A Drop of Blood to Detect Cancer

> Wallonian researchers from VolitionRx developing an innovation in medical science
> Company has listed on stock exchange in Wall Street

A drop of blood to diagnose cancers! This is the revolutionary principle that’s being developed in Wallonia. Behind the concept is VolitionRX, a company with a research center based in Namur. All of the Wallonians taking part in this adventure were present last week in New York as VolitionRX listed to the stock exchange in Wall Street.

Can Wallonian knowledge achieve prowess in cancer screening? VolitionRX is based in Wallonia to develop a revolution in medical science. “We are working on a test which would allow us to diagnose early-stage cancer”, says Marielle Herzog, lead scientist at Belgian Volition. “Our main objective is the creation of a non-invasive blood test which is sensitive and cost-effective.”

A SIMPLE DROP OF BLOOD
A small drop of blood, using the system developed by VolitionRX, detects the presence of a cancerous tumor in the body.
“As the tumor develops, there is cellular proliferation, but also cell death”, explains Marielle Herzog. “At the moment of death, the cells “release” into the blood parts of the cells, to be recycled. Among this content, we can find markers which are specific to cancer. Our principle is simple: it is possible to analyze the blood using an immunoassay. By doing this, we can understand the specific structures, from drawn blood, which were released by the cancerous cells.”

The final idea of the scientists of VolitionRX is a simple blood test which could potentially, through a single blood draw, detect what type of cancer the patient has.
“At the moment, our tests are still being clinically validated,” adds Marielle Herzog. “Our most advanced project focuses on colorectal cancers. A clinical study taking place in Copenhagen in Denmark, on 4800 subjects has given us promising early results.”

But the VolitionRX team is not only working on colorectal cancer. The team is also working on cancers such as lung, prostate and pancreatic. The technology is less expensive than a scan and more easily acceptable than any analysis of blood stool samples.
“With our Nucleosomics technology platform, we have developed 20 to 25 different biomarkers. Today, our work is focused on testing them all together to find which are most relevant for early diagnosis.”

UNTIL NEW YORK
If the actual research is taking place in Wallonia, the VolitionRX adventure is truly international.
“The technology came from an English company which is developing treatments for cancer,” explains Gaetan Michel, Chief Operating Officer of Belgian Volition. “Thanks to the Walloon region, we obtained a grant of €1.4 million to establish the company in Belgium, in Namur. Belgian Volition, the Belgian subsidiary, was created in October 2010. The work in the laboratory began in May 2011. The location is ideal from a logistical point of view. Moreover, Wallonia and the l’Agence wallonne à l’exportation [the Wallonia Export Agency] has helped us enormously.”

The company has already benefited from foreign investors, and listed to the stock exchange in New York [the NYSE MKT] in February. The whole team from this small company was present this Thursday to ring the famous Wall Street stock exchange’s closing bell.
“Why the New York Stock Exchange and not Brussels? Because here, there are more investors ready to invest in more risky businesses,” explains Gaetan Michel.

NEXT STEPS
There is still work to be done: “We would like, by the end of 2015, to have CE marked the first biomarkers,” concludes Gaetan Michel. “Now, we will begin to canvass each country, to introduce the tests and to meet with the organizations in charge of reimbursement. We hope to reach this stage in 2016 or 2017. We will begin in Europe, targeting Belgium, Germany, France or Denmark. Following that there will be the United States and Asia…”!