a naked short position, the position can be closed out only by buying shares of common stock in the open market. A naked short position is more likely to be created if the underwriter is concerned that after pricing there could be downward pressure on the price of the shares of common stock in the open market that could adversely affect investors who purchase in the offering.

These stabilizing transactions and syndicate covering transactions may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock in the open market may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriter make any representation or prediction as to the effect that the transactions described above may have on the price of our common stock. These transactions may be effected on The NYSE American Market, in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time.

Passive Market Making

In connection with this offering, the underwriter may engage in passive market making transactions in our common stock on The NYSE American Market in accordance with Rule 103 of Regulation M under the Exchange Act, during a period before the commencement of offers or sales of common stock and extending through the completion of the distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid that bid must then be lowered when specified purchase limits are exceeded.

Other Activities and Relationships

The underwriter and certain of its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriter and certain of its affiliates may in the future perform various commercial and investment banking and financial advisory services for us and our affiliates, for which they will receive customary fees and expenses. In the ordinary course of their various business activities, the underwriter and certain of its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the underwriter or its affiliates have a lending relationship with us, they may routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriter and its affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the common stock offered hereby. Any such short positions could adversely affect future trading prices of the common stock offered hereby. The underwriter and its affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Notice to Investors

Canada

This prospectus supplement constitutes an “exempt offering document” as defined in and for the purposes of applicable Canadian securities laws. No prospectus has been filed with any securities commission or similar regulatory authority in Canada in connection with the offer and sale of the common stock. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon this prospectus supplement or on the merits of the common stock and any representation to the contrary is an offence.

Canadian investors are advised that this prospectus supplement has been prepared in reliance on section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* (“NI 33-105”). Pursuant to section 3A.3 of NI 33-105, this prospectus supplement is exempt from the requirement that we and the underwriter(s) provide investors with certain conflicts of interest disclosure pertaining to “connected issuer” and/or “related issuer” relationships that may exist between us and the underwriter(s) as would otherwise be required pursuant to subsection 2.1(1) of NI 33-105.

Resale Restrictions

The offer and sale of the common stock in Canada is being made on a private placement basis only and is exempt from the requirement that we prepare and file a prospectus under applicable Canadian securities laws. Any resale of the common stock acquired by a Canadian investor in this offering must be made in accordance with applicable Canadian securities laws, which may vary depending on the relevant jurisdiction, and which may require resales to be made in accordance with Canadian prospectus requirements, pursuant to a statutory exemption from the prospectus requirements, in a transaction exempt from the prospectus requirements or otherwise under a discretionary exemption from the prospectus requirements granted by the applicable local Canadian securities regulatory authority. These resale restrictions may under certain circumstances apply to resales of the common stock outside of Canada.

Representations of Purchasers

Each Canadian investor who purchases the common stock will be deemed to have represented to us and the underwriter(s) that the investor (i) is purchasing the common stock as principal, or is deemed to be purchasing as principal in accordance with applicable Canadian securities laws, for investment only and not with a view to resale or redistribution; (ii) is an “accredited investor” as such term is defined in section 1.1 of National Instrument 45-106 *Prospectus Exemptions* (“NI 45-106”) or, in Ontario, as such term is defined in section 73.3(1) of the *Securities Act* (Ontario); and (iii) is a “permitted client” as such term is defined in section 1.1 of National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*.

Taxation and Eligibility for Investment

Any discussion of taxation and related matters contained in this prospectus supplement does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a Canadian investor when deciding to purchase the common stock and, in particular, does not address any Canadian tax considerations. No representation or warranty is hereby made as to the tax consequences to a resident, or deemed resident, of Canada of an investment in the common stock or with respect to the eligibility of the common stock for investment by such investor under relevant Canadian federal and provincial legislation and regulations.

