We are interested in developing methods for

- conducting early phase clinical trial
- validating prognostic and predictive biomarkers.
- accounting for correlation induced by clustered observations (a cluster can be: a patient, a clinical trial)
- estimating treatment effect or treatment algorithm from observational data
- quantifying long term responders under immunotherapy

To ensure reproducibility of our findings, our code can be found in our team’s Github repository

**Key publications**

**Year of publication 2021**

Pavel Mozgunov, Xavier Paoletti, Thomas Jaki (2021 Jan 7)

**A benchmark for dose-finding studies with unknown ordering.**

*Biostatistics (Oxford, England)*: DOI : kxaa054
Year of publication 2020

Pavel Mozgunov, Thomas Jaki, Xavier Paoletti (2020 Jun 13)
**Using a dose-finding benchmark to quantify the loss incurred by dichotomization in Phase II dose-ranging studies.**

Alessandra Meddis, Paul Blanche, François C Bidard, Aurélien Latouche (2020 Apr 28)
**A covariate-specific time-dependent receiver operating characteristic curve for correlated survival data.**
*Statistics in medicine* : DOI : 10.1002/sim.8550

Year of publication 2019

Alessandra Meddis, Aurélien Latouche, Bingqing Zhou, Stefan Michiels, Jason Fine (2019 Dec 10)
**Meta-analysis of clinical trials with competing time-to-event endpoints.**

Peter C Austin, Aurélien Latouche, Jason P Fine (2019 Oct 30)
**A review of the use of time-varying covariates in the Fine-Gray subdistribution hazard competing risk regression model.**
*Statistics in medicine* : DOI : 10.1002/sim.8399

PONS-TOSTIVINT Elvire, LATOUCHE Aurélien, VAFLARD Pauline, RICCI Francesco, LOIRAT Delphine, HESCOT Ségolène, SABLIN S Marie-Paule, ROUZIER Roman, KAMAL Maud, MOREL Claire, LECERF Charlotte, SERVOIS Vincent, PAOLETTI Xavier, LE TOURNEAU Christophe (2019 Feb 6)
**Comparative Analysis of Durable Responses on Immune Checkpoint Inhibitors Versus Other Systemic Therapies: A Pooled Analysis of Phase III Trials**
*JCO Precision Oncology* : DOI : 10.1200/PO.18.00114