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

FORM 10-Q

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2020

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: 001-36833

VOLITIONRX LIMITED

(Exact name of registrant as specified in its charter)

Delaware	**91-1949078**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

13215 Bee Cave Parkway
Suite 125, Galleria Oaks B
Austin, Texas 78738
(Address of principal executive offices)

+1 (646) 650–1351
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on which Registered
Common Stock	VNRX	NYSE American

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. [X] Yes [ ] No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). [X] Yes [ ] No

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

Large accelerated filer	[ ]	Accelerated filer	[ ]
Non-accelerated filer	[X]	Smaller reporting company	[X]
		Emerging growth company	[ ]

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. **[ ]**

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).[ ] Yes [X] No

As of November 4, 2020, there were 48,197,687 shares of the registrant's $0.001 par value common stock issued and outstanding.

VOLITIONRX LIMITED
QUARTERLY REPORT ON FORM 10-Q
FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2020

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Use of Terms

Except as otherwise indicated by the context, references in this Report to "Company," "VolitionRx," "Volition," "we," "us," and "our" are references to VolitionRx Limited and its wholly-owned subsidiaries, Singapore Volition Pte. Limited, Belgian Volition SPRL, Volition Diagnostics UK Limited, Volition America, Inc., Volition Germany GmbH, as well as its majority-owned subsidiary Volition Veterinary Diagnostics Development LLC. Additionally, unless otherwise specified, all references to "$" refer to the legal currency of the United States of America.

Nucleosomics™ and Nu.Q™ 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 Report are the property of their respective owners.

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS (UNAUDITED)

VOLITIONRX LIMITED
Condensed Consolidated Balance Sheets
(Expressed in United States Dollars, except share numbers)

	September 30, 2020 $	December 31, 2019 $
ASSETS	(UNAUDITED)	
Current Assets		
Cash and cash equivalents	20,927,729	16,966,168
Accounts receivable	573	-
Prepaid expenses	444,872	267,518
Other current assets	791,349	322,593
Total Current Assets	22,164,523	17,556,279
Property and equipment, net	3,343,297	2,981,225
Operating lease right-of-use assets	257,903	381,483
Intangible assets, net	321,848	372,305
Total Assets	26,087,571	21,291,292
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Accounts payable	849,146	627,253
Accrued liabilities	2,403,102	2,168,588
Management and directors' fees payable	47,675	21,979
Current portion of long-term debt	765,151	647,569
Current portion of finance lease liabilities	57,047	97,946
Current portion of operating lease liabilities	157,796	257,244
Current portion of grant repayable	37,992	39,295
Total Current Liabilities	4,317,909	3,859,874
Long-term debt, net of current portion	1,831,021	2,195,278
Finance lease liabilities, net of current portion	591,658	607,708
Operating lease liabilities, net of current portion	108,305	131,875
Grant repayable, net of current portion	277,267	297,991
Total Liabilities	7,126,160	7,092,726
STOCKHOLDERS' EQUITY		
Common Stock		
Authorized: 100,000,000 shares of common stock, at $0.001 par value		
Issued and outstanding: 48,064,575 shares and 41,125,303 shares, respectively	48,065	41,125
Additional paid-in capital	124,121,703	103,853,627
Accumulated other comprehensive income	(148,121)	125,670
Accumulated deficit	(105,036,840)	(89,821,856)
Total VolitionRx Limited Stockholders' Equity	18,984,807	14,198,566
Non-controlling interest	(23,396)	-
Total Stockholders' Equity	18,961,411	14,198,566
Total Liabilities and Stockholders' Equity	26,087,571	21,291,292

(The accompanying notes are an integral part of these condensed consolidated financial statements)

VOLITIONRX LIMITED
Condensed Consolidated Statements of Operations and Comprehensive Loss (Unaudited)
(Expressed in United States Dollars, except share numbers)

	Three Months ended September 30,		Nine Months ended September 30,	
	2020	2019	2020	2019
	$	$	$	$
Revenues				
Services	-	16,204	-	16,204
Royalty	-	892	2,112	892
Product	575	-	4,201	-
Total Revenues	575	17,096	6,313	17,096
Operating Expenses				
Research and development	3,180,177	2,642,610	10,567,988	7,596,097
General and administrative	1,080,308	1,354,992	4,292,666	4,020,893
Sales and marketing	244,510	195,641	734,355	718,047
Total Operating Expenses	4,504,995	4,193,243	15,595,009	12,335,037
Operating Loss	(4,504,420)	(4,176,147)	(15,588,696)	(12,317,941)
Other Income (Expenses)				
Grant income	-	-	98,870	-
Gain on disposal of fixed assets	200,393	-	293,595	-
Interest income	2,801	27,633	48,956	68,656
Interest expense	(34,722)	(32,291)	(91,105)	(95,507)
Other expenses	-	-	-	(196,957)
Total Other Income (Expenses)	168,472	(4,658)	350,316	(223,808)
Provision for Income Taxes	-	-	-	-
Net Loss	(4,335,948)	(4,180,805)	(15,238,380)	(12,541,749)
Net Loss attributable to Non-Controlling Interest	8,050	-	23,396	-
Net Loss attributable to VolitionRx Limited Stockholders	(4,327,898)	(4,180,805)	(15,214,984)	(12,541,749)
Other Comprehensive Income (Loss)				
Foreign currency translation adjustments	(573,397)	401,309	(273,791)	427,168
Net Comprehensive Loss	(4,909,345)	(3,779,496)	(15,512,171)	(12,114,581)
Net Loss Per Share – Basic and Diluted attributable to VolitionRx Limited	(0.09)	(0.10)	(0.34)	(0.33)
Weighted Average Shares Outstanding – Basic and Diluted	47,027,011	39,880,246	44,148,793	38,538,394

(The accompanying notes are an integral part of these condensed consolidated financial statements)

VOLITIONRX LIMITED
Condensed Consolidated Statements of Stockholders' Equity (Unaudited)
(Expressed in United States Dollars, except share numbers)

For the Three and Nine Months ended September 30, 2020 and September 30, 2019

	Common Stock		Additional Paid-in	Accumulated Other Comprehensive	Accumulated	Non Controlling	
	Shares	Amount	Capital	Income (Loss)	Deficit	Interest	Total
	#	$	$	$	$	$	$
Balance, December 31, 2019	41,125,303	41,125	103,853,627	125,670	(89,821,856)	-	14,198,566
Common stock issued for Director compensation in Volition Germany	73,263	73	333,896	-	-	-	333,969
Common stock issued in exercise of stock options	19,430	20	(20)	-	-	-	-
Common stock repurchase and retirement	(11,364)	(11)	(54,423)	-	-	-	(54,434)
Stock-based compensation	-	-	192,669	-	-	-	192,669
Foreign currency translation	-	-	-	373,926	-	-	373,926
Net loss for the period	-	-	-	-	(5,849,772)	(9,567)	(5,859,339)
Balance, March 31, 2020	41,206,632	41,207	104,325,749	499,596	(95,671,628)	(9,567)	9,185,357
Common stock issued in public offering, net	5,452,922	5,453	14,229,160	-	-	-	14,234,613
Stock-based compensation	-	-	360,640	-	-	-	360,640
Foreign currency translation	-	-	-	(74,320)	-	-	(74,320)
Net loss for the period	-	-	-	-	(5,037,314)	(5,779)	(5,043,093)
Balance, June 30, 2020	46,659,554	46,660	118,915,549	425,276	(100,708,942)	(15,346)	18,663,197
Common stock issued in public offering, net	1,252,183	1,252	4,820,839	-	-	-	4,822,091
Common stock issued in exercise of stock options	127,838	128	82,372	-	-	-	82,500
Common stock issued for cash exercise of warrants	25,000	25	61,725	-	-	-	61,750
Stock-based compensation	-	-	428,683	-	-	-	428,683
Tax withholdings paid related to stock-based compensation	-	-	(187,465)	-	-	-	(187,465)
Foreign currency translation	-	-	-	(573,397)	-	-	(573,397)
Net loss for the period	-	-	-	-	(4,327,898)	(8,050)	(4,335,948)
Balance, September 30, 2020	48,064,575	48,065	124,121,703	(148,121)	(105,036,840)	(23,396)	18,961,411

(The accompanying notes are an integral part of these condensed consolidated financial statements)

VOLITIONRX LIMITED
Condensed Consolidated Statements of Stockholders' Equity (Unaudited)
(Expressed in United States Dollars, except share numbers)

For the Three and Nine Months ended September 30, 2020 and September 30, 2019

	Common Stock		Additional Paid-in	Accumulated Other Comprehensive	Accumulated	Non Controlling	
	Shares	Amount	Capital	Income (Loss)	Deficit	Interest	Total
	#	$	$	$	$	$	$
Balance, December 31, 2018	35,335,378	35,335	85,604,271	223,651	(73,722,801)	-	12,140,456
Common stock issued in exercise of warrants	2,478,613	2,479	6,658,192	-	-	-	6,660,671
Stock-based compensation	-	-	340,458	-	-	-	340,458
Modification of financing warrants	-	-	196,957	-	-	-	196,957
Foreign currency translation	-	-	-	(24,054)	-		(24,054)
Net loss for the period	-	-	-	-	(4,203,773)	-	(4,203,773)
Balance, March 31, 2019	37,813,991	37,814	92,799,878	199,597	(77,926,574)	-	15,110,715
Common stock issued in exercise of warrants	1,666,667	1,667	4,998,334	-	-	-	5,000,001
Stock-based compensation	-	-	379,507	-	-	-	379,507
Foreign currency translation	-	-	-	49,913	-	-	49,913
Net loss for the period	-	-	-	-	(4,157,171)	-	(4,157,171)
Balance, June 30, 2019	39,480,658	39,481	98,177,719	249,510	(82,083,745)	-	16,382,965
Common stock issued in exercise of warrants	1,609,195	1,609	4,825,976	-	-	-	4,827,585
Common stock issued in exercise of stock options	2,487	2	(2)	-	-	-	-
Stock-based compensation	-	-	370,726	-	-	-	370,726
Foreign currency translation	-	-	-	401,309	-	-	401,309
Net loss for the period	-	-	-	-	(4,180,805)	-	(4,180,805)
Balance, September 30, 2019	41,092,340	41,092	103,374,419	650,819	(86,264,550)	-	17,801,780

(The accompanying notes are an integral part of these condensed consolidated financial statements)

VOLITIONRX LIMITED
Condensed Consolidated Statements of Cash Flows (Unaudited)
(Expressed in United States Dollars)

	Nine Months ended September 30,	
	2020	**2019**
	$	$
Operating Activities		
Net loss	(15,238,380)	(12,541,749)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	525,150	509,736
Amortization of operating lease right-of-use assets	194,749	51,090
Gain on disposal of fixed assets	(293,595)	-
Stock-based compensation	981,992	1,090,691
Common stock issued for Director compensation in Volition Germany	333,969	-
Financing costs for warrants modified	-	196,957
Changes in operating assets and liabilities:		
Prepaid expenses	(177,354)	(163,638)
Accounts receivable	(573)	(16,031)
Other current assets	(274,398)	44,904
Accounts payable and accrued liabilities	365,167	687,636
Management and directors' fees payable	47,672	47,575
Right-of-use assets operating leases liabilities	(194,146)	(48,475)
Net Cash Used In Operating Activities	(13,729,747)	(10,141,304)
Investing Activities:		
Purchases of property and equipment	(679,782)	(359,502)
Proceeds from sales of property and equipment	97,388	-
Net Cash Used In Investing Activities	(582,394)	(359,502)
Financing Activities:		
Net proceeds from issuances of common shares	19,200,954	16,488,257
Tax withholdings paid related to stock-based compensation	(187,465)	-
Common stock repurchased	(54,434)	-
Proceeds from grants repayable	3,802	32,652
Proceeds from long-term debt	-	282,513
Payments on long-term debt	(356,701)	(262,661)
Payments on grants repayable	(41,257)	(39,261)
Payments on finance lease obligations	(83,221)	(106,616)
Net Cash Provided By Financing Activities	18,481,678	16,394,884
Effect of foreign exchange on cash	(207,976)	375,869
Net Change in Cash	3,961,561	6,269,947
Cash and cash equivalents – Beginning of Period	16,966,168	13,427,222
Cash and cash equivalents – End of Period	20,927,729	19,697,169
Supplemental Disclosures of Cash Flow Information:		
Interest paid	91,105	95,507
Non-Cash Financing Activities:		
Common stock issued on cashless exercises of stock options	118	2
Offering costs from issuance of common stock	1,229,169	-

(The accompanying notes are an integral part of these condensed consolidated financial statements)

Note 1 – Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation

The interim consolidated financial statements of VolitionRx Limited (the "Company", "VolitionRx," "we" or "us") for the three and nine months ended September 30, 2020 and September 30, 2019, respectively, are not audited. Our consolidated financial statements are prepared in accordance with the requirements for unaudited interim periods and, consequently, do not include all disclosures required to be made in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP"). In the opinion of our management, the accompanying consolidated financial statements contain all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of our financial position as of September 30, 2020, and our results of operations and cash flows for the periods ended September 30, 2020 and September 30, 2019, respectively. The results of operations for the periods ended September 30, 2020 and September 30, 2019, respectively, are not necessarily indicative of the results for a full-year period. These interim consolidated financial statements should be read in conjunction with the financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2019, which was filed with the Securities and Exchange Commission (the "SEC") on February 20, 2020.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The Company also regularly evaluates estimates and assumptions related to useful lives of property and equipment, impairment of long-lived assets, the estimate of the fair value of the lease liability and related right of use assets, allowance for doubtful accounts and valuation of share based payments.

The Company bases its estimates and assumptions on current facts, historical experience and various other factors that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and the accrual of costs and expenses that are not readily apparent from other sources. The actual results experienced by the Company may differ materially and adversely from the Company's estimates. To the extent there are material differences between the estimates and the actual results, future results of operations will be affected.

Principles of Consolidation

The accompanying condensed consolidated financial statements for the period ended September 30, 2020 include the accounts of the Company and its subsidiaries. The Company has one wholly-owned subsidiary, Singapore Volition Pte. Limited ("Singapore Volition"). Singapore Volition has one wholly-owned subsidiary, Belgian Volition SPRL ("Belgian Volition"). Belgian Volition has four subsidiaries, Volition Diagnostics UK Limited ("Volition Diagnostics"), Volition America, Inc. ("Volition America"), Volition Germany GmbH ("Volition Germany"), and its one majority-owned subsidiary, Volition Veterinary Diagnostics Development LLC ("Volition Vet"). See Note 8(f) for more information regarding Volition Vet and Volition Germany. All intercompany balances and transactions have been eliminated in consolidation.

Cash and Cash Equivalents

For the purposes of the statements of cash flows, the Company considers interest bearing deposits with original maturity dates of three months or less to be cash equivalents. The Company invests excess cash from its operating cash accounts in overnight investments and reflects these amounts in cash and cash equivalents in the condensed consolidated balance sheets at fair value using quoted prices in active markets for identical assets. As of September 30, 2020, cash and cash equivalents totaled approximately $20.9 million, of which $14.7 million was held in an overnight money market account.

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Note 1 - Basis of Presentation and Summary of Significant Accounting Policies (continued)

Accounts Receivables

Trade accounts receivable are stated at the amount the Company expects to collect. Due to the nature of the accounts receivable balance, the Company believes the risk of doubtful accounts is minimal and therefore no allowance is recorded. If the financial condition of the Company's customers were to deteriorate, adversely affecting their ability to make payments, additional allowances would be required. The Company may provide for estimated uncollectible amounts through a charge to earnings and a credit to a valuation allowance. Balances that remain outstanding after the Company has used reasonable collection efforts are written off through a charge to the valuation allowance and a credit to accounts receivable. As of September 30, 2020, the accounts receivable balance was $573 and the allowance for doubtful debts was $nil.

Revenue Recognition

The Company adopted Accounting Standards Codification ("ASC") 606, "*Revenue from Contracts with Customers,"* effective January 1, 2019. Under ASC 606, the Company recognizes revenues when the customer obtains control of promised goods or services, in an amount that reflects the consideration which the Company expects to receive in exchange for those goods or services. The Company recognizes revenues following the five step model prescribed under ASC 606: (i) identify contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenues when (or as) the Company satisfies the performance obligation(s).

The Company generates revenue from its license agreement with Active Motif Inc. ("Active Motif") for the sale of Research Use Only kits from which the Company receives royalties. In addition, revenue is received from external third parties for product sales and/or services the Company performs for them in its laboratory.

Revenues, and their respective treatment for financial reporting purposes under ASC 606, are as follows:

Royalty

The Company receives royalty revenues on the net sales recognized during the period in which the revenue is earned, and the amount is determinable from the licensee. These are presented in "Royalty" in the consolidated statements of operations and comprehensive loss. The Company does not have future performance obligations under this revenue stream. In accordance with ASC 606, the Company records these revenues based on estimates of the net sales that occurred during the relevant period from the licensee. The relevant period estimates of these royalties are based on preliminary gross sales data provided by Active Motif and analysis of historical gross-to-net adjustments. Differences between actual and estimated royalty revenues are adjusted for in the period in which they become known.

Product

The Company includes revenue from product sales recognized during the period in which goods are shipped to third parties, and the amount is deemed collectable from the third parties. These are presented in "Product " in the consolidated statements of operations and comprehensive loss.

Services

The Company includes revenue recognized from laboratory services performed in the Company's laboratory on behalf of third parties in "Services" in the consolidated statements of operations and comprehensive loss.

For each development and/or commercialization agreement that results in revenues, the Company identifies all performance obligations, aside from those that are immaterial, which may include a license to intellectual property and know-how, development activities and/or transition activities. In order to determine the transaction price, in addition to any upfront payment, the Company estimates the amount of variable consideration at the outset of the contract either utilizing the expected value or most likely amount method, depending on the facts and circumstances relative to the contract. The Company constrains (reduces) the estimates of variable consideration such that it is probable that a significant reversal of previously recognized revenue will not occur throughout the life of the contract. When determining if variable consideration should be constrained, management considers whether there are factors outside the Company's control that could result in a significant reversal of revenue. In making these assessments, the Company considers the likelihood and magnitude of a potential reversal of revenue. These estimates are re-assessed each reporting period as required.

Note 1 - Basis of Presentation and Summary of Significant Accounting Policies (continued)

Basic and Diluted Net Loss Per Share

The Company computes net loss per share in accordance with ASC 260, *"Earnings Per Share,"* which requires presentation of both basic and diluted earnings per share ("EPS") on the face of the statement of operations and comprehensive loss. Basic EPS is computed by dividing net loss available to common stockholders (numerator) by the weighted average number of shares outstanding (denominator) during the period. Diluted EPS gives effect to all dilutive potential common shares outstanding during the period using the treasury stock method. In computing diluted EPS, the average stock price for the period is used in determining the number of shares assumed to be purchased from the exercise of stock options or warrants. As of September 30, 2020, 4,551,119 potential common shares equivalents from warrants, options and restricted stock units ("RSUs") were excluded from the diluted EPS calculations as their effect is anti-dilutive.

Reclassification

Certain amounts presented in previously issued financial statements have been reclassified to be consistent with the current period presentation. The Company has reclassified the prior period comparative amounts in the statement of stockholders' equity and cash flows to be consistent with the current year classification.

Recent Accounting Pronouncements

The Company does not believe there are any new applicable accounting pronouncements that have been issued that might have a material impact on its financial position or results of operations.

COVID-19 Pandemic Impact

On March 11, 2020, the World Health Organization designated the outbreak of the novel strain of coronavirus known as COVID-19 as a global pandemic. Governments and businesses around the world have taken unprecedented actions to mitigate the spread of COVID-19, including, but not limited to, shelter-in-place orders, quarantines, significant restrictions on travel, as well as restrictions that prohibit many employees from going to work. Uncertainty with respect to the economic impacts of the pandemic has introduced significant volatility in the financial markets. The Company did not observe significant impacts on its business or results of operations for the three and nine months ended September 30, 2020 due to the global emergence of COVID-19. While the extent to which COVID-19 impacts the Company's future results will depend on future developments, the pandemic and associated economic impacts could result in a material impact to the Company's future financial condition, results of operations and cash flows**.**

Note 2 - Going Concern

The Company's condensed consolidated financial statements are prepared using U.S. GAAP applicable to a going concern which contemplates the realization of assets and liquidation of liabilities in the normal course of business. The Company has incurred losses since inception of $105.0 million, has negative cash flows from operations, and currently has limited revenues, which creates substantial doubt about its ability to continue as a going concern for a period of one year from the date of issuance of these condensed consolidated financial statements.

The future of the Company as an operating business will depend on its ability to obtain sufficient capital contributions, financing and/or generate revenues as may be required to sustain its operations. Management plans to address the above as needed by (a) securing additional grant funds, (b) obtaining additional financing through debt or equity transactions, (c) granting licenses to third parties in exchange for specified up-front and/or back-end payments and (d) developing and commercializing its products on an accelerated timeline. Management continues to exercise tight cost controls to conserve cash.

The ability of the Company to continue as a going concern is dependent upon its ability to successfully accomplish the plans described in the preceding paragraph and eventually attain profitable operations. The accompanying condensed consolidated financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern. If the Company is unable to obtain adequate capital, it could be forced to cease operations.

($ expressed in United States Dollars)

Note 3 - Property and Equipment

The Company's property and equipment consist of the following amounts as of September 30, 2020 and December 31, 2019:

	Useful Life	Cost $	Accumulated Depreciation $	September 30, 2020 Net Carrying Value $
Computer hardware and software	3 years	490,687	369,584	121,103
Laboratory equipment	5 years	1,980,047	920,295	1,059,752
Office furniture and equipment	5 years	235,740	152,240	83,500
Buildings	30 years	1,537,352	183,600	1,353,752
Building improvements	5-15 years	792,282	160,882	631,400
Land	Not amortized	93,790	-	93,790
		5,129,898	1,786,601	3,343,297

	Useful Life	Cost $	Accumulated Depreciation $	December 31, 2019 Net Carrying Value $
Computer hardware and software	3 years	426,461	280,554	145,907
Laboratory equipment	5 years	2,052,348	1,256,637	795,711
Office furniture and equipment	5 years	217,545	114,242	103,303
Buildings	30 years	1,472,211	139,021	1,333,190
Building improvements	5-15 years	630,824	117,526	513,298
Land	Not amortized	89,816	-	89,816
		4,889,205	1,907,980	2,981,225

During the nine-month periods ended September 30, 2020 and September 30, 2019, the Company recognized $459,450 and $443,972, respectively, in depreciation expense.

During the nine-month period ended September 30, 2020, the Company sold laboratory equipment for $293,595, resulting in a gain on disposal of equipment of $293,595. As of September 30, 2020, the Company has received $97,388 in payment for the laboratory equipment, with the remaining receivable of $196,207 recorded in other current assets.

Note 4 - Intangible Assets

The Company's intangible assets consist of patents. The patents are being amortized over the assets' estimated useful lives, which range from 8 to 20 years.

	Cost $	Accumulated Amortization $	September 30, 2020 Net Carrying Value $
Patents	1,197,312	875,464	321,848

	Cost $	Accumulated Amortization $	December 31, 2019 Net Carrying Value $
Patents	1,147,391	775,086	372,305

($ expressed in United States Dollars)

Note 4 - Intangible Assets (continued)

During the nine-month periods ended September 30, 2020 and September 30, 2019, the Company recognized $65,567 and $65,761, respectively, in amortization expense.

The Company amortizes the patents on a straight-line basis with terms ranging from 8 to 20 years. The annual estimated amortization schedule over the next five years is as follows:

2020 - remaining	$	24,749
2021	$	90,883
2022	$	90,883
2023	$	90,883
2024	$	24,450
Total Intangible Assets	$	**321,848**

The Company periodically reviews its long-lived assets to ensure that their carrying value does not exceed their fair market value. The Company carried out such a review in accordance with ASC 360, *"Property, Plant and Equipment,"* as of December 31, 2019. The result of this review confirmed that the ongoing value of the patents was not impaired as of December 31, 2019.

Note 5 - Related Party Transactions

See Note 6 for common stock issued to related parties and Note 7 for stock options, warrants and RSUs issued to related parties. The Company has agreements with related parties for the purchase of products and consultancy services which are accrued under management and directors' fees payable (see condensed consolidated balance sheets).

Note 6 - Common Stock

As of September 30, 2020, the Company was authorized to issue 100 million shares of common stock par value $0.001 per share, of which 48,064,575 and 41,125,303 shares were issued and outstanding as of September 30, 2020 and December 31, 2019, respectively.

Stock Issuances Upon Warrant and Option Exercises

From January 7, 2020 to August 17, 2020, 97,500 stock options were exercised to purchase shares of common stock at $2.50 per share in cashless exercises that resulted in the issuance of 30,033 shares of common stock.

From January 7, 2020 to August 17, 2020, 97,500 stock options were exercised to purchase shares of common stock at $3.00 per share in cashless exercises that resulted in the issuance of 16,539 shares of common stock.

