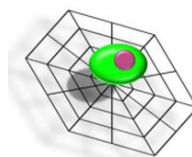


Newsletter CTCTrap



The CTCTrap consortium aims to develop and test technology to identify tumor cells in blood of all breast and prostate cancer patients with disseminated disease. Realization of this ambitious goal will enable a real-time liquid biopsy for the selection of the most appropriate therapy. Preliminary results of the CTCTrap program were presented at the American Association for Cancer Research in San Diego (USA), the COMBATing meeting in Lubeck (Germany) and the Advances in Circulating Tumour Cells meeting in Crete (Greece).

The annual CTCTrap progress meeting was held September 23 & 24 in Padova (Italy). The first results of the studies investigating the frequency and phenotype of Circulating Tumor Cells (CTC) not detected by CellSearch in patients with metastatic disease showed the presence of additional CTC recognized with a broader coverage of the cytokeratins and a substantial portion of CTC that did not express the Epithelial Cell Adhesion Molecule (EpCAM). From the ongoing studies we will learn the implications of these findings. These studies include a more detailed characterization of the additional CTC detected and the assessment of the relation of the presence of these phenotypically different CTC with clinical outcome.

The "CTC-Trap" module depicted in the figure was presented by Leukocare. This module contains a foam coated with molecules that capture CTC expressing the EpCAM antigen and was test-run on an apheresis system (Adamonitor, Otsuka Pharma GmbH, Frankfurt). The intend is to first use the system in conjunction with Diagnostic LeukApheresis (DLA) first reported by Johannes Fischer and Nick Stoeklein from the Heinrich Heine University of Dusseldorf that have joined the CTCTrap consortium (PNAS 2013;110:16580-5).

CTC present in the DLA will also be isolated with different approaches and a portion will be used to investigate the potential to expand tumor cells (BRC, Hungary). At a later stage the "CTC-Trap" module will be used in-vivo, i.e. patients blood directly flowing in the in the "CTC-Trap" module and back to the patient, but now void of CTC.



The CTCTrap presented at the progress meeting in Padova by Leukocare

CTCTrap consortium



For more information on CTCTrap please visit our website:
www.tnw.utwente.nl/ctctrap or contact mcbp@tnw.utwente.nl

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