

A CIC bioGUNE project on biomarkers in prostate cancer screening is granted EU funding for its launch onto the market

The European Research Council provides the project with EUR 150,000 to speed up its transition from laboratory to commercialisation

The CIC bioGUNE project has been selected alongside 43 other research studies

The study reveals that PGC1A functions as a switch that turns off the metabolism associated with prostate cancer cell growth

(Bilbao, 2 February 2017). A CIC bioGUNE project focused on the metabolism of prostate cancer cells to obtain information on their spreading mechanisms has been given a European Research Council (ERC) grant of EUR 150,000 to aid its launch onto the market.

The work, led by CIC bioGUNE Ikerbasque researcher Arkaitz Carracedo, was published last year in *Nature Cell Biology*, one of the most prestigious international journals in the field of cell biology, and was based on the existence of master regulators that define the metabolic state of prostate cancer cells. After detailed analysis of twenty of these regulators, the research group identified PGC1A as the best candidate. As Dr. Carracedo explains, “ [...] the study of mouse models provided us with the ultimate proof: if the PGC1A gene is eliminated, prostate cancer metastasizes. Conversely, if the dose of the gene in metastatic cells is increased, their aggressiveness diminishes”.

The CIC bioGUNE project has been selected alongside a further 43 European projects to accelerate technology transition from laboratory to commercialisation. The EUR 150,000 grant can be used to cover the costs of registering intellectual property, technical validation or looking into new business opportunities.

The CIC bioGUNE team has demonstrated that PGC1A functions as a switch that turns off the metabolism associated with cancer cell growth. Laboratory tests have shown that a genetic signature based on PGC1A activity is capable of discriminating between patients at high risk and those at low risk of developing aggressive prostate cancer. As Dr. Carracedo emphasizes, “these findings encourage us to translate the signature into a biomarker that can be used for the benefit of patients”.



The CIC bioGUNE team will now focus their efforts on transforming the idea into a potential product for use at the clinical level. The ERC grant will be used for technical development, to help fund the market study and for the potential preparation of the product for its launch onto the market.

About CIC bioGUNE

The Centre for Cooperative Research in Biosciences (CIC bioGUNE), located in the Bizkaia Technology Park, is a biomedical research organisation conducting cutting-edge research at the interface between structural, molecular and cell biology, with a particular focus on the study of the molecular bases of disease, for use in the development of new diagnostic methods and advanced therapies.