

Saryga – Publications

Submitted, under review or ongoing

- Fauvel T., **Tanniou J.**, Godbillot P., Génin M., Amzal B. Comparison of Bayesian methods for extrapolation of treatment effects: a large scale simulation study, Under review.
- **Andrillon A, Guhl M, Tanniou J, Dubois F, Riviere MK.** Designing Better Trials: Group Sequential Approaches for Subpopulation Testing. Under review.
- **Andrillon A, Micallef S, Ursino M, Mozgunov P, Riviere MK.** U-DESPE: a Bayesian Utility-based methodology for dosing regimen optimization in early-phase oncology trials based on Dose-Exposure, Safety, Pharmacodynamics, Efficacy. Under review.
- **Riviere MK, Andrillon A, Mozgunov P, Gerard E, Ursino M.** Evaluating early-stage oncology clinical trial designs in the era of project Optimus: a scoping review, Under minor revision to Pharm Stat.
- **Riviere MK, Guhl M, Hadjur H, Tanniou J.** Exact approaches to evaluate decision-making frameworks using single or multiple correlated endpoints: a tutorial, Under minor revision to Pharm Stat.
- **Ratta M., Mozgunov P., Boulet S., Ursino M.** Bayesian hybrid clinical trials and how to reassess sample size. Under first round of review.
- **Hadjur H, Geronimi J, Guilleminot S, Serra A, Daniells L, Riviere MK, Saint-Hilary G, Mozgunov P.** Evaluating methods for biomarker cut-off detection: a comparative study in small and unbalanced samples, in review in Stat Med.
- Liu H, Hua Z, Teng Z, Tang S, **Saint-Hilary G.** Methodological aspects and practical application of drug Quantitative Benefit-Risk Assessment, a Case Study. Under second round of review.
- Livieratos A, Goea L, Das V, **Riviere MK, Chlamydas S, Purkayastha D, Gerhold-Ay A, Schlieker L, Cardner M, Gaga M, Jansen G.** Non-Oncology Biomarkers in Precision Medicine: A Narrative Review, Therapeutic Innovation & Regulatory Science. Under review.
- **Ratta M., Saint-Hilary G., Teng Z., Gasparini M., Skanji D., Mozgunov P.** Including quantitative benefit-risk assessment in seamless phase II/III design with dose selection. Under second round of review.
- **Ratta M., Mozgunov P.** Anchoring the Winner: a benchmark-referenced testing for multi-arm selection designs. Ongoing.
- Rostgaard K., **Ratta M.** Objective posterior model odds as methodology to screen rather than jointly test multiple hypotheses. Ongoing.
- **Hadjur H., Daniells L., Ratta M., Germonimi J., Guillerminot S., Mozgunov P.** Methods for the treatment effect estimation following a subgroup selection in the early phase trial setting. Ongoing.

2026

- **Ratta M., Saint-Hilary G., Barboux V., Gasparini M., Skanji D., Mozgunov P.** Dual-criterion approach incorporating historical information to seek accelerated approval with application in time-to-event group sequential trials. Statistics in Medicine. 1-2 (2026). DOI: [10.1002/sim.70361](https://doi.org/10.1002/sim.70361)
- Gasparini M., Di Trani V., **Ratta M.** New, shorter small-sample intervals for vaccine efficacy. Pharmaceutical Statistics 2 (2026). DOI: [10.1002/pst.70077](https://doi.org/10.1002/pst.70077)
- **Ratta M, Saint-Hilary G, Gasparini M, Mozgunov P,** On the interplay between prior weight and variance of the robustification component in Robust Mixture Prior Bayesian Dynamic Borrowing approach. Statistics in Medicine. 2026; 45 (13-14).

DOI: [10.1002/sim.70616](https://doi.org/10.1002/sim.70616)

- Barnett H, **Mozgunov P**, Di Stefano F, Skanji D, Guilleminot S, **Saint-Hilary G**, **Guhl M**, **Riviere MK**. Integrating preclinical insights for adaptive dose escalation in phase I oncology trials. *Pharmaceutical Statistics*, 2026; 25(3) .
DOI: [10.1002/pst.70093](https://doi.org/10.1002/pst.70093)
- Rondano L, **Saint-Hilary G**, Gasparini M, Vezzoli S. Investigating the impact of data monitoring committee recommendations on the probability of trial success. *Journal of Biopharmaceutical Statistics*. 2026;36(3).
DOI: [10.1080/10543406.2024.2430308](https://doi.org/10.1080/10543406.2024.2430308)