On January 7, 2020, 35,000 stock options were exercised to purchase shares of common stock at $4.00 per share in cashless exercises that resulted in the issuance of 6,486 shares of common stock.

From February 24, 2020 to September 2, 2020, 11,599 stock options were exercised to purchase shares of common stock at $2.35 per share in cashless exercises that resulted in the issuance of 2,752 shares of common stock.

From July 16, 2020 to August 10, 2020, 210,000 stock options were exercised to purchase shares of common stock at $2.50 per share in cashless exercises and withholding of shares for taxes that resulted in the issuance of 39,197 shares of common stock.

From July 21, 2020 to August 12, 2020, 210,000 stock options were exercised to purchase shares of common stock at $3.00 per share in cashless exercises and withholding of shares for taxes that resulted in the issuance of 22,261 shares of common stock.

On August 12, 2020, 15,000 stock options were exercised to purchase shares of common stock at $2.50 per share that resulted in the issuance of 15,000 shares of common stock for proceeds to the Company of $37,500.

On August 12, 2020, 15,000 stock options were exercised to purchase shares of common stock at $3.00 per share that resulted in the issuance of 15,000 shares of common stock for proceeds to the Company of $45,000.

Note 6 - Common Stock (continued)

On September 18, 2020, 25,000 warrants were exercised to purchase shares of common stock at $2.47 per share that resulted in the issuance of 25,000 shares of common stock for proceeds to the Company of $61,750.

Stock Issuance for Services

On January 9, 2020, 73,263 shares were issued as fully paid shares of common stock valued at $333,969 as compensation to a managing director of Volition Germany (see Note 8(f)).

Stock Repurchase

On January 12, 2020, the Company purchased from its Chief Medical Officer 11,364 shares of our common stock at $4.79 per share, for a total cost to the Company of $54,434. These shares were subsequently retired.

Equity Capital Raise

On May 20, 2020, the Company entered into an underwriting agreement with National Securities Corporation, acting on its own behalf and as representative of the several underwriters, in connection with the public offering, issuance and sale by the Company of 4,365,000 shares of the Company's common stock, at the public offering price of $2.75 per share, less underwriting discounts and commissions. Under the terms of the agreement, the Company granted the underwriters an option, exercisable for 30 days from the date of the agreement, to purchase up to 654,750 additional shares of the Company's common stock to cover overallotments, if any, at the public offering price of $2.75 per share, less underwriting discounts and commissions. On May 21, 2020, the underwriters exercised the overallotment option in full. As a result of the equity capital raise, the Company issued a total of approximately 5 million shares for aggregate gross proceeds of $13.8 million. Additionally, in connection with this transaction, $1.1 million was incurred in fees relating to the equity offering, resulting in net proceeds of $12.7 million.

Equity Distribution Agreement

On September 7, 2018, the Company entered into an equity distribution agreement (as amended, the "Equity Distribution Agreement") with Oppenheimer & Co. Inc. ("Oppenheimer"), which agreement allows it to offer and sell shares of common stock having an aggregate offering price of up to $10.0 million from time-to-time pursuant to a shelf registration statement on Form S-3 (declared effective by the SEC on September 28, 2018, File No.333-227248) through Oppenheimer acting as the Company's agent and/or principal. From inception through September 30, 2020, the Company raised aggregate net proceeds of approximately $6.5 million under the Equity Distribution Agreement through the sale of 1,688,555 shares of its common stock.

During the nine-month period ended September 30, 2020, the Company raised aggregate net proceeds of approximately $6.5 million under the Equity Distribution Agreement through the sale of 1,685,355 shares of its common stock. Additionally, in connection with this transaction $104,813 was incurred in fees relating to the Equity Distribution Agreement. See Note 9 for details regarding additional sales of common stock under the Equity Distribution Agreement after September 30, 2020.

($ expressed in United States Dollars)

Note 7 – Stock-based Compensation

a) Warrants

The following table summarizes the changes in warrants outstanding of the Company during the nine-month period ended September 30, 2020:

	Number of Warrants	Weighted Average Exercise Price ($)
Outstanding at December 31, 2019	190,000	2.90
Granted	50,000	3.45
Exercised	(25,000)	2.47
Expired	-	-
Outstanding at September 30, 2020	215,000	3.08
Exercisable at September 30, 2020	165,000	2.97

Effective February 26, 2020, the vesting criteria of the remaining installment of a warrant originally granted March 20, 2013 to an officer of the Company, and previously amended, was deemed met pursuant to the approval of the Compensation Committee, resulting in the vesting of the Warrant as to 125,000 shares effective February 26, 2020, with an expiration date of February 26, 2023.

Effective March 1, 2020, the Company granted warrants to purchase 50,000 shares of common stock to a Company employee for services to the Company. These warrants vest on September 1, 2021 (subject to continued employment through such date) and expire on March 1, 2026, with an exercise price of $3.45 per share. The Company has calculated the estimated fair market value of these warrants at $86,771, using the Black-Scholes model and the following assumptions: term 3.75 years, stock price $3.44, exercise price $3.45, 69.03% volatility, 0.95% risk free rate, and no forfeiture rate.

Below is a table summarizing the warrants issued and outstanding as of September 30, 2020, which have an aggregate weighted average remaining contractual life of 2.68 years.

Number Outstanding	Number Exercisable	Exercise Price ($)	Weighted Average Remaining Contractual Life (Years)	Proceeds to Company if Exercised ($)
125,000	125,000	2.47	2.41	308,750
50,000	-	3.45	5.42	172,500
40,000	40,000	4.53	0.12	181,200
215,000	**165,000**			**662,450**

Stock-based compensation expense related to warrants of $56,127 and $6,379 was recorded in the nine months ended September 30, 2020 and September 30, 2019, respectively. Total remaining unrecognized compensation cost related to non-vested warrants is $53,105 and is expected to be recognized over a period of 0.92 years. As of September 30, 2020, the total intrinsic value of warrants outstanding was $92,500.

($ expressed in United States Dollars)

Note 7 – Stock-based Compensation (continued)

b) Options

The following table summarizes the changes in options outstanding of the Company during the nine-month period ended September 30, 2020:

	Number of Options	Weighted Average Exercise Price ($)
Outstanding at December 31, 2019	4,169,301	3.88
Granted	835,000	3.60
Exercised	(691,599)	2.81
Expired/Cancelled	(29,083)	4.52
Outstanding at September 30, 2020	4,283,619	4.00
Exercisable at September 30, 2020	3,448,619	4.10

Effective April 13, 2020, the Company granted stock options to purchase 835,000 shares of common stock to various Company personnel (including directors, executives, members of management and employees) in exchange for services provided to the Company. These options vest on April 13, 2021 and expire 5 years after the vesting date, with an exercise price of $3.60 per share. The Company has calculated the estimated fair market value of these options at $1,481,709, using the Black-Scholes model and the following assumptions: term 3.5 years, stock price $3.52, exercise price $3.60, 72.94% volatility, 0.54% risk free rate, and no forfeiture rate.

Below is a table summarizing the options issued and outstanding as of September 30, 2020, all of which were issued pursuant to the 2011 Equity Incentive Plan (for option issuances prior to 2016) or the 2015 Stock Incentive Plan (for option issuances commencing in 2016) and which have an aggregate weighted average remaining contractual life of 3.23 years. As of September 30, 2020, an aggregate of 4,250,000 shares of common stock were authorized for issuance under the 2015 Stock Incentive Plan, of which 261,867 shares of common stock remained available for future issuance thereunder.

Number Outstanding	Number Exercisable	Exercise Price ($)	Weighted Average Remaining Contractual Life (Years)	Proceeds to Company if Exercised ($)
685,000	685,000	3.25	4.37	2,226,250
10,351	10,351	3.35	0.58	34,676
835,000	-	3.60	5.54	3,006,000
20,000	20,000	3.80	0.63	76,000
1,782,837	1,782,837	4.00	2.06	7,131,348
15,268	15,268	4.35	1.40	66,416
89,163	89,163	4.38	3.32	390,534
50,000	50,000	4.80	2.25	240,000
796,000	796,000	5.00	2.49	3,980,000
4,283,619	**3,448,619**			**17,151,224**

Stock-based compensation expense related to stock options of $861,312 and $1,084,312 was recorded in the nine months ended September 30, 2020 and September 30, 2019, respectively. Total remaining unrecognized compensation cost related to non-vested stock options is $791,598. As of September 30, 2020, the total intrinsic value of stock options outstanding was $nil.

($ expressed in United States Dollars)

Note 7 – Stock-based Compensation (continued)

c) Restricted Stock Units (RSUs)

Below is a table summarizing the RSUs issued and outstanding as of September 30, 2020, all of which were issued pursuant to the 2015 Stock Incentive Plan.

	Number of RSUs	Share Price ($)
Outstanding at December 31, 2019	-	-
Granted	52,500	3.52
Vested	-	-
Cancelled	-	-
Outstanding at September 30, 2020	52,500	3.52

Effective April 13, 2020, the Company granted RSUs of 52,500 shares of common stock to various Company personnel (including a director and an employee) in exchange for services provided to the Company. These RSUs vest over 2 years, with 50% vesting on each of April 13, 2021 and April 13, 2022 and will result in total compensation expense of $184,800.

Below is a table summarizing the RSUs issued and outstanding as of September 30, 2020 and which have an aggregate weighted average remaining contractual life of 1.03 years.

Number Outstanding	Number Exercisable	Share Price ($)	Weighted Average Remaining Contractual Life (Years)
52,500	-	3.52	1.03

Stock-based compensation expense related to RSUs of $64,553 and $nil was recorded in the nine months ended September 30, 2020 and September 30, 2019, respectively. Total remaining unrecognized compensation cost related to non-vested RSUs is $120,246. As of September 30, 2020, the total intrinsic value of the RSUs outstanding was $nil.

Note 8 – Commitments and Contingencies

a) Finance Lease Obligations

In 2015, the Company entered into an equipment finance lease to purchase three Tecan machines (automated liquid handling robots) for €550,454 Euros that matured in May 2020. As of September 30, 2020, the balance payable was $nil.

In 2016, the Company entered into a real estate finance lease with ING Asset Finance Belgium S.A. (“ING”) to purchase a property located in Belgium for €1.12 million Euros, maturing in May 2031. As of September 30, 2020, the balance payable was $635,130.

In 2018, the Company entered into a finance lease with BNP Paribas leasing solutions to purchase a freezer for the Belgium facility for €25,000 Euros, maturing in January 2022. The leased equipment is amortized on a straight-line basis over 5 years. As of September 30, 2020, the balance payable was $13,575.

($ expressed in United States Dollars)

Note 8 – Commitments and Contingencies (continued)

a) Finance Lease Obligations (continued)

The following is a schedule showing the future minimum lease payments under finance leases by years and the present value of the minimum payments as of September 30, 2020.

2020 - remaining	$	18,259
2021	$	73,042
2022	$	64,531
2023	$	63,058
2024	$	63,057
Greater than 5 years	$	465,037
Total	$	746,984
Less: Amount representing interest	$	(98,279)
Present value of minimum lease payments	**$**	**648,705**

b) Operating Lease Right-of-Use Obligations

As all the existing leases subject to the new lease standard ASC 842, *"Leases,"* were previously classified as operating leases by the Company, they were similarly classified as operating leases under the new standard. The Company has determined that the identified operating leases did not contain non-lease components and require no further allocation of the total lease cost. Additionally, the agreements in place did not contain information to determine the rate implicit in the leases, so we used our incremental borrowing rate as the discount rate. Our weighted average discount rate is 4.48% and the weighted average remaining lease term is 24 months.

As of September 30, 2020, operating lease right-of-use assets and liabilities arising from operating leases were $257,903 and $266,101, respectively. During the nine months ended September 30, 2020, cash paid for amounts included for the measurement of lease liabilities was $184,769 and the Company recorded operating lease expense of $185,077.

The following is a schedule showing the future minimum lease payments under operating leases by years and the present value of the minimum payments as of September 30, 2020.

2020 - remaining	$	74,831
2021	$	109,716
2022	$	50,652
2023	$	32,917
2024	$	10,665
Total Operating Lease Obligations	$	278,781
Less: Amount representing interest	$	(12,680)
Present Value of minimum lease payments	$	**266,101**

The Company's office space leases are short-term and the Company has elected under the short-term recognition exemption not to recognize them on the balance sheet. During the nine months ended September 30, 2020, $10,737 was recognized in short-term lease costs associated with office space leases. The annual payments remaining for short-term office leases were as follows:

2020 - remaining	$	-
Total Operating Lease Obligations	$	**-**

($ expressed in United States Dollars)

Note 8 – Commitments and Contingencies (continued)

c) Grants Repayable

In 2010, the Company entered into an agreement with the Walloon Region government in Belgium for a colorectal cancer research grant for €1.05 million Euros. Per the terms of the agreement, €314,406 Euros of the grant is to be repaid, by installments over the period from June 30, 2014 to June 30, 2023. In the event that the Company receives revenue from products or services as defined in the agreement, it is due to pay a 6% royalty on such revenue to the Walloon Region. The maximum amount payable to the Walloon Region, in respect of the aggregate of the amount repayable of €314,406 Euros and the 6% royalty on revenue, is equal to twice the amount of funding received. As of September 30, 2020, the grant balance repayable was $102,473.

In 2018, the Company entered into an agreement with the Walloon Region government in Belgium for a colorectal cancer research grant for €605,000 Euros. Per the terms of the agreement, €181,500 Euros of the grant is to be repaid by installments over 12 years commencing in 2020. In the event that the Company receives revenue from products or services as defined in the agreement, it is due to pay a 3.53% royalty on such revenue to the Walloon Region. The maximum amount payable to the Walloon Region, in respect of the aggregate of the amount repayable of €181,500 Euros and the 3.53% royalty on revenue, is equal to the amount of funding received. As of September 30, 2020, the grant balance repayable was $212,786.

As of September 30, 2020, the total grant balance repayable was $315,259 and the payments remaining were as follows:

2020 - remaining	$	14,186
2021	$	52,178
2022	$	49,357
2023	$	50,579
2024	$	21,279
Greater than 5 years	$	127,680
Total Grants Repayable	**$**	**315,259**

d) Long-Term Debt

In 2016, the Company entered into a 7-year loan agreement with Namur Invest for €440,000 Euros with a fixed interest rate of 4.85%, maturing in December 2023. As of September 30, 2020, the principal balance payable was $284,741.

In 2016, the Company entered into a 15-year loan agreement with ING for €270,000 Euros with a fixed interest rate of 2.62%, maturing in December 2031. As of September 30, 2020, the principal balance payable was $249,887.

In 2017, the Company entered into a 4-year loan agreement with Namur Invest for €350,000 Euros with a fixed interest rate of 4.00%, maturing in June 2021. As of September 30, 2020, the principal balance payable was $102,962.

In 2017, the Company entered into a 7-year loan agreement with SOFINEX for up to €1 million Euros with a fixed interest rate of 4.50%, maturing in September 2024. As of September 30, 2020, €1 million Euros has been drawn down under this agreement and the principal balance payable was $1,055,139.

In 2018, the Company entered into a 4-year loan agreement with Namur Innovation and Growth for €500,000 Euros with a fixed interest rate of 4.00%, maturing in June 2022. As of September 30, 2020, the principal balance payable was $317,254.

In 2019, the Company entered into a 4-year loan agreement with Namur Innovation and Growth for €500,000 Euros with a fixed interest rate of 4.80%, maturing in September 2023. As of September 30, 2020, the principal balance payable was $586,189.

($ expressed in United States Dollars)

Note 8 – Commitments and Contingencies (continued)

d) Long-Term Debt (continued)

As of September 30, 2020, the total balance for long-term debt payable was $2,596,172 and the payments remaining were as follows:

2020 - remaining	$	286,719
2021	$	777,691
2022	$	652,975
2023	$	552,544
2024	$	403,760
Greater than 5 years	$	181,739
Total	$	2,855,428
Less: Amount representing interest	$	(259,256)
Total Long-Term Debt	**$**	**2,596,172**

e) Collaborative Agreement Obligations

In 2015, the Company entered into a research sponsorship agreement with DKFZ in Germany for a 3-year period for €338,984 Euros. As of September 30, 2020, $87,928 is still to be paid by the Company under this agreement.

In 2016, the Company entered into a research co-operation agreement with DKFZ in Germany for a 5-year period for €400,000 Euros. As of September 30, 2020, $234,475 is still to be paid by the Company under this agreement.

In 2017, the Company entered into a collaborative research agreement with Munich University in Germany for a 3-year period for €360,000 Euros. As of September 30, 2020, $0 is still to be paid by the Company under this agreement.

In 2017, the Company entered into a clinical study research agreement withthe University of Michigan for a 3-year period forup to $3 million. This agreement was amended in February 2020 to redefine a new clinical study. Pursuant to the terms of the amendment, the parties acknowledged that, although not fully completed, the requirements of the original clinical study had been satisfied, including any and all payment obligations by the Company. Further, the Amendment provided that a new clinical study would be undertaken at no additional cost to the Company. As of September 30, 2020, up to $138,000 is still accruedby the Company for any additional expenses for the new clinical study.

In 2018, the Company entered into a research collaboration agreement with the University of Taiwan for a 3-year period for a cost to the Company of up to $2.55 million payable over such period. As of September 30, 2020, $892,500 is still to be paid by the Company under this agreement.

In 2019, the Company entered into a research collaboration agreement with the University of Taiwan for a 2-year period to collect a total of 1,200 samples for a cost to the Company of up to $320,000 payable over such period. As of September 30, 2020, $160,000 is still to be paid by the Company under this agreement.

In 2019, the Company entered into a funded sponsored research agreement with the Texas A&M University (“TAMU”) in consideration for the license granted to the Company for a 5-year period for a cost to the Company of up to $400,000 payable over such period. As of September 30, 2020, $329,986 is still to be paid by the Company under this agreement.

In 2019, the Company entered into a lyophilization study and a CE marking project including GMP validation and documentation with Biomerica Inc. for $160,000. As of September 30, 2020, $54,663 is still to be paid by the Company under this agreement.

On September 16, 2020, the Company entered into a research agreement for the bioinformatic analysis of cell-free DNA fragments from whole-genome sequencing with the Hebrew University of Jerusalem for 6 months for a cost to the Company of €54,879 Euros. As of September 30, 2020, $64,338 is still to be paid by the Company under this agreement.

($ expressed in United States Dollars)

Note 8 – Commitments and Contingencies (continued)

e) Collaborative Agreement Obligations (continued)

As of September 30, 2020, the total amount to be paid for future research and collaboration commitments was approximately $1.96 million and the annual payments remaining were as follows:

2020 - remaining	$	625,464
2021 - 2024	$	1,336,426
Total Collaborative Agreement Obligations	**$**	**1,961,890**

f) Other Commitments

Volition Vet

On August 15, 2020, the Company entered into a consulting services agreement with Novis Animal Solutions LLC ("Novis"), to provide chief commercial officer services for Volition Vet in exchange for payment of consultancy fees, 5% sales commission on third party sales capped at $20,000 per quarter and a potential equity interest of up to 2% in Volition Vet upon achievement of revenue milestones. The agreement superseded the existing consulting services agreement between the parties dated August 7, 2019 which terminated and is of no further effect. The term of the contract is perpetual and terminable on 2 months' written notice from either party. As of September 30, 2020, Novis has no equity interest in Volition Vet. See Note 9 for details regarding termination of the consulting services agreement after September 30, 2020.

On October 25, 2019, the Company entered into an agreement with TAMU for provision of in kind services of personnel, animal samples and laboratory equipment in exchange for a non-controlling interest of 7.5% in Volition Vet, with an additional 5% vesting a year from the date of the agreement, giving TAMU in aggregate a 12.5% equity interest as of such date. As of September 30, 2020, TAMU has a 7.5% equity interest in Volition Vet.

Volition Germany

On January 10, 2020, the Company, through its wholly-owned subsidiary Belgian Volition, acquired an epigenetic reagent company, Octamer GmbH ("Octamer"), based in Munich, Germany, and hired its founder for his expertise and knowledge to be passed to Company personnel. On March 9, 2020, Octamer was renamed to Volition Germany GmbH (or "Volition Germany").

Upon considering the definition of a business, as defined in ASC 805, *"Business Combinations,"* paragraph 805-10-20, which is an integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing a return, the Company has determined that this did not constitute a business. This is primarily due to the fact that additional inputs are needed in the form of training personnel further to produce outputs. Accordingly, the Company has treated this transaction as the hiring of a member of management, described below, rather than accounting for the transaction as a business combination.

The Company agreed to terms of the transaction on December 13, 2019 and closed on January 10, 2020. Pursuant to the transaction agreement, the Company purchased all outstanding shares of Octamer. In exchange, the Company agreed to issue 73,263 newly-issued restricted shares of Company common stock valued at $333,969 (based on the $4.56 per share volume weighted trading price for the five days prior to December 13, 2019), committed to pay approximately €350,000 Euros, subject to adjustments, and agreed to pay off certain Octamer expenses leading up to the agreement (representing net liabilities of $6,535). At closing, the Company issued 73,263 restricted shares of Company common stock, paid an adjusted amount of approximately $357,000 (€321,736 Euros) and recorded a holdback liability of $55,404 (€50,000 Euros) to be paid after the holdback period of 9 months following the closing (subject to offset for breaches of representations and warranties).

In connection with the transaction agreement, the Company also entered into a 2-year Managing Director's agreement with the founder of Octamer to continue to manage Volition Germany for a payment of €288,000 Euros payable in equal monthly installments over such 2-year period and a royalty agreement with the founder providing for the payment of royalties in the amount of 6% of net sales of Volition Germany's nucleosomes as reagents to pharmaceutical companies for use in the development, manufacture and screening of molecules for use as therapeutic drugs for a period of 5 years post-closing.

Note 8 – Commitments and Contingencies (continued)

f) Other Commitments (continued)

The Company recorded approximately $753,000 in compensation expense as a result of cash paid, holdback liability, stock issued and assumption of expenses. As of September 30, 2020, $211,028 is still to be paid by the Company under the Managing Director's agreement and $229 is payable under the 6% royalty agreement.

g) Legal Proceedings

There are no legal proceedings which the Company believes will have a material adverse effect on its financial position.

Note 9 – Subsequent Events

From October 1 to November 4, 2020, the Company raised aggregate net proceeds of approximately $471,600 under the equity distribution agreement through the sale of 133,122 shares of its common stock in accordance with a Rule 10b5-1 plan.

On October 1, 2020, the Company signed a new office lease in London, UK for total fee payable of approximately $111,540 (£86,400) at a rental rate of approximately $7,000 (£5,400) per month for a period of 16 months until January 31, 2022.

On October 5, 2020, the Company borrowed $973,000 (€830,000 Euros) from Preface S.A at an interest rate of 4%, repayable over 10 years to finance the acquisition and construction of a production facility in Belgium.

On November 3, 2020, the Company entered into a professional services master agreement with Diagnostic Oncology CRO, LLC, to conduct a pivotal clinical trial and provide regulatory submission and reimbursement related services. Under the terms of the agreement, Diagnostic Oncology CRO, LLC will provide ad hoc consulting assistance on a project-by-project basis related to the review and assessment of existing data and information to prepare recommended intended use claims and coverage/reimbursement plans to support the preparation of FDA pre-submissions, clinical trial protocol development and study administration, and potential 510k regulatory marketing submissions of the Company's diagnostic tests, including those proposed for use as an adjunct diagnostic tool for common and aggressive forms of Non-Hodgkin's Lymphoma. The initial projects contemplated by the agreement relating to Non-Hodgkin's Lymphoma obligate the Company to pay an aggregate of up to $2.9 million over a period of 22 months. Such payment obligations are on a project-by-project basis as deliverables are executed and subject to certain terms and conditions. Additionally, the Company may terminate the agreement or any project with or without cause upon at least 30 days' prior written notice. Unless earlier terminated, the term of the agreement is until December 31, 2025 or such later date as when all projects have been completed.

On November 4, 2020, the Company terminated a consulting services agreement with Novis Animal Solutions LLC ("Novis") to provide chief commercial officer services for Volition Vet. The termination was effective immediately and the compensation payable to Novis for the required two-month notice period and a general release of any claims will be $19,000.

On November 10, 2020, the Company entered into a consulting services agreement through a related party transaction between its wholly-owned subsidiary, Singapore Volition and PB Commodities Pte Ltd ("PB Commodities"). This agreement is effective December 1, 2020 and provides for consultancy services to be rendered by Cameron Reynolds through PB Commodities to Singapore Volition. Singapore Volition will also make available the services of Mr. Reynolds, as Group Chief Executive Officer, to the Company and its subsidiaries, pursuant to the services agreements entered into by and between Singapore Volition and the Company or its subsidiaries. The term of the agreement is perpetual, commencing on December 1, 2020 until terminated upon six months' prior notice. The agreement includes a six-month non-compete following termination of the agreement. The consulting services agreement replaces in its entirety the employment agreement by and between Volition Diagnostics and Mr. Reynolds, dated March 7, 2017, which was terminated upon mutual agreement of the parties. PB Commodities will receive a monthly fee of $35,650 in exchange for the services provided by Mr. Reynolds.

