

Nano Science, Technology and Industry Scoreboard

RUBYnanomed One of 65 Innovative Start-ups and SMEs to Receive €363 Million EIC Funding

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RUBYnanomed, a spin-off from INL - International Iberian Nanotechnology Laboratory, is one of 65 European SMEs that will receive €363 million to accelerate the development of unique solutions in areas such as healthcare and biotechnology through the support of the EIC Accelerator program from the European Innovation Council.

RUBYnanomed was founded by three female scientists from the International Iberian Nanotechnology Laboratory (INL) to bring to hospitals the first non-invasive device for continuous monitoring and personalized diagnosis during the evolution of breast cancer, through the isolation and analysis of circulating tumour cells in patients blood samples.

Currently, cancer patients are monitored using diagnostic imaging technologies such as MRI. These technologies have a limited degree of sensitivity and do not provide up-to-date molecular information that can guide oncologists for early detection of metastatic disease and personalized treatment selection, leading to 75% of treatments in a metastatic setting being ineffective.

RUBYnanomed developed the RUBYchipTM, a microfluidic device capable of capturing very efficiently circulating tumor cells – responsible for metastatic lesions. This liquid biopsy tool allows - through blood samples - to study the progression of the disease with a high degree of sensitivity and provide the oncologist with up-to-date information that allows for tailoring and customizing the treatment for each patient.

According to Lorena Diéguez, CEO of RUBYnanomed and Group Leader of Medical Devices research group at INL, <u>EIC Accelerator</u> support is a turning point for RUBYnanomed's technology. "We will be able to move forward with registered clinical trials to certify the technology as an in-vitro diagnostic tool for monitoring breast cancer metastases and treatment response. This will save 24 billion euros wasted on inefficient treatment costs and improve the lives of 700,000 people across Europe".

Currently, RUBYnanomed is already conducting preclinical trials in five different types of cancer in 8 European hospitals. The results have shown that the technology is capable of detecting the progression of metastasis up to a year before current technologies.

Launched in March 2021, the EIC Accelerator program, provides financing and supports investment to start-ups and SMEs to develop and explore high-impact solutions through the EIC Fund.

Read the <u>original article</u> on International Iberian Nanotechnology Laboratory (INL).