Principal Investigator Grant

Project
«Getting new insights out of failed AD trials»

Granted amount  CHF 75'750
Starting date  1.4.22
Duration  18 months

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Getting insights out of failed trials

Alzheimer's Disease (AD) is the number one cause of mortality for which not a single dis-
ease modifying drug is approved. Despite the fact that over the last 20 years, thousands of
patients have been enrolled in 156 clinical trials, together costing 250-300 billion USD. 152
of them turned out negative, bringing only four new drugs to the market.

Why did so many fail? Across all of the failed trials, there were successes at the individual
patient level; but little is published, or understood, about why such successes emerged.

To change this, we propose to apply a semi-mechanistic machine learning methodology to
quantitatively assess clinically relevant biomarkers driving AD progression. We will identify
novel imaging biomarkers; predict trajectories of clinical decline in the placebo arm; and
evaluate drug response at the patient level in the treatment arm.

In addition, University Basel gets access to state of the art know-how in data modelling
and use of Artificial Intelligence / Machine Learning application.