Note 9 – Subsequent Events (continued)

On November 12, 2020, the Company entered into an Equity Distribution Agreement (the "EDA") with Cantor Fitzgerald & Co. ("Cantor") and Oppenheimer, to sell shares of its Common Stock, par value $0.001 (the "Common Stock"), having an aggregate offering price of up to $25,000,000 (the "Shares") from time to time, through an "at the market" offering program (the "New ATM Offering") under which Oppenheimer and Cantor will jointly act as sales agents (the "Sales Agents"). The offer and sale of the Shares will be made pursuant to the Company's effective "shelf" registration statement on Form S-3 (File No. 333-227248), the base prospectus contained therein, dated September 28, 2018, and a prospectus supplement related to the New ATM Offering, dated November 12, 2020. The Company is not obligated to sell any shares under the EDA. The Company will pay the Sales Agents a commission of up to 3% of the aggregate gross proceeds from each sale of Shares occurring pursuant to the EDA, if any. The Company has also agreed to reimburse the Sales Agents for legal fees and disbursements, not to exceed $50,000 in the aggregate, in connection with the EDA. The EDA may be terminated by the Sales Agents or the Company at any time upon written notice to the other party(ies), as permitted therein.

END NOTES TO FINANCIALS

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Cautionary Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2020, or this Report, contains 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. 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 Report or incorporated by reference into this Report are forward-looking statements. These statements include, among other things, any predictions of earnings, revenues, expenses or other financial items; plans or expectations with respect to our development activities or business strategy; statements concerning clinical studies and results; statements concerning industry trends; statements regarding anticipated demand for our products, or the products of our competitors; statements relating to manufacturing forecasts, and the potential impact of our relationship with contract manufacturers and original equipment manufacturers on our business; statements relating to the commercialization of our products, assumptions regarding the future cost and potential benefits of our research and development efforts; forecasts of our liquidity position or available cash resources; statements relating to the impact of pending litigation; statements regarding the anticipated impact of the COVID-19 pandemic and statements relating to the assumptions underlying any of the foregoing. Throughout this Report, we have attempted to identify forward-looking statements by using words such as "may," "believe," "will," "could," "project," "anticipate," "expect," "estimate," "should," "continue," "potential," "plan," "forecasts," "goal," "seek," "intend," other forms of these words or similar words or expressions or the negative thereof (although not all forward-looking statements contain these words).

We have based our forward-looking statements on our current expectations and projections about trends affecting our business and industry and other future events. Although we do not make forward-looking statements unless we believe we have a reasonable basis for doing so, we cannot guarantee their accuracy. Forward-looking statements are subject to substantial risks and uncertainties that could cause our future business, financial condition, results of operations or performance, to differ materially from our historical results or those expressed or implied in any forward-looking statement contained in this Report. For instance, if we fail to develop and commercialize diagnostic products, we may be unable to execute our plan of operations. Other risks and uncertainties include those associated with the COVID-19 pandemic; our failure to obtain necessary regulatory clearances or approvals to distribute and market future products in the veterinary or clinical in-vitro diagnostics, or IVD, market; a failure by the marketplace to accept the products in our development pipeline or any other diagnostic products we might develop; our failure to secure adequate intellectual property protection; we will face fierce competition and our intended products may become obsolete due to the highly competitive nature of the diagnostics market and its rapid technological change; and other risks identified elsewhere in this Report, as well as in our other filings with the Securities and Exchange Commission, or the SEC. In addition, actual results may differ as a result of additional risks and uncertainties of which we are currently unaware or which we do not currently view as material to our business. For these reasons, readers are cautioned not to place undue reliance on any forward-looking statements.

You should read this Report in its entirety, together with our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, as filed with the SEC on February 20, 2020, or our Annual Report, the documents that we file as exhibits to this Report and the documents that we incorporate by reference into this Report, with the understanding that our future results may be materially different from what we currently expect. The forward-looking statements we make speak only as of the date on which they are made. We expressly disclaim any intent or obligation to update any forward-looking statements after the date hereof to conform such statements to actual results or to changes in our opinions or expectations. If we do update or correct any forward-looking statements, readers should not conclude that we will make additional updates or corrections.

Company Overview

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the interim consolidated financial statements and related condensed notes thereto, which are included in Part I of this Report.

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 are planning the launch of 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.

Developments - COVID-19 Pandemic

On March 11, 2020, the World Health Organization designated the outbreak of the novel strain of coronavirus known as COVID-19 as a global pandemic. Governments and businesses around the world have taken unprecedented actions to mitigate the spread of COVID-19, including, but not limited to, shelter-in-place orders, quarantines, significant restrictions on travel, as well as restrictions that prohibit many employees from going to work. Uncertainty with respect to the economic effects of the pandemic has introduced significant volatility in the financial markets.

During the first nine months of 2020, we implemented contingency planning to protect the health and well-being of our employees, with most employees working remotely where possible. We have implemented travel restrictions as well as visitor protocols and we are following social distancing practices. We did not observe significant impacts on our business or results of operations for the quarter ended September 30, 2020 due to the global emergence of COVID-19 or the mitigation actions taken to slow its spread. To the extent the pandemic worsens, we cannot predict the effects it may have on our business, in particular with respect to demand for our services, our strategy, and our prospects, or the impact on our financial results.

Liquidity and Capital Resources

We have financed our operations since inception primarily through private placements and public offerings of our common stock. As of September 30, 2020, we had cash and cash equivalents of approximately $20.9 million.

Net cash used in operating activities was $13.7 million and $10.1 million for the nine months ended September 30, 2020 and September 30, 2019, respectively. The increase in cash used in operating activities for the period ended September 30, 2020 when compared to same period in 2019 was primarily due to increased expenditures on antibodies, sample purchases, stage payment to a collaborator partner and common stock issued for services.

Net cash used in investing activities was $0.6 million and $0.4 million for the nine months ended September 30, 2020 and September 30, 2019, respectively. The increase was primarily due to purchases of laboratory equipment.

Net cash provided by financing activities was $18.5 million and $16.4 million for the nine months ended September 30, 2020 and September 30, 2019, respectively. The increase in cash provided by financing activities for the period ended September 30, 2020 when compared to same period in 2019 was primarily due to $12.7 million in net cash received from the issuance of shares of common stock in a registered public offering in May 2020 and $6.5 million in net cash received from the issuance of shares of common stock pursuant to the Equity Distribution Agreement.

The following table summarizes our approximate contractual payments due by year as of September 30, 2020.

Approximate Payments (Including Interest) Due by Year

Description	Total $	2020 (Remaining) $	2021 - 2024 $	2025 + $
Finance Lease Obligations	746,984	18,259	263,688	465,037
Operating Lease Obligations	278,781	74,831	203,950	-
Grants Repayable	315,259	14,186	173,393	127,680
Long-Term Debt	2,855,428	286,719	2,386,970	181,739
Collaborative Agreements Obligations	1,961,890	625,464	1,336,426	-
Total	6,158,342	1,019,459	4,364,427	774,456

We intend to use our cash reserves to predominantly fund further research and development activities. We do not currently have any substantial source of revenues and expect to rely on additional future financing, through the sale of equity or debt securities, or the sale of licensing rights, to provide sufficient funding to execute our strategic plan. There is no assurance that we will be successful in raising further funds.

In the event that additional financing is delayed, we will prioritize the maintenance of our research and development personnel and facilities, primarily in Belgium, and the maintenance of our patent rights. In such instance, the completion of clinical validation studies and regulatory approval processes for the purpose of bringing products to the IVD and veterinary market would be delayed. In the event of an ongoing lack of financing, it may be necessary to discontinue operations, which will adversely affect the value of our common stock.

We have not attained profitable operations and are dependent upon obtaining financing to pursue any extensive activities. For these reasons, our auditors stated in their report on our audited financial statements for the year ended December 31, 2019 an explanatory paragraph regarding factors that raise substantial doubt that we will be able to continue as a going concern.

Results of Operations

Comparison of the Three Months Ended September 30, 2020 and September 30, 2019

The following table sets forth our results of operations for the three months ended on September 30, 2020 and September 30, 2019, respectively:

	Three Months ended September 30, 2020 $	2019 $	Increase (Decrease) $	Percentage Increase (Decrease) %
Service	-	16,204	(16,204)	(100%)
Royalty	-	892	(892)	(100%)
Product	575	-	575	100%
Total Revenues	575	17,096	(16,521)	(97%)
Research and development	3,180,177	2,642,610	537,567	20%
General and administrative	1,080,308	1,354,992	(274,684)	(20%)
Sales and marketing	244,510	195,641	48,869	25%
Total Operating Expenses	4,504,995	4,193,243	311,752	7%
Grant income	-	-	-	-%
Gain on disposal of fixed assets	200,393	-	200,393	100%
Interest income	2,801	27,633	(24,832)	(90%)
Interest expense	(34,722)	(32,291)	2,431	8%
Other expenses	-	-	-	-%
Total Other Income (Expenses)	168,472	(4,658)	173,130	>100%
Net Loss	(4,335,948)	(4,180,805)	155,143	4%

Revenues

Our operations are still predominantly in the research and development stage and we had limited revenues of $575 and $17,096 during the three months ended September 30, 2020 and September 30, 2019, respectively.

Operating Expenses

Total operating expenses increased to $4.5 million from $4.2 million for the three months ended September 30, 2020 and September 30, 2019, respectively, as a result of the factors described below.

Research and Development Expenses

Research and development expenses increased to $3.2 million from $2.6 million for the three months ended September 30, 2020 and September 30, 2019, respectively. This increase was primarily related to higher antibody costs, sample costs, laboratory expenses and personnel expenses during the period.

	Three Months ended September 30,		
	2020	2019	Change
	$	$	$
Personnel expenses	1,152,952	992,868	160,084
Stock-based compensation	75,054	99,423	(24,369)
Direct research and development expenses	1,606,316	1,048,195	558,121
Other research and development	163,845	328,611	(164,766)
Depreciation and amortization	182,010	173,513	8,497
Total research and development expenses	3,180,177	2,642,610	537,567

General and Administrative Expenses

General and administrative expenses decreased to $1.1 million from $1.4 million for the three months ended September 30, 2020 and September 30, 2019, respectively. This was primarily due to lower personnel costs offset by higher professional fees in respect of financing activities during the period.

	Three Months ended September 30,		
	2020	2019	Change
	$	$	$
Personnel expenses	483,033	562,964	(79,931)
Stock-based compensation	304,921	224,874	80,047
Legal and professional fees	327,346	196,020	131,326
Other general and administrative	(87,777)	349,733	(437,510)
Depreciation and amortization	52,785	21,401	31,384
Total general and administrative expenses	1,080,308	1,354,992	(274,684)

Sales and Marketing Expenses

Sales and marketing expenses were at the same level of $0.2 million for the three months ended September 30, 2020 and September 30, 2019, respectively. There was an increase in direct marketing professional fees offset by lower travel and personnel costs during the period.

	Three Months ended September 30,		
	2020	2019	Change
	$	$	$
Personnel expenses	115,402	135,680	(20,278)
Stock-based compensation	48,709	46,088	2,621
Direct marketing and professional fees	80,399	13,873	66,526
Total sales and marketing expenses	244,510	195,641	48,869

Other Income (Expenses)

For the three months ended September 30, 2020, the Company's other income was $168,472 compared to other expenses of $4,658 for the three months ended September 30, 2019. The increase in other income was due to a gain on disposal of a fixed asset, offset by less interest received from cash deposited in an overnight money market deposit account.

Net Loss

For the three months ended September 30, 2020, the Company's net loss was $4.3 million in comparison to a net loss of $4.2 million for the three months ended September 30, 2019. The change was a result of the factors described above.

Comparison of the Nine Months Ended September 30, 2020 and September 30, 2019

The following table sets forth our results of operations for the nine months ended on September 30, 2020 and September 30, 2019, respectively:

	Nine Months Ended September 30,		Increase	Percentage Increase
	2020	2019	(Decrease)	(Decrease)
	$	$	$	%
Service	-	16,204	(16,204)	(100%)
Royalty	2,112	892	1,220	>100%
Product	4,201	-	4,201	100%
Total Revenues	6,313	17,096	(10,783)	(63%)
Research and development	10,567,988	7,596,097	2,971,891	39%
General and administrative	4,292,666	4,020,893	271,773	7%
Sales and marketing	734,355	718,047	16,308	2%
Total Operating Expenses	15,595,009	12,335,037	3,259,972	26%
Grant income	98,870	-	98,870	100%
Gain on disposal of fixed assets	293,595	-	293,595	100%
Interest income	48,956	68,656	(19,700)	(29%)
Interest expense	(91,105)	(95,507)	(4,402)	(5%)
Other expenses	-	(196,957)	(196,957)	(100%)
Total Other Income (Expenses)	350,316	(223,808)	574,124	>100%
Net Loss	(15,238,380)	(12,541,749)	2,696,631	22%

Revenues

Our operations are still predominantly in the research and development stage and we had limited revenues of $6,313 and $17,096 during the nine months ended September 30, 2020 and September 30, 2019, respectively.

Operating Expenses

Total operating expenses increased to $15.6 million from $12.3 million for the nine months ended September 30, 2020 and September 30, 2019, respectively as a result of the factors described below.

Research and Development Expenses

Research and development expenses increased to $10.6 million for the nine months ended September 30, 2020, from $7.6 million for the nine months ended September 30, 2019. This increase in overall research and development expenditures was primarily related to higher antibody costs, higher sample costs, laboratory expenses and personnel expenses during the 2020 period.

	Nine Months Ended September 30,		
	2020	2019	Change
	$	$	$
Personnel expenses	3,611,730	2,850,614	761,116
Stock-based compensation	252,344	298,686	(46,342)
Direct research and development expenses	4,970,879	3,276,582	1,694,297
Other research and development	1,178,098	651,764	526,334
Depreciation and amortization	554,937	518,451	36,486
Total research and development expenses	10,567,988	7,596,097	2,971,891

General and Administrative Expenses

General and administrative expenses increased to $4.3 million from $4.0 million for the nine months ended September 30, 2020 and September 30, 2019, respectively. This increase was primarily due to higher professional fees in respect of financing activities, offset by lower personnel expenses and stock-based compensation charges during the 2020 period.

	Nine Months Ended September 30,		
	2020	2019	Change
	$	$	$
Personnel expenses	1,523,864	1,688,747	(164,883)
Stock-based compensation	616,241	655,639	(39,398)
Legal and professional fees	1,254,935	882,815	372,120
Other general and administrative	732,664	751,320	(18,656)
Depreciation and amortization	164,962	42,372	122,590
Total general and administrative expenses	4,292,666	4,020,893	271,773

Sales and Marketing Expenses

Sales and marketing expenses were at the same level of $0.7 million for the nine months ended September 30, 2020 and September 30, 2019, respectively. There was an increase in direct marketing professional fees offset by lower stock-based compensation costs and travel costs during the 2020 period.

	Nine Months Ended September 30,		
	2020	2019	Change
	$	$	$
Personnel expenses	377,100	463,466	(86,366)
Stock-based compensation	113,407	136,368	(22,961)
Direct marketing and professional fees	243,848	118,213	125,635
Total sales and marketing expenses	734,355	718,047	16,308

Other Income (Expenses)

For the nine months ended September 30, 2020, the Company's other income was $350,316 compared to other expenses of $223,808 for the nine months ended September 30, 2019. This increase in other income was primarily due to gain on disposal of fixed assets, and grant income received, offset by other expenses related to the amendment to outstanding warrants which resulted in a $196,957 expense in the same period in 2019.

Net Loss

For the nine months ended September 30, 2020, the Company's net loss was $15.2 million in comparison to a net loss of $12.5 million for the nine months ended September 30, 2019. The change was a result of the factors described above.

Going Concern

We have not attained profitable operations and are dependent upon obtaining external financing to continue to pursue our operational and strategic plans. For these reasons, management has determined that there is substantial doubt that the business will be able to continue as a going concern without further financing.

Off-Balance Sheet Arrangements

We have no significant off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to stockholders.

Future Financings

We may seek to obtain additional capital through the sale of debt or equity securities, if we deem it desirable or necessary. However, we may be unable to obtain such additional capital when needed, or on terms favorable to us or our stockholders, if at all. If we raise additional funds by issuing equity securities, the percentage ownership of our stockholders will be reduced, stockholders may experience additional dilution, or such equity securities may provide for rights, preferences or privileges senior to those of the holders of our common stock. If additional funds are raised through the issuance of debt securities, the terms of such securities may place restrictions on our ability to operate our business.

Critical Accounting Policies

Our financial statements and accompanying notes have been prepared in accordance with United States generally accepted accounting principles, or U.S. GAAP, applied on a consistent basis. The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods.

We regularly evaluate the accounting policies and estimates that we use to prepare our financial statements. A complete summary of these policies is included in the notes to our financial statements. In general, management's estimates are based on historical experience, on information from third party professionals, and on various other assumptions that are believed to be reasonable under the facts and circumstances. Actual results could differ from those estimates made by management.

Recently Issued Accounting Pronouncements

The Company has implemented all applicable new accounting pronouncements that are in effect. The Company does not believe that there are any other applicable new accounting pronouncements that have been issued that might have a material impact on its financial position or results of operations.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information under this item.

ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Disclosure controls and procedures are controls and procedures that are designed to ensure that information required to be disclosed in our reports filed under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by our company in the reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including our Principal Executive and Principal Financial Officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Our management carried out an evaluation under the supervision and with the participation of our Principal Executive Officer and Principal Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based upon that evaluation, our Principal Executive Officer and Principal Financial Officer have concluded, as they previously concluded as of December 31, 2019, that our disclosure controls and procedures continue to not be effective as of September 30, 2020, because of material weaknesses in our internal control over financial reporting, as described below and in detail in our Annual Report.

Changes in Internal Control over Financial Reporting

The Audit Committee of the Board of Directors meets regularly with our financial management, and with the independent registered public accounting firm engaged by us. Internal accounting controls and the quality of financial reporting are discussed during these meetings. The Audit Committee has discussed with the independent registered public accounting firm matters required to be discussed by the auditing standards adopted or established by the Public Company Accounting Oversight Board ("PCAOB"). In addition, the Audit Committee and the independent registered public accounting firm have discussed the independent registered public accounting firm's independence from the Company and its management, including the matters in the written disclosures required by PCAOB Rule 3526, *"Communicating with Audit Committees Concerning Independence."*

As of September 30, 2020, we did not maintain sufficient internal controls over financial reporting due to insufficient:

- segregation of duties in some areas of Finance;
- oversight in the area of Information Technology, where certain processes may affect the internal controls over financial reporting; and
- monitoring of review controls with respect to accounting for complex transactions.

We have developed, and are currently implementing, a remediation plan for these material weaknesses. Specifically, we have identified and selected a system for financial reporting that will allow further automation of the reporting process, thereby strengthening the control environment over financial reporting. As we continue to evaluate and work to enhance our internal controls over financial reporting, we may determine that additional measures should be taken to address these or other control deficiencies, and/or that we should modify our remediation plan considering the Company's size and growth.

There have been no changes in our internal controls over financial reporting that occurred during the fiscal quarter ended September 30, 2020, other than those described above, that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

Once the Company is engaged in stable business operations and has sufficient personnel and resources available, then our Board of Directors, in particular and in connection with the aforementioned deficiencies, will establish the following remediation measures:

- Additional Finance resources will be recruited to resolve the segregation of duties control weaknesses noted above;
- Internal audit resources will be contracted to review and advise on control weaknesses across the organization; and
- Specialist resources in IT and Human Resources will be recruited to recommend and implement relevant policy and processes to strengthen IT and Human Resources internal controls associated with financial reporting.

Limitations of the Effectiveness of Disclosure Controls and Internal Controls

Our management, including our Principal Executive Officer and Principal Financial Officer, does not expect that our disclosure controls and internal controls will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control.

The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving our stated goals under all potential future conditions; over time, a control may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

In the ordinary course of business, we may be subject to claims, counter claims, lawsuits and other litigation of the type that generally arise from the conduct of our business. We know of no material, existing or pending legal proceedings against our company, nor are we involved as a plaintiff in any material proceeding or pending litigation. There are no proceedings in which our directors, officers or any affiliates, or any registered or beneficial stockholders, is an adverse party or has a material interest adverse to our interest.

ITEM 1A. RISK FACTORS

There have been no material changes in our assessment of risk factors affecting our business since those presented in Part I, Item 1A of our Annual Report, as supplemented in Part II, Item 1A of our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Consulting Agreement

On November 10, 2020, the Company entered into a consulting services agreement through a related party transaction between its wholly-owned subsidiary, Singapore Volition and PB Commodities Pte. Ltd ("PB Commodities"). The agreement is effective as of December 1, 2020 and provides for consultancy services to be rendered by Cameron Reynolds through PB Commodities to Singapore Volition. Singapore Volition will also make available the services of Mr. Reynolds, as Group Chief Executive Officer, to the Company and its other subsidiaries, pursuant to services agreements entered into by and between Singapore Volition and the Company or its subsidiaries. PB Commodities will receive a monthly fee of $35,650 in exchange for the services provided by Mr. Reynolds. The term of the agreement is perpetual until terminated upon six months' prior notice. The agreement includes a six-month non-compete following termination of the agreement. The consulting services agreement replaces in its entirety the employment agreement by and between Volition Diagnostics and Mr. Reynolds, dated March 7, 2017, which was terminated upon mutual agreement of the parties. The foregoing description of the consulting services agreement does not purport to be complete and is qualified in its entirety by such consulting services agreement, a copy of which is filed as Exhibit 10.1 to this Report.

Equity Distribution Agreement

On November 12, 2020, the Company entered into an Equity Distribution Agreement (the "EDA") with Cantor Fitzgerald & Co. ("Cantor") and Oppenheimer & Co. Inc. ("Oppenheimer"), to sell shares of its Common Stock, par value $0.001 (the "Common Stock"), having an aggregate offering price of up to $25,000,000 (the "Shares") from time to time, through an "at the market" offering program (the "New ATM Offering") under which Oppenheimer and Cantor will jointly act as sales agents (the "Sales Agents"). The offer and sale of the Shares will be made pursuant to the Company's effective "shelf" registration statement on Form S-3 (File No. 333-227248), the base prospectus contained therein, dated September 28, 2018, and a prospectus supplement related to the New ATM Offering, dated November 12, 2020. The Company is not obligated to sell any shares under the EDA. Subject to the terms and conditions of the EDA, the Sales Agents will use commercially reasonable efforts to sell on the Company's behalf all of the Common Stock requested to be sold by the Company, consistent with its normal trading and sales practices, upon the Company's instructions, including any price, time or size limits specified by the Company. The Sales Agents' obligations to sell Shares under the EDA are subject to the satisfaction of certain conditions. The Company will pay the Sales Agents a commission of up to 3% of the aggregate gross proceeds from each sale of Shares occurring pursuant to the EDA, if any, and has agreed to provide the Sales Agents with customary indemnification and contribution rights, including with respect to certain liabilities under the Securities Act of 1933, as amended. The Company has also agreed to reimburse the Sales Agents for legal fees and disbursements, not to exceed $50,000 in the aggregate, in connection with the EDA. The EDA may be terminated by the Sales Agents or the Company at any time upon written notice to the other party(ies), as permitted therein. The foregoing description of the EDA does not purport to be complete and is qualified in its entirety by such EDA, a copy of which is filed as Exhibit 1.1 to this Report on Form 10-Q.

The legal opinion of Stradling Yocca Carlson & Rauth, P.C., counsel to the Company, related to the Shares is filed as Exhibit 5.1 to this Report.

ITEM 6. EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
1.1	Equity Distribution Agreement, dated November 12, 2020, by and among the Company, Oppenheimer & Co. Inc. and Cantor Fitzgerald & Co.					X
5.1	Legal Opinion of Stradling Yocca Carlson & Rauth, P.C.					X
10.1#	Consulting Services Agreement, dated November 10, 2020, by and between Singapore Volition Pte. Limited and PB Commodities Pte. Ltd.					X
23.1	Consent of Stradling Yocca Carlson & Rauth, P.C. (included in Exhibit 5.1 above).					
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended.					X
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended.					X
32.1*	Certifications of Chief Executive Officer and Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	XBRL Instance Document.					X
101.SCH	XBRL Taxonomy Extension Schema Document.					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.					X

Indicates a management contract or compensatory plan or arrangement.

