

## First VolitionRx Study Data Presented at CNAPS, Baltimore

## Initial study results demonstrate detection rate of 75% for colorectal cancer

BALTIMORE, Nov. 7, 2013 /PRNewswire/ -- <u>VolitionRx Limited</u> (OTC: VNRX), a life sciences company focused on developing blood-based diagnostic tests for different types of cancer, today announces the publication of preliminary data from an ongoing independent trial of one of its NuQ® assays. Priv.-Doz. Dr. Stefan Holdenrieder will present a poster at the eighth CNAPS (Circulating Nucleic Acids in Plasma and Serum) congress in Baltimore, MD, USA, showing results from his third party study into the effectiveness of a single NuQ assay for detecting patients with colorectal cancers.

Dr. Stefan Holdenrieder, who coordinated the trial, is based at the Institute of Clinical Chemistry and Clinical Pharmacology at University Hospital Bonn, Rheinische Friedrich-Wilhelms-Universitat Bonn. He is an expert in the field of circulating nucleosomes, and is widely published, having authored over 70 journal papers and several patents. Some example relevant publications may be found in the notes below\*.

The results from the 90 patient study demonstrate that Volition's NuQ-5mc assay was able to detect 75% of patients with colorectal cancer (CRC) at 70% specificity compared to healthy samples. The results were validated in a second set of 113 people.

"These initial results are a promising indicator that blood based methylation levels are a valuable biomarker in the diagnosis of colorectal cancer," Dr Holdenrieder commented. "The sensitivity and specificity achieved in the NuQ-5mc trial is comparable to other single-biomarker cancer diagnostic tests such as the widely adopted PSA for prostate cancer."

"To get such encouraging results from a single assay gives us a solid platform to build on in our larger trials with multiple markers," said Dr Jake Micallef, Chief Scientific Officer of VolitionRx. "Our approach is to combine two or more assays, which have shown differentiation independently from our current suite of 21 validated NuQ® biomarkers, with the aim of significantly higher sensitivity and specificity than from single markers alone. This initial data is the first in a series of trials currently underway for colorectal cancer diagnosis. In addition to these exciting results from Bonn, we expect to be able to report on our ongoing trials in Mont Godinne (Belgium) later in the year and the completion of the first 1000 patients of our pivotal Danish study Q1 2014."

The poster abstract and a PDF of the poster is available on VolitionRx's website at: <a href="http://volitionrx.com/technologies-abstracts-papers-posters.html">http://volitionrx.com/technologies-abstracts-papers-posters.html</a>

The full results and methodology of the study have been submitted for publication.

Volition is carrying out several further clinical trials on the effectiveness of the NuQ assays as a cancer diagnostic tool:

- 3 ongoing multi-cancer studies at University Hospital in Bonn, Germany; including an 800 patient retrospective study and a 2,000 patient prospective study that involves patients with the 20 most prevalent cancers
- A 250 patient study into colorectal cancer at CHU-UCL Mont Godinne Hospital, Belgium
- A 4,800 patient retrospective study and a 6,000 patient prospective study into colorectal cancer at Hvidovre Hospital, University of Copenhagen, Denmark.

## \*Some of Dr Holdenrieder's notable publications:

- Holdenrieder et.al., "Nucleosomes in serum of patients with benign and malignant diseases" International Journal of Cancer. Volume 95, Issue 2, pages 114–120, 20 March 2001.
- Holdenrieder et.al., "Circulating Nucleosomes Predict the Response to Chemotherapy in Patients with Advanced Non–Small Cell Lung Cancer" Clin Cancer Res September 15, 2004 10: 5981.
- Holdenrieder et al., "Nucleosomes, ProGRP, NSE, CYFRA 21-1 and CEA in the therapy monitoring of small-cell lung cancer during first-line chemotherapy" Clin Cancer Res 2008; 14: 7813-7821.
- Holdenrieder S, Stieber P., "Clinical use of circulating nucleosomes" Crit Rev Lab Med Sci 2009; 46: 1-24.
- Fahmuller, Holdenrieder., "Predictive and prognostic value of circulating nucleosomes and serum biomarkers in patients with metastasized colorectal cancer undergoing Selective Internal Radiation Therapy." BMC Cancer 2012 Jan 4;12:5. doi: 10.1186/1471-2407-12-5.

## 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 <u>Facebook</u>.

Forward-Looking Statements: 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.

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