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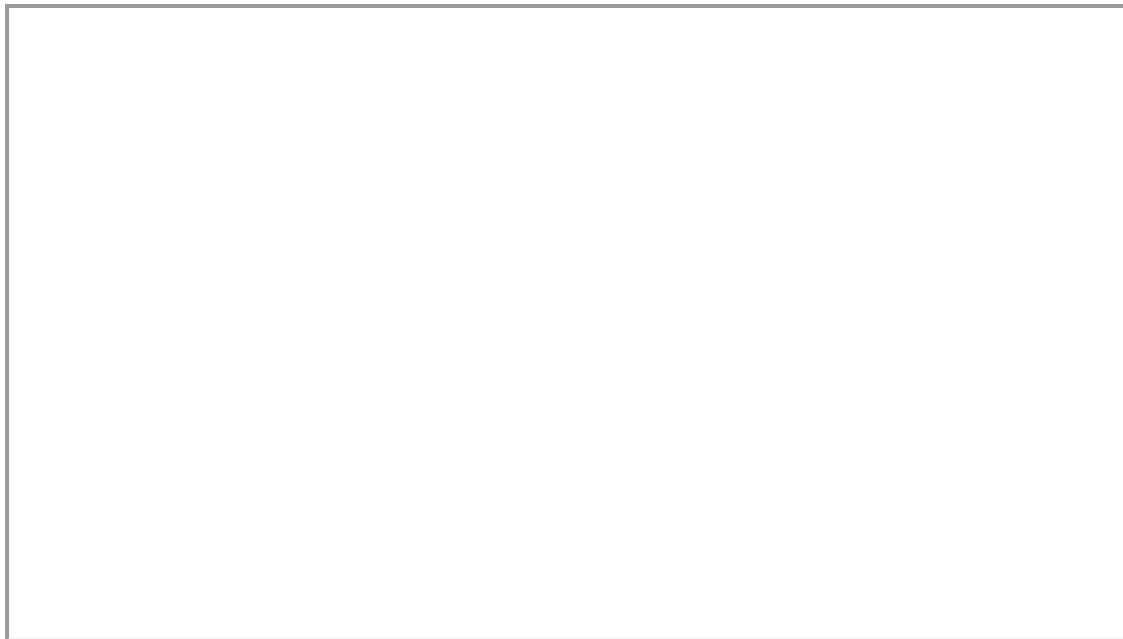


# Volition Announces Promising Clinical Trials Results for its Novel COVID-19 Triage Test

AUSTIN, Texas, July 14, 2020 /PRNewswire/ -- VolitionRx Limited (NYSE AMERICAN: VNRX) ("Volition"), a multi-national epigenetics company applying its Nu.Q™ Nucleosomics™ technology to develop simple, cost effective blood-based tests for cancer and other diseases, today announced that results from two proof of concept clinical studies using its Nu.Q™ assays have been submitted for peer review and will be available on BIORXIV.ORG shortly. *"Circulating Nucleosomes as potential prognostic markers for COVID-19 disease severity"* .

Commenting on the results, corresponding author Professor Stefan Holdenrieder, Director of the Institute of Laboratory Medicine, German Heart Center, Munich, Germany said, "We tested two independent cohorts of COVID-19 positive patients with quantitative nucleosome immunoassays and found that nucleosomes were highly elevated in plasma of severe COVID-19 patients relative to healthy control subjects and that both histone 3.1 variant and citrullinated nucleosomes increased with disease severity. Given that the highest levels of nucleosomes were found in patients requiring artificial ventilation or extracorporeal oxygenation, we believe that nucleosomes could serve as a guiding biomarker for disease severity in COVID-19 positive patients."

Cameron Reynolds, Chief Executive Officer of Volition commented, "Nu.Q™ has shown correlation with more severe COVID-19 cases implying strong prognostic potential, and we are now focused on the completion of larger longitudinal studies that would be needed to support a potential COVID-19 product launch. If we continue to see positive results in these longitudinal studies, we aim to have a CE-marked product available on multiple platforms in 2020 and will look to launch a low-cost product that could be used in any laboratory worldwide as soon as possible thereafter."



The studies, conducted at University Hospital Liege, Belgium and the German Heart Center in Munich, Germany aimed to confirm whether circulating nucleosomes could serve as a potential prognostic marker for COVID-19 disease severity. Early identification and triaging of patients tested positive for COVID-19 who are the most likely to deteriorate and need critical care would enable both improved outcomes for patients and a more efficient use of critical care resources for healthcare providers. Volition believes that this is still very much an unmet need worldwide in fighting the impact of the pandemic.

Volition's goal is to develop a prognostic test with nucleosomes as a biomarker to provide early insight into which COVID-19 positive patients require higher levels of monitoring including hospitalization and critical care resources, versus those who are less likely to develop serious symptoms.

