



Thanks to EU funds, the company MultiplexDX kicked off a revolution in cancer testing

Time and accuracy. These are crucial when treating one of the most serious and frightening diseases: cancer. And that's just what we will get in a few years, thanks to the Slovak start-up MultiplexDX, which has developed a unique, nearly 100% accurate method of diagnosing breast cancer. Thanks to support from the Enterprise Europe Network, the largest global network supporting small and medium-sized enterprises (SMEs), and with EU co-financing and a grant from the EIC Accelerator programme, the test will be available to patients very soon.

While MultiplexDX currently operates in Bratislava, the company's story started more than 6,800 kilometres away, in New York. When working at Rockefeller University there, biochemist Pavol Čekan developed an innovative method of diagnosing breast cancer. He decided to found a start-up together with fellow Slovak scientist Vladimír Wolf in late 2015 – early 2016. And since both had long wanted to return home, the development of the revolutionary test was relocated to Slovakia.

While the accuracy of current breast cancer tests ranges from 50 to 90%, the method developed by Pavol Čekan brings this figure up to 98%. “The method is based on the fact that we were the first to use two technologies in a single test. First, the biomarkers in the tissue are quantified. Then precisely that part of the cancerous tissue which is important for diagnostics and adjusting the treatment is resected. This tissue is triturated, then sequenced, and then the biomarker quantification are compared, resulting in cross-validation. And all of this is done in a single test,” Čekan explains.

Expert advice on applying for a grant was provided by the Enterprise Europe Network

The founders of MultiplexDX knew that they would need financing if they wanted to finish developing the new method and get it to the patients. Ever since they founded the start-up, they had been trying to obtain a prestigious grant from the EIC Accelerator programme. After several unsuccessful attempts, they received help with the application from Ivan Filus, a senior consultant at Business and Innovation Centre Bratislava (BIC Bratislava), a partner organisation of the Enterprise Europe Network. With 3,000 experts from more than 600 member organisations based in 60 countries all over the world, the network is a valuable source of support for small and medium-sized enterprises (SMEs) in gaining access to financing and partnerships within the EU.

“We provided MultiplexDX with advice focusing on the formal and administrative accuracy of the proposal that they prepared. These proposals are highly complex and have specific evaluation criteria. Based on these proposals, we then tried to improve the proposal to make it as successful as possible,” explains Ivan Filus.

Since the competition is fierce and the demands are high, MultiplexDX obtained its 2.5 million only on the tenth attempt. However, Pavol Čekan does not see this as a negative – quite the contrary. Each time the proposal went back to the drawing board, the company itself improved and grew.

“We took advantage of each draft to identify potential to grow the company. That way, we also progressed our business plan together with the grant application. Firstly we added new goals,

then we took on new people and decided to upgrade our product,” explains Čekan.

And it was precisely the business part of the proposal that the Enterprise Europe Network, represented by Ivan Filus, helped them with. What’s more, in Pavol Čekan’s words, being put into contact with experts was a big help to them. Based on advice from an Austrian expert, they created an “oncological chain” of all potential partners – from patient organisations, hospitals and ecologists to insurance providers and pharmaceutical companies. “We received a certificate of support from all of them and showed that we have supporters all over the world – in Switzerland, Germany, the Netherlands, the USA, Norway and many other countries. After that, we were awarded the grant,” Čekan adds.

The Enterprise Europe Network also gained access to new partners and experts in the industry

The Enterprise Europe Network is currently helping to arrange consultation from the best experts in the field during project implementation. MultiplexDX also received innovation coaching as part of the grant package. “Based on a company analysis, we chose a set of the most suitable coaches, MultiplexDX was selected and we are currently putting together a coaching plan,” explains Filus.

The coach is an expert in the field of cancer diagnostics and will be helping MultiplexDX to arrange the final phase of the project: launch onto the market. The coaching took a total of twelve days and at least two experts from different countries will be assigned to them. “So with MultiplexDX, we see that there will again be fields in which they will need help in the future, and we will aid them in selecting and arranging coaching from a second expert as well,” concludes Filus.

MultiplexDX will launch the new cancer test onto the market in about 3 years. Until then, MultiplexDX knows that it can count on the help of the Enterprise Europe Network.

Disclaimer

The interviews with the SME owners and the Enterprise Europe Network were concluded before the outbreak of the COVID-19 pandemic, which led to a difficult situation for many European businesses.

Since the outbreak of the pandemic, the European Union has launched a close partnership with member states in order to support the economy and protect businesses such as MultiplexDX and is introducing supportive measures and COVID-19 recovery plans. Read more on the [coronavirus response](#) and the [coronavirus recovery plan for Europe](#).

About the Enterprise Europe Network

The Enterprise Europe Network is the largest network for supporting small and medium-sized enterprises (SMEs) with multi-national ambitions. It brings together more than 600 member organisations in more than 60 countries and provides them with advice and support in order to help SMEs to expand, gain access to financing, understand EU statutory regulations and find business partners both inside and outside of Europe. The European Commission launched the Enterprise Europe Network in 2008. It is co-financed as part of the EU’s [Competitiveness of Enterprises and Small and Medium-Sized Enterprises programme](#) (COSME).

Further information: www.een.sk