* The certifications attached as Exhibit 32.1 accompany this Quarterly Report pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed "filed" by the registrant for purposes of Section 18 of the Exchange Act and are not to be incorporated by reference into any of the registrant's filings under the Securities Act or the Exchange Act, irrespective of any general incorporation language contained in any such filing.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

VOLITIONRX LIMITED

Dated: November 12, 2020

By: */s/ Cameron Reynolds*
Cameron Reynolds
President and Chief Executive Officer
(Authorized Signatory and Principal Executive Officer)

Dated: November 12, 2020

By: */s/ David Vanston*
David Vanston
Chief Financial Officer and Treasurer
(Authorized Signatory and Principal Financial and Accounting Officer)

VOLITIONRX LIMITED

$25,000,000

COMMON STOCK

EQUITY DISTRIBUTION AGREEMENT

November 12, 2020

Cantor Fitzgerald & Co.
499 Park Avenue
New York, NY 10022

Oppenheimer & Co. Inc.
85 Broad Street, 26th Floor
New York, New York 10004

Ladies and Gentlemen:

VolitionRx Limited, a Delaware corporation (the "**Company**"), confirms its agreement (this "**Agreement**") with Cantor Fitzgerald & Co. and Oppenheimer & Co. Inc. (each, an "**Agent**" and together, the "**Agents**"), as follows:

1. Issuance and Sale of Shares. The Company agrees that, from time to time during the term of this Agreement, on the terms and subject to the conditions set forth herein, it may issue and sell to or through the Designated Agent (as defined in Section 22(b)), shares of the Company's common stock, par value $0.001 per share (the "**Common Stock**"), having an aggregate offering price of up to $25,000,000 (the "**Maximum Amount**"), subject to the limitations set forth in Section 3(b) hereof. The issuance and sale of shares of Common Stock to or through the Designated Agent will be effected pursuant to the Registration Statement (as defined below) filed, or to be filed, by the Company and after such Registration Statement has been declared effective by the U.S. Securities and Exchange Commission (the "**Commission**"), although nothing in this Agreement shall be construed as requiring the Company to use the Registration Statement (as defined below) to issue the Common Stock.

On the date of this Agreement, the Company has filed, or will file, in accordance with the provisions of the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the "**Securities Act**"), with the Commission, a registration statement on Form S-3, including a base prospectus, relating to certain securities, including the Common Stock, to be issued from time to time by the Company, and which incorporates by reference documents that the Company has filed or will file in accordance with the provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the "**Exchange Act**"). The Company has prepared a prospectus supplement specifically relating to the offer and sale of Placement Shares pursuant to this Agreement included as part of such registration statement (the "**ATM Prospectus**"). As soon as practicable following the date that such registration statement is declared effective, the Company will furnish to each Agent, for use by such Agent, copies of the ATM Prospectus included as part of such registration statement, relating to the Placement Shares. Except where the context otherwise requires, such registration statement, as amended when it becomes effective, including all documents filed as part thereof or incorporated by reference therein, and including any information contained in a Prospectus (as defined below) subsequently filed with the Commission pursuant to Rule 424(b) under the Securities Act or deemed to be a part of such registration statement pursuant to Rule 430B or 462(b) of the Securities Act, is herein called the "**Registration Statement.**" The base prospectus, including all documents incorporated therein by reference (to the extent such information has not been superseded or modified in accordance with Rule 412 under the Securities Act (as qualified by Rule 430B(g) of the Securities Act)), and the ATM Prospectus, including all documents incorporated therein by reference (to the extent such information has not been superseded or modified in accordance with Rule 412 under the Securities Act (as qualified by Rule 430B(g) of the Securities Act)), each of which is included in the Registration Statement, as it or they may be supplemented by any additional prospectus supplement, in the form in which such prospectus and/or ATM Prospectus have most recently been filed by the Company with the Commission pursuant to Rule 424(b) under the Securities Act, together with any "issuer free writing prospectus," as defined in Rule 433 of the Securities Act ("**Rule 433**"), relating to the Placement Shares (as defined below) that (i) is required to be filed with the Commission by the Company or (ii) is exempt from filing pursuant to Rule 433(d)(5)(i), in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g), is herein called the "**Prospectus**." Any reference herein to the Registration Statement, the Prospectus or any amendment or supplement thereto shall be deemed to refer to and include the documents incorporated by reference therein, and any reference herein to the terms "amend," "amendment" or "supplement" with respect to the Registration Statement or the Prospectus shall be deemed to refer to and include the filing after the execution hereof of any document with the Commission deemed to be incorporated by reference therein pursuant to the Securities Act or the Exchange Act. For purposes of this Agreement, all references to the Registration Statement, the Prospectus or to any amendment or supplement thereto shall be deemed to include the most recent copy of the relevant document filed with the Commission pursuant to the Electronic Data Gathering Analysis and Retrieval System or any successor thereto (collectively "**EDGAR**").

2. Placements. Each time that the Company wishes to issue and sell the Common Stock through the Designated Agent (each, a "**Placement**"), it will notify the Designated Agent by email notice (or other method mutually agreed to in writing by the parties) (a "**Placement Notice**") containing the parameters in accordance with which it desires the Common Stock to be sold, which shall at a minimum include the number of shares of Common Stock to be issued (the "**Placement Shares**"), the time period during which sales are requested to be made, any limitation on the number of shares of Common Stock that may be sold in any one Trading Day (as defined in Section 3) and any minimum price below which sales may not be made, a form of which containing such minimum sales parameters necessary is attached hereto as **Schedule 1**. The Placement Notice shall originate from any of the individuals from the Company set forth on **Schedule 2** (with a copy to each of the other individuals from the Company listed on such schedule), and shall be addressed to each of the individuals from the Designated Agent set forth on **Schedule 2**, as such **Schedule 2** may be amended from time to time by a party by delivering email notice to the other parties of the addition or deletion of individuals of such party. The receipt of each such Placement Notice shall be acknowledged by the Designated Agent by providing email notice to the Company. The Placement Notice shall be effective upon receipt by the Designated Agent unless and until (i) in accordance with the notice requirements set forth in Section 4, the Designated Agent declines to accept the terms contained therein for any reason, in its sole discretion (which the Designated Agent must communicate by providing email notice by the end of the Business Day (as defined below) following the date of receipt of the Placement Notice, or the Placement Notice will be deemed to be accepted by the Designated Agent in accordance with its terms), (ii) the entire amount of the Placement Shares have been sold, (iii) in accordance with the notice requirements set forth in Section 4, the Company suspends or terminates the Placement Notice, (iv) the Company issues a subsequent Placement Notice with parameters superseding those on the earlier dated Placement Notice, or (v) the Agreement has been terminated under the provisions of Section 11. The amount of any discount, commission or other compensation to be paid by the Company to any Agent in connection with such Agent's sale of the Placement Shares, as the Designated Agent, shall be as set forth in **Schedule 3**. It is expressly acknowledged and agreed that neither the Company nor either Agent will have any obligation whatsoever with respect to a Placement or any Placement Shares unless and until the Company delivers a Placement Notice to a Designated Agent and the Designated Agent does not decline such Placement Notice pursuant to the terms set forth above, and then only upon the terms specified therein and herein. In the event of a conflict between the terms of this Agreement and the terms of a Placement Notice, the terms of the Placement Notice will control.

3. Sale of Placement Shares by the Designated Agent.

(a) Subject to the terms and conditions herein set forth, upon the Company's issuance of a Placement Notice, and unless the sale of the Placement Shares described therein has been declined, suspended, or otherwise terminated in accordance with the terms of this Agreement, the Designated Agent will use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable state and federal laws, rules and regulations and the rules of the NYSE American (the "**Exchange**"), for the period specified in the Placement Notice, to sell such Placement Shares up to the amount specified by the Company in, and otherwise in accordance with the terms of such Placement Notice. The Designated Agent will provide written confirmation to the Company (including by email correspondence to each of the individuals of the Company set forth on **Schedule 2**, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) no later than the opening of the Trading Day (as defined below) immediately following the Trading Day on which it has made sales of Placement Shares hereunder setting forth the number of Placement Shares sold on such day, the compensation payable by the Company to the Designated Agent pursuant to Section 2 with respect to such sales, and the Net Proceeds (as defined below) payable to the Company, with an itemization of the deductions made by the Designated Agent (as set forth in Section 5(a)) from the gross proceeds that it receives from such sales. Subject to the terms of the Placement Notice, the Designated Agent may sell Placement Shares by any method permitted by law deemed to be an "at the market" offering as defined in Rule 415 under the Securities Act, including without limitation sales made directly on the Exchange, on any other existing trading market for the Common Stock or to or through a market maker. If expressly authorized by the Company in a Placement Notice, the Designated Agent may also sell Placement Shares in privately negotiated transactions. Subject to Section 3(c) below, the Designated Agent shall not purchase Placement Shares for its own account as principal unless expressly authorized to do so by the Company in a Placement Notice. The Company acknowledges and agrees that (i) there can be no assurance that the Designated Agent will be successful in selling Placement Shares, and (ii) the Designated Agent will incur no liability or obligation to the Company or any other person or entity if it does not sell Placement Shares for any reason other than a failure by the Designated Agent to use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable law and regulations to sell such Placement Shares as required under this Section 3. For the purposes hereof, "**Trading Day**" means any day on which the Company's Common Stock is purchased and sold on the principal market on which the Common Stock is listed or quoted.

(b) Under no circumstances shall the Company cause or request the offer or sale of any Placement Shares if, after giving effect to the sale of such Placement Shares, the aggregate number or gross sales proceeds of Placement Shares sold pursuant to this Agreement would exceed the lesser of: (i) the number or dollar amount of shares of Common Stock registered pursuant to the Registration Statement pursuant to which the offering hereunder is being made, (ii) the number of authorized but unissued and unreserved shares of Common Stock, (iii) the number or dollar amount of shares of Common Stock permitted to be offered and sold by the Company under Form S-3 (including General Instruction I.B.6. of Form S-3, if and for so long as applicable), (iv) the number or dollar amount of shares of Common Stock authorized from time to time to be issued and sold under this Agreement by the Company's board of directors, a duly authorized committee thereof or a duly authorized executive officer, and notified to the Designated Agent in writing, or (v) the number or dollar amount of shares of Common Stock for which the Company has filed the ATM Prospectus or other prospectus or prospectus supplement thereto specifically relating to the offering of the Placement Shares pursuant to this Agreement. Under no circumstances shall the Company cause or request the offer or sale of any Placement Shares pursuant to this Agreement at a price lower than the minimum price authorized from time to time by the Company's board of directors, a duly authorized committee thereof or a duly authorized executive officer, and notified to the Designated Agent in writing. Notwithstanding anything to the contrary contained herein, the parties hereto acknowledge and agree that compliance with the limitations set forth in this Section 3(b) on the number or dollar amount of Placement Shares that may be issued and sold under this Agreement from time to time shall be the sole responsibility of the Company, and that the Designated Agent shall have no obligation in connection with such compliance.

(c) The Company acknowledges and agrees that the Designated Agent has informed the Company that the Designated Agent may, to the extent permitted under the Securities Act and the Exchange Act (including, without limitation, Regulation M promulgated thereunder), purchase and sell shares of Common Stock for its own account while this Agreement is in effect, and shall be under no obligation to purchase Placement Shares on a principal basis pursuant to this Agreement, except as otherwise agreed by the Designated Agent in a Placement Notice; *provided*, that no such purchase or sales shall take place while a Placement Notice is in effect (except (i) as agreed by the Company and the Designated Agent in the Placement Notice or (ii) to the extent the Designated Agent may engage in sales of Placement Shares purchased or deemed purchased from the Company as a "riskless principal" or in a similar capacity); and, *provided, further*, that the Designated Agent acknowledges and agrees that, except as expressly set forth in a Placement Notice, any such transactions are not being, and shall not be deemed to have been, undertaken at the request or direction of, or for the account of, the Company, and that the Company has and shall have no control over any decision by the Designated Agent to enter into any such transactions.

(d) During the term of this Agreement and notwithstanding anything to the contrary herein, each Agent agrees that in no event will such Agent or its affiliates engage in any market making, bidding, stabilization or other trading activity with regard to the Common Stock or related derivative securities if such activity would be prohibited under Regulation M or other anti-manipulation rules under the Exchange Act.

(e) Each Agent represents and warrants that it is duly registered as a broker-dealer under FINRA, the Exchange Act and the applicable statutes and regulations of each state in which the Placement Shares will be offered and sold, except such states in which such Agent is exempt from registration or such registration is not otherwise required in connection with the offer and sale of the Placement Shares. Each Agent shall continue, for the term of this Agreement, to be duly registered as a broker-dealer under FINRA, the Exchange Act and the applicable statutes and regulations of each state in which the Placement Shares will be offered and sold, except such states in which it is exempt from registration or such registration is not otherwise required in connection with the offer and sale of the Placement Shares.

4. Suspension of Sales.

(a) The Company or the Designated Agent may, upon notice to the other party in writing (including by email correspondence to each of the individuals of the other party set forth on **Schedule 2**, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) or by telephone (confirmed immediately by verifiable facsimile transmission or email correspondence to each of the individuals of the other party set forth on **Schedule 2**), suspend any offer and sale of Placement Shares for a period of time (a "**Suspension Period**") in which case the Designated Agent shall immediately cease offering and selling such Placement Shares; *provided*, *however*, that such suspension shall not affect or impair either party's obligations with respect to any Placement Shares sold hereunder prior to the receipt of such notice. Each of the parties agrees that no such notice under this Section 4 shall be effective against the other unless it is made to one of the individuals named on **Schedule 2** hereto, as such schedule may be amended from time to time. During a Suspension Period, the Company shall not issue any Placement Notices and the Designated Agent shall not sell any Placement Shares hereunder. The party that issued a suspension notice shall notify the other party in writing of the Trading Day on which the Suspension Period shall expire not later than twenty-four (24) hours prior to such Trading Day.

(b) Notwithstanding any other provision of this Agreement, except in accordance with a duly adopted trading plan entered into with a Designated Agent that complies with the requirements of Rule 10b5-1 under the Securities Exchange Act of 1934, during any period in which the Company is in possession of material non-public information, the Company and the Designated Agent agree that (i) no sale of Placement Shares will take place, (ii) the Company shall not request the sale of any Placement Shares, and (iii) the Designated Agent shall not be obligated to sell or offer to sell any Placement Shares.

5. Settlement.

(a) Settlement of Placement Shares. Unless otherwise specified in the applicable Placement Notice, settlement for sales of Placement Shares will occur on the second (2^{nd}) Trading Day (or such earlier day as is industry practice for regular-way trading) following the respective Point of Sale (as defined below) (each, a "**Settlement Date**"). The amount of proceeds to be delivered to the Company on a Settlement Date against receipt of the Placement Shares sold (the "**Net Proceeds**") will be equal to the aggregate sales price received by the Designated Agent at which such Placement Shares were sold, after deduction for (i) the Designated Agent's discount, commission or other compensation for such sales payable by the Company pursuant to Section 2 hereof, (ii) any other amounts due and payable by the Company to the Designated Agent hereunder pursuant to Section 7(g) hereof, and (iii) any transaction fees imposed by any governmental or self-regulatory organization in respect of such sales. "**Point of Sale**" means, for a Placement, the time at which an acquiror of Placement Shares entered into a contract, binding upon such acquiror, to acquire such Placement Shares.

(b) Delivery of Placement Shares. On or before each Settlement Date, the Company will, or will cause its transfer agent to, electronically transfer the Placement Shares being sold by crediting the Designated Agent's or its designee's account (provided the Designated Agent shall have given the Company written notice of such designee at least one (1) Trading Day prior to the Settlement Date) at The Depository Trust Company through its Deposit and Withdrawal at Custodian System or by such other means of delivery as may be mutually agreed upon by the parties hereto which in all cases shall be freely tradable, transferable, registered shares in good deliverable form. On each Settlement Date, the Designated Agent will deliver the related Net Proceeds in same day funds to an account designated by the Company on, or prior to, the Settlement Date. The Designated Agent will be responsible for providing DWAC instructions or instructions for delivery by other means with regard to the transfer of the Placement Shares being sold. The Company agrees that if the Company, or its transfer agent (if applicable), defaults in its obligation to deliver duly authorized Placement Shares on a Settlement Date (other than as a result of a failure by the Designated Agent to provide instructions for delivery), in addition to and in no way limiting the rights and obligations set forth in Section 9(a) (Indemnification and Contribution) hereto, the Company will (i) hold the Designated Agent, its directors, officers, members, partners, employees and agents of the Designated Agent, each broker-dealer affiliate of the Designated Agent, and each person, if any, who (A) controls the Designated Agent within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act or (B) is controlled by or is under common control with the Designated Agent (each, a "**Designated Agent Affiliate**"), harmless against any loss, claim, damage, or reasonable and documented expense (including reasonable and documented legal fees and expenses), as incurred, arising out of or in connection with such default by the Company or its transfer agent (if applicable) and (ii) pay to the Designated Agent any commission, discount, or other compensation to which it would otherwise have been entitled absent such default.

(c) Sales Through Agents. With respect to the offering and sale of Placement Shares pursuant to this Agreement, the Company agrees that any offer to sell Placement Shares, any solicitation of an offer to buy Placement Shares, and any sales of Placement Shares shall only be effected by or through the Designated Agent on any single given day, and the Company shall in no event request that more than one Agent offer or sell Placement Shares pursuant to this Agreement on the same day.

6. Representations and Warranties of the Company. The Company, on behalf of itself and its subsidiaries, represents and warrants to, and agrees with, each Agent that as of each Applicable Time (as defined in Section 22(a)) unless such representation, warranty or agreement specifies a different date or time:

(a) Compliance with Registration Requirements. As of each Applicable Time other than the date of this Agreement, the Registration Statement and any Rule 462(b) Registration Statement have been declared effective by the Commission under the Securities Act. The Company has complied to the Commission's satisfaction with all requests of the Commission for additional or supplemental information related to the Registration Statement and the Prospectus. No stop order suspending the effectiveness of the Registration Statement or any Rule 462(b) Registration Statement is in effect and no proceedings for such purpose have been instituted or are pending or, to the knowledge of the Company, are contemplated or threatened by the Commission. The Registration Statement and, assuming no act or omission on the part of the Agents that would make such statements untrue, the offer and sale of the Placement Shares as contemplated hereby meet the requirements of Rule 415 under the Securities Act and comply in all material respects with said Rule. In the section entitled "Plan of Distribution" in the ATM Prospectus, the Company has named Cantor Fitzgerald & Co. and Oppenheimer & Co., Inc. as agents that the Company has engaged in connection with the transactions contemplated by this Agreement. The Company was not and is not an "ineligible issuer" as defined in Rule 405 under the Securities Act.

(b) No Misstatement or Omission. As of (i) the time of filing of the Registration Statement and (ii) as of the date of this Agreement, the Company was not an "ineligible issuer" in connection with the offering of the Placement Shares pursuant to Rules 164, 405 and 433 under the Securities Act. The Company agrees to notify the Agents promptly upon the Company becoming an "ineligible issuer." The Prospectus when filed will comply or complied and, as amended or supplemented, if applicable, will comply in all material respects with the Securities Act. Each of the Registration Statement, any Rule 462(b) Registration Statement and any post-effective amendment thereto, at the time it becomes effective, and as of each Applicable Time, if any, will comply in all material respects with the Securities Act and did not and, as of each Applicable Time, if any, will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The Prospectus, as amended or supplemented, as of its date, did not and, as of each Applicable Time, if any, will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The representations and warranties set forth in the two immediately preceding sentences do not apply to statements in or omissions from the Registration Statement, any Rule 462(b) Registration Statement, or any post-effective amendment thereto, or the Prospectus, or any amendments or supplements thereto, made in reliance upon and in conformity with information furnished to the Company in writing by the Agents expressly for use therein. The parties hereto agree that the information provided in writing by or on behalf of the Agents expressly for use in the Registration Statement, any Rule 462(b) Registration Statement, or any post-effective amendment thereto, or the Prospectus, or any amendments or supplements thereto, consists solely of the material referred to in **Schedule 5** hereto, as updated from time to time. There are no contracts or other documents required to be described in the Prospectus or to be filed as exhibits to the Registration Statement which have not been described or filed as required.

(c) S-3 Eligibility. At the time the Registration Statement and any Rule 462(b) Registration Statement was or will be filed with the Commission, at the time the Registration Statement and any Rule 462(b) Registration Statement was or will be declared effective by the Commission, and at the time the Company's most recent Annual Report on Form 10-K was filed with the Commission, the Company met or will meet the then applicable requirements for the use of Form S-3 under the Securities Act, including, but not limited to, General Instruction I.B.6. of Form S-3, if and for so long as applicable. The Company is not a shell company (as defined in Rule 405 under the Securities Act) and has not been a shell company for at least 12 calendar months previously and if it has been a shell company at any time previously, has filed current Form 10 information (as defined in General Instruction I.B.6. of Form S-3) with the Commission at least 12 calendar months previously reflecting its status as an entity that is not a shell company.

(d) Distribution of Offering Material By the Company. The Company has not distributed and will not distribute, prior to the completion of the Agents' distribution of the Placement Shares, any offering material in connection with the offering and sale of the Placement Shares other than the Prospectus or the Registration Statement.

(e) The Equity Distribution Agreement. This Agreement has been duly authorized, executed and delivered by the Company, and constitutes a valid, legal, and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as rights to indemnity or contribution hereunder may be limited by federal or state securities laws and except as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the rights of creditors generally, and subject to general principles of equity. The Company has full corporate power and authority to enter into this Agreement and to authorize, issue and sell the Placement Shares as contemplated by this Agreement. This Agreement conforms in all material respects to the descriptions thereof in the Registration Statement and the Prospectus.

(f) Authorization of the Placement Shares. The Placement Shares to be sold by the Designated Agent have been duly authorized and when issued and paid for as contemplated herein will be validly issued, fully paid and non-assessable. The issuance of the Placement Shares is not subject to the preemptive or other similar rights of any stockholder of the Company.

(g) No Applicable Registration or Other Similar Rights. There are no persons with registration or other similar rights to have any equity or debt securities registered for sale under the Registration Statement or included in the offering contemplated by this Agreement, except for such rights as have been duly waived. No person has the right to act as an underwriter or as a financial advisor to the Company in connection with the offer and sale of the Placement Shares hereunder, whether as a result of the filing or effectiveness of the Registration Statement or the sale of the Placement Shares as contemplated hereby or otherwise.

(h) No Material Adverse Change. Except as otherwise disclosed in the Registration Statement or the Prospectus, subsequent to the respective dates as of which information is given in the Prospectus: (i) there has been no material adverse change in the condition (financial or otherwise), assets, operations, business, or prospects of the Company and its subsidiaries, considered as one entity (any such change is called a "**Material Adverse Change**") or any development involving a prospective material adverse change, which, individually or in the aggregate, has had or would reasonably be expected to result in a Material Adverse Change; (ii) the Company and its subsidiaries, considered as one entity, have not incurred any material liability or obligation, indirect, direct or contingent, not in the ordinary course of business nor entered into any material transaction or agreement not in the ordinary course of business; and (iii) there has been no dividend or distribution of any kind declared, paid or made by the Company or, except for regular quarterly dividends publicly announced by the Company or dividends paid to the Company or other subsidiaries, by any of its subsidiaries on any class of capital stock or repurchase or redemption by the Company or any of its subsidiaries of any class of capital stock.

(i) Independent Accountants. Sadler, Gibb & Associates, LLC, who have certified certain financial statements of the Company, whose report with respect to the financial statements (which term as used in this Agreement includes the related notes thereto) and any supporting schedules filed with the Commission or incorporated by reference in the Registration Statement and included or incorporated by reference in the Prospectus, are independent public accountants as required by the Securities Act and the rules and regulations thereunder.

(j) Preparation of the Financial Statements. The consolidated financial statements of the Company, together with related notes and schedules as incorporated by reference in the Registration Statement and the Prospectus, present fairly in all material respects the financial position and the results of operations and cash flows of the Company and its subsidiaries, at the indicated dates and for the indicated periods (subject, in the case of unaudited statements, to normal year-end audit adjustments). Such financial statements and related schedules have been prepared in accordance with U.S. generally accepted principles of accounting, as in effect at the time of filing, consistently applied throughout the periods involved, except as disclosed therein, and all adjustments necessary for a fair presentation of results for such periods have been made (subject (i) to such adjustments to accounting standards and practices as are noted therein, and (ii) in the case of unaudited interim statements, to (A) normal recurring adjustments (B) the exclusion of financial statement footnotes, and (C) the information being presented in a condensed or summary manner). The summary financial and statistical data included or incorporated by reference in the Registration Statement and the Prospectus present fairly in all material respects the information shown therein and such data has been compiled on a basis consistent with the financial statements presented therein and the books and records of the Company. The statistical, industry-related and market-related information included or incorporated by reference in the Registration Statement and the Prospectus are based on or derived from sources which the Company reasonably and in good faith believes are reliable and accurate and the Company has obtained the written consent to the use of such data from such sources to the extent required. The other financial data set forth or incorporated by reference in the Registration Statement and the Prospectus is accurately presented in all material respects and prepared on a basis consistent with the financial statements and books and records of the Company. The Company and its subsidiaries do not have any material liabilities or obligations, direct or contingent (including any off-balance sheet obligations or any "variable interest entities" as that term is used in Accounting Standards Codification Paragraph 810-10-25-20), not disclosed in the Registration Statement and the Prospectus which are required to be disclosed in the Registration Statement and the Prospectus. All disclosures contained in the Registration Statement or the Prospectus that contain "non-GAAP financial measures" (as such term is defined by the rules and regulations of the Commission) comply, in all material respects, with Regulation G under the Exchange Act and Item 10 of Regulation S-K under the Securities Act, to the extent applicable.

