



ImmUniverse

Acronym

ImmUniverse

Full title

ImmUniverse – Better control and treatment of immune-mediated diseases by exploring the universe of microenvironment imposed tissue signatures and their correlates in liquid biopsies

Programme

Horizon 2020/Innovative Medicines Initiative 2 Joint Undertaking (JU)

Contract number

853995

Project aim

To improve and personalise diagnostic and therapeutic options for patients living with ulcerative colitis and atopic dermatitis.

Abstract

Immune-mediated inflammatory diseases (IMIDs) are an increasing medical burden in industrialised countries worldwide. They are characterised by an enormous heterogeneity with regard to disease outcome and response to targeted therapies, which often cannot be adequately tailored to individual patients. Hence, an in-depth understanding of this heterogeneity and the biomarkers which predict disease control and therapy response over time are important prerequisites for future precision medicine strategies in IMIDs. The pathogenic components (“omics”) responsible for the disease outcome in each individual patient, i.e. environment, genes, gut microbiota or the immune system, are remarkably multifactorial, with thousands of constituents all interacting with and impacting on each other.

ImmUniverse has been formed as a European transdisciplinary consortium to tackle these unmet needs and pave the way towards a truly personalised disease understanding of two different IMIDs: Ulcerative Colitis and Atopic Dermatitis. Following a unique cross-disease approach, the multinational project will fill the gap and address the limitations of current studies by systematically comparing the complex interactions between recirculating immune cells and the respective tissue microenvironment. The novel, circulating biomarker assays are expected to

- improve diagnosis
- inform about disease severity and progression early in the clinical course, and
- enable treatment response and remission monitoring.

Realisation of these objectives will result in improvement of patient management, lead to increased patient well-being and will significantly reduce the socioeconomic burden of these diseases.

Duration

60 months (01/01/2020 - 31/12/2024)



ImmUniverse has received funding from the Innovative Medicines Initiative 2 Joint Undertaking (JU) under grant agreement No. 853995. The JU received support from the European Union's Horizon 2020 research and innovation programme and EFPIA. www.imi.europa.eu

Project funding

31.000.000 €

Coordinator

Prof. Silvio Danese
Humanitas University
Milan, Italy
silvio.danese@hunimed.eu

Partners

Austria

- AIT Austrian Institute of Technology GmbH
- JOANNEUM RESEARCH Forschungsgesellschaft mbH

Belgium

- European Federation of Allergy and Airways Diseases Patients' Associations
- European Federation of Crohn's and Ulcerative Colitis Associations
- Katholieke Universiteit Leuven
- Vlaams Instituut voor Biotechnologie

Denmark

- Aarhus Universitet
- Aarhus Universitetshospital

France

- Centre Hospitalier Régional Universitaire Nancy

Germany

- Christian Albrechts-Universität zu Kiel
- EURICE - European Research and Project Office GmbH
- Ludwig-Maximilians-Universität München
- Sanofi-Aventis Deutschland GmbH

Italy

- Humanitas University
- Istituto Superiore de Sanità
- Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna

Luxembourg

- European Patients Forum
- Information Technology for Translational Medicine (ITTM) SA
- Université du Luxembourg

Netherlands

- Academisch Medisch Centrum Universiteit van Amsterdam
- Radboud Universitair Medisch Centrum (Radboudumc) Nijmegen

Switzerland

- Novartis Pharma AG

United Kingdom

- Eli Lilly and Company Limited
- GlaxoSmithKline Research and Development Limited
- Pfizer Limited
- The University of Cambridge