Rights of Action for Damages or Rescission

Securities legislation in certain of the Canadian jurisdictions provides certain purchasers of securities pursuant to an offering memorandum (such as this prospectus supplement), including where the distribution involves an “eligible foreign security” as such term is defined in Ontario Securities Commission Rule 45-501 *Ontario Prospectus and Registration Exemptions* and in Multilateral Instrument 45-107 *Listing Representation and Statutory Rights of Action Disclosure Exemptions*, as applicable, with a remedy for damages or rescission, or both, in addition to any other rights they may have at law, where the offering memorandum, or other offering document that constitutes an offering memorandum, and any amendment thereto, contains a “misrepresentation” as defined under applicable Canadian securities laws. These remedies, or notice with respect to these remedies, must be exercised or delivered, as the case may be, by the purchaser within the time limits prescribed under, and are subject to limitations and defences under, applicable Canadian securities legislation. In addition, these remedies are in addition to and without derogation from any other right or remedy available at law to the investor.

Language of Documents

Upon receipt of this document, each Canadian investor hereby confirms that it has expressly requested that all documents evidencing or relating in any way to the sale of the securities described herein (including for greater certainty any purchase confirmation or any notice) be drawn up in the English language only. *Par la réception de ce document, chaque investisseur Canadien confirme par les présentes qu’il a expressément exigé que tous les documents faisant foi ou se rapportant de quelque manière que ce soit à la vente des valeurs mobilières décrites aux présentes (incluant, pour plus de certitude, toute confirmation d’achat ou tout avis) soient rédigés en anglais seulement.*

Australia

This prospectus supplement is not a disclosure document for the purposes of the Corporations Act 2001 (Cth) of Australia, or Corporations Act, and has not been lodged with the Australian Securities & Investments Commission and is only directed to the categories of exempt persons set out below. Accordingly, if you receive this prospectus supplement in Australia:

You confirm and warrant that you are either:

- a “sophisticated investor” under section 708(8)(a) or (b) of the Corporations Act;
- a “sophisticated investor” under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant’s certificate to us which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made; or
- a “professional investor” within the meaning of section 708(11)(a) or (b) of the Corporations Act.

To the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor or professional investor under the Corporations Act any offer made to you under this prospectus supplement is void and incapable of acceptance.

You warrant and agree that you will not offer any of the shares issued to you pursuant to this prospectus supplement for resale in Australia within 12 months of those securities being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

European Economic Area

In relation to each Member State of the European Economic Area (each, a “Relevant State”), no shares have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that the shares may be offered to the public in that Relevant State at any time:

- (a) to any legal entity which is a qualified investor as defined under Article 2 of the Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of the underwriter for any such offer; or
- (c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of the shares shall require us or the underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an “offer to the public” in relation to the shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

Hong Kong

No securities have been offered or sold, and no securities may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent; or to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or in other circumstances which do not result in the document being a “prospectus” as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap.32) of Hong Kong. No document, invitation or advertisement relating to the securities has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance.

This prospectus supplement has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus may not be issued, circulated or distributed in Hong Kong, and the securities may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the securities will be required, and is deemed by the acquisition of the securities, to confirm that he is aware of the restriction on offers of the securities described in this prospectus supplement and the relevant offering documents and that he is not acquiring, and has not been offered any securities in circumstances that contravene any such restrictions.

Japan

The offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended), or FIEL, and the Initial Purchaser will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means, unless otherwise provided herein, any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations and ministerial guidelines of Japan.

Singapore

This prospectus supplement has not been and will not be lodged or registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and any other document or material in connection with the offer or sale, or the invitation for subscription or purchase of the securities may not be issued, circulated or distributed, nor may the securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to the public or any member of the public in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA, (ii) to a relevant person as defined under Section 275(2), or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions, specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of any other applicable provision of the SFA.

Where the securities are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- a corporation (which is not an accredited investor as defined under Section 4A of the SFA) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor,

shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

- to an institutional investor under Section 274 of the SFA or to a relevant person defined in Section 275(2) of the SFA, or to any person pursuant to an offer that is made on terms that such shares, debentures and units of shares and debentures of that corporation or such rights and interest in that trust are acquired at a consideration of not less than \$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets, and further for corporations, in accordance with the conditions, specified in Section 275 of the SFA;
- where no consideration is given for the transfer; or
- where the transfer is by operation of law.