(k) XBRL. The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.

(l) Incorporation and Good Standing of the Company and its Subsidiaries. The Company is a corporation duly incorporated and validly existing under the laws of the State of Delaware and is in good standing under such laws. The Company has the requisite corporate power to carry on its business as described in the Prospectus. The Company is duly qualified to transact business and is in good standing in all jurisdictions in which the conduct of its business requires such qualification; except where the failure to be so qualified or to be in good standing would not result in a Material Adverse Change. The Company does not own or control, directly or indirectly, any corporation, association or other entity other than the subsidiaries listed on **Schedule 4**. Each subsidiary is a corporation, limited liability company or other organization duly formed and validly existing under the laws of the jurisdiction of its formation and is in good standing under such laws. Each of the subsidiaries has requisite corporate power to carry on its business as described in the Prospectus. Each of the subsidiaries is duly qualified to transact business and is in good standing in all jurisdictions in which the conduct of its business requires such qualification; except where the failure to be so qualified or to be in good standing would not result in a Material Adverse Change.

(m) Capital Stock Matters. The Common Stock conforms in all material respects to the description thereof contained in the Prospectus. The form of certificates for the Common Stock conforms to the corporate law of the jurisdiction of the Company's incorporation. All of the issued and outstanding shares of Common Stock have been duly authorized and validly issued, are fully paid and nonassessable and have been issued in compliance with federal and state securities laws. None of the outstanding shares of Common Stock were issued in violation of any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase securities of the Company. There are no authorized or outstanding options, warrants, preemptive rights, rights of first refusal or other rights to purchase, or equity or debt securities convertible into or exchangeable or exercisable for, any capital stock of the Company or any of its subsidiaries other than those disclosed in the Prospectus or in a document filed as an exhibit to or incorporated by reference into the Registration Statement. All of the issued and outstanding capital stock of, or other ownership interests in, each subsidiary of the Company has been duly authorized and validly issued, is fully paid and non-assessable and, except for directors' qualifying shares, is owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance or claim.

(n) Non-Contravention of Existing Instruments; No Further Authorizations or Approvals Required. Neither the Company nor any of its subsidiaries is (i) in breach or violation of its certificate or articles of incorporation, charter, bylaws, limited liability company agreement, certificate or agreement of limited or general partnership, memorandum and articles of association, or other similar organizational documents, as the case may be, of such entity, (ii) in breach of or in default (or, with the giving of notice or lapse of time or both, would be in default) ("**Default**") under any indenture, mortgage, loan or credit agreement, deed of trust, note, contract, franchise, lease or other agreement, obligation, condition, covenant or instrument to which the Company or any of its subsidiaries is a party or by which it or any of them may be bound or to which any of the property or assets of the Company or any of its subsidiaries is subject (each, an "**Existing Instrument**"), or (iii) in violation of any statute, law, rule, regulation, judgment, order or decree of any court, regulatory body, administrative agency, governmental body, arbitrator or other authority having jurisdiction over the Company or any of its subsidiaries or any of their properties, as applicable, except, with respect to clauses (ii) and (iii) only, for such breaches, violations or Defaults that would not, individually or in the aggregate, result in a Material Adverse Change. The Company's execution, delivery and performance of this Agreement and consummation of the transactions contemplated hereby or by the Registration Statement and the Prospectus (including the issuance and sale of the Placement Shares and the use of the proceeds from the sale of the Placement Shares as described in the Prospectus under the caption "Use of Proceeds") (i) will not result in any breach or violation of the certificate or articles of incorporation, charter, bylaws, limited liability company agreement, certificate or agreement of limited or general partnership, memorandum and articles of association, or other similar organizational documents, as the case may be, of the Company or any of its subsidiaries, (ii) will not conflict with or constitute a breach of, or Default or a Debt Repayment Triggering Event (as defined below) under, or result in the creation or imposition of any lien, charge, claim or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to, or require the consent of any other party to, any Existing Instrument, and (iii) will not result in any violation of any statute, law, rule, regulation, judgment, order or decree applicable to the Company or any of its subsidiaries of any court, regulatory body, administrative agency, governmental body, arbitrator or other authority having jurisdiction over the Company or any of its subsidiaries or any of its or their properties, as applicable, except, with respect to clauses (ii) and (iii) only, for such conflicts, breaches, Defaults, Debt Repayment Triggering Events or violations that would not, individually or in the aggregate, result in a Material Adverse Change. As used herein, a "**Debt Repayment Triggering Event**" means any event or condition which gives, or with the giving of notice or lapse of time or both would give, the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder's behalf), issued by the Company, the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company or any of its subsidiaries. Each approval, consent, order, authorization, designation, declaration or filing by or with any regulatory, administrative or other governmental body necessary in connection with the execution and delivery by the Company of this Agreement and the performance of the Company of the transactions herein contemplated has been obtained or made and is in full force and effect, except (i) such additional steps as may be required by the bylaws and rules of the Financial Industry Regulatory Authority, Inc. ("**FINRA**") or (ii) such additional steps as may be necessary to qualify the Common Stock for sale by the Agents under state securities or Blue Sky laws, or foreign securities laws if applicable.

(o) No Material Actions or Proceedings; Labor Disputes. There is no action, suit, claim or proceeding pending or, to the knowledge of the Company, threatened against the Company before any court or administrative agency or otherwise (i) that is required to be described in the Registration Statement or the Prospectus and are not so described or (ii) which, if determined adversely to the Company, would reasonably be expected to result in a Material Adverse Change or prevent the consummation of the transactions contemplated hereby, except as set forth in the Registration Statement and the Prospectus. The aggregate of all pending legal or governmental proceedings to which the Company and its subsidiaries is a party or of which any of their property or assets is the subject which are not described in the Prospectus, including ordinary routine litigation incidental to the business, could not reasonably be expected to result in a Material Adverse Change. No labor dispute with the employees of the Company exists or, to the Company's knowledge, is threatened or imminent. None of the employees of the Company or any of its subsidiaries is represented by a union and, to the knowledge of the Company, no union organizing activities are taking place. Neither the Company nor any of its subsidiaries has violated any federal, state or local law or foreign law relating to the discrimination in hiring, promotion or pay of employees, nor any applicable wage or hour laws, or the rules and regulations thereunder, or analogous foreign laws and regulations, which might, individually or in the aggregate, result in a Material Adverse Change.

(p) All Necessary Permits, etc. Each of the Company and its subsidiaries has all licenses, certifications, permits, franchises, approvals, clearances and other regulatory authorizations ("**Permits**") from governmental authorities as are necessary to (i) conduct its businesses as currently conducted and (ii) own, lease and operate its properties in the manner described in the Prospectus, except where the failure to possess, obtain or make the same would not, individually or in the aggregate result in a Material Adverse Change. There is no claim or proceeding pending or, to the knowledge of the Company, threatened in writing, involving the status of or sanctions under any of the Permits. Each of the Company and its subsidiaries has fulfilled and performed all of its material obligations with respect to the Permits, and the Company is not aware of the occurrence of any event which allows, or after notice or lapse of time would allow, the revocation, termination, or other impairment of the rights of the Company or any of its subsidiaries under such Permit.

(q) Tax Law Compliance. All United States federal income tax returns of the Company and its subsidiaries required by law to be filed have been filed or extensions thereof have been requested, and all taxes shown by such returns or otherwise assessed, which are due and payable, have been paid, except assessments that are being contested in good faith and as to which adequate reserves have been provided, and except where the failure to do so would not result in a Material Adverse Change. Each of the Company and its subsidiaries has filed all other tax returns that are required to have been filed by it pursuant to applicable foreign, state, provincial, local or other law except insofar as the failure to file such returns would not result in a Material Adverse Change, and has paid all taxes due pursuant to such returns or pursuant to any assessment received by the Company and its subsidiaries, except for such taxes, if any, as are being contested in good faith and as to which adequate reserves have been provided and except for such taxes or assessments the nonpayment of which would not, individually or in the aggregate, result in a Material Adverse Change. The charges, accruals and reserves on the books of the Company and its subsidiaries in respect of any income and corporation tax liability for any years not finally determined are adequate to meet any assessments or re-assessments for additional tax for any years not finally determined, except to the extent of any inadequacy that would not result in a Material Adverse Change. All taxes which the Company and its subsidiaries are required by law to withhold or to collect for payment have been duly withheld and collected and have been paid to the appropriate governmental authority or agency or have been accrued, reserved against and entered on the books of the Company and its subsidiaries, except to the extent that would not result in a Material Adverse Change. There are no transfer taxes or other similar fees or charges under Federal law or the laws of any state, or any political subdivision thereof, required to be paid in connection with the execution and delivery of this Agreement or the issuance by the Company or sale by the Designated Agent of the Placement Shares.

(r) Company Not an "Investment Company". The Company has been advised of the rules and requirements under the Investment Company Act of 1940, as amended (the "**Investment Company Act**"). The Company is not, and after receipt of payment for the Placement Shares will not be, an "investment company" within the meaning of Investment Company Act and will conduct its business in a manner so that it will not become subject to the Investment Company Act.

(s) Insurance. Except as otherwise described in the Prospectus, the Company carries, or is covered by, insurance in such amounts and covering such risks as it believes is reasonably adequate for the conduct of its business and the value of its properties and as is customary for companies engaged in similar industries. All policies of insurance insuring the Company or its business, assets, employees, officers and directors are in full force and effect, and the Company is in compliance with the terms of such policies in all material respects. There are no claims by the Company under any such policy or instrument as to which an insurance company is denying liability or defending under a reservation of rights clause. The Company has no reason to believe that it will not be able (i) to renew its existing insurance coverage as and when such policies expire or (ii) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not result in a Material Adverse Change.

(t) No Price Stabilization or Manipulation. Neither the Company, nor any of its subsidiaries, nor any of its or their respective directors, officers or, to the knowledge of the Company, controlling persons has taken, directly or indirectly, any action designed to or that might reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Common Stock.

(u) Related Party Transactions. There are no business relationships or related-party transactions involving the Company or any subsidiary or any other person required to be described in the Prospectus which have not been described as required.

(v) Exchange Act Compliance. The documents incorporated or deemed to be incorporated by reference in the Registration Statement, the Prospectus or any amendment or supplement thereto, at the time they were or hereafter are filed with the Commission under the Exchange Act, complied and will comply in all material respects with the requirements of the Exchange Act, and, when read together with the other information in the Prospectus, at each Point of Sale and each Settlement Date, will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(w) Free Writing Prospectuses. The Company represents and warrants to the Agents that neither it nor any of its agents or representatives (other than the Agents in their capacity as such) has made any offer relating to the Placement Shares that would constitute a "free writing prospectus" as defined in Rule 405 under the Securities Act and that it agrees with the Agents that it will not make any offer relating to the Placement Shares that would constitute a "free writing prospectus" as defined in Rule 405 under the Securities Act.

(x) Compliance with Environmental Laws. To its knowledge, the Company is not in violation of any statute, any rule, regulation, decision or order of any governmental agency or body or any court, domestic or foreign, relating to the use, disposal or release of hazardous chemicals, toxic substances or radioactive and biological materials or relating to the protection or restoration of the environment or human exposure to hazardous chemicals, toxic substances or radioactive and biological materials (collectively, "**Environmental Laws**"). The Company neither owns nor, to its knowledge, operates any real property contaminated with any substance that is subject to any Environmental Laws, is not liable for any off-site disposal or contamination pursuant to any Environmental Laws, nor is it subject to any claim relating to any Environmental Laws, which violation, contamination, liability or claim would individually or in the aggregate result in a Material Adverse Change; and the Company is not aware of any pending investigation which might lead to such a claim.

(y) Intellectual Property. Each of the Company and its subsidiaries owns and has full right, title and interest in and to, or has valid licenses to use, each material trade name, trademark, service mark, patent, copyright, approval, trade secret and other similar rights (collectively "**Intellectual Property**") under which the Company and its subsidiaries conduct all or any material part of their respective businesses, and the Company has not created any lien or encumbrance on, or granted any right or license with respect to, any such Intellectual Property, except where the failure to own or obtain a license or right to use any such Intellectual Property could not reasonably be expected to result in a Material Adverse Change; there is no claim pending against the Company or its subsidiaries with respect to any Intellectual Property, and the Company and its subsidiaries have not received notice or otherwise become aware that any Intellectual Property that it uses or has used in the conduct of its business infringes upon or conflicts with the rights of any third party.

(z) Brokers. Other than the Agents, there is no broker, finder or other party that is entitled to receive from the Company any brokerage or finder's fee or other fee or commission as a result of any transactions contemplated by this Agreement.

(aa) No Outstanding Loans or Other Indebtedness. There are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees of indebtedness by the Company to or for the benefit of any of the officers or directors of the Company or any of their respective family members, except as disclosed in the Prospectus to the extent required to be disclosed therein. The Company has not directly or indirectly extended or maintained credit, arranged for the extension of credit, or renewed an extension of credit, in the form of a personal loan to or for any director or executive officer of the Company.

(bb) No Reliance. The Company has not relied upon the Agents or legal counsel for the Agents for any legal, tax or accounting advice in connection with the offering and sale of the Placement Shares.

(cc) Broker-Dealer Status. Neither the Company nor any of its related entities (i) is required to register as a "broker" or "dealer" in accordance with the provisions of the Exchange Act or (ii) directly or indirectly through one or more intermediaries, controls or is a "person associated with a member" or "associated person of a member" (within the meaning of Article I of the NASD Manual administered by FINRA). To the Company's knowledge, there are no affiliations or associations between any member of FINRA and any of the Company's officers, directors or 5% or greater security holders, except as set forth in the Registration Statement. All of the information (including, but not limited to, information regarding affiliations, security ownership and trading activity) provided to the Agents or their counsel by the Company, and to the Company's knowledge, its officers and directors and the holders of any securities (debt or equity) or warrants, options or rights to acquire any securities of the Company in connection with the filing to be made and other supplemental information to be provided to FINRA pursuant to Rule 5110 of FINRA in connection with the transactions contemplated by this Agreement is true, complete and correct, and copies of any Company filings required to be filed with FINRA have been filed with the Commission or delivered to the Agents for filing with FINRA.

(dd) Compliance with Laws. The Company has not been advised, and has no reason to believe, that it and each of its subsidiaries are not conducting business in compliance with all applicable laws, rules and regulations of the jurisdictions in which it is conducting business, except where failure to be so in compliance would not result in a Material Adverse Change.

(ee) Certain Regulations. The studies, tests and clinical trials conducted by or on behalf of the Company and its subsidiaries were and, if still pending, are being conducted in compliance with experimental protocols, procedures and controls pursuant to accepted professional scientific standards and all applicable laws and authorizations, including, without limitation, the Federal Food, Drug and Cosmetic Act and the rules and regulations promulgated thereunder, except where the failure to be in compliance would not reasonably be expected to result in a Material Adverse Change; the descriptions of the results of such studies, tests and clinical trials contained in the Registration Statement and the Prospectus are accurate and complete in all material respects and fairly present the data derived from such studies, tests and clinical trials; except to the extent disclosed in the Registration Statement and the Prospectus, to the knowledge of the Company, there are no studies, tests or clinical trials, the results of which the Company believes reasonably call into question the study, test, or clinical trial results described or referred to in the Registration Statement and the Prospectus when viewed in the context in which such results are described; and, except to the extent disclosed in the Registration Statement and the Prospectus, the Company and its subsidiaries have not received any notices or correspondence from any applicable governmental authority requiring the termination, suspension or material modification of any studies, tests or clinical trials conducted by or on behalf of the Company or its subsidiaries.

(ff) FDA Regulations. The Company and its subsidiaries: (A) are and at all times have been in material compliance with all statutes, rules, or regulations, including but not limited to those administered by the United States Food and Drug Administration ("**FDA**"), the European Medicines Agency ("**EMA**") and similar governmental authorities applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any products being developed, manufactured or distributed by the Company or its subsidiaries ("**Applicable Laws**"), except as could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change; (B) have not received any warning letter or other correspondence or notice from the FDA, EMA or any other governmental authority alleging or asserting noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("**Authorizations**"); (C) possess all material Authorizations and such Authorizations are valid and in full force and effect and are not in material violation of any term of any such Authorizations; (D) have not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental authority or third party alleging that any product operation or activity is in violation of any Applicable Laws or Authorizations and have no knowledge that any such governmental authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (E) have not received written notice that any governmental authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations and have no knowledge that any such governmental authority is considering such action; (F) have filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations, and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and correct in all material respects on the date filed (or were corrected or supplemented by a subsequent submission); and (G) have not, either voluntarily or involuntarily, initiated, conducted, or issued or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to the Company's knowledge, no third party has initiated, conducted or intends to initiate any such notice or action.

(gg) Sarbanes–Oxley Act. There is and has been no failure on the part of the Company or any of the Company's directors or officers, in their capacities as such, to comply in all material respects with any applicable provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith (the "**Sarbanes-Oxley Act**"), including Section 402 related to loans and Sections 302 and 906 related to certifications.

(hh) Disclosure Controls And Procedures. The Company has established and maintains "disclosure controls and procedures" (as defined in Rules 13a–15(e) and 15d–15(e) of the Exchange Act) reasonably designed to ensure that all information (both financial and non–financial) required to be disclosed by the Company in the reports that it will file or furnish under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and regulations of the Commission, and that all such information is accumulated and communicated to the Company's management as appropriate to allow timely decisions regarding required disclosure and to make the certifications of the Chief Executive Officer and Chief Financial Officer of the Company required under the Exchange Act with respect to such reports.

(ii) Company's Accounting System. The Company maintains a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(jj) ERISA. (i) The Company is in compliance in all material respects with all presently applicable provisions of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder ("**ERISA**"); (ii) no "reportable event" (as defined in ERISA) has occurred with respect to any "pension plan" (as defined in ERISA) for which the Company would have any liability; (iii) the Company has not incurred and does not expect to incur liability under (A) Title IV of ERISA with respect to termination of, or withdrawal from, any "pension plan" or (B) Sections 412 or 4971 of the Internal Revenue Code of 1986, as amended, including the regulations and published interpretations thereunder (the "**Code**"); and (iv) each "pension plan" for which the Company would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified in all material respects and nothing has occurred, whether by action or by failure to act, which would cause the loss of such qualification, except in the case of (ii) and (iv), where such failure would not result in a Material Adverse Change.

(kk) Contracts and Agreements. There are no contracts, agreements, instruments or other documents that are required to be described in the Registration Statement or the Prospectus or to be filed as exhibits thereto which have not been so described in all material respects and filed as required by Item 601(b) of Regulation S-K under the Securities Act. The copies of all contracts, agreements, instruments and other documents (including governmental licenses, authorizations, permits, consents and approvals and all amendments or waivers relating to any of the foregoing) that have been furnished to the Agents or their counsel are complete in all material respects and genuine and include all material collateral and supplemental agreements thereto. All contracts and agreements between the Company and third parties expressly referenced in the Registration Statement or the Prospectus are legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms, except as rights to indemnity or contribution thereunder (as applicable) may be limited by federal or state securities laws and except as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting the rights of creditors generally, and subject to general principles of equity.

(ll) Title to Properties. Except as set forth in the Registration Statement and the Prospectus, the Company and each of its subsidiaries have good and marketable title to all of the properties and assets reflected as owned in the financial statements referred to in Section 6(j) above (or elsewhere in the Registration Statement and the Prospectus), in each case free and clear of any security interests, mortgages, liens, encumbrances, equities, claims and other defects, except such as do not materially and adversely affect the value of such property or assets and do not materially interfere with the use made or proposed to be made of such property by the Company or any subsidiary. The material real property, improvements, equipment and personal property held under lease by the Company or any of its subsidiaries are held under valid and enforceable leases, with such exceptions as are not material and do not materially interfere with the use made or proposed to be made of such real property, improvements, equipment or personal property by the Company or such subsidiary. The Company and each of its subsidiaries have such consents, easements, rights-of-way or licenses from any person ("**rights-of-way**") as are necessary to enable the Company and each of its subsidiaries to conduct its business in the manner described in the Registration Statement and the Prospectus, and except for such rights-of-way the lack of which would not, individually or in the aggregate, result in a Material Adverse Change.

(mm) No Unlawful Contributions or Other Payments. No payments or inducements have been made or given, directly or indirectly, to any federal or local official or candidate for, any federal or state office in the United States or foreign offices by the Company or any of its officers or directors, or, to the knowledge of the Company, by any of its employees or agents or any other person in connection with any opportunity, contract, permit, certificate, consent, order, approval, waiver or other authorization relating to the business of the Company, except for such payments or inducements as were lawful under applicable laws, rules and regulations. Neither the Company, nor, to the knowledge of the Company, any director, officer, agent, employee or other person associated with or acting on behalf of the Company, (i) has used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (ii) made any direct or indirect unlawful payment to any government official or employee from corporate funds; or (iii) made any bribe, unlawful rebate, payoff, influence payment, kickback or other unlawful payment in connection with the business of the Company.

(nn) Foreign Corrupt Practices Act. None of the Company, any subsidiary or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company or any of its subsidiaries, is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (collectively, the "**FCPA**"), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any "foreign official" (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA. The Company and its subsidiaries have conducted their respective businesses in compliance in all material respects with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance in all material respects therewith.

(oo) Money Laundering Laws. The operations of the Company and its subsidiaries are and have been conducted at all times in material compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "**Money Laundering Laws**") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(pp) OFAC. None of the Company, any subsidiary or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or person acting on behalf of the Company or any of its subsidiaries is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("**OFAC**"); and the Company will not directly or indirectly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

(qq) Exchange Listing. The Common Stock is currently listed on the Exchange under the trading symbol "VNRX." Except as disclosed in the Prospectus, the Company has not, in the 12 months preceding the date the first Placement Notice is given hereunder, received notice from the Exchange to the effect that the Company is not in compliance with the listing or maintenance requirements. Except as disclosed in the Prospectus, the Company has no reason to believe that it will not in the foreseeable future continue to be in compliance with all such listing and maintenance requirements.

(rr) Margin Rules. Neither the issuance, sale and delivery of the Placement Shares nor the application of the proceeds thereof by the Company as described in the Registration Statement and the Prospectus will violate Regulation T, U or X of the Board of Governors of the Federal Reserve System or any other regulation of such Board of Governors.

(ss) Continuous Offering Agreements. Except for this Agreement, the Company is not party to any other equity distribution or sales agency agreement or other similar arrangement with any other agent or any other representative in respect of any "at the market offering" or other continuous equity offering transaction.

(tt) No Material Defaults. Neither the Company nor any of its subsidiaries has defaulted on any installment on indebtedness for borrowed money or on any rental on one or more long-term leases, which defaults, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change.

(uu) Cybersecurity. The Company and its subsidiaries' information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases (collectively, "**IT Systems**") are adequate for, and operate and perform in all material respects as required in connection with the operation of the business of the Company as currently conducted, to the Company's knowledge, free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. The Company and its subsidiaries have implemented and maintained commercially reasonable physical, technical and administrative controls, policies, procedures, and safeguards to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and data, including all "Personal Data" (defined below) and all sensitive, confidential or regulated data ("**Confidential Data**") used in connection with their businesses. "**Personal Data**" means (i) a natural person's name, street address, telephone number, e-mail address, photograph, social security number or tax identification number, driver's license number, passport number, credit card number, bank information, or customer or account number; (ii) any information which would qualify as "personally identifying information" under the Federal Trade Commission Act, as amended; (iii) "personal data" as defined by GDPR; (iv) any information which would qualify as "protected health information" under the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act (collectively, "**HIPAA**"); (v) any "personal information" as defined by the California Consumer Privacy Act ("**CCPA**"); and (vi) any other piece of information that allows the identification of such natural person, or his or her family, or permits the collection or analysis of any data related to an identified person's health or sexual orientation. To the Company's knowledge, there have been no breaches, violations, outages or unauthorized uses of or accesses to same, except for those that have been remedied without material cost or liability or the duty to notify any other person, nor any incidents under internal review or investigations relating to the same. The Company and its subsidiaries are presently in material compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems, Confidential Data, and Personal Data and to the protection of such IT Systems, Confidential Data, and Personal Data from unauthorized use, access, misappropriation or modification.

(vv) Compliance with Data Privacy Laws. The Company and its subsidiaries are, and at all prior times were, in material compliance with all applicable state and federal data privacy and security laws and regulations, including without limitation HIPAA, CCPA, and the European Union General Data Protection Regulation ("**GDPR**") (EU 2016/679) (collectively, the "**Privacy Laws**"). To ensure compliance with the Privacy Laws, the Company has in place, complies with, and takes appropriate steps reasonably designed to ensure compliance in all material respects with their policies and procedures relating to data privacy and security and the collection, storage, use, processing, disclosure, handling, and analysis of Personal Data and Confidential Data (the "**Policies**"). The Company has at all times made all disclosures to users or customers required by applicable laws and regulatory rules or requirements, and none of such disclosures made or contained in any Policy have, to the knowledge of the Company, been inaccurate or in violation of any applicable laws and regulatory rules or requirements in any material respect. The Company further certifies that neither it nor any subsidiary: (i) has received notice of any actual or potential liability under or relating to, or actual or potential violation of, any of the Privacy Laws, and has no knowledge of any event or condition that would reasonably be expected to result in any such notice; (ii) is currently conducting or paying for, in whole or in part, any investigation, remediation, or other corrective action pursuant to any Privacy Law; or (iii) is a party to any order, decree, or agreement that imposes any obligation or liability under any Privacy Law.