2025

- Serra A, Geronimi J, Guilleminot S, **Hadjur H**, **Riviere M-K**, **Saint-Hilary G**, **Mozgunov P**. A novel approach to assess the predictiveness of a continuous biomarker in early phases of drug development. *Statistics in Medicine*. 2025 Feb 28;44(5):e70026.
DOI: [10.1002/sim.70026](https://doi.org/10.1002/sim.70026)
- Serra A, Guilleminot S, Geronimi J, **Saint-Hilary G**, **Mozgunov P**. Adaptive biomarker-based design for early phase clinical trials. *Statistics in Medicine*. 2025; 44(23-24).
DOI: [10.1002/sim.70275](https://doi.org/10.1002/sim.70275)
- Herman, D., **Tanniou, J.**, Leray, E., Pierret, C., Pilard, Q. (2025). Analyzing recurrent events in multiple sclerosis: a review of statistical models with application to the MSOAC database. *Journal of neurology*, 272(5), 371.
DOI: [10.1007/s00415-025-13100-5](https://doi.org/10.1007/s00415-025-13100-5)
- Best N, Ajimi M, Neuenschwander B, **Saint-Hilary G**, Wandel S. Beyond the classical type I error: Bayesian metrics for Bayesian designs using informative priors. *Statistics in Biopharmaceutical Research*. 2025 17(2), 183–196.
DOI: [10.1080/19466315.2024.2342817](https://doi.org/10.1080/19466315.2024.2342817)
- Jiang, C., Beji, C., Zebachi, S., Hayek, G. Y., Cetinyurek-Yavuz, A., Fayyad, M. B. N., Rodwell, L., Roes, K. C. B., Amzal, B., Gerlinger, C., Porcher, R., **Tanniou, J.** (2025). Decision-Making Criteria and Methods for Initiating Late-Stage Clinical Trials in Drug Development From a Multi-Stakeholder Perspective: A Scoping Review. *Clinical pharmacology and therapeutics*, 117(4), 978–988.
DOI: [10.1002/cpt.3566](https://doi.org/10.1002/cpt.3566)
- L Daniells, **P Mozgunov**, H Barnett, A Bedding, and T Jaki. How to add baskets to an ongoing basket trial with information borrowing. *Statistical Methods in Medical Research*, 2025.
DOI: [10.1177/09622802251316961](https://doi.org/10.1177/09622802251316961)
- Zebachi, S., **Tanniou, J.**, Bakker, E., de Vries, S. T., Di Bidino, R., Xoxi, E., Glaser, A., Savarese, G., Hillert, J., Mol, P. G. M., Plueschke, K., Amzal, B., Hayek, G. Y., Moreira, J. (2025). Navigating the Real World: A Scoping Review of Structured Frameworks to Effectively Identify, Evaluate, and Select Real-World Data Sources for Fit-for-Purpose Studies. *Clinical pharmacology and therapeutics*, 118(4), 894–905.
DOI: [10.1002/cpt.3746](https://doi.org/10.1002/cpt.3746)
- A Ollier and **P Mozgunov**. On inclusion of covariates in model based dose finding clinical trial designs. *Statistics in Medicine*, 44(3-4):e10337, 2025.
DOI: [10.1002/sim.10337](https://doi.org/10.1002/sim.10337)
- Cetinyurek Yavuz, A., Fayyad, M. B. N., Jiang, C., Brion Bouvier, F., Beji, C., Zebachi, S., Hayek, G. Y., Amzal, B., Porcher, R., **Tanniou, J.**, Roes, K. C. B., Rodwell, L. (2025). On the Concepts, Methods, and Use of “Probability of Success” for Drug Development Decision-Making: A Scoping Review. *Clinical pharmacology and therapeutics*, 117(4), 967–977.
DOI: [10.1002/cpt.3571](https://doi.org/10.1002/cpt.3571)
- Valle JW, Abou-Alfa GK, (. . .), **Saint-Hilary G**, et al. Quantitative benefit–risk assessment of data from the phase III ClarIDHy study of ivosidenib versus placebo in patients with mIDH1 cholangiocarcinoma. *ESMO Gastrointest Oncol*. 2025;8:100159.