Switzerland

The securities may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This prospectus supplement has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this prospectus supplement nor any other offering or marketing material relating to the securities or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus supplement nor any other offering or marketing material relating to the offering, us or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus supplement will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, or FINMA, and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of securities.

Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, or the Securities Law, and has not been filed with or approved by the Israel Securities Authority. In the State of Israel, this document is being distributed only to, and is directed only at, and any offer of the shares is directed only at, investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals", each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors will be required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

United Kingdom

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the Shares which has been approved by the Financial Conduct Authority, except that the shares may be offered to the public in the United Kingdom at any time:

- (a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the underwriter for any such offer; or
- (c) in any other circumstances falling within Section 86 of the Financial Services and Markets Act 2000, as amended (the "FSMA").

provided that no such offer of the shares shall require us or the underwriter to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

For the purposes of this provision, the expression an “offer to the public” in relation to the shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression “UK Prospectus Regulation” means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

LEGAL MATTERS

Certain legal matters relating to this offering will be passed upon for us by Stradling Yocca Carlson & Rauth, P.C., Newport Beach, California. Certain legal matters relating to this offering will be passed upon for the underwriter by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo P.C., New York, New York.

EXPERTS

Sadler, Gibb & Associates, LLC, an independent registered public accounting firm, has audited our financial statements as of December 31, 2019 and 2018 included in our Annual Report on Form 10-K for the year ended December 31, 2019, as set forth in their report, which is incorporated by reference in this prospectus supplement, the accompanying prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Sadler, Gibb & Associates, LLC's report, given on their authority as experts in accounting and auditing.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate" into this prospectus supplement 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 supplement is considered part of this prospectus supplement and accompanying 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.

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 of the initial registration statement of which this prospectus is a part 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 year ended December 31, 2019, as filed with the SEC on February 20, 2020;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2020, June 30, 2020, and September 30, 2020, as filed with the SEC on May 7, 2020, August 13, 2020, and November 12, 2020, respectively;
- our Definitive Proxy Statement on Schedule 14A, as filed with the SEC on April 29, 2020 (to the extent incorporated by reference into Part III of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019);
- Our Current Reports on Form 8-K, as filed with the SEC on May 22, 2020, June 22, 2020, December 3, 2020, January 15, 2021, February 2, 2021 and February 9, 2021; and
- the description of our common stock contained in Exhibit 4.1 to our Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on February 20, 2020.

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 the documents that this prospectus incorporates. To request such materials, please contact Mr. Rodney Rootsart, our Corporate Secretary, at c/o Corporate Secretary, VolitionRx Limited, 13215 Bee Cave Parkway, Suite 125, Galleria Oaks B, Austin, Texas 78738, or by email at notice@volition.com. These documents are also available free of charge through the Investors section on our website at <http://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 prospects may have changed since that date.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports and other information with the SEC. Our filings with the SEC are available from the SEC's internet site at <http://www.sec.gov>, which contains reports, proxy and information statements, and other information regarding issuers that file electronically.

This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the SEC. As permitted by SEC rules, this prospectus supplement and the accompanying prospectus form a part of the registration statement, but do not contain all of the information that is included in the registration statement. The registration statement contains more information regarding us and our securities, including certain exhibits. You can obtain a copy of the registration statement from the SEC's website.

\$100,000,000



VOLITIONRX LIMITED

**Common Stock
Warrants
Units**

We may offer and sell, from time to time in one or more offerings, any combination of common stock, warrants exercisable for shares of our 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 quoted on the NYSE American market under the symbol “VNRX.” On September 24, 2018, the last reported sale price of our common stock on the NYSE American market was \$2.37 per share.