Any certificate signed by an officer of the Company and delivered to the Agents or to counsel for the Agents pursuant to or in connection with this Agreement shall be deemed to be a representation and warranty by the Company to the Agents as to the matters set forth therein.

The Company acknowledges that the Agents and, for purposes of the opinions to be delivered pursuant toSection 7 hereof, counsel to the Company and counsel to the Agents, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

7. Covenants of the Company. The Company covenants and agrees with each Agent that:

(a) Registration Statement Amendments. After the date of this Agreement and during any period in which a Prospectus relating to any Placement Shares is required to be delivered by a Designated Agent pursuant to this Agreement under the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), (i) the Company will notify the Agents promptly of the time when any subsequent amendment to the Registration Statement, other than documents incorporated by reference, has been filed with the Commission and/or has become effective or any subsequent supplement to the Prospectus has been filed and of any request by the Commission for any amendment or supplement to the Registration Statement or Prospectus or for additional information, (ii) the Company will prepare and timely file with the Commission, upon either Agent's request, any amendments or supplements to the Registration Statement or Prospectus that, upon the advice of the Company's legal counsel (after due consultation with such Agent and its counsel), may be necessary or advisable in connection with the distribution of the Placement Shares by the Agents (*provided*, *however*, that the failure of the Agents to make such request shall not relieve the Company of any obligation or liability hereunder, or affect the Agents' right to rely on the representations and warranties made by the Company in this Agreement, and *provided*, *further*, that the only remedy the Agents shall have with respect to the failure to make such filing shall be to cease making sales under this Agreement until such amendment or supplement is filed); (iii) the Company will not file any amendment or supplement to the Registration Statement or Prospectus, other than documents incorporated by reference, relating to the Placement Shares or a security convertible into the Placement Shares unless a copy thereof has been submitted to the Agents within a reasonable period of time before the filing and neither Agent has reasonably objected thereto (*provided*, *however*, that the failure of either Agent to make such objection shall not relieve the Company of any obligation or liability hereunder, or affect the Agents' right to rely on the representations and warranties made by the Company in this Agreement, and *provided*, *further*, that the only remedy the Agents shall have with respect to the failure by the Company to obtain such consent shall be to cease making sales under this Agreement); (iv) the Company will furnish to the Agents at the time of filing thereof a copy of any document that upon filing is deemed to be incorporated by reference into the Registration Statement or Prospectus, except for those documents available via EDGAR; (v) the Company will cause each amendment or supplement to the Prospectus, other than documents incorporated by reference, to be filed with the Commission as required pursuant to the applicable paragraph of Rule 424(b) of the Securities Act (without reliance on Rule 424(b)(8) of the Securities Act) or, in the case of any documents incorporated by reference, to be filed with the Commission as required pursuant to the Exchange Act, within the time period prescribed.

(b) Notice of Commission Stop Orders. The Company will advise the Agents, promptly after it receives notice or obtains knowledge thereof, of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any notice objecting to, or other order preventing or suspending the use of, the Prospectus, of the suspension of the qualification of the Placement Shares for offering or sale in any jurisdiction, or of the initiation of any proceeding for any such purpose or any examination pursuant to Section 8(e) of the Securities Act, or if the Company becomes the subject of a proceeding under Section 8A of the Securities Act in connection with the offering of the Placement Shares; and it will promptly use its commercially reasonable efforts to prevent the issuance of any stop order or to obtain its withdrawal if such a stop order should be issued. Until such time as any stop order is lifted, the Designated Agent shall cease making offers and sales under this Agreement.

(c) Delivery of Prospectus; Subsequent Changes. During any period in which a Prospectus relating to the Placement Shares is required to be delivered by a Designated Agent under the Securities Act with respect to a pending sale of the Placement Shares (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), the Company will comply with all requirements imposed upon it by the Securities Act, as from time to time in force, and to file on or before their respective due dates all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14, 15(d) or any other provision of or under the Exchange Act. If during such period any event occurs as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances then existing, not misleading, or if during such period it is necessary to amend or supplement the Registration Statement or Prospectus to comply with the Securities Act, the Company will promptly notify the Agents to suspend the offering of Placement Shares during such period and the Company will promptly amend or supplement the Registration Statement or Prospectus (at the expense of the Company) so as to correct such statement or omission or effect such compliance; *provided, however*, that the Company may delay the filing of any amendment or supplement (subject to continued suspension of the offering of Placement Shares by a Designated Agent during such period), if in the judgment of the Company, it is in the best interest of the Company to do so.

(d) Listing of Placement Shares. During any period in which the Prospectus relating to the Placement Shares is required to be delivered by a Designated Agent under the Securities Act with respect to a pending sale of the Placement Shares (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), the Company will use its commercially reasonable efforts to cause the Placement Shares to be listed on the Exchange and to qualify the Placement Shares for sale under the securities laws of such jurisdictions in the United States as each Agent reasonably designates and to continue such qualifications in effect so long as required for the distribution of the Placement Shares; *provided*, *however*, that the Company shall not be required in connection therewith to qualify as a foreign corporation or dealer in securities or file a general consent to service of process, or subject itself to taxation in any jurisdiction if it is not otherwise so subject.

(e) Delivery of Registration Statement and Prospectus. The Company will furnish to the Agents and their counsel (at the reasonable expense of the Company) copies of (i) the Registration Statement and the Prospectus (including all documents incorporated by reference therein) filed with the Commission on the date of this Agreement and (ii) all amendments and supplements to the Registration Statement or Prospectus that are filed with the Commission during any period in which a Prospectus relating to the Placement Shares is required to be delivered by a Designated Agent under the Securities Act (including all documents filed with the Commission during such period that are deemed to be incorporated by reference therein), in each case as soon as reasonably practicable and in such quantities as each Agent may from time to time reasonably request and, at the Agents' reasonable request, will also furnish copies of the Prospectus to each exchange or market on which sales of the Placement Shares may be made; *provided, however,* that the Company shall not be required to furnish any document (other than the Prospectus) to the Agents to the extent such document is available on EDGAR.

(f) Earnings Statement. The Company will make generally available to its security holders as soon as practicable, but in any event not later than 15 months after the end of the Company's current fiscal quarter, an earnings statement of the Company and its subsidiaries (which need not be audited) covering a 12-month period that complies with Section 11(a) and Rule 158 of the Securities Act. The terms "earnings statement" and "make generally available to its security holders" shall have the meanings set forth in Rule 158 under the Securities Act.

(g) Expenses. The Company, to the extent such expenses accrue prior to the termination of this Agreement in accordance with the provisions of Section 11 hereunder, will pay the following expenses all incident to the performance of its obligations hereunder, including, but not limited to, expenses relating to (i) the preparation, printing and filing of the Registration Statement and each amendment and supplement thereto, of each Prospectus and of each amendment and supplement thereto, (ii) the preparation, issuance and delivery of the Placement Shares, including any stock or other transfer taxes and any stamp or other duties payable upon the sale, issuance or delivery of the Placement Shares to the Agents, (iii) the fees and disbursements of the counsel, accountants and other advisors to the Company in connection with the transactions contemplated by this Agreement; (iv) the qualification of the Placement Shares under securities laws in accordance with the provisions of Section 7(d) of this Agreement, including filing fees (*provided*, *however*, that any fees or disbursements of counsel for the Agents in connection therewith shall be paid by the Agents except as set forth in (ix) below), (v) the printing and delivery to the Agents of copies of the Prospectus and any amendments or supplements thereto, and of this Agreement, (vi) the fees and expenses incurred in connection with the listing or qualification of the Placement Shares for trading on the Exchange, (vii) the fees and expenses of the transfer agent or registrar for the Common Stock; (viii) filing fees and expenses, if any, of the Commission and the FINRA Corporate Financing Department, and (ix) the Company shall reimburse the Agents for the reasonable out-of-pocket fees and disbursements of the Agents' counsel in an amount not to exceed $50,000 in the aggregate with respect to all Placement Shares sold pursuant to this Agreement, unless otherwise approved by the Company (such approval not to be unreasonably withheld, conditioned or delayed).

(h) Use of Proceeds. The Company will use the Net Proceeds as described in the Prospectus in the section entitled "Use of Proceeds."

(i) Notice of Other Sales. During the pendency of any Placement Notice given hereunder, the Company shall provide the Agents notice as promptly as reasonably possible before it offers to sell, contracts to sell, sells, grants any option to sell or otherwise disposes of any shares of Common Stock (other than Placement Shares offered pursuant to the provisions of this Agreement) or securities convertible into or exchangeable for Common Stock, warrants or any rights to purchase or acquire Common Stock; *provided*, that such notice shall not be required in connection with the (i) issuance, grant or sale of Common Stock, options or other rights to purchase or otherwise acquire Common Stock, or Common Stock issuable upon the exercise of options or other equity awards, in each case granted pursuant to any stock option, stock bonus or other stock or compensatory plan or arrangement, whether now in effect or hereafter implemented or Common Stock issued upon the vesting or exercise of any such equity awards, (ii) issuance of securities in connection with an acquisition, merger or sale or purchase of assets which is described at the time of issuance in the Registration Statement and the Prospectus, (iii) issuance or sale of Common Stock upon conversion of securities or the exercise of warrants, options or other rights then in effect or outstanding, and disclosed in filings by the Company available on EDGAR or otherwise in writing to the Agents, and (iv) issuance or sale of Common Stock pursuant to any dividend reinvestment and stock purchase plan that the Company has in effect or may adopt from time to time, *provided* that the implementation of such new plan is disclosed to the Agents in advance. If the Company notifies the Agents under this Section 7(i) of a proposed sale of shares of Common Stock or Common Stock equivalents, the Agents may suspend any offers and sales of Securities under this Agreement for a period of time deemed appropriate by the Agents.

(j) Change of Circumstances. The Company will, at any time during a fiscal quarter in which the Company intends to tender a Placement Notice or sell Placement Shares, advise the Designated Agent promptly after it shall have received notice or obtained knowledge thereof, of any information or fact that would materially and adversely affect any opinion, certificate, letter or other document required to be provided to the Agents pursuant to this Agreement.

(k) Due Diligence Cooperation. The Company will cooperate with any reasonable due diligence review conducted by the Agents or their agents in connection with the transactions contemplated hereby, including, without limitation, providing information and making available upon reasonable prior notice documents and senior corporate officers, during regular business hours and at the Company's principal offices, as the Agents may reasonably request.

(l) Required Filings Relating to Placement of Placement Shares. The Company shall set forth in each Annual Report on Form 10-K and Quarterly Report on Form 10-Q filed by the Company with the Commission in respect of any quarter in which sales of Placement Shares were made by or through the Agents under this Agreement, with regard to the relevant period, the amount of Placement Shares sold to or through the Agents, the Net Proceeds to the Company and the compensation payable by the Company to the Agents with respect to such sales of Placement Shares. To the extent that the filing of a prospectus supplement to the Prospectus with the Commission with respect to any sales of Placement Shares becomes required under Rule 424(b) under the Securities Act, the Company agrees that, on or before such dates as the Securities Act shall require, the Company will (i) file a prospectus supplement to the Prospectus with the Commission under the applicable paragraph of Rule 424(b) under the Securities Act, which prospectus supplement will set forth, with regard to the relevant period, the amount of Placement Shares sold to or through the Agents, the Net Proceeds to the Company and the compensation payable by the Company to the Agents with respect to such Placement Shares, and (ii) deliver such number of copies of each such prospectus supplement to each exchange or market on which such sales were effected as may be required by the rules or regulations of such exchange or market. The Company shall afford the Agents and their counsel with a reasonable opportunity to review and comment upon, shall consult with the Agents and their counsel on the form and substance of, any such filing prior to the issuance, filing or public disclosure thereof; provided, however, that the Company shall not be required to submit for review (A) any portion of any periodic reports filed with the Commission under the Exchange Act other than the specific disclosure relating to any sales of Placement Shares and (B) any disclosure contained in periodic reports filed with the Commission under the Exchange Act if it shall have previously provided the same disclosure for review in connection with a previous filing.

(m) Representation Dates; Certificate. On or prior to the date the first Placement Notice is given hereunder and each time the Company subsequently thereafter (i) amends or supplements the Registration Statement or the Prospectus relating to the Placement Shares (other than (A) a prospectus supplement filed in accordance with Section 7(l) of this Agreement or (B) a supplement or amendment that relates to an offering of securities other than the Placement Shares) by means of a post-effective amendment, sticker, or supplement but not by means of incorporation of document(s) by reference to the Registration Statement or the Prospectus relating to the Placement Shares; (ii) files an annual report on Form 10-K under the Exchange Act (including any Form 10-K/A containing amended financial information or a material amendment to the previously filed Form 10-K); (iii) files a quarterly report on Form 10-Q under the Exchange Act; or (iv) files a report on Form 8-K containing amended financial information (other than an earnings release, to "furnish" information pursuant to Items 2.02 or 7.01 of Form 8-K or to provide disclosure pursuant to Item 8.01 of Form 8-K relating to the reclassification of certain properties as discontinued operations in accordance with Statement of Financial Accounting Standards No. 144) under the Exchange Act (each date of filing of one or more of the documents and each other date referred to in clauses (i) through (iv) shall be a "**Representation Date**"), the Company shall furnish the Agents within three (3) Trading Days after each Representation Date (but in the case of clause (iv) above only if the Agents reasonably determine that the information contained in such Form 8-K is material) with a certificate, in the form attached hereto as Exhibit 7(m). The requirement to provide a certificate under this Section 7(m) shall be waived for any Representation Date occurring at a time at which no Placement Notice is pending, which waiver shall continue until the earlier to occur of the date the Company delivers a Placement Notice hereunder (which for such calendar quarter shall be considered a Representation Date) and the next occurring Representation Date; *provided, however,* that such waiver shall not apply for any Representation Date on which the Company files its annual report on Form 10-K. Notwithstanding the foregoing, if the Company subsequently decides to sell Placement Shares following a Representation Date when the Company relied on such waiver and did not provide the Agents with a certificate under this Section 7(m), then before the Company delivers the Placement Notice or either Agent sells any Placement Shares, the Company shall provide the Agents with a certificate, in the form attached hereto as Exhibit 7(m), dated the date of the Placement Notice.

(n) Legal Opinion. On or prior to the date the first Placement Notice is given hereunder, the Company shall cause to be furnished to the Agents (i) the written opinions and negative assurance of Stradling Yocca Carlson & Rauth, P.C., counsel to the Company, or other counsel reasonably satisfactory to the Agents ("**Company Counsel**"), and (ii) the written opinions and negative assurance of Sagittarius IP, intellectual property counsel to the Company, or other counsel reasonably satisfactory to the Agents ("**Company IP Counsel**"), in each case in form and substance reasonably satisfactory to the Agents. Thereafter, within three (3) Trading Days after each Representation Date with respect to which the Company is obligated to deliver a certificate pursuant to Section 7(m) for which no waiver is applicable pursuant to Section 7(m), and not more than once per calendar quarter, the Company shall cause to be furnished to the Agents the written opinions and negative assurance of Company Counsel and written opinions and negative assurance of Company IP Counsel substantially in the form previously agreed between the Company and the Agents, modified, as necessary, to relate to the Registration Statement and the Prospectus as then amended or supplemented; *provided*, *however*, that if Company Counsel or Company IP Counsel has previously furnished to the Agents such written opinions and negative assurance substantially in the form previously agreed between the Company and the Agents, such counsel may, in respect of any future Representation Date, furnish the Agents with a letter (a "**Reliance Letter**") in lieu of such opinions and negative assurance to the effect that the Agents may rely on the prior opinions and negative assurance of such counsel delivered pursuant to this Section 7(n) to the same extent as if it were dated the date of such Reliance Letter (except that statements in such prior opinion shall be deemed to relate to the Registration Statement and the Prospectus as amended or supplemented to the date of such Reliance Letter).

(o) Comfort Letter. On or prior to the date the first Placement Notice is given hereunder and within three (3) Trading Days after each subsequent Representation Date with respect to which the Company is obligated to deliver a certificate pursuant to Section 7(m) for which no waiver is applicable pursuant to Section 7(m), the Company shall cause its independent accountants to furnish the Agents letters (the "**Comfort Letters**"), dated the date that the Comfort Letter is delivered, in form and substance satisfactory to the Agents, (i) confirming that they are an independent registered public accounting firm within the meaning of the Securities Act, the Exchange Act and the rules and regulations of the PCAOB and are in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X of the Commission, (ii) stating, as of such date, the conclusions and findings of such firm with respect to the financial information and other matters ordinarily covered by accountants' "comfort letters" to the Agents in connection with registered public offerings (the first such letter, the "**Initial Comfort Letter**") and (iii) updating the Initial Comfort Letter with any information that would have been included in the Initial Comfort Letter had it been given on such date and modified as necessary to relate to the Registration Statement and the Prospectus, as amended and supplemented to the date of such letter.

(p) Market Activities. The Company will not, directly or indirectly, (i) take any action designed to cause or result in, or that constitutes or might reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Common Stock or (ii) sell, bid for, or purchase the Placement Shares to be issued and sold pursuant to this Agreement, or pay anyone any compensation for soliciting purchases of the Placement Shares other than the Agents.

(q) Insurance. The Company and its subsidiaries shall maintain, or caused to be maintained, insurance in such amounts and covering such risks as is reasonable and customary for the conduct of its business and the value of its properties.

(r) Compliance with Laws. The Company and each of its subsidiaries shall maintain, or cause to be maintained, all material environmental permits, licenses and other authorizations required by federal, state and local law in order to conduct their businesses as described in the Prospectus, and the Company and each of its subsidiaries shall conduct their businesses, or cause their businesses to be conducted, in substantial compliance with such permits, licenses and authorizations and with applicable environmental laws, except where the failure to maintain or be in compliance with such permits, licenses and authorizations would not reasonably be expected to result in a Material Adverse Change.

(s) Investment Company Act. The Company will conduct its affairs in such a manner so as to reasonably ensure that neither it nor its subsidiaries is or, after giving effect to the offering and sale of the Placement Shares and the application of proceeds therefrom as described in the Prospectus, will be, an "investment company" within the meaning of such term under the Investment Company Act.

(t) Securities Act and Exchange Act. The Company will use its best efforts to comply with all requirements imposed upon it by the Securities Act and the Exchange Act as from time to time in force, so far as necessary to permit the continuance of sales of, or dealings in, the Placement Shares as contemplated by the provisions hereof and the Prospectus.

(u) No Offer to Sell. Other than the Prospectus, neither the Agents nor the Company (including its agents and representatives, other than the Agents in their capacity as such) will make, use, prepare, authorize, approve or refer to any written communication (as defined in Rule 405 under the Securities Act), required to be filed with the Commission, that constitutes an offer to sell or solicitation of an offer to buy Placement Shares hereunder.

(v) Sarbanes-Oxley Act. The Company and its subsidiaries will use their best efforts to comply with all effective applicable provisions of the Sarbanes-Oxley Act.

(w) New Registration Statement. If immediately prior to the third anniversary of the initial effective date of the Registration Statement, any of the Placement Shares remain unsold, the sale of the Placement Shares under this Agreement shall automatically be suspended unless and until the Company files a new shelf registration statement relating to the Placement Shares and such new registration statement is declared effective by the Commission. References herein to the Registration Statement shall include such new shelf registration statement. If any such new shelf registration statement becomes effective prior to the termination date of this Agreement, the Company agrees to notify the Agents of such effective date.

8. Conditions to the Agents' Obligations. The obligations of the Agents hereunder with respect to a Placement will be subject to the continuing accuracy and completeness of the representations and warranties made by the Company herein (other than those representations and warranties made as of a specified date or time), to the due performance by the Company of its obligations hereunder, to the completion by the Agents of a due diligence review satisfactory to the Agents in their reasonable judgment, and to the continuing reasonable satisfaction (or waiver by the Agents in their sole discretion) of the following additional conditions:

(a) Registration Statement Effective. The Registration Statement shall be effective and shall be available for the sale of all Placement Shares contemplated to be issued by any Placement Notice.

(b) Securities Act Filings Made. The Company shall have filed with the Commission the ATM Prospectus pursuant to Rule 424(b) under the Securities Act within the applicable time period prescribed for such filing by Rule 424(b) (without reliance on Rule 424(b)(8) of the Securities Act). All other filings with the Commission required by Rule 424 under the Securities Act to have been filed prior to the issuance of any Placement Notice hereunder shall have been made within the applicable time period prescribed for such filing by Rule 424.

(c) No Material Notices. None of the following events shall have occurred and be continuing: (i) receipt by the Company or any of its subsidiaries of any request for additional information from the Commission or any other federal or state governmental authority during the period of effectiveness of the Registration Statement, the response to which would require any post-effective amendments or supplements to the Registration Statement or the Prospectus; (ii) the issuance by the Commission or any other federal or state governmental authority of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for that purpose; (iii) receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Placement Shares for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; (iv) the occurrence of any event that makes any material statement made in the Registration Statement or the Prospectus or any material document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires the making of any changes in the Registration Statement, related Prospectus or such documents so that, in the case of the Registration Statement, it will not contain any materially untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading and, that in the case of the Prospectus, it will not contain any materially untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, which changes shall not, as of the time of the Placement, have been so made.

(d) No Misstatement or Material Omission. Neither Agent shall have advised the Company that the Registration Statement or Prospectus, or any amendment or supplement thereto, contains an untrue statement of fact that in such Agent's reasonable opinion is material, or omits to state a fact that in such Agent's reasonable opinion is material and is required to be stated therein or is necessary to make the statements therein not misleading.

(e) Material Changes. Except as contemplated in the Prospectus, or disclosed in the Company's reports filed with the Commission, there shall not have been any Material Adverse Change or any development that could reasonably be expected to result in a Material Adverse Change, or any downgrading in or withdrawal of the rating assigned to any of the Company's securities (other than asset backed securities) by any rating organization or a public announcement by any rating organization that it has under surveillance or review its rating of any of the Company's securities (other than asset backed securities), the effect of which, in the case of any such action by a rating organization described above, in the reasonable judgment of the Agents (without relieving the Company of any obligation or liability it may otherwise have), is so material as to make it impracticable or inadvisable to proceed with the offering of the Placement Shares on the terms and in the manner contemplated by this Agreement and the Prospectus.

(f) Company Counsel Legal Opinion. The Agents shall have received the opinions and negative assurances of Company Counsel required to be delivered pursuant Section 7(n) on or before the date on which such delivery of such opinions and negative assurances is required pursuant to Section 7(n).

(g) Company IP Counsel Legal Opinion. The Agents shall have received the opinions and negative assurances of Company IP Counsel required to be delivered pursuant Section 7(n) on or before the date on which such delivery of such opinions and negative assurances is required pursuant to Section 7(n).

(h) Agents' Counsel Legal Opinion. The Agents shall have received from Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel to the Agents, on or before the date on which the delivery of the Company Counsel legal opinion is required pursuant to Section 7(n), such opinions and negative assurances with respect to such matters as the Agents may reasonably require, and the Company shall have furnished to such counsel such documents as they request for enabling them to pass upon such matters.

(i) Comfort Letter. The Agents shall have received the Comfort Letter required to be delivered pursuant Section 7(o) on or before the date on which such delivery of such Comfort Letter is required pursuant to Section 7(o).

(j) Representation Certificate. The Agents shall have received the certificate required to be delivered pursuant to Section 7(m) on or before the date on which delivery of such certificate is required pursuant to Section 7(m).

(k) Secretary's Certificate. On or prior to the date the first Placement Notice is given hereunder, the Agents shall have received a certificate, signed on behalf of the Company by its corporate Secretary, certifying as to (i) the Certificate of Incorporation of the Company, (ii) the By-laws of the Company, (iii) the resolutions of the Board of Directors of the Company (or a committee thereof) authorizing the execution, delivery and performance of this Agreement and the issuance of the Placement Shares and (iv) the incumbency of the officers duly authorized to execute this Agreement and the other documents contemplated by this Agreement.

(l) No Suspension. Trading in the Common Stock shall not have been suspended on the Exchange and the Common Stock shall not have been delisted from the Exchange.

(m) Other Materials. On each date on which the Company is required to deliver a certificate pursuant to Section 7(m), the Company shall have furnished to the Agents such appropriate further opinions, certificates, letters and documents as the Agents may have reasonably requested and which are usually and customarily furnished by an issuer of securities in connection with a securities offering of the type contemplated hereby. All such opinions, certificates, letters and other documents shall have been in compliance with the provisions hereof. The Company will furnish the Agents with such conformed copies of such opinions, certificates, letters and other documents as the Agents shall have reasonably requested.

(n) Approval for Listing. The Placement Shares shall have been approved for listing on the Exchange, subject only to notice of issuance.

