

## Factsheet



### Acronym

3TR

### Full title

Taxonomy, Treatment, Targets and Remission  
Identification of the Molecular Mechanisms of Non-response to  
Treatments, Relapses and Remission in Autoimmune, Inflammatory,  
and Allergic Conditions

### Programme

H2020-JTI-IMI2-2018-14-two-stage

### Contract number


831434

### Abstract

3TR is a transdisciplinary consortium that unites experts from different areas of medicine, basic sciences and bioinformatics. Among the 69 partners are academic institutions, SMEs, pharmaceutical companies and patient organisations. They all have teamed up to study a fundamental issue in medicine: the mechanisms of response and non-response to therapies, both within single disease entities and across diseases, where molecular stratification may identify shared disease taxonomies. By bringing together and harmonising data from existing academic or industry-sponsored studies 3TR aims to identify novel biomarkers leading to improved patient management and personalised therapy.

Specimens of diseased tissues, blood, stools, and other fluids will be obtained in a “de novo” observational prospective trial with standard of care medication prior, during and after first or second line of treatment. Since the studies will be at different phases of progression, a “carousel model” was designed for the input and output of data, which will be continuously analysed, interpreted, and cross-validated.

The 3TR team will elucidate the role of the microbiome, genetics and regulatory genomic features in disease progression. The central working objectives are: 1) establish a centralised data and sample management platform; 2) perform comprehensive molecular and clinical characterisation of a prospective patient cohort; 3) establish integrated analysis of all data using advanced bioinformatics/statistical and modelling methods; 4) identify sets of predictive biomarkers of



response/non-response to therapies; 5) improve the competitiveness of European industry and support development of novel solutions. 3TR will sustain the samples and its knowledge base beyond the project end. The project will challenge and revolutionise the conventional “single disease”-based approach with important implications for future treatment.

**Duration** 84 months (01/09/2019 – 31/08/2026)

**Project funding** 80,546,383 €


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**Partners**

- Fundación Pública Andaluza Progreso y Salud (FPS), Spain
- The University of Manchester, UK
- Christian-Albrechts-Universität zu Kiel , Germany
- University of Leicester, Germany
- Eurice European Research and Project Office GmbH, Germany
- Fundació Centre de Regulació Genòmica, Spain
- European Respiratory Society, Switzerland
- Fondazione Irccs Ca' Granda IRCCS - Ospedale Maggiore Policlinico, Italy
- Academisch Medisch Centrum bij de Universiteit van Amsterdam, The Netherlands
- Academisch Ziekenhuis Groningen, The Netherlands
- Alacris Theranostics GmbH, Germany
- Atrys Health SA, Spain
- Azienda Ospedaliera di Padova, Italy
- Azienda Ospedaliera – Universitaria Anna Meyer, Italy
- Universitair Ziekenhuis Gent, Belgium
- Region Hovedstaden - Bispebjerg and Frederiksberg Hospital, Denmark
- Centre Hospitalier Régional Universitaire Nancy, France
- University of Glasgow, UK
- Charité - Universitätsmedizin Berlin, Germany
- Consejo Superior de Investigaciones Científicas, Spain
- Consorci Institut D'investigacions Biomediques August Pi I Sunyer, Spain
- Consorcio Centro de Investigacion biomedica en Red M.P, Spain
- Deutsches Rheuma-Forschungszentrum Berlin, Germany



- European Federation of Asthma & Allergy Associations Ideell Forenning, Belgium
- European Lung Foundation, UK
- Genos Doo Za Vjestacenjei Analizu, Croatia
- Imperial College of Science Technology and Medicine, UK
- Institut National de la Sante et de la Recherche Medicale, France
- Instituto de Medicina Molecular Joao Lobo Antunes, Portugal
- Karolinska Institutet, Sweden
- Lupus Europe, UK
- Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V., Germany
- Medizinische Hochschule Hannover, Germany
- Örebro University, Sweden
- Owlstone Medical Limited, UK
- Philipps Universität Marburg, Germany
- Queen Mary University of London, UK
- Servicio Andaluz de Salud, Spain
- Servicio Madrilenio de Salud, Spain
- SIP Service, Italy
- Société de Pneumologie de Langue Française, France
- Stichting Vumc, The Netherlands
- Technische Universität Dresden, Germany
- The Chancellor Masters and Scholars of the University of Cambridge, UK
- The Queen's University of Belfast, UK
- Università degli Studi di Catania, Italy
- Università degli Studi del Piemonte Orientale Amedeo Avogadro, Italy
- Università degli Studi di Cagliari, Italy
- Università Degli Studi di Genova, Italy
- Università di Pisa, Italy
- Universitat Basel, Switzerland
- Cliniques Universitaires Saint-Luc, Belgium
- Université de Bretagne Occidentale, France
- Universiteit Hasselt, Belgium
- Universitetet i Bergen, Norway
- University College Dublin, National University of Ireland, Ireland
- University College London, UK
- Katholieke Universiteit Leuven, Belgium
- University of Southampton, UK
- Uniwersytet Medyczny W Lodzi, Poland
- VIB-Ghent University, Belgium

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- Sanofi-Aventis Deutschland GmbH, Germany
  - Janssen Pharmaceutica NV, Belgium
  - Takeda Development Centre Europe Ltd., UK
  - Astrazeneca AB, Sweden
  - Glaxosmithkline Research and Development Ltd., UK
  - Novartis Pharma AG, Switzerland
  - Pfizer Ltd., UK
  - F. Hoffmann-La Roche AG, Switzerland

**Website**

[www.3tr-imi.eu](http://www.3tr-imi.eu)



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