PhD Position

Job type	PhD Position F/M
Title	Exploring the impact of data sources and methodological choices on the estimation of drug efficacy through the emulated target trials framework
Employer	Université Grenoble Alpes
Location	Grenoble, France
Application deadline	Sept 15th 2025
Fields	Clinical Pharmacology, Pharmacoepidemiology, Clinical Research Methods, Biostatistics
Supervisor	Pr Matthieu Roustit, HP2, U1300, Univ. Grenoble Alpes, Inserm
Co-supervisor	Dr Joris Giai, TIMC, UMR 5525, Univ. Grenoble Alpes, CNRS

Project

To access the market, the benefits of medications must be supported by solid evidence. Randomized controlled trials (RCTs) are considered the gold standard for producing such evidence because they provide a rigorous framework. Yet, increasing access to large databases and recent methodological advances such as target trial emulation offer new perspectives to produce valid causal inferences on the risk-benefit of medicines. The objectives of this project are to explore the feasibility of target trial emulation using different types of observational data (administrative vs. electronic health records) and to evaluate the heterogeneity of treatment effect estimates based on methodological choices. By better understanding the sources of variation in effect estimates between RCTs and emulated studies, this project will provide key insights into the reliability of these approaches in decision-making regarding the market approval and reimbursement of medications.

Main activities

Literature review and conception of target trials protocols, data management, data analysis, data reporting, and article writing.

Skills

Technical skills in data management and analysis (SAS or R) are required.

Knowledge on causal inference, clinical research and drug development would be preferred, and previous experience with the French SNDS would be a great asset.

Languages: fluent english reading, writing and speaking

Contacts

PhD Supervisors: matthieu.roustit@univ-grenoble-alpes.fr and JGiai1@chu-grenoble.fr