Curriculum Vitae – Félix Balazard, PhD

Personal Information Félix Balazard, PhD 33 years old, married, two children Parisian region felix.balazard@gmail.fr Personal webpage



After several years as a data scientist at the AI biotech Owkin, I am now in charge of clinical trial optimization projects. Covariate adjustment in clinical trials is a way for machine learning to improve the statistical power of phase 3 trials as shown by the Letter of Support we obtained from the EMA. Federated ECA (external control arm) allows to have an early estimate of efficacy during clinical development while respecting Owkin's academic partners' data governance. These workstreams have led to the Owkin-BMS alliance as well as a publicly-funded consortium with Sorbonne University and AP-HP.

Professional Experience 07/2022-current: **Owkin - Director of Optimized Development Solutions**. I support business development in commercial discussions concerning clinical trial optimization, define project proposals and oversee the execution of projects. I define the strategy of Owkin on clinical development optimization.

09/2018-06/2022: **Owkin - Lead data scientist** since 03/2021, Senior DS before that. Project manager or scientific lead on projects for pharma clients on clinical trials (covariate adjustment, heterogeneous treatment effects, surrogate endpoints) and real-world evidence. Projects in oncology and cardiovascular.

SELECTED PUBLICATIONS

FedECA: A Federated External Control Arm Method for Causal Inference with Time-To-Event Data in Distributed Settings co-last author, arXiv, (2023)

Adjuvant endocrine therapy uptake, toxicity, quality of life, and prediction of early discontinuation, first author, JNCI, (2023)

More efficient and inclusive time-to-event trials with covariate adjustment: a simulation study, last author, BMC Trials, (2023)

Federated learning for predicting histological response to neoadjuvant chemotherapy in triple-negative breast cancer, middle author, Nature Medicine, (2023)

EDUCATION

2014-2018: **PhD at Sorbonne University** supervised by Gérard Biau (Statistics) and Pierre Bougnères (endocrinologist at INSERM) in statistics applied to epidemiology. Topic: genetic and environmental causes of type 1 diabetes. 2016: Diploma of the ENS with a major in mathematics and a minor in biology. 2014: Master of probability theory at Sorbonne University with highest honors. 2011-2015: Élève normalien at **École Normale Supérieure**.

Coding skills

I am proficient in R and with the Unix Shell. I have experience with Python for data science. I am familiar with Cloud environments.

Language skills French: Native tongue. English: Fluent. Chinese: Currently learning. Spanish, Japanese: High-school level.