Anaïs Andrillon

STATISTICAL METHODOLOGIST

Paris, FRANCE

French | February 11th 1995 | Driver license

PROFESSIONAL EXPERIENCES

Statistical methodologist – Saryga, Statistics Methodology **France** March 2023

Statistical expertise to support innovation and decision-making in healthcare

- Provide statistical input and technical support on the design and statistical analysis of clinical trials to pharmaceutical companies, biotechnology companies
- Perform research work to develop advanced statistical methodologies to optimize drug development plans and clinical trials

Oncology Phase I trials | Seamless Phase I/II trials | Bayesian modeling | Seamless Phase II/III trials | Group sequential designs | Sub-populations testing | Enrichment

Statistical methodologist – INSERM U1153, Paris Cité University - APHP **Paris, France** 2019 – 2022

Hôpital Saint-Louis AP-HP (Assistance Publique - Hôpitaux de Paris). AHU (Assistant Hospitalier Universitaire).

- Educational activities (see Teaching section)
- Statistical consulting with physicians for planning, conducting clinical research project and analyzing clinical trials.

Study Protocols | e-CRF | Surveys Creation and Management on REDCap | Randomization lists | Dose-finding algorithms Programming | Interim Analysis in RCT | Study Reports

EDUCATION

PhD in Biostatistics **Paris Cité University, France** 2019 – 2022

INSERM U1153, ECSTRRA Team – Supervised by Pr. Sylvie Chevret and Dr. Lucie Biard
Obtained with honors *(Félicitations du jury)*

- Development of novel clinical trial statistical methods for early assessment of the toxicity and therapeutic effect of novel anti-cancer agents in Oncology

Phase I Clinical Trial designs | Phase I/II designs | Late-onset endpoints | Survival Data | Competing Risks | Bayesian Inference | Non-parametric optimal Benchmark

Visiting Student Researcher – Fulbright Commission Grant **Columbia University, New-York, US** Aug–Dec 2021

Columbia University Mailman School of Public Health

Model parameter Calibration | Dependent toxicity and efficacy criteria

Master of Science (MSc) in Statistics equivalent **ENSAI, Rennes, France** 2016 – 2019

ENSAI: National Engineering School for Statistics and Data Analysis – Obtained with honors

- **Specialized in Biostatistics**: Clinical Trials, Omics Data, Survival Analysis, Bayesian Statistics, Health Economics

Erasmus Exchange Student **Sheffield University, UK** Jan–Jun 2018

Master of Research (MRes) in Public Health **University of Rennes 1, France** 2018 – 2019

Dual degree in conjunction with studies at ENSAI

- Clinical Research, Etiology, Epidemiology, Pharmacoepidemiology

Bachelor of Science (BSc) in Mathematics and Economics equivalent **University of Rennes 1, France** 2014 – 2016

- Fundamental Mathematics, Econometric, Macro and Microeconomics, Accounting – Obtained with honors

Magister in Statistics and Economics Modeling **University of Rennes 2, France** 2015 – 2016

Dual degree in conjunction with studies at University of Rennes 1

PUBLICATIONS

STATISTICAL PUBLICATIONS

- Andrillon A, Micallef S, Ursino M, Mozgunov P, Riviere MKR. *U-DESPE: a Bayesian Utility-based approach for dose regimen optimization using Dose-Exposure model to assess Safety, Pharmacodynamics, Efficacy in early-phase oncology trials*. Under review in Stat in Med.
- Riviere MKR, Andrillon A, Mozgunov P, Gerard E, Ursino M. *Evaluating Early-Stage Oncology Clinical Trial Designs in the Era of Project Optimus: A scoping review.* Submitted.
- Andrillon A, Guhl M, Tanniou J, Dubois F, Riviere MKR. *A simulation study to Riviere Group Sequential Designs for subpopulation testing and enrichment*. (Ongoing)
- Biard L, Andrillon A, Lee SM. *Dose Optimization with Considerations for Late Onset Toxicities*. Clin Trials. 2024 Jun;21(3):322-330.
- Andrillon A, Biard L, Lee SM. *Incorporating patient-reported outcomes in dose-finding clinical trials with continuous patient enrollment*. J Biopharm Stat. 2023 Jul;1–12.
- Andrillon A, Chevret S, Lee SM, Biard L. *Surv-CRM-12: A Bayesian Phase I/II Survival CRM for right-censored toxicity endpoints with competing disease progression*. Stat in Med. 2022 Oct;1-14.
- Andrillon A, Chevret S, Lee SM, Biard L. *Dose-finding design and benchmark for a right censored endpoint*. J Biopharm Stat. 2020 Nov 1;30(6):948-963.
- Andrillon A, Pirracchio R, Chevret S. *Performance of propensity score matching to estimate causal effects in small samples*. Stat Methods Med Res. 2020 Mar;29(3):644-658.

CLINICAL PUBLICATIONS

- Maalouf G, Andrillon A, Leclercq M, [...], Saadoun D. *Lower relapses rate with infliximab versus adalimumab in sight threatening uveitis: a multicenter study of 330 patients*. Am J Ophthalmol. 2022 Feb.
- Roelens M, de Masson A, Andrillon A, [...], Moins-Teisserenc H. *Mogamulizumab induces long term immune restoration and reshapes tumor heterogeneity in Sézary syndrome*. Br J Dermatol. 2022 Jan.
- Leclercq M, Andrillon A, Maalouf G, [...], Saadoun D. *Anti-Tumor Necrosis Factor versus Tocilizumab in the Treatment of Refractory Uveitic Macular Edema: A Multicenter Study from the French Uveitis Network.* Ophthalmology. 2021 Nov.