(o) No Termination Event. There shall not have occurred any event that would permit the Agents to terminate this Agreement pursuant to Section 11(a).

(p) FINRA. FINRA shall not have raised any objection with respect to the fairness or reasonableness of the terms and arrangements related to the sale of the Placement Shares pursuant to this Agreement.

9. Indemnification and Contribution.

(a) Company Indemnification. The Company agrees to indemnify and hold harmless each Agent, its directors, officers, members, partners, and employees and agents and each person, if any, who controls any Agent within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any and all losses, claims, liabilities, expenses and damages (including, but not limited to, any and all reasonable investigative, legal and other expenses incurred in connection with, and any and all amounts paid in settlement (in accordance with Section 9(c)) of, any action, suit or proceeding between any of the indemnified parties and any indemnifying parties or between any indemnified party and any third party, or otherwise, or any claim asserted), as and when incurred, to which any Agent, or any such person, may become subject under the Securities Act, the Exchange Act or other federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, liabilities, expenses or damages arise out of or are based upon (x) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or the Prospectus or any amendment or supplement thereto or in any free writing prospectus or in any application or other document executed by or on behalf of the Company or based on written information furnished by or on behalf of the Company filed in any jurisdiction in order to qualify the Common Stock under the securities laws thereof or filed with the Commission, (y) the omission or alleged omission to state in any such document a material fact required to be stated in it or necessary to make the statements in it not misleading or (z) any breach by any of the indemnifying parties of any of their respective representations, warranties and agreements contained in this Agreement; *provided, however*, that this indemnity agreement shall not apply to the extent that such loss, claim, liability, expense or damage arises from the sale of the Placement Shares pursuant to this Agreement and is caused directly by an untrue statement or omission made in reliance upon and in conformity with written information relating to the Agents and furnished to the Company by the Agents expressly for inclusion in any document as described in clause (x) of this Section 9(a). This indemnity agreement will be in addition to any liability that the Company might otherwise have.

(b) Agent Indemnification. Each Agent, severally and not jointly, agrees to indemnify and hold harmless the Company and its directors and each officer of the Company that signed the Registration Statement, and each person, if any, who (i) controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act or (ii) is controlled by or is under common control with the Company (each, a "**Company Affiliate**") from and against any and all losses, claims, liabilities, expenses and damages (including, but not limited to, any and all reasonable investigative, legal and other expenses incurred in connection with, and any and all amounts paid in settlement (in accordance with Section 9(c)) of, any action, suit or proceeding between any of the indemnified parties and any indemnifying parties or between any indemnified party and any third party, or otherwise, or any claim asserted), as and when incurred, to which any such Company Affiliate, may become subject under the Securities Act, the Exchange Act or other federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, liabilities, expenses or damages arise out of or are based upon (x) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or the Prospectus or any amendment or supplement thereto, or (y) the omission or alleged omission to state in any such document a material fact required to be stated in it or necessary to make the statements in it not misleading; *provided*, *however*, that this indemnity agreement shall apply only to the extent that such loss, claim, liability, expense or damage is caused directly by an untrue statement or omission made in reliance upon and in conformity with written information relating to such Agent and furnished to the Company by such Agent expressly for inclusion in any document as described in clause (x) of this Section 9(b), which the Company acknowledges consists solely of the material referred to in Schedule 5 hereto, as updated from time to time.

(c) Procedure. Any party that proposes to assert the right to be indemnified under this Section 9 will, promptly after receipt of notice of commencement of any action against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section 9, notify each such indemnifying party of the commencement of such action, enclosing a copy of all papers served, but the omission so to notify such indemnifying party will not relieve the indemnifying party from (i) any liability that it might have to any indemnified party otherwise than under this Section 9 and (ii) any liability that it may have to any indemnified party under the foregoing provision of this Section 9 unless, and only to the extent that, such omission results in the forfeiture or material impairment of substantive rights or defenses by the indemnifying party. If any such action is brought against any indemnified party and it notifies the indemnifying party of its commencement, the indemnifying party will be entitled to participate in and, to the extent that it elects by delivering written notice to the indemnified party promptly after receiving notice of the commencement of the action from the indemnified party, jointly with any other indemnifying party similarly notified, to assume the defense of the action, with counsel reasonably satisfactory to the indemnified party, and after notice from the indemnifying party to the indemnified party of its election to assume the defense, the indemnifying party will not be liable to the indemnified party for any legal or other expenses except as provided below and except for the reasonable costs of investigation subsequently incurred by the indemnified party in connection with the defense. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (1) the employment of counsel by the indemnified party has been authorized in writing by the indemnifying party, (2) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party, (3) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party) such that representation of such indemnified party and any indemnifying party(s) by the same counsel would be inappropriate under applicable standards of professional conduct (whether or not such representation by the same counsel has been proposed), or (4) the indemnifying party has not in fact employed counsel to assume the defense of such action within a reasonable time after receiving notice of the commencement of the action, in each of which cases the reasonable and documented out-of-pocket fees, disbursements and other charges of counsel will be at the expense of the indemnifying party or parties. It is understood that the indemnifying party or parties shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable and documented out-of-pocket fees, disbursements and other charges of more than one separate firm admitted to practice in such jurisdiction at any one time for all such indemnified party or parties. All such reasonable and documented out-of-pocket fees, disbursements and other charges will be reimbursed by the indemnifying party promptly after the indemnifying party receives a written invoice relating to the fees, disbursements and other charges in reasonable detail. An indemnifying party will not, in any event, be liable for any settlement of any action or claim effected without its written consent. No indemnifying party shall, without the prior written consent of each indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding relating to the matters contemplated by this Section 9 (whether or not any indemnified party is a party thereto), unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising or that may arise out of such claim, action or proceeding.

(d) Contribution. In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in the foregoing paragraphs of this Section 9 is applicable in accordance with its terms but for any reason is held to be unavailable from the Company or the Agents, the Company and the Agents will contribute to the total losses, claims, liabilities, expenses and damages (including any investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted, but after deducting any contribution received by the Company from persons other than the Agents, such as persons who control the Company within the meaning of the Securities Act, officers of the Company who signed the Registration Statement and directors of the Company, who also may be liable for contribution) to which the Company and the Agents may be subject in such proportion as shall be appropriate to reflect the relative benefits received by the Company on the one hand and the Agents on the other. The relative benefits received by the Company on the one hand and the Agents on the other hand shall be deemed to be in the same proportion as the total Net Proceeds from the sale of the Placement Shares (before deducting expenses) received by the Company bear to the total compensation received by each Agent from the sale of Placement Shares on behalf of the Company. If, but only if, the allocation provided by the foregoing sentence is not permitted by applicable law, the allocation of contribution shall be made in such proportion as is appropriate to reflect not only the relative benefits referred to in the foregoing sentence but also the relative fault of the Company, on the one hand, and the Agents, on the other, with respect to the statements or omission that resulted in such loss, claim, liability, expense or damage, or action in respect thereof, as well as any other relevant equitable considerations with respect to such offering. Such relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or the Agents, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Agents agree that it would not be just and equitable if contributions pursuant to this Section 9(d) were to be determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, liability, expense, or damage, or action in respect thereof, referred to above in this Section 9(d) shall be deemed to include, for the purpose of this Section 9(d), any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim to the extent consistent with Section 9(c) hereof. Notwithstanding the foregoing provisions of this Section 9(d), the Agents shall not be required to contribute any amount in excess of the commissions received by it under this Agreement and no person found guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 9(d), any person who controls a party to this Agreement within the meaning of the Securities Act will have the same rights to contribution as that party (and any officers, directors, members, partners, employees or agents of the Agents and each broker dealer affiliate of the Agents will have the same rights to contribution as the Agents), and each officer of the Company who signed the Registration Statement and each director of the Company will have the same rights to contribution as the Company, subject in each case to the provisions hereof. Any party entitled to contribution, promptly after receipt of notice of commencement of any action against such party in respect of which a claim for contribution may be made under this Section 9(d), will notify any such party or parties from whom contribution may be sought, but the omission to so notify will not relieve that party or parties from whom contribution may be sought from any other obligation it or they may have under this Section 9(d) except to the extent that the failure to so notify such other party materially prejudiced the substantive rights or defenses of the party from whom contribution is sought. Except for a settlement entered into pursuant to the last sentence of Section 9(c) hereof, no party will be liable for contribution with respect to any action or claim settled without its written consent if such consent is required pursuant to Section 9(c) hereof. The Agents' respective obligations to contribute pursuant to this Section 9(d) are several in proportion to the respective number of Placement Shares they have sold hereunder, and not joint.

10. Representations and Agreements to Survive Delivery. The indemnity and contribution agreements contained in Section 9 of this Agreement and all representations and warranties of the Company and the Agents herein or in certificates delivered pursuant hereto shall survive, as of their respective dates, regardless of (i) any investigation made by or on behalf of the Agents, any controlling person of the Agents, or the Company (or any of their respective officers, directors, members or controlling persons), (ii) delivery and acceptance of the Placement Shares and payment therefor or (iii) any termination of this Agreement.

11. Termination.

(a) The Agents shall have the right by giving notice as hereinafter specified at any time to terminate this Agreement if (i) any Material Adverse Change, or any development that could reasonably be expected to result in a Material Adverse Change has occurred that, in the reasonable judgment of the Agents, may materially impair the ability of the Agents to sell the Placement Shares hereunder, (ii) the Company shall have failed, refused or been unable to perform any agreement on its part to be performed hereunder; *provided*, *however*, in the case of any failure of the Company to deliver (or cause another person to deliver) any certification, opinion, or letter required under Sections 7(m), 7(n), or 7(o), the Agents' right to terminate shall not arise unless such failure to deliver (or cause to be delivered) continues for more than thirty (30) days from the date such delivery was required, (iii) any other condition of the Agents' obligations hereunder is not fulfilled, or (iv) any suspension or limitation of trading in the Placement Shares or in securities generally on the Exchange shall have occurred (including automatic halt in trading pursuant to market-decline triggers, other than those in which solely program trading is temporarily halted), or a major disruption of securities settlements or clearing services in the United States shall have occurred, or minimum prices for trading have been fixed on the Exchange. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(g) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 11(f), Section 16 (Applicable Law; Consent to Jurisdiction) and Section 17 (Waiver of Jury Trial) hereof shall remain in full force and effect notwithstanding such termination. If either Agent elects to terminate this Agreement as provided in this Section 11(a), such Agent shall provide the required notice as specified in Section 12 (Notices). For the avoidance of doubt, the termination by one Agent of its rights and obligations under this Agreement pursuant to this Section 11(a) shall not affect the rights and obligations of the other Agent under this Agreement.

(b) The Company shall have the right, by giving five (5) days' notice as hereinafter specified in Section 12, to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(g) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 11(f), Section 16 (Applicable Law; Consent to Jurisdiction) and Section 17 (Waiver of Jury Trial) hereof shall remain in full force and effect notwithstanding such termination. Nothing in this Section 11(b) shall limit the ability of the Company to suspend offers and sales of Placement Shares pursuant to the provisions of Section 4.

(c) The Agents shall have the right, by giving five (5) days' notice as hereinafter specified in Section 12, to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(g) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 11(f), Section 16 (Applicable Law; Consent to Jurisdiction) and Section 17 (Waiver of Jury Trial) hereof shall remain in full force and effect notwithstanding such termination. For the avoidance of doubt, the termination by one Agent of its rights and obligations under this Agreement pursuant to this Section 11(c) shall not affect the rights and obligations of the other Agent under this Agreement.

(d) Unless earlier terminated pursuant to this Section 11, this Agreement shall automatically terminate upon the issuance and sale of all of the Placement Shares to or through the Agents on the terms and subject to the conditions set forth herein; *provided* that the provisions of Section 7(g) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 11(f), Section 16 (Applicable Law; Consent to Jurisdiction) and Section 17 (Waiver of Jury Trial) hereof shall remain in full force and effect notwithstanding such termination.

(e) This Agreement shall remain in full force and effect unless terminated pursuant to Sections 11(a), (b), (c) or (d) above or otherwise by mutual agreement of the parties; *provided*, *however*, that any such termination by mutual agreement shall in all cases be deemed to provide that Section 7(g) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 11(f), Section 16 (Applicable Law; Consent to Jurisdiction) and Section 17 (Waiver of Jury Trial) shall remain in full force and effect. Upon termination of this Agreement, the Company shall not have any liability to the Agents for any discount, commission or other compensation with respect to any Placement Shares not otherwise sold by an Agent under this Agreement.

(f) Any termination of this Agreement shall be effective on the date specified in such notice of termination; *provided, however,* that such termination shall not be effective until the close of business on the date of receipt of such notice by the Agents or the Company, as the case may be, *provided, further,* that the Agents shall suspend any ongoing placement as soon as practicable following receipt of the notice of termination (and in any event by the close of business on the date of receipt). If such termination shall occur prior to the Settlement Date for any sale of Placement Shares, such termination shall not become effective until the close of business on such Settlement Date and such Placement Shares shall settle in accordance with the provisions of this Agreement.

12. Notices. All notices or other communications required or permitted to be given by any party to any other party pursuant to the terms of this Agreement shall be in writing, unless otherwise specified, and if sent to the Agents, shall be delivered to:

Oppenheimer & Co. Inc.
85 Broad Street, 26th Floor
New York, NY 10004
Attention: Peter Vogelsang, Office of General Counsel
Email: [*]

and:

Cantor Fitzgerald & Co.
499 Park Avenue
New York, NY 10022
Attention: Capital Markets
Facsimile: (212) 307-3730

with copies (which shall not constitute notice) to:

Cantor Fitzgerald & Co.
499 Park Avenue
New York, NY 10022
Attention: General Counsel

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
666 Third Avenue
New York, New York 10017
Attention: Ivan K. Blumenthal, Esq.
Email: [*]

and if to the Company, shall be delivered to:

VolitionRx Limited
93-95 Gloucester Place
London W1U 6JQ
Attention: Cameron Reynolds
Email: [*]

with a copy (which shall not constitute notice) to:

Stradling Yocca Carlson & Rauth, P.C.
660 Newport Center Drive, Suite 1600
Newport Beach, CA 92660
Attention: Marc G. Alcser, Esq.
Email: [*]

Each party may change such address for notices by sending to the other party to this Agreement written notice of a new address for such purpose. Each such notice or other communication shall be deemed given (i) when delivered personally, by email, or by verifiable facsimile transmission (with an original to follow) on or before 4:30 p.m., New York City time, on a Business Day or, if such day is not a Business Day, on the next succeeding Business Day, (ii) on the next Business Day after timely delivery to a nationally-recognized overnight courier and (iii) on the Business Day actually received if deposited in the U.S. mail (certified or registered mail, return receipt requested, postage prepaid). For purposes of this Agreement, "**Business Day**" shall mean any day on which the Exchange and commercial banks in the City of New York are open for business.

An electronic communication ("**Electronic Notice**") shall be deemed written notice for purposes of this Section 12 if sent to the electronic mail address specified by the receiving party under separate cover. Electronic Notice shall be deemed received at the time the party sending Electronic Notice receives confirmation of receipt by the receiving party (other than pursuant to auto-reply). Any party receiving Electronic Notice may request and shall be entitled to receive the notice on paper, in a nonelectronic form ("**Nonelectronic Notice**") which shall be sent to the requesting party within ten (10) days of receipt of the written request for Nonelectronic Notice.

13. Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Company and the Agents and their respective successors and permitted assigns and, as to Section 5(b) and Section 9, the other indemnified parties specified therein. References to any of the parties contained in this Agreement shall be deemed to include the successors and permitted assigns of such party. Nothing in this Agreement, express or implied, is intended to confer upon any other person any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement. Neither party may assign its rights or obligations under this Agreement without the prior written consent of the other party; *provided, however,* that any Agent may assign its rights and obligations hereunder to an affiliate of such Agent without obtaining the Company's consent.

14. Adjustments for Share Splits. The parties acknowledge and agree that all share-related numbers contained in this Agreement shall be adjusted to take into account any share split, share dividend or similar event effected with respect to the Common Stock.

15. Entire Agreement; Amendment; Severability. This Agreement (including all schedules and exhibits attached hereto and Placement Notices issued pursuant hereto) and any other writing entered into by the parties relating to this Agreement constitutes the entire agreement and supersedes all other prior and contemporaneous agreements and undertakings, both written and oral, among the parties hereto with regard to the subject matter hereof. Neither this Agreement nor any term hereof may be amended except pursuant to a written instrument executed by the Company and the Agents. In the event that any one or more of the provisions contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable as written by a court of competent jurisdiction, then such provision shall be given full force and effect to the fullest possible extent that it is valid, legal and enforceable, and the remainder of the terms and provisions herein shall be construed as if such invalid, illegal or unenforceable term or provision was not contained herein, but only to the extent that giving effect to such provision and the remainder of the terms and provisions hereof shall be in accordance with the intent of the parties as reflected in this Agreement.

16. Applicable Law; Consent to Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the internal laws of the State of New York, without regard to the principles of conflicts of laws. Each party hereby irrevocably submits to the non-exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection with any transaction contemplated hereby, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof (certified or registered mail, return receipt requested) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law.

17. Waiver of Jury Trial. The Company and the Agents each hereby irrevocably waives any right it may have to a trial by jury in respect of any claim based upon or arising out of this Agreement or any transaction contemplated hereby.

18. Absence of Fiduciary Relationship. The Company acknowledges and agrees that:

(a) the Agents are acting solely as agents in connection with the sale of the Placement Shares contemplated by this Agreement and the process leading to such transactions, and no fiduciary or advisory relationship between the Company or any of its respective affiliates, stockholders (or other equity holders), creditors or employees or any other party, on the one hand, and the Agents, on the other hand, has been or will be created in respect of any of the transactions contemplated by this Agreement, irrespective of whether the Agents have advised or is advising the Company on other matters, and the Agents have no obligation to the Company with respect to the transactions contemplated by this Agreement, except the obligations expressly set forth in this Agreement and in any schedule or exhibit attached hereto;

(b) the Company is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement;

(c) the Agents have not provided any legal, accounting, regulatory or tax advice with respect to the transactions contemplated by this Agreement, and the Company has consulted its own legal, accounting, regulatory and tax advisors to the extent it has deemed appropriate;

(d) the Company has been advised and is aware that the Agents and their affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that the Agents have no obligation to disclose such interests and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; and

(e) the Company waives, to the fullest extent permitted by law, any claims it may have against the Agents, for breach of fiduciary duty or alleged breach of fiduciary duty in connection with the sale of Placement Shares under this Agreement and agrees that the Agents shall have no liability (whether direct or indirect, in contract, tort or otherwise) to the Company in respect of such a fiduciary claim or to any person asserting a fiduciary duty claim on behalf of or in right of the Company, including stockholders, partners, employees or creditors of the Company.

19. Use of Information. The Agents may not disclose any information gained in connection with this Agreement and the transactions contemplated by this Agreement, including due diligence, to any third party other than its legal counsel advising it on this Agreement unless expressly approved by the Company in writing.

20. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery of an executed Agreement by one party to the other may be made by facsimile transmission or email of a .pdf attachment.

21. Effect of Headings; Knowledge of the Company. The section and Exhibit headings herein are for convenience only and shall not affect the construction hereof. All references in this Agreement to the "knowledge of the Company" or the "Company's knowledge" or similar qualifiers shall mean the actual knowledge of the directors and executive officers of the Company.

22. Definitions. As used in this Agreement, the following term has the meaning set forth below:

(a) "**Applicable Time**" means the date of this Agreement, each Representation Date, each date on which a Placement Notice is given, each Point of Sale, and each Settlement Date.

(b) "**Designated Agent**" means, as of any given time, an Agent that the Company has designated as sales agent to sell Placement Shares pursuant to the terms of this Agreement.

[Remainder of Page Intentionally Blank]

If the foregoing correctly sets forth the understanding between the Company and the Agents, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement between the Company and the Agents.

Very truly yours,

VOLITIONRX LIMITED

By: */s/ Cameron Reynolds*
Name: Cameron Reynolds
Title: President and Chief Executive Officer

ACCEPTED as of the date first-above written:

OPPENHEIMER & CO. INC.

By: */s/ Michael Margolis*
Name: Michael Margolis, R. Ph.
Title: Managing Director, Co-Head of Healthcare Investment Banking

CANTOR FITZGERALD & CO.

By: */s/ Sage Kelly*
Name: Sage Kelly
Title: Global Head of Investment Banking

SCHEDULE 1

FORM OF PLACEMENT NOTICE

From: VolitionRx Limited

To: Oppenheimer & Co., Inc.
Attention:

Cantor Fitzgerald & Co.
Attention:

Subject: At-The-Market Offering—Placement Notice

Gentlemen:

Pursuant to the terms and subject to the conditions contained in the Equity Distribution Agreement between VolitionRx Limited, a Delaware corporation (the "Company"), and Oppenheimer & Co., Inc. and Cantor Fitzgerald & Co., dated [_____], 2020 (the "Agreement"), I hereby request on behalf of the Company that the Designated Agent sell up to [___] shares of the Company's common stock, par value $0.001 per share, at a minimum market price of $[_____] per share, during the period beginning [MONTH/DAY/TIME] and ending [MONTH/DAY/TIME]. [INCLUDE ANY ADDITIONAL TERMS OR INFORMATION AS THE COMPANY DEEMS APPROPRIATE WITH RESPECT TO A PLACEMENT]

SCHEDULE 2

Notice Parties

VolitionRx Limited

Cameron Reynolds [*]
Dr. Martin [*]
With a copy to [*] and [*]

Oppenheimer & Co. Inc.

DL-EquityATMOffering@opco.com
With a copy to [*]

Cantor Fitzgerald & Co.

Sameer [*]
With a copy to CFControlledEquityOffering@cantor.com

SCHEDULE 3

Compensation

The Agents shall be paid compensation equal to up to 3% of the gross proceeds from the sales of Placement Shares pursuant to the terms of this Agreement and shall be reimbursed for certain expenses in accordance with Section 7(g) of this Agreement.

The foregoing rate of compensation shall not apply when the Agents act as principal, in which case the Company may sell the Placement Shares to the Agents as principal at a price agreed upon at the relevant Point of Sale pursuant to the applicable Placement Notice.

SCHEDULE 4

Schedule of Subsidiaries

Name of Subsidiary	State or other Jurisdiction of Incorporation or Organization
Singapore Volition Pte. Limited, a private company limited by shares *(100% subsidiary of VolitionRX Limited)*	Singapore
Belgian Volition SPRL, a private limited liability company *(99.9% subsidiary of Singapore Volition Pte. Limited)*	Belgium
Volition Diagnostics UK Limited, a limited company incorporated and registered in England and Wales *(100% subsidiary of Belgian Volition SPRL)*	United Kingdom
Volition America, Inc., a Delaware corporation *(100% subsidiary of Belgian Volition SPRL)*	Delaware
Volition Veterinary Diagnostics Development LLC, a Texas limited liability company *(87.5% subsidiary of Belgian Volition SPRL)*	Texas
Volition Germany GmbH (formerly Octamer GmbH), a company with limited liability organized under the laws of Germany *(100% subsidiary of Belgian Volition SPRL)*	Germany

SCHEDULE 5

Information Provided By Agents

The parties acknowledge and agree that, for purposes of Section 6(b) and Section 9(b) of this Agreement, there is no information provided by the Agents.

The information in this Schedule shall be updated from time to time in connection with the filing of a new Prospectus or otherwise as necessary.

REPRESENTATION DATE CERTIFICATE

VOLITIONRX LIMITED

REPRESENTATION DATE CERTIFICATE

[_____]

The undersigned, the duly qualified, appointed and acting President and Chief Executive Officer of**VOLITIONRX LIMITED**, a Delaware corporation (the "***Company***"), does hereby certify in such capacity and on behalf of the Company, pursuant to Section 7(m) of the Equity Distribution Agreement, dated November 12, 2020 (the "***Equity Distribution Agreement***"), by and among the Company, Cantor Fitzgerald & Co. and Oppenheimer & Co., Inc., that:

1. The representations and warranties of the Company in Section 6 of the Equity Distribution Agreement (A) to the extent such representations and warranties are subject to qualifications and exceptions contained therein relating to materiality or Material Adverse Change, are true and correct on and as of the date hereof with the same force and effect as if expressly made on and as of the date hereof, except for those representations and warranties that speak solely as of a specific date and which were true and correct as of such date, (B) to the extent such representations and warranties are not subject to any qualifications or exceptions, are true and correct in all material respects as of the date hereof as if made on and as of the date hereof with the same force and effect as if expressly made on and as of the date hereof except for those representations and warranties that speak solely as of a specific date and which were true and correct as of such date, and (C) are subject to exceptions disclosed in the Prospectus and the Registration Statement with respect to Sections 6(hh) and 6(ii);

2. The Company has complied in all material respects with all agreements and satisfied in all material respects all conditions on its part to be performed or satisfied pursuant to the Equity Distribution Agreement at or prior to the date hereof;

3. As of the date hereof, (i) neither the Registration Statement nor the Prospectus contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading and (ii) to the Company's knowledge, no event has occurred as a result of which it is necessary to amend or supplement the Registration Statement or the Prospectus in order to make the statements therein not untrue or misleading for clause (i) above, to be true and correct;

4. There has been no Material Adverse Change since the date as of which information is given in the Prospectus (including documents incorporated therein), as amended or supplemented;

5. As of the date hereof, the Company does not possess any material non-public information; and

6. The aggregate offering price of the Placement Shares that may be issued and sold pursuant to the Equity Distribution Agreement and the maximum number or amount of Placement Shares that may be sold pursuant to the Equity Distribution Agreement have been duly authorized by the Company's board of directors or a duly authorized committee thereof.