DOI: [10.1016/j.esmogo.2025.100159](https://doi.org/10.1016/j.esmogo.2025.100159)

- P Greenstreet, T Jaki, A Bedding, and **P Mozgunov**. A preplanned multi-stage platform trial for discovering multiple superior treatments with control of FWER and power. Biometrical Journal, 67(1):e70025, 2025.
DOI: [10.1002/bimj.70025](https://doi.org/10.1002/bimj.70025)

2024

- Barnett HY, George M, Skanji D, **Saint-Hilary G**, Jaki T, **Mozgunov P**. A comparison of model-free phase I dose escalation designs for dual-agent combination therapies. Statistical Methods in Medical Research. 2024 Feb;33(2):203-226.
DOI: [10.1177/09622802231220497](https://doi.org/10.1177/09622802231220497)
- P Greenstreet, T Jaki, A Bedding, C Harbron, and **P Mozgunov**. A multi-arm multi-stage platform design that allows preplanned addition of arms while still controlling the family-wise error. Statistics in Medicine, 43(19):3613–3632, 2024.
DOI: [10.1002/sim.10135](https://doi.org/10.1002/sim.10135)
- T Jaki, H Barnett, A Titman, and **P Mozgunov**. A seamless phase i/ii platform design with a time-to-event efficacy endpoint for potential covid-19 therapies. Statistical Methods in Medical Research, page Epub, 2024.
DOI: [10.1177/09622802241288348](https://doi.org/10.1177/09622802241288348)
- **Hugo Hadjur**, Doreid Ammar, Laurent Lefèvre. Deep Reinforcement Learning for Energy-efficient Selection of Embedded Services at the Edge, 2024 IEEE International Conferences on Internet of Things (iThings), Copenhagen, Denmark, 2024, pp. 67-74 hal-04708697.
DOI: [10.1109/iThings-GreenCom-CPSCoM-SmartData-Cybermatics62450.2024.00034](https://doi.org/10.1109/iThings-GreenCom-CPSCoM-SmartData-Cybermatics62450.2024.00034)
- Biard L, **Andrillon A**, Lee SM. Dose optimization for cancer treatments with considerations for late-onset toxicities. Clin Trials. 2024 Jun;21(3):322-330.
DOI: [10.1177/17407745231221152](https://doi.org/10.1177/17407745231221152)
- Fontan A., **Ratta M.**, Altafini C. From populations to networks: relating diversity indices and frustration in signed graphs. PNAS Nexus, 2024.
DOI: [10.1093/pnasnexus/pgae046](https://doi.org/10.1093/pnasnexus/pgae046)
- Fougeray R.* , Vidot L.* , **Ratta M.*** , Teng Z., Skanji D., **Saint-Hilary G**. Futility interim analysis based on Probability of Success using a surrogate endpoint. Pharmaceutical Statistics, 2024.
DOI: [10.1002/pst.2410](https://doi.org/10.1002/pst.2410)
- Wiklund S-J, Thorn K, Götte H, Hacquoil K, **Saint-Hilary G**, Carlton A. Going beyond probability of success: Opportunities for statisticians to influence quantitative decision-making at the portfolio level. Pharmaceutical Statistics. 2024 May-Jun;23(3):429-438.
DOI: [10.1002/pst.2361](https://doi.org/10.1002/pst.2361)
- **M. Guhl**, J. Bertrand, L. Fayette, F. Mercier, and E. Comets, “Uncertainty computation at finite distance in nonlinear mixed effects models - a new method based on metropolis hasting algorithm,” The AAPS Journal, vol. 26, no. 3, p. 53, 2024.
DOI: [10.1208/s12248-024-00905-x](https://doi.org/10.1208/s12248-024-00905-x)

2023

- A Serra, **P Mozgunov**, and T Jaki. A bayesian multi-arm multi-stage clinical trial design incorporating information about treatment ordering. Statistics in Medicine, 42(16):2841–2854, 2023.
DOI: [10.1002/sim.9752](https://doi.org/10.1002/sim.9752)
- L Daniells, **P Mozgunov**, A Bedding, and T Jaki. A comparison of bayesian information borrowing methods in basket trials and a novel proposal of modified exchangeability-nonexchangeability method. Statistics in Medicine, 42(24):4392–4417, 2023.
DOI: [10.1002/sim.9867](https://doi.org/10.1002/sim.9867)

