



## €8.3 million EU grant awarded to international 'PRECIOUS' consortium to integrate nanomedicines and immunotherapy to attack cancer

April 21, 2016

Bilthoven, April 21, 2016 - An international multi-disciplinary consortium of 11 partners, in which 5 leading academic institutes, 4 cutting-edge biotech companies and 2 excellent service providers will join forces to advance the treatment of cancer using an innovative immunotherapeutic nanomedicine, has received an €8.3 million Horizon 2020 grant (grant agreement No 686089). The PRECIOUS consortium will be coordinated by the awarded Prof. Dr. Carl Figdor, senior professor in Experimental Immunology and head of the Tumor Immunology Department of the Radboud University Medical Center, the Netherlands.

### Novel treatment strategies for cancer are highly needed

Despite the access to different classical treatment strategies such as chemotherapy, radiotherapy and surgery, cancer is still a leading cause of death worldwide accounting for over 8 million deaths per year. Often, tumour cells that have become resistant to chemo- and radiotherapy ultimately lead to the death of a patient. Therefore, radically innovative approaches are highly needed to increase survival rates. In the past 5 years, immunotherapy has completely overhauled the cancer field with several new types of therapies entering the market at a rapid pace. The great benefit of immunotherapy is that it attacks tumour cells via a completely different mechanism than chemo- and radiotherapy, harnessing the power of the body's own immune system to fight cancer. However, current immunotherapies are challenged by low efficacy, partially due to the immunosuppressive tumour microenvironment.

### PRECIOUS will revolutionise cancer treatment

The PRECIOUS (scaling-up immunomodulating nanomedicines for multimodal precision cancer immunotherapy) project will establish a platform for the development of new medicines that contain immunomodulating components acting at multiple levels. *'These novel medicines will act as a two-sided knife' by boosting the immune system, and at the same time attacking the immunosuppressive microenvironment that characterises the tumour site'* Prof. Dr. C. Figdor says. Nanoparticles offer the optimal platform for a combinational immunotherapy, as they are able to encapsulate immunomodulators in biodegradable particles. Currently, immunomodulating nanomedicines are not used to their full potential due to its challenging manufacturing requirements. PRECIOUS will develop a manufacturing process at industrial scale for immunomodulating nanomedicines and test the potential of these nanoparticle based immunotherapies in the clinic. To ensure that these novel treatment strategies will reach patients, the development of a marketing and commercialisation strategy for these novel medicines is an important part of the project. Together, PRECIOUS will realise a major improvement in cancer therapy to provide cancer patients with enhanced quality of life.

### About the consortium

The consortium consists of academic experts in the field from 5 leading institutes (**RadboudUMC, University of Konstanz, Institute of Macromolecular Chemistry ASCR, University of Oxford and Fondazione IRCCS Istituto Nazionale dei Tumori**) with outstanding track records in the fields of immunotherapy, tumour immunology, preclinical drug development and clinical trials. In addition, it includes cutting-edge biotech companies that will enable project results to be translated to the clinic. **Evonik Nutrition & Care GmbH** is the lead manufacturer of PLGA-based particles and will bring in invaluable expertise on manufacturing of nanomedicines. **iTeos Therapeutics** will develop and provide novel immunomodulators that target the tumour micro-environment. **iOx Therapeutics** and **Oncoarendi Therapeutics** will contribute their promising, novel immunomodulators (iNKT and ARG inhibitors respectively) to be part of the immunomodulating nanomedicine platform. **SMS-oncology** will support the clinical development path with their broad knowledge on clinical trial design and implementation. **ttopstart**, involved in developing the business cases of many leading cancer therapies and diagnostic tests, will be responsible for the business aspects of PRECIOUS by ensuring a strong exploitation strategy and tight project management. The combined expertise will allow the PRECIOUS consortium to truly perform translational research towards benefit of the most important stakeholder, cancer patients in need of novel treatment strategies. The project will kick off in May 2016 and has a duration of 60 months.

### Contact

To learn more about the project, visit the [EC website](#).

### About iTeos Therapeutics SA

Based in Gosselies, Belgium, iTeos, a spin-off of Ludwig Cancer Research (LICR) and de Duve Institute (UCL), has built a discovery platform to

identify therapeutics targeting the immune tumor micro-environment to optimize cancer immunotherapy and is now positioned to help deliver the next generation of cancer immunotherapies. iTeos combines expertise in tumor immunology with drug discovery of small molecules and biologics. The company entered into a strategic collaboration with Pfizer in December 2014 and with Adimab in January 2016. iTeos is developing partnerships with top-tier academic and industrial partners to develop new programs. iTeos is supported by the Walloon Region of Belgium and the FEDER (European Fund for Economic and Regional Development).