

Research Project AIMS-2-TRIALS

Third-party funded project

Project title AIMS-2-TRIALS

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Organisation / Research unit

Departement Biozentrum

Departement Biozentrum / Cell Biology (Scheiffele)

Department

Project start 01.06.2018

Probable end 31.05.2023

Status Completed

Autism Spectrum Disorder (ASD) is a heterogeneous neurodevelopmental condition affecting over five million people in the European Union. The combination of core symptoms (deficits in social-communication and repetitive and restricted behaviours and interests) and common comorbidities (e.g. epilepsy and depression) significantly reduces the quality of life and life-span of affected individuals. Currently there are no effective drug treatments for the core symptoms. Key factors that have hampered progress include; 1) limited understanding of the underlying pathophysiolog(ies); 2) lack of successful translation from animal models to humans; 3) testing of drugs with specific actions in biologically heterogeneous populations; 4) limited expertise of many European ASD centres in running large-scale clinical trials; and 5) trial designs (e.g. placebo effects).

Our vision, therefore, is to apply a precision medicine approach to ASD and improve patient outcomes by tailoring treatments to a patient's biological profile. Our efforts will build on the achievements of 5 other IMI initiatives, 4 Horizon 2020 networks, and 6 SMEs for the first time to; 1) align global resources to validate and qualify stratification biomarkers from infancy to adulthood; 2) develop objective outcome measures that can be used in trials; 3) create a European-wide clinical trials network that reliably carries out studies able to support filings to the EMA/FDA; 4) carry out better targeted clinical trials linked to other international efforts – including quick wins or "fast fails" of ineffective agents; 5) translate molecular mechanisms and drug effects between preclinical models and particular subtypes of ASD.

Together we will bring Europe to the forefront of clinical research in ASD. Also we will provide a sustainable legacy that is accessible by others across the world, attracts industry into ASD, and helps transform healthcare.

Financed by

Commission of the European Union

Add publication

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