

VolitionRx To Present First Data on Nu.Q™ Capture Performance and Nu.Q™ Assay Performance in Lung Cancer and Blood Cancer at the 2020 ASCO Annual Meeting

AUSTIN, Texas, May 13, 2020 /PRNewswire/ -- VolitionRx Limited (NYSE AMERICAN: VNRX) ("Volition"), an epigenetics company developing simple, easy to use and cost effective blood tests to help diagnose a range of cancers, will present three abstracts at the 2020 ASCO Annual Meeting.

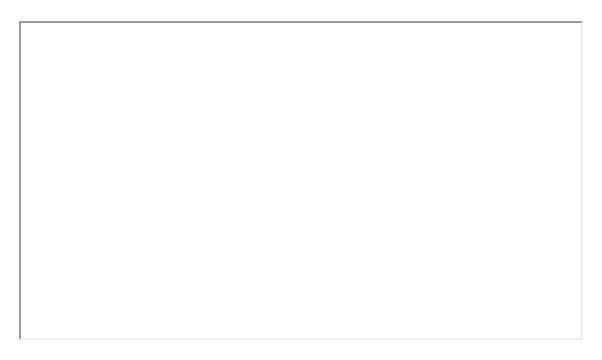
The first abstract presented announces initial data demonstrating the ability of Volition's sample-enrichment tool, Nu.Q[™] Capture, to separate short and long nucleosomes in clinical colorectal cancer samples to enable the concentration of tumor-derived nucleosomal markers prior to analysis. The other two abstracts presented provide new performance data for Volition's Nucleosomics[™] Nu.Q[™] technology in the early detection of lung cancer and blood cancer.

E13534: Enrichment of circulating tumor DNA from cell free DNA of Hematopoietic origin

Data from this pilot study, the first published results for Volition's Nu.Q™ Capture program, showed that Nu.Q™ Capture technology successfully demonstrated enrichment of circulating tumor nucleosomes and tumor DNA ("ctDNA"). The data clearly showed the separation of short and long nucleosomes from both cancer cell lines in a laboratory setting, and in clinical colorectal cancer patients versus healthy controls.

Dr. Mark Eccleston, Business Development Director and a founding scientist at Volition, said: "Effective removal of most 'healthy/long' nucleosomes creates an enriched sample allowing for more accurate measurement of cancer nucleosomes. Similarly, the removal of most 'healthy/long' nucleosome-associated DNA can also enhance detection of cancer using ctDNA technologies. These data are a really positive sign of the potential of Nu.Q™ Capture as a valuable tool to enable improved and earlier detection of cancer."

For more information about this abstract please watch this short video: https://youtu.be/ypzzfpnvC5w



E15542: Performance of a Nu.Q™-H3.1 assay for lung cancer detection

This study, conducted in conjunction with Dr. Anne Sibille and team of Liege University Hospital, Belgium, aimed to assess the performance of a Nu.Q[™] assay in discriminating both between lung cancer and healthy controls, and between lung cancer and Chronic Obstructive Pulmonary Disease ("COPD").

A pilot study of 142 subjects demonstrated that Nu.Q™ assays could not only discriminate lung cancer versus healthy controls with an Area Under the Curve ("AUC") of 88%, but also between lung cancer and COPD with an AUC of 85%. The AUC is an industry accepted measure of the effectiveness of an assay whereby 100% is the most accurate.

Commenting on this study, Dr. Marielle Herzog, Research and Development Director at Volition, said: "Lung cancer is not only the most prevalent cancer, but it is also the most deadly, responsible for over 1.75 million deaths worldwide each year. Its diagnosis currently relies on invasive methods and often occurs at a late stage of disease, explaining its poor outcome. Our hope is that a blood-based test could aid earlier diagnosis. Based on these encouraging results, we believe further studies with larger numbers of patients should be performed to confirm and validate the usefulness of these biomarkers and models."

E20078: Circulating nucleosomes in hematological malignancy

This pilot study investigated the circulating levels of intact nucleosomes containing the histone H3.1 isoform (Nu.Q[™]-H3.1) in a variety of solid tumors including Non Hodgkin Lymphoma ("NHL"), Acute Myeloid Leukemia ("AML"), Acute Lymphocytic Leukemia ("ALL"), and in healthy subjects.

The results showed elevated levels of Nu.Q[™]-H3.1 in patients diagnosed with cancers. Only 14 of 271 patients with a solid tumor had levels >200ng/ml. In contrast, the median Nu.Q[™]-H3.1 levels observed for patients with NHL, AML and ALL were 276, 284 and 585ng/ml, respectively. The median nucleosome level in 62 healthy subjects was 40ng/ml and the highest level was 198ng/ml. The Area Under the Curve ("AUC") for all patients diagnosed with NHL, AML or ALL (n=54) vs healthy subjects was 91% with a sensitivity of 74% at 95% specificity.

Lead author, Dr. Jason Terrell, Chief Medical Officer at Volition, commented: "Elevated nucleosome levels have been reported for a number of diseases. These encouraging early results indicate that levels of Nu.Q™-H3.1 are particularly elevated in haematological cancers. These data show that Nu.Q technology may be a useful diagnostic tool warranting further study."

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Abstracts will be available to view starting at 5:00 pm ET on May 13, 2020 on the ASCO Meeting Library.

For further details please contact mediarelations@volition.com

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 <u>volition.com</u> or connect with us via:

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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 effectiveness of Volition's bloodbased diagnostic tests as well as Volition's ability to develop and successfully commercialize such test platforms for early detection of cancer and other diseases. Volition's actual results may differ materially from those indicated in these forward-looking statements due to numerous risks and uncertainties, including, without limitation, results of studies testing the efficacy of its tests. For instance, if Volition fails to develop and commercialize diagnostic products, it may be unable to execute its plan of operations. Other risks and uncertainties include Volition's failure to obtain necessary regulatory clearances or approvals to distribute and market future products in the clinical IVD or the veterinary market; a failure by the marketplace to accept the products in Volition's development pipeline or any other diagnostic products Volition might develop; Volition's failure to secure adequate intellectual property protection; Volition will face fierce competition and Volition's intended products may become obsolete due to the highly competitive nature of the diagnostics market and its rapid technological change; 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. 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. 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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