Terms used herein and not defined herein have the meanings ascribed to them in the Equity Distribution Agreement.

IN WITNESS WHEREOF, I have signed this Representation Date Certificate as of the date first set forth above.

VOLITIONRX LIMITED

By: _____
Name:
Title:

Exhibit 5.1

Stradling
Attorneys at Law

STRADLING YOCCA CARLSON & RAUTH, P.C.
660 NEWPORT CENTER DRIVE, SUITE 1600
NEWPORT BEACH, CA 92660-6422
SYCR.COM

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November 12, 2020

VolitionRx Limited
13215 Bee Cave Parkway
Suite 125, Galleria Oaks B
Austin, Texas 78738

Re: VolitionRx Limited Registration Statement on Form S-3 (File No. 333-227248)

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the proposed offer and sale by VolitionRx Limited, a Delaware corporation (the "***Company***"), of up to an aggregate of $25,000,000 of shares of the Company's common stock, par value $0.001 per share (the "***Shares***"), pursuant to a registration statement on Form S-3, as amended (File No. 333-227248) (the "***Registration Statement***"), filed with, and declared effective by, the Securities and Exchange Commission (the "***Commission***") under the Securities Act of 1933, as amended (the "***Securities Act***"), the base prospectus filed September 26, 2018 contained in the Registration Statement (the "***Base Prospectus***"), and the prospectus supplement relating to the proposed offer and sale of the Shares filed with the Commission on November 12, 2020 pursuant to Rule 424(b) of the rules and regulations of the Securities Act (the "***Prospectus Supplement***" and together with the Base Prospectus, the "***Prospectus***"). We understand that the Shares are proposed to be offered and sold by the Company through Oppenheimer & Co. Inc. and Cantor Fitzgerald & Co. (each an "***Agent***" and together the "***Agents***"), pursuant to that certain Equity Distribution Agreement, dated as of November 12, 2020, by and among the Agents and the Company (the "***Sales Agreement***").

In connection with the preparation of this opinion, we have examined such documents and considered such questions of law as we have deemed necessary or appropriate. We have assumed the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies thereof and the genuineness of all signatures. As to questions of fact material to our opinions, we have relied upon the certificates of certain officers of the Company.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, when issued and sold in the manner described in the Registration Statement, the Prospectus and the Sales Agreement, will be validly issued, fully paid and non-assessable.

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

We hereby consent to the use of this opinion as Exhibit 5.1 to the Quarterly Report on Form 10-Q of the Company filed with Commission on the date hereof, which is incorporated by reference into the Registration Statement, and further consent to the use of our name under the caption "Legal Matters" in the Prospectus. In giving such consent, we do not hereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

This opinion is intended solely for use in connection with the issuance and sale of the Shares pursuant to the Registration Statement and the Prospectus and is not to be relied upon for any other purpose or delivered to or relied upon by any other person without our prior written consent. This opinion is rendered as of the date hereof and based solely on our understanding of facts in existence as of such date after the examination described in this opinion. We assume no obligation to advise you of any fact, circumstance, event or change in the law or the facts that may hereafter be brought to our attention whether or not such occurrence would affect or modify the opinions expressed herein.

Very truly yours,

/s/ STRADLING YOCCA CARLSON & RAUTH, P.C.

STRADLING YOCCA CARLSON & RAUTH, P.C.

CONSULTING SERVICES AGREEMENT

THIS CONSULTING AGREEMENT (this "***Agreement"***), is entered into as of December 1, 2020 (the "***Effective Date***") by and between Singapore Volition Pte. Limited, a Singapore corporation with its office located at 111 Somerset Road, Level 3, TripleOne Somerset, Singapore 238164 (the "***Company***") and PB Commodities Pte. Ltd, a Singapore corporation with its registered office located at 165 Gangsa Road, Unit 01-70, Singapore 670165 (the "***Consultant***").

(referred to herein individually as a "***Party***" or collectively as the "***Parties***")

1. Consulting Services.

(a) This Agreement supersedes and replaces in its entirety the existing employment agreement between Mr. Cameron Reynolds (the "***Individual***") and Volition Diagnostics UK Limited dated March 7, 2017 which is hereby terminated upon mutual agreement and is of no further force and effect (other than the provisions expressly surviving termination).

(b) Subject to and upon the terms and conditions set forth in this Agreement, the Company hereby retains the Consultant, and the Consultant hereby agrees to provide to the Company (or any Group Company pursuant to services agreements entered into by and between the Company and its affiliates) the consulting services attached to this Agreement as Exhibit A (as may be amended from time to time upon mutual agreement of the Parties, the "***Services***"). The Services shall be performed in a timely, competent, professional and workmanlike manner by the Consultant and its employees. Consultant may not use a subcontractor or other third party to perform its duties under this Agreement. The Consultant shall make available to the Company, the *Individual*, one of its employees, to provide the Services under this Agreement. In rendering the Services pursuant to this Agreement, the Consultant shall act solely as an independent contractor and this Agreement shall not be construed to create any employee/employer, agent or representative relationship between the Consultant and the Company or any Group Company. The Consultant and the Individual each acknowledge and agree that all work performed by the Individual, or other employees of the Consultant, shall be performed as employees of the Consultant, on behalf of the Consultant and not as additional independent contractors. For purposes of this Agreement, "Group Company" shall mean affiliated entities of the Company including its parent (VolitionRx Limited), subsidiaries, subsidiaries of parent and other related entities.

(c) With respect to the conduct of and progress of the Services, the Consultant and the Individual will report to and liaise with the Board of Directors of the Company or any Group Company for which it is providing Services (as applicable, the "***Board of Directors***") on any matter related to the Services. Consultant shall have the right to control and direct the means, manner and method by which the Services are performed.

(d) The Consultant shall provide the Services hereunder from its offices or the offices of the Company, from such other location that permits the performance of the Services, or as mutually agreed upon by the Consultant and the Company. The Company shall reimburse the Consultant for expenses incurred in connection with the provision of the Services in accordance with Section 3.

(e) The Consultant will perform the Services in accordance with all policies and procedures provided by the Company, including any third-party policies and procedures that the Company is required to comply with.

2. Compensation.

(a) Consultancy Fees. The Company shall, so long as the Consultant is providing Services to the Company under this Agreement, pay the Consultant the consulting fee as detailed in Exhibit A. The Company will not withhold any tax or social security payments due from the Consultant to any governmental taxing authority. The Consultant will be responsible for the payment of any social security, income tax or similar payments required by law to be made in relation to this Agreement. The Consultant will indemnify and hold the Company harmless to the extent of any obligation imposed on the Company (a) to pay in withholding taxes or similar items or (b) resulting from a determination that the Consultant is not an independent contractor. Neither the Consultant nor the Individual shall have any claim against the Company for health or disability benefits, retirement benefits, social security, worker's compensation, unemployment insurance benefits, or employee benefits of any kind.

(b) VNRX Equity Compensation. The Individual shall be entitled to participate in the VolitionRx Limited ("VNRX") stock incentive plan. The criteria for determining the amount of any allocations to the Individual under the stock incentive plan for any year during the Term of this Agreement shall be determined by the Board of Directors of VolitionRx Limited or a designated committee in its absolute discretion and upon the terms and conditions set forth in the award agreement and the governing plan.

3. Expenses.

(a) The Company shall reimburse the Consultant for any actual expenses incurred by the Consultant while rendering Services under this Agreement so long as such expenses are reasonable and necessary, and appropriately documented.

(b) In claiming expenses the Consultant shall comply with the generally applicable policies, practices and procedures of the Company and/or the Group Company for submission of expense reports, receipts or similar documentation of such expenses (as amended from time to time), a copy of which will be provided.

4. Term; Termination.

(a) This Agreement shall take effect as of the Effective Date and shall continue thereafter in full force until terminated in accordance with the provisions of Section 4(b). The period commencing on the Effective Date and ending on the effective date of termination shall be referred to as the ***"Term"***.

(b) This Agreement and the Services may be terminated at any time by either Party for any reason or no reason upon at least six (6) months prior written notice of termination to the other Party.

(c) Notwithstanding the provisions of Section 4(a), the Company may terminate this Agreement with immediate effect without notice and without any liability to make any further payment to the Consultant (other than in respect of amounts accrued prior to the termination date) if at any time:

(i) the Individual is not available to perform the Services for any single continuous period extending beyond 90 days;

(ii) the Consultant or Individual commits any gross misconduct affecting the business of the Company or its affiliates;

(iii) the Consultant or Individual commits any serious or repeated breach or non-observance of any material provisions of this Agreement;

(iv) the Individual is convicted of any serious criminal offence involving a custodial penalty;

(v) the Consultant makes a resolution for its winding up, makes an arrangement or composition with its creditors or makes an application to a court of competent jurisdiction for protection from its creditors or an administration or winding-up order is made or an administrator or receiver is appointed in relation to the Consultant;

(vi) the Consultant or the Individual commits any fraud or any acts that are materially adverse to the interests of the Company or its affiliates.

(d) The rights of the Company under Section 4(c) are without prejudice to any other rights that it might have at law to terminate the Agreement or to accept any breach of this Agreement on the part of the Consultant as having brought the Agreement to an end. Any delay by the Company in exercising its rights to terminate shall not constitute a waiver thereof.

(e) The provisions of Sections 5, 6, 7, 8 and 9 shall survive the expiration or termination of this Agreement, in accordance with their provisions.

5. Confidential Information.

(a) Any non-public information acquired by the Consultant from the Company or any Group Company, directly or indirectly, in writing, orally, or by inspection or observation of tangible items, including, without limitation, the actual or anticipated business, research or development of the Company or any Group Company, any proprietary information, trade secrets and know-how of the Company or any Group Company, and the terms of this Agreement, and any information, data and materials developed in the course of performing the Services contemplated by this Agreement (collectively, "***Confidential Information***"), will be the sole property of the Company and/or the Group Company, as applicable, and will be maintained in confidence and not used by the Consultant or the Individual except as necessary to perform the Services contemplated by this Agreement. Confidential Information includes, but is not limited to, intellectual property, research, product plans, business operations, processes, products, services, customer lists, development plans, inventions, formulas, technology, designs, drawings, marketing, finances, and other business information. Neither the Consultant nor the Individual will disclose any Confidential Information to any third party, without first obtaining the prior written consent of the Company or the Group Company, as applicable. Each of the Consultant and the Individual will take reasonable precautions to prevent any unauthorized disclosure of Confidential Information.

(b) The provisions of Section 5(a) will not apply to any portion of the Confidential Information that: (i) is or becomes publicly available through no fault of the Consultant; (ii) is lawfully obtained by the Consultant from any third parties who are not under any obligation of confidentiality to the Company or any Group Company with respect to such information and who otherwise have a right to make such disclosure; or (iii) is previously known to the Consultant, without confidentiality obligations, prior to disclosure by the Company or any Group Company as evidenced by the Consultant's written files and records. In addition, the Consultant may disclose Confidential Information pursuant to a request or order of any court or governmental agency, provided that the Consultant promptly notifies the Company or the Group Company, as applicable, of any such request or order and provides reasonable cooperation (at the Company's or Group Company's expense) in the efforts, if any, of the Company to contest or limit the scope of such request or order.

(c) Neither the Consultant nor the Individual shall improperly use or disclose to or for the Company's or any Group Company's benefit any confidential information or trade secrets of (i) any former, current or future employer, (ii) any person to whom the Consultant or the Individual has previously provided, currently provides or may in the future provide Services or (iii) any other person to whom the Consultant or the Individual owes an obligation of confidentiality.

(d) The Consultant and the Individual will promptly deliver to the Company or the Group Company, as applicable, upon the termination of this Agreement or upon the request of the Company or such Group Company, all documents and other tangible media (including all originals, copies, digests, abstracts, summaries, analyses, notes, notebooks, drawings, manuals, memoranda, records, reports, plans, specifications, devices, formulas, storage media, including software, and computer printouts) in the Consultant's and the Individual's actual or constructive possession or control that contain, reflect, disclose or relate to any Confidential Information, Inventions (as defined below) or intellectual property rights relating to Inventions. The restrictions upon disclosure and use of Confidential Information shall continue for a period of five (5) years from the expiration or termination of this Agreement.

6. Work Product.

(a) Each of the Consultant and the Individual hereby fully assigns and agrees to assign and transfer to the Company or the Group Company, as applicable, all rights, title and interest, in and to any ideas, inventions, improvements, technologies, designs, works of authorship, developments, discoveries, trade secrets or suggestions that (i) are made, conceived, invented, discovered, originated, authored, created, learned or reduced to practice by the Consultant or the Individual, either alone or together with others, in the course of rendering the Services to the Company or any Group Company, as applicable, under this Agreement (regardless of whether or not such Inventions were made, conceived, invented, discovered, originated, authored, created, learned or reduced to practice by the Consultant or the Individual at the Company's or the Group Company's facilities or during regular business hours or utilizing resources of the Company or the Group Company) or (ii) arise out of or are based upon any Confidential Information (collectively, "***Inventions***"), including, without limitation, all physical embodiments thereof provided by the Consultant or the Individual as well as all other rights therein throughout the world. The obligations of the Consultant and the Individual under this Section 6 are in addition to any other obligations or duties of the Consultant and the Individual, whether express or implied or imposed by applicable law, to assign to the Company or the Group Company, as applicable, the Inventions. Inventions that constitute trademark or copyrightable subject matter, including without limitation, terms, logos, branding or marketing collateral, packaging designs, promotional materials, business stationary or collateral, print or digital copy, artwork, and website design will be considered "works made for hire" as that term is defined in the United States Copyright Act.

(b) Each of the Consultant and the Individual will give the Company or the Group Company, as applicable, prompt written notice of any Inventions and agrees to execute such instruments of transfer, assignment, conveyance or confirmation and such other documents as the Company, the Group Company, or its respective designees may request to evidence, confirm or perfect the assignment of all of the Consultant's or the Individual's (as applicable) right, title and interest in and to any Inventions in all countries. The Consultant's and the Individual's obligation to provide assistance will continue after the termination or expiration of this Agreement. The Consultant and the Individual hereby waive and quitclaim to the Company and the Group Companies, as applicable, any and all claims of any nature whatsoever that the Consultant and the Individual may now or hereafter have for infringement of any rights assigned hereunder to the Company or any Group Company. Without the prior written consent of the Company or any Group Company, as applicable, neither the Consultant nor the Individual shall, at any time, file any patent or copyright application with respect to, or claiming, any Inventions.

(c) At the request of the Company or a Group Company, as applicable, the Consultant and/or the Individual will assist the Company or such Group Company (including, without limitation, by executing factually accurate patent applications and assignments of patents or copyrights) to obtain and enforce in any country in the world intellectual property rights relating to Inventions. If and to the extent that, at any time after the Term, the Company or a Group Company requests assistance from the Consultant and/or the Individual with respect to obtaining and enforcing in any country in the world any intellectual property rights relating to Inventions, the Company shall compensate the Consultant and/or the Individual at a reasonable rate for the time actually spent by the Consultant or the Individual on such assistance.

(d) Neither the Company's nor any Group Company's title in Inventions and intellectual property rights relating to Inventions shall extend to any pre-existing products, materials, tools and methodologies that are proprietary to the Consultant or the Individual or to any third parties; or in any intellectual property rights embodied in such products, materials, tools and methodologies by implication, estoppel or otherwise except for the rights expressly granted under this Agreement. Title to all such intellectual property shall remain vested in the Consultant, the Individual or any third party (as applicable). If in the course of performing the Services, the Consultant or the Individual incorporates into any Inventions any other work of authorship, invention, improvement, the Consultant's or the Individual's pre-existing products, or proprietary information, or other materials owned by the Consultant or the Individual or in which the Consultant or the Individual has an interest, the Consultant or the Individual, as applicable, will grant and does now hereby grant to the Company or the Group Company, as applicable, a non-exclusive, royalty free, perpetual, irrevocable, worldwide license to reproduce, manufacture, modify, distribute, use, import, and otherwise exploit the material as part of or in connection with the Inventions.

(e) If the Consultant's or the Individual's unavailability or any other factor prevents the Company or a Group Company from pursuing or applying for any application for any United States or foreign registrations or applications covering any related rights assigned to Company or a Group Company, then the Consultant or the Individual, as applicable, irrevocably designates and appoints the Company as the Consultant's or the Individual's agent and attorney in fact for such limited purpose. Accordingly, the Company may act for and in the Consultant's or the Individual's behalf and stead to execute and file any applications in conformance with the terms hereof, and to do all other lawfully permitted acts to further the prosecution and issuance of the registrations and applications with the same legal force and effect as if executed by the Consultant or the Individual, as applicable.

7. No Conflicting Obligation. Each of the Consultant and the Individual represents and warrants to the Company that (i) it is free to enter into this Agreement, (ii) it has and will have all requisite ownership, rights, and licenses to fully perform its obligations under this Agreement and to grant to the Company and the Group Companies, as applicable, all rights with respect to any related Inventions and rights to be granted under this Agreement, free and clear of any and all agreements, liens, adverse claims, encumbrances, and interests of any person or entity, (iii) nothing contained in the Inventions or required in order for the Consultant or the Individual to create and deliver the Inventions under this Agreement does or will infringe, violate, or misappropriate any intellectual property rights of any third party, (iv) no characteristic of any Invention does or will cause manufacturing, using, maintaining, or selling the Invention to infringe, violate, or misappropriate the rights of any third party, and (v) its performance of all of the terms of this Agreement and of all of its duties as a consultant to the Company or any Group Company do not and will not breach: (a) any agreement to keep in confidence information acquired by the Consultant or the Individual in confidence or in trust; (b) any agreement to assign to any third party inventions made by the Consultant or the Individual; or (c) any agreement not to compete against the business of any third party. Each of the Consultant and the Individual further represents that it has not made and will not make any agreements in conflict with this Agreement.

8. Non-Compete. It is accepted and acknowledged that the Consultant and the Individual may have employment, consultancy or business interests other than those of the Company and any Group Company and has declared any conflicts that are apparent at present. In the event that the Consultant or the Individual becomes aware of any potential conflicts of interest, these will be disclosed to the Company as soon as apparent. Each of the Consultant and the Individual agrees that it shall not provide services (whether in the nature of employment services, consulting services or otherwise) to any direct commercial competitor of the Company or any Group Company without the prior written consent of the Company for a period of six (6) months from the expiration or termination of this Agreement.

9. Miscellaneous.

(a) This Agreement represents the entire agreement of the Parties with respect to the arrangements contemplated hereby. No prior agreement, whether written or oral, shall be construed to change, amend, alter, repeal or invalidate this Agreement. This Agreement may be amended only by a written instrument executed in one or more counterparts by the Parties.

(b) No consent to or waiver of any breach or default in the performance of any obligations hereunder shall be deemed or construed to be a consent to or waiver of any other breach or default in the performance of any of the same or any other obligations hereunder. Failure on the part of either Party to complain of any act or failure to act of the other Party or to declare the other Party in default, irrespective of the duration of such failure, shall not constitute a waiver of rights hereunder and no waiver hereunder shall be effective unless it is in writing, executed by the Party waiving the breach or default hereunder. Exercise or enforcement by either Party of any right or remedy under this Agreement will not preclude the enforcement by the Party of any other right or remedy under this Agreement or that the Party is entitled by law to enforce.

(c) This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and permitted assigns. This Agreement may be assigned by the Company to any affiliate of the Company and to a successor of its business to which this Agreement relates (whether by purchase or otherwise). Neither this Agreement nor any rights under this Agreement may be assigned or otherwise transferred by the Consultant, in whole or in part, whether voluntarily or by operation of law, without the prior written consent of the Company. Any assignment in violation of the foregoing will be null and void.

(d) Any notice, report, payment or document to be given by one Party to the other shall be in writing and shall be deemed given when delivered personally or on the next business day after transmission (in the case of email delivery of a ".pdf" format data file (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party).

(e) This Agreement shall be governed by and construed in accordance with the laws of the Republic of Singapore, without reference to the principles of conflict of laws. All disputes concerning this Agreement will first be negotiated between the Parties in good faith. If the Parties are unable to settle any difference, dispute, conflict or controversy (a "**Dispute**"), which arises out of or in connection with this Agreement or its performance, including without limitation any dispute regarding its existence, validity, termination of rights or obligations of any party, then such Dispute shall be referred to and finally resolved by arbitration in Singapore in accordance with the Arbitration Rules of the Singapore International Arbitration Centre (**"SIAC")** in force at the time of referral of the Dispute (the "**Rules**"). The place of arbitration shall be Singapore and the proceedings shall be conducted in the English language. There shall be a single arbitrator and the appointing authority shall be the Chairman of the SIAC.

(f) Section headings of this Agreement are for reference only and shall not affect its interpretation. In the event that any term, condition or provision of this Agreement should be held invalid, unlawful or unenforceable by a court of competent jurisdiction, such court is hereby authorized to amend such provision so as to be enforceable to the fullest extent permitted by law, and all remaining provisions shall continue in full force without being impaired or invalidated in any way.

(g) The parties agree that any breach or threatened breach of Sections 5, 6 or 8 of this Agreement by the Consultant or the Individual would cause irreparable harm to the Company; and that money damages will not provide an adequate remedy. In the event of a breach or threatened breach of Sections 5, 6 or 8 of this Agreement by the Consultant or the Individual, the Company shall, in addition to any other rights and remedies it may have, be entitled to an injunction restraining the Consultant or the Individual from disclosing or using, in whole or in part, any Confidential Information or Inventions or intellectual property rights relating to Inventions, without the need to post bond.

(h) This Agreement may be executed in counterparts, all of which together shall for all purposes constitute one agreement binding on each of the parties hereto notwithstanding that each such Party shall not have signed the same counterpart.

[Signature page follows]

IN WITNESS WHEREOF, the Parties have signed this Agreement as of the Effective Date intending it to take effect as an instrument under seal.

SINGAPORE VOLITION PTE LIMITED

/s/ Rodney Rootsaert
By: Rodney Rootsaert
Position: Director
Date: November 10, 2020

Notice Address
1 Somerset Road, #03-03, TripleOne Somerset, Singapore 238164

E-Mail:

PB COMMODITIES PTE LTD

/s/ Cameron Reynolds
By: Cameron Reynolds
Position: Director
Date: November 10, 2020

Notice Address
165 Gangsa Road,
Unit 01-70,
Singapore, 670165

E Mail:

Acknowledged and agreed:

INDIVIDUAL

/s/ Cameron Reynolds
Cameron Reynolds

Exhibit A

Scope of engagement: Consultant

Services to be performed:

During the Term the Consultant shall procure that the Individual shall be responsible for all areas that would be expected from a Group Chief Executive Officer, as reasonably and lawfully directed by the Board of Directors of VNRX.

Consulting Fee:

Fees:	From the Effective Date the Monthly Fee shall be US$35,650 payable by the Company to the Consultant, based on the Individual spending all of his Normal Working Hours (as defined below) in the performance of the Services. Between the Effective Date and December 31, 2021, the Monthly Fee shall be payable in Singapore Dollars which as at the Effective Date shall be SGD48,450. With effect from January 1, 2022, and annually thereafter, the Consultant will elect, within fifteen (15) days of the first day of each calendar year respectively, to either (i) continue to be paid the Monthly Fee in Singapore Dollars, calculated at the currency conversion rate as quoted by Oanda.com as at the close of business on the last business day of the calendar year; or (ii) be paid the Monthly Fee in US Dollars.
Payment terms:	The Monthly Fee shall be payable to the account nominated by the Consultant in accordance with the Company's normal payment practices. "Normal Working Hours" means a minimum of a forty hour week, Monday through Friday, excluding public holidays in the Republic of Singapore.

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Cameron Reynolds, certify that:

1. I have reviewed this quarterly report on Form 10-Q of VolitionRx Limited;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 12, 2020

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

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, David Vanston, certify that:

1. I have reviewed this quarterly report on Form 10-Q of VolitionRx Limited;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 12, 2020

/s/ David Vanston
David Vanston
Chief Financial Officer and Treasurer

Exhibit 32.1

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

The following certifications are hereby made in connection with the Quarterly Report on Form 10-Q of VolitionRx Limited (the "Company") for the quarterly period ended September 30, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"):

I, Cameron Reynolds, President and Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge, (i) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented.

Date: November 12, 2020

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

I, David Vanston, Chief Financial Officer and Treasurer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge, (i) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented.

Date: November 12, 2020

/s/ David Vanston
David Vanston
Chief Financial Officer and Treasurer