COMMUNICATIONS

ORAL PRESENTATIONS

- **SnB** - *Paris, France. 2025*. Evaluating Early-Stage Oncology Clinical Trials in the Era of Project Optimus: A scoping review.
- **PSI** - *London, UK. 2025*. Evaluating Early-Stage Oncology Clinical Trials in the Era of Project Optimus: A scoping review.
- **PSI webinar** - *Online. 2025*. U-DESPE: a Bayesian Utility-based methodology for dosing regimen optimization in early-phase oncology trials based on Dose-Exposure, Safety, Pharmacodynamics, Efficacy.
- **PSI** - *Amsterdam, Netherlands. 2024*. TITE-PRO-CRM: incorporating patient-reported outcomes in dose-finding clinical trials with continuous patient enrollment.
- **Bayes** - *Utrecht, Netherlands. 2023*. Survival-CRM-12, a phase I/II dose-finding design for right-censored toxicity endpoints with competing disease progression.
- **ISCB** - *Milan, Italy. 2023*. Incorporating patient-reported outcomes in dose-finding clinical trials with continuous patient enrollment.
- **PSI** - *London, UK. 2023*. Survival-CRM-12, a phase I/II dose-finding design for right-censored toxicity endpoints with competing disease progression.
- **7th Early Phase Adaptive Trials Workshop** - *Cambridge, UK. 2022*. Survival models for dose-finding clinical trials in oncology.
- **Seminar on complex innovative early phase trial design in onco-hematology** - *Paris, France. 2022*. State of the art of designs of phase I and phase I/II designs for single-agent trials in oncology.
- **EPICLIN** - *Paris, France. 2022*. Survival-CRM-12, a phase I/II dose-finding design for right-censored toxicity endpoints with competing disease progression.
- **CRESS doctoral day - Centre of Research in Epidemiology and StatisticS** - *Paris, France. 2022*. Survival models for dose-finding clinical trials in oncology.
- **GSRS - Graduate Student Research Seminar of Columbia University** - *New York, US. 2021*. Calibration approach for the Survival-CRM-12, a Phase I/II dose-finding design with dependent toxicity and disease progression endpoint.
- **ISCB** - *Lyon, France. 2021*. Survival-CRM-12, a phase I/II dose-finding design for right-censored toxicity endpoints with competing disease progression.
- **ISCB** - *Kravov, Poland. 2020*. Survival-CRM, a phase I dose-finding design for right-censored endpoint.

POSTERS

- **ISCB** - *Thessaloniki, Greece. 2024*. U-DESPE: a Bayesian Utility-based approach for dose regimen optimization using Dose-Exposure model to assess Safety, Pharmacodynamics, Efficacy in early-phase oncology trials.
- **Pierre Louis Graduate School of Public Health seminar** - *Saint-Malo, France. 2020*. Dose-finding design and benchmark for a right censored endpoint.

TEACHING

Biostatistics and Clinical Research courses **Paris Cité University, France** 2019– 2022

- First-year Medical School
  Probability | Statistics | Sampling | Estimation | Parametric and Non-parametric tests
- First-year MRes in Public Health
  Introduction to R | Database Analysis | Clinical Trials (Planning, Design, Analysis) | Critical Thinking of articles
- CESAM Inter-University Diploma, STARC module
  Interim Analysis | Survival Analysis

IT SKILLS

Microsoft Office Suite | LaTeX | R | RStan | R Markdown | RShiny | SQL | html

LANGUAGES

French
English
Spanish

TOEIC : 820/990

INTERESTS

SAILING (10 years). Departmental and regional regatta – Part-time assistant instructor

Practicing for pleasure – Swimming, fitness, ceramics

TRAVEL. US, Canada, UK, Ireland, Italy, Greece, Portugal, Madagascar, Chile.

VOLUNTEER ACTIVITIES

- **Fulbright Alumni** - network of 325,000 Fulbrighters from over 155 countries (cultural activites, enrichment seminars) - *Active member since 2021*.
- **ENSAI Alumni** - network of 4,000 alumni (afterworks, conferences) - *Active member since 2019*.
- **Capgemini Invent data challenge** - Predicted race times of the Innovation Cup participants'. Finished 2 out of 15 teams. *Marseille, France. 2019*.
- **Archelon, Sea Turtle Protection Society** - Protected sea turtles and their habitats, collected scientific data, informed visitors, and raised public awareness of environmental education. *The Peloponnese, Greece, 2017*.
- **Student Union (BDE), ENSAI** - Planned events, coordinated associative activities and prospected partners, *2016–2017*.
- **Fizarana Association, Helping for the Future** - Taught Maths and French, and assisted in daily and extracurricular activities in schools. *Antsirabé, Madagascar, 2016*.
- **Attention Mer Fragile** (Association for the protection of oceans and coastlines) - *Active member since 2015*.
- **AFM-Téléthon** (French Association against neuromuscular diseases) - Carried out fundraising actions- *2013–2017*.