Press Release

# TRON is part of the European Bioinformatics Research Consortium on personalised cancer immunotherapy

**Mainz, June 2015.** On May 1st, TRON under the leadership of Prof. Dr. med. Ugur Sahin started an innovative research project on personalised cancer immunotherapy: The newly established APERIM "**A**dvanced bioinformatics platform for **PER**sonalised cancer **IM**munotherapy" consortium coordinated by Univ.-Prof. Dr. Zlatko Trajanoski (Medical University of Innsbruck, Austria) will collaborate on the practical implementation of immunotherapy and the development of a new treatment platform specifically for unique tumour mutations of individual patients.

The collaboration of eight academic partners and three companies is made possible through funding by the EU within the H2020 framework programme "*Personalising Health and Care*" (H2020-PHC-2014) totalling three million euros over the course of three years. The APERIM consortium is one of the few successful ones with an overall success rate of only 6.9% for the given sub-call.

**Immune system against cancer: Analysis of next generation sequencing data**
The immune system protects the human body not only against foreign pathogens, but also against tumour cells. Tumour cells can escape the control of the immune system in various ways. However, this reduced defensive reaction can be stimulated therapeutically, as has been demonstrated in numerous publications. These new findings, as well as new ways of obtaining more and more information from patient samples using a method known as Next Generation Sequencing (NGS), require the development of new platforms to manage and utilise the obtained data for patient treatment. Thus, treatment platforms can process the individual data of cancer patients to identify individually tailored therapy options. Advanced bioinformatics methods enable the evaluation and processing of specific information on the molecular fundamentals of individual tumours, which in turn forms the basis for a truly personalised cancer immunotherapy.

**APERIM - Four steps to personalised cancer immunotherapy**
The APERIM project has four goals: A new database will store all molecular information on a tumour, a new analysis tool will permit quantification of tumour-infiltrating T cells, a software application will provide the information required to produce personalised therapeutic vaccinations, and a new method will be used to develop a specific T cell gene therapy.
"This comprehensive information will then provide an important foundation for diagnosis and therapy," explains Univ.-Prof Trajanoski, the project coordinator.

**Media contact:**
TRON gGmbH
Dr. Tina Büchling
Phone: +49 (0) 6131 – 2161 - 470
Mail: Tina.Buechling@tron-mainz.de

**About the Consortium:**

Medical University of Innsbruck, Austria
National Center for Investigating Cardiovascular diseases (CNIC), Spain
University of Tübingen, Germany
Utrecht University, The Netherlands
Masaryk University, Czech Republic
French Institute of Health and Medical Research (INSERM), France
TRON - Translational Oncology at the University Medical Center Mainz, Germany
The Netherlands Cancer Institute (NKI)
Definiens AG, Germany
AptaIT, Germany
Cemit – Center of Excellence in Medicine and IT GmbH, Austria

**About TRON gGmbH:**

TRON, Institute for Translational Oncology at the University Medical Center Mainz, is a trans-disciplinary, non-profit research organization dedicated to innovation transfer for cancer immunotherapies at the interface of immunology, genomics and bioinformatics. It is financially supported by the Federal State of Rhineland-Palatinate.

Prof. Dr. med. Ugur Sahin, founder and managing director of TRON, is a physician by training and translational researcher with long-standing expertise in managing projects in the public-private interface. A pioneer in cancer target discovery using high throughput immunological methods and bioinformatics approaches, Prof. Sahin holds more than 70 independent patent applications covering novel cancer biomarkers and targeted therapeutic platforms. His key focus is solving deeply rooted challenges in the multifaceted process of translating innovation from bench to bedside, an interest that was originally prompted by his experiences as a physician. Prof. Sahin's publications have more than 6000 citations and he is the recipient of prestigious awards from the German Hemato-Oncology Association, German Association for Immunology, German Federal Ministry of Education and Research (BMBF) and American Society of Clinical Oncology.