As of the date of this prospectus, the aggregate market value of our outstanding common stock held by non-affiliates, or public float, was approximately \$71,548,670, based on 35,031,225 shares of outstanding common stock, of which approximately 5,946,400 shares were held by affiliates, and a price of \$2.46 per share, which was the highest reported closing sale price of our common stock on the NYSE American market in the 60 days prior to September 25, 2018. We have not offered any securities pursuant to General Instruction I.B.6. of Form S-3 during the prior 12-calendar-month period that ends on and includes the date of this prospectus. Pursuant to General Instruction I.B.6. of Form S-3, in no event will we sell securities registered on this registration statement in a public primary offering with a value exceeding more than one-third of our public float in any 12-month period so long as our public float remains below \$75 million.

INVESTING IN THE SECURITIES WE MAY OFFER INVOLVES VARIOUS RISKS. WE STRONGLY RECOMMEND THAT YOU READ CAREFULLY THE RISKS WE DESCRIBE IN THIS PROSPECTUS AS WELL AS IN ANY ACCOMPANYING PROSPECTUS SUPPLEMENT AND THE RISK FACTORS IN OUR MOST CURRENT REPORTS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION, FOR A FULLER UNDERSTANDING OF THE RISKS AND UNCERTAINTIES THAT WE FACE. SEE THE SECTION ENTITLED “RISK FACTORS” ON PAGE 3.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is _____, 2018

TABLE OF CONTENTS

PROSPECTUS	Page
ABOUT THIS PROSPECTUS	1
PROSPECTUS SUMMARY	2
RISK FACTORS	3
CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION	4
USE OF PROCEEDS	5
GENERAL DESCRIPTION OF SECURITIES	6
DESCRIPTION OF CAPITAL STOCK	7
DESCRIPTION OF WARRANTS	9
DESCRIPTION OF UNITS	10
PLAN OF DISTRIBUTION	11
LEGAL MATTERS	13
EXPERTS	13
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	14
WHERE YOU CAN FIND MORE INFORMATION	15

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or 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.

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.

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.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. The registration statement containing this prospectus, including the exhibits to the registration statement, provides additional information about us and the securities offered pursuant to this prospectus. The registration statement, including the exhibits, can be read on the SEC’s website or at the SEC’s offices mentioned under the heading “Where You Can Find More Information.”

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.”

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 subsidiaries. Our fiscal year ends on December 31 of each calendar year. Nucleosomics[®], NuQ[®], Nu.Q[™] and Hypergenomics[®] 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 heading "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

We are a multi-national life sciences company developing simple, easy to use, cost effective blood tests to help diagnose a range of cancers. Our tests are based on the science of Nucleosomics[®], which is the practice of identifying and measuring nucleosomes in the bloodstream or other bodily fluid – an indication that disease is present. The principle behind what we are doing relies on bringing together two main lines of research: the chromosomes of cancer cells differ from those of healthy cells – both in terms of DNA sequence (due to genetic cancer mutations) and in protein structure – due to epigenetic changes. There are chromosome fragments from dead cancer cells circulating in the blood as nucleosomes. Each such circulating nucleosome contains a small (approx. 140bp) fragment of tumor DNA. Our Nucleosomics[®] technology exploits the different compositions of circulating nucleosome structures present in the serum of cancer patients to detect and identify cancer diseases.

We are developing a novel suite of blood assays for epigenetically altered circulating nucleosomes as biomarkers in cancer. Nu.Q[™] products are simple, low-cost ELISA platform tests, and can incorporate other off patent, low-cost ELISA tests in our panels (e.g., CEA, PSA, and CA125) for higher accuracy.

We have incurred losses since inception, have negative cash flows from operations, and currently have no revenues, and we do not anticipate earning significant revenues until such time as we are able to fully market our intended products. For these reasons, our auditors stated in their report on our most recent audited financial statements that our net losses since inception and accumulation of a significant deficit raise substantial doubt that we will be able to continue as a going concern without further financing. See Item 8. Financial Statements and Supplementary Data of our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, or our Annual Report, for a discussion of our ability to continue as a going concern. Our ability to continue as a going concern is dependent upon our ability to successfully accomplish our plan of operations described herein, obtain financing and eventually attain profitable operations.