"Whilst cancer remains our core disease focus, these results demonstrate the versatility of the Nu.Q™ platform and the range of applications for which these products can be leveraged to help increase diagnostic power. I am hopeful that our Nu.Q™ epigenetic toolbox may have potential to help doctors and patients in the COVID-19 pandemic" commented Dr. Jake Micallef, Chief Scientific Officer of Volition. "I believe it may also be helpful in other respiratory viral outbreaks including influenza and pneumonia, particularly given that current COVID tests are specific to strain or disease, whereas Nu.Q™ is not. I am also pleased that the Nu.Q™ test kits used by the teams in Liege and Munich performed extremely well on their own laboratory equipment. This bodes well for use of the kit in any future laboratory setting."

**For further details please contact [mediarelations@volition.com](mailto:mediarelations@volition.com)**

### **The Science Behind Nu.Q™ and COVID-19**

Volition announced in April 2020 that it was actively developing a COVID-19 triage test and had filed a novel patent for the utilization of its Nu.Q™ epigenetic platform for the triaging of COVID-19 diagnosed individuals. Preliminary study results reported in May 2020

demonstrated an Area Under the Curve (AUC) for a single Nu.Q™ assay of 98.7% patients diagnosed as COVID positive following a polymerase chain reaction (PCR) test, versus control subjects with a sensitivity of 100% at 94% specificity.

White blood cells help protect the body against infection. White cells engulf invading viruses and bacteria and produce antibodies against them. In addition, white cells also eject chromatin material out of the cell to form Neutrophil Extracellular Traps (NETs) which catch and trap invading viruses. In a respiratory infection, white cells migrate to the lungs to protect them from the virus.

However, Severe acute respiratory syndrome (SARS) and pneumonia are associated with an inappropriate hyperinflammatory response to the virus involving massive ejection of NETs into the blood by white blood cells which is highly damaging to the lungs. The ejected NETs material is made up of nucleosomes that can be detected in minute quantities using Volition's Nu.Q™ nucleosome assays which Volition believes may, therefore, predict the progression of SARS-CoV-2 pneumonia and complications including Acute Respiratory Distress Syndrome (ARDS) in COVID-19 patients.

Volition has not yet successfully developed a triage test for COVID-19 and is in investigational stages only.

## **About Volition**

Volition is a multi-national epigenetics company developing simple, easy to use, cost effective blood tests to help diagnose a range of cancers and other diseases. Early diagnosis has the potential to not only prolong the life of patients, but also to improve their quality of life. The tests are based on the science of Nucleosomics™, which is the practice of identifying and measuring nucleosomes in the bloodstream or other bodily fluid - an indication that disease is present. Volition is primarily focused on human diagnostics but also has a subsidiary focused on animal diagnostics.

Volition's research and development activities are centered in Belgium, with additional offices in Texas, London and Singapore, as the company focuses on bringing its diagnostic products to market.

For more information about Volition, visit Volition's website [volition.com](http://volition.com) or connect with us via:

Twitter: <https://twitter.com/volitionrx>

LinkedIn: <https://www.linkedin.com/company/volitionrx>

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## Safe Harbor Statement

Statements in this press release may be "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, that concern matters that involve risks and uncertainties that could cause actual results to differ materially from those anticipated or projected in the forward-looking statements. Words such as "expects," "anticipates," "intends," "plans," "aims," "targets," "believes," "seeks," "estimates," "optimizing," "potential," "goal," "suggests," "could," "would," "should," "may," "will" and similar expressions identify forward-looking statements. These forward-looking statements relate to the timing of the publication and availability on BIORXIV.ORG of the results from the preliminary trials with the University Hospital of Liège, Belgium and the German Heart Centre, the timing of and the results from any additional trials, the effectiveness of Volition's blood-based diagnostic tests in predicting the progression of complications in COVID-19 and patients with other respiratory diseases, as well as Volition's ability to develop and successfully commercialize such test platforms for accurate stratification of COVID-19 patients and the timing of certification and commercialization of such products. Volition's actual results, and the timing of events, may differ materially from those indicated in or implied by these forward-looking statements due to numerous risks and uncertainties including, without limitation, results of studies testing the efficacy of its COVID-19 triage test; regulatory clearances or approvals necessary prior to commercialization of its COVID-19 triage test; marketplace acceptance of its COVID-19 triage test; and its ability to secure adequate intellectual property protection. These statements are based on current expectations, estimates and projections about Volition's business based, in part, on assumptions made by management. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. Additional risks include, among others, Volition's failure to develop and commercialize diagnostic products generally, which could result in an inability to execute its plan of operations, the highly competitive environment in which Volition will be competing and resulting rapid product obsolescence, downturns in domestic and foreign economies, and other risks identified in Volition's most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, as well as other documents that Volition files with the Securities and Exchange Commission. Forward-looking statements are made as of the date of this release, and, except as required by law, Volition does not undertake an obligation to update its forward-looking statements to reflect future events or circumstances.

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