

VolitionRx Finds Simple Blood Test Detects 85% of Colorectal Cancers and Over 50% of Polyps

Research released this week at the Clinical Genomics and Informatics Europe Conference in Portugal

NAMUR, Belgium, Dec. 2, 2013 /PRNewswire/ -- VolitionRx Limited (VNRX:OB), a life sciences company focused on developing blood-based diagnostic tests for different types of cancer, today releases new data showing that when combining two of its proprietary NuQ® assays into one test, they can achieve 85% detection rates at 85% specificity for colorectal cancer. The data also shows that Volition's two-assay test can detect more than 50% of precancerous polyps. These new findings come from its ongoing prospective study with CHU Dinant Godinne | UCL Namur Hospital in Belgium.

Earlier this month, VolitionRx presented preliminary data from a 90 patient independent trial, later confirmed in a further 113 patients, at University Hospital Bonn in Germany. This data demonstrated 75% detection rates at 70% specificity when using a single NuQ assay. The Belgian team confirmed these results using the same single assay, but when combining it with another nucleosome biomarker they achieved even better results. They have now analysed 39 patients' samples from the ongoing prospective trial which includes both healthy patients and patients with benign colon disorders.

"This increased detection rate confirms our original hypothesis that combining nucleosomes increases the accuracy of the test," comments Dr. Jake Micallef, Chief Scientific Officer of VolitionRx. "We hope to further increase the sensitivity and specificity by adding more biomarkers and developing a larger panel of nucleosome tests."

Current diagnostic screening practices for colorectal cancer vary globally, from inviting at-risk groups to submit faecal occult blood tests to offering regular investigative colonoscopies. Unfortunately studies show compliance rates of between 30-60%^[i] for faecal blood tests, likely due to the uncomfortable nature of the test. Meanwhile, a US study found that less than 40%^[ii] of people who were offered a colonoscopy screening actually attended.

Encouragingly, uptake of diagnostic blood tests is much higher, with one study showing annual prostate cancer screening compliance at higher than 80%^[iii]. When VolitionRx's NuQ blood test is made publically available, higher uptake could be very likely. Additionally, if the research team continue to identify at least 50% of polyps this could also have vast implications for diagnosing earlier-stage colorectal cancers.

Professor Hans Jorgen Nielsen, Professor of Surgical Oncology at Hvidovre Hospital in Denmark, recently expanded his prospective study evaluating VolitionRx's NuQ panel as a colorectal cancer screening tool. He comments, "The 85% detection rate seen in this latest

research is on par with rates achieved by faecal occult blood tests. If we could improve screening compliance by offering the public a simple, less intrusive test that is just as accurate, we could detect even more colorectal cancer cases in the earlier stages and survival rates could drastically improve."

This test has the potential to become a global first choice diagnostic tool, replacing faecal occult blood tests and preventing unnecessary colonoscopies around the world. The company hopes to apply for CE mark early next year and FDA approval roughly a year later.

Colorectal cancer is the third most prevalent cancer and fourth most common cause of cancer death worldwide.

About VolitionRx

VolitionRx is a life sciences company focused on developing blood-based diagnostic tests for different types of cancer. The tests are based on the science of Nucleosomics which is the practice of identifying and measuring nucleosomes in the bloodstream – an indication that cancer is present.

VolitionRx's goal is to make the tests as common and simple to use, for both patients and doctors, as existing diabetic and cholesterol blood tests. VolitionRx's research and development activities are currently centred in Belgium as the company focuses on bringing its diagnostic products to market first in Europe, then in the US and ultimately, worldwide.

Visit Volition's website (<u>www.volitionrx.com</u>) or connect with us via <u>Twitter</u>, <u>LinkedIn</u> or Facebook.

Safe Harbor Statement

Statements in this press release may be "forward-looking statements". Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates," "optimizing," "potential," "goal," and similar expressions, as they relate to the Company, its business or management, identify forward-looking statements. These statements are based on current expectations, estimates and projections about the Company'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. Actual outcomes and results may, and probably will, differ materially from what is expressed or forecasted in such forward-looking statements due to numerous factors, including those described above and those risks discussed from time to time in the Company's filings with the Securities and Exchange Commission.

SOURCE VolitionRx Limited

[[]i] Numerous study links available on request.

[[]ii] Arch Intern Med. 2012;172(7):575-582. doi:10.1001/archinternmed.2012.332.

[[]iii] BJU Int. 2008 Dec;102(11):1524-30. doi: 10.1111/j.1464-410X.2008.08214.x.