Corporate Information

We are a Delaware corporation. Our executive offices are located at 1 Scotts Road, #24-05 Shaw Centre, Singapore 228208, and our telephone number is +1 (646) 650-1351. We maintain a website at www.volitionrx.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.volitionrx.com as soon as practicable after such materials have been electronically filed with, or furnished to, the SEC. The information contained on or accessed through our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to be a 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

Before making an investment decision, you should carefully consider the risks described under “Risk Factors” in the applicable prospectus supplement and in our most recent Annual Report on Form 10-K, or any updates in our Quarterly Reports on Form 10-Q, together with all of the other information appearing in this prospectus or incorporated by reference into this prospectus and any applicable prospectus supplement, in light of your particular investment objectives and financial circumstances. The risks so described are not the only risks facing our company. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The trading price of our securities could decline due to any of these risks, and you may lose all or part of your investment. For more information, see the information included under the heading “Where You Can Find More Information.”

CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This prospectus, any accompanying prospectus supplement, and the documents incorporated by reference herein and therein, include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements other than statements of historical fact contained in this prospectus, any accompanying prospectus supplement, or the documents incorporated by reference herein or therein, including statements regarding estimates, future events, our future financial performance, business strategy and plans and objectives of management for future operations, including with respect to us specifically and the cancer diagnostics industry in general, are forward-looking statements. We have attempted to identify estimates and forward-looking statements by terminology including “aims,” “anticipates,” “believes,” “can,” “continue,” “could,” “estimates,” “expects,” “goal,” “intends,” “may,” “plans,” “potential,” “predicts,” “seeks,” “should,” “suggests,” “targets” or “will” or the negative of these terms or other comparable terminology. Although we do not make estimates or forward-looking statements unless we believe we have a reasonable basis for doing so, we cannot guarantee their accuracy. Our estimates and forward-looking statements are based on our current assumptions and expectations about future events and trends, which affect or may affect our business, strategy, operations or financial performance. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, which may cause our or our industry’s actual results, levels of activity, performance or achievements to vary materially from those expressed or implied by these estimates and forward-looking statements.

Factors that could cause or contribute to such differences in results and outcomes include, but are not limited to, those discussed under the section entitled “Risk Factors” in this prospectus, any accompanying prospectus supplement, and in any documents incorporated by reference herein and therein. Readers should carefully review this information as well as other risks and uncertainties described in other filings with the SEC that we may make after the filing date of this prospectus. See the information included under the heading “Where You Can Find More Information.”

Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time and it is not possible for us to predict all risk factors, nor can we address the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause our actual results to differ materially from those contained in any estimates or forward-looking statements. All estimates and forward-looking statements speak only as of the date they were made, and, except to the extent required by applicable law or regulation, we undertake no obligation to update or to review any estimate and/or forward-looking statement. In light of these risks and uncertainties, we cannot assure you that the estimates or forward-looking statements contained in this prospectus, any accompanying prospectus supplement, or the documents incorporated by reference herein or therein, will in fact occur. You should not place undue reliance on these estimates and forward-looking statements.

We qualify all of our forward-looking statements by these cautionary statements.

USE OF PROCEEDS

We intend to use the net proceeds we receive from the sale of our securities offered by us hereby for working capital and other general corporate purposes.

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.

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 our common stock, par value \$0.001 per share;
- warrants to purchase shares of our 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 under the heading “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. This summary does not purport to be complete and is qualified in its entirety by reference to our second amended and restated certificate of incorporation and amended and restated bylaws, copies of which have been filed as exhibits to our SEC filings. For more information, see “Where You Can Find More Information.”

Common Stock

We have authority under our second amended and restated certificate of incorporation to issue up to 100,000,000 shares of our common stock, par value \$0.001 per share. As of August 31, 2018, there were 35,031,225 shares of our common stock issued and outstanding.

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 nonassessable.

