Researchers successfully use Parsortix system in ovarian cancer drug trials

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ANGLE plc's Parsortix, which was granted a European patent in March 2016, harvests circulating cancer cells from blood for further medical analysis. Its use is an essential step in research under the GANNET53 project, which bets on a second generation Hsp90 inhibitor to improve metastatic ovarian cancer survival rates.

The GANNET53 project - set to be completed in 2019 - is well under way. 424 blood samples have been collected so far from 136 patients and processed using Parsortix. Sufficient RNA could be isolated for further qPCR (real time quantitative polymerase-chain-reaction) analysis in 134 of the 136 samples, and the Medical University of Vienna is currently analysing the RNA Markers to determine their presence or absence.

'For the first time, using the Parsortix system, we can now reliably access ovarian cancer cells from patient blood samples for analysis,' said Prof. Robert Zeillinger, Head of the Molecular Oncology Group at the Medical University of Vienna. 'This opens up completely new approaches to drug development in ovarian cancer and has the potential for wide applicability in other ovarian cancer drug trials.'

Unlike other CTC (circulating tumour cells) analysis systems, which lack suitable surface markers that makes them ineffective for ovarian cancer, Angle's Parsortix showed 'unprecedented sensitivity and specificity' when it was first used by the Medical University of Vienna in January 2015.

ANGLE has since been invited to participate in the project. The company hopes that GANNET53 will help obtain evidence of the capability of Parsortix to harvest cancer cells from patient blood for analysis in large scale studies, but also that, if the trail is successful, Parsortix will be utilised as a companion diagnostic to identify patient responders for Ganetespib – the drug being developed under GANNET53.

'The integration of our system into drug trials is a key objective in order to grow research use sales. Performance demonstrated in the GANNET53 trial and the capability developed by Medical University of Vienna to analyse the cancer cells has the potential to open new markets for Parsortix,' explained Andrew Newland, ANGLE Founder and Chief

Executive. In the years to come, ANGLE is confident that the analysis of blood cells harvested with Parsortix has the potential to help deliver personalised care for various forms of cancers.

A highly potent drug

Ganetespib is considered by its creators as the safest, most effective and clinically most advanced Hsp90 (heat shock protein 90) inhibitor available. It was developed by Synta Pharmaceuticals in the United States, which has agreed to provide the drug for GANNET53 trials at no charge.

The GANNET53 project consists of two phases: Phase one will test the safety of Ganetespib in a new combination with standard chemotherapy (Paclitaxel weekly) in high-grade serous, high-grade endometrioid or undifferenciated, platinum-resistant ovarian cancer patients. The second phase will examine the efficacy of this combination with the sole use of standard chemotherapy.

The GANNET53 project will run until March 2019 and has received close to EUR 6 million in EU funding.

More information: Project website: www.gannet53.eu/

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