Registration Rights

As of August 10, 2018, Cotterford Company Limited, or Cotterford, is entitled to contractual rights that require us to register 10,000,000 shares of our common stock, including shares of our common stock issuable upon exercise of warrants, under the Securities Act, subject to certain exceptions. These rights are provided under the terms of a Common Stock Purchase Agreement dated August 8, 2018, or the Cotterford Agreement. We generally must pay all expenses relating to any such registration, other than Cotterford’s counsel, broker’s commissions, discounts or fees and transfer taxes. These registration rights terminate automatically upon the earlier of the sale of the Registrable Securities (as such term is defined in the Cotterford Agreement), the date such registrable securities may be resold without volume or manner-of-sale limitations pursuant to Rule 144 under the Securities Act, or August 10, 2021.

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

Certain provisions of Delaware law, our second amended and restated certificate of incorporation and our amended and restated 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 second amended and restated certificate of incorporation and amended and restated 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 proceeding 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, or 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 the voting stock of the corporation 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, (1) shares owned by persons who are directors and also officers, and (2) shares owned by 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 the date of the transaction, the business combination is approved by the board of directors of the corporation 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 restated certificate of incorporation and our amended and restated 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.

NYSE American Market

Our common stock is listed on the NYSE American market and traded under the symbol “VNRX.” On September 24, 2018, the last reported sale price for our common stock on the NYSE American market was \$2.37 per share.

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 +1 (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:

- through agents;
- to or through underwriters;
- to or through broker-dealers (acting as agent or principal);
- 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 market 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.

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 market. 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, or 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 on by Stradling Yocca Carlson & Rauth, P.C., Newport Beach, California.

EXPERTS

The consolidated financial statements of VolitionRx Limited as of December 31, 2017 and 2016 and for each of the years in the two-year period ended December 31, 2017 have been incorporated by reference herein and in the registration statement in reliance upon the reports of Sadler, Gibb & Associates, LLC, our independent registered public accountant, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The report of Sadler, Gibb & Associates, LLC dated March 1, 2018 notes that our net losses since inception and accumulation of a significant deficit raise substantial doubt that we will be able to continue as a going concern without further financing.

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 “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, 2017, as filed with the SEC on March 1, 2018;
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2018 and June 30, 2018, as filed with the SEC on May 10, 2018 and August 13, 2018, respectively;
- our Current Reports on Form 8-K as filed with the SEC on each of March 12, 2018, August 9, 2018 and September 11, 2018; and
- the description of our common stock contained in our registration statement on Form 8-A, filed with the SEC on February 3, 2015, including any amendment or report filed for the purpose of updating such description.

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, 1 Scotts Road, #24-05 Shaw Centre, Singapore, 228208, by telephone at +1 (646) 650-1351 or by email at notice@volitionrx.com. These documents are also available free of charge through the investors section on our website at <http://www.volitionrx.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 prospects may have changed since those respective dates.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-3 with the SEC relating to the securities offered by this prospectus. As permitted by the SEC rules and regulations, this prospectus and any accompanying prospectus supplement that we may file, which form a part of the registration statement, do not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. Statements contained in this prospectus as to the contents of any contract or other document referred to are not necessarily complete and in each instance reference is made to the copy of such contract or other document filed as an exhibit to the registration statement, each such statement being qualified in all respects by such reference. For further information with respect to us and the common stock, the warrants and the units offered hereby, reference is made to such registration statement, exhibits and schedules.

We are subject to the information and periodic reporting requirements of the Exchange Act, and in accordance therewith file periodic reports, current reports, proxy statements and other information with the SEC. Such periodic reports, current reports, proxy statements, other information and a copy of the registration statement on Form S-3 may be inspected by anyone without charge and copies of these materials may be obtained upon the payment of the fees prescribed by the SEC, at the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The registration statement on Form S-3 and the periodic reports, current reports, proxy statements and other information filed by us are also available through the SEC's website at <http://www.sec.gov>.



VOLITIONRX LIMITED

Shares of Common Stock

PROSPECTUS SUPPLEMENT

Sole Book-Running Manager

Cantor

February , 2021