- H Zheng, M Grayling, **P Mozgunov**, T Jaki, and J Wason. Bayesian sample size determination in basket trials borrowing information between subsets. *Biostatistics*, 24(4):1000–1016, 2023. DOI: [10.1093/biostatistics/kxac033](https://doi.org/10.1093/biostatistics/kxac033)
- A Serra, **P Mozgunov**, G Davies, and T Jaki. Determining the minimum duration of treatment in tuberculosis: An order restricted non-inferiority trial design. *Pharmaceutical Statistics*, 22(5):938–962, 2023. DOI: [10.1002/pst.2320](https://doi.org/10.1002/pst.2320)
- T Jaki, A Burdon, X Chen, **P Mozgunov**, H Zheng, and R Baird. Early phase clinical trials in oncology: Realising the potential of seamless designs. *European Journal of Cancer*, 189:112916, 2023. DOI: [10.1016/j.ejca.2023.05.005](https://doi.org/10.1016/j.ejca.2023.05.005)
- Riviere P, Penel N, Faure K, Marie G, Najem A, **Riviere MK**, Panaget S. Effect of medical staff training on vaccination coverage in outpatients with cancer: An interventional multicenter before-and-after study, *Vaccine: X*. 2023, 13:100261. DOI: [10.1016/j.jvacx.2023.100261](https://doi.org/10.1016/j.jvacx.2023.100261)
- Lepinet, U., **Tanniou, J.**, Courtois Communier, E., Créach, V., Beaumont, M. (2023). Impact of anthropometric data and physical activity level on the closed kinetic chain upper extremity stability test (CKCUEST) score: A cross-sectional study. *Phys Ther Sport*, 64:91-96. DOI: [10.1016/j.ptsp.2023.09.004](https://doi.org/10.1016/j.ptsp.2023.09.004)
- Di Stefano F, Rodrigues C, Galtier S, Guilleminot S, Robert V, Gasparini M, **Saint-Hilary G**. Incorporation of healthy volunteers data on receptor occupancy into a phase II proof-of-concept trial using a Bayesian dynamic borrowing design. *Biometrical Journal*. 2023; 65 (8). DOI: [10.1002/bimj.202200305](https://doi.org/10.1002/bimj.202200305)
- **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. DOI: [10.1080/10543406.2023.2236216](https://doi.org/10.1080/10543406.2023.2236216)
- S Khoo, R FitzGerald, G Saunders, C Middleton, S Ahmad, C Edwards, D Hadjiyiannakis, L Walker, **P Mozgunov**, R Lyon, V Shaw, et al. Molnupiravir versus placebo in unvaccinated and vaccinated patients with early SARS-CoV-2 infection in the uk (AGILE CST-2): a randomised, placebo-controlled, double-blind, phase 2 trial. *The Lancet Infectious Diseases*, 23(2):183–195, 2023. DOI: [10.1016/S1473-3099\(22\)00644-2](https://doi.org/10.1016/S1473-3099(22)00644-2)
- K Kasianova, M Kelbert, and **P Mozgunov**. Response-adaptive randomization for multiarm clinical trials using context-dependent information measures. *Biometrical Journal*, 65(8):2200301, 2023. DOI: [10.1002/bimj.202200301](https://doi.org/10.1002/bimj.202200301)
- **Hugo Hadjur**, Doreid Ammar, Laurent Lefèvre. Services Orchestration at the Edge and in the Cloud for Energy-Aware Precision Beekeeping Systems, 2023 IEEE International Parallel and Distributed Processing Symposium Workshops (IPDPSW), St. Petersburg, FL, USA, 2023, pp. 769-776 hal-04091575. DOI: [10.1109/IPDPSW59300.2023.00129](https://doi.org/10.1109/IPDPSW59300.2023.00129)

2022

- **P Mozgunov**, X Paoletti, and T Jaki. A benchmark for dose-finding studies with unknown ordering. *Biostatistics*, 23(3):721–737, 2022. DOI: [10.1093/biostatistics/kxaa054](https://doi.org/10.1093/biostatistics/kxaa054)
- Di Stefano F, Pannaux M, Correges A, Galtier S, Robert V, **Saint-Hilary G**. A comparison of estimation methods adjusting for selection bias in adaptive enrichment designs with time-to-event endpoints. *Statistics in Medicine*. 2022; 1-13. DOI: [10.1002/sim.9327](https://doi.org/10.1002/sim.9327)

- Menzies T, **Saint-Hilary G, Mozgunov P**. A comparison of various aggregation functions in multi-criteria decision analysis for drug benefit-risk assessment. *Statistical Methods in Medical Research*. 2022.
DOI: [10.1177/09622802211072512](https://doi.org/10.1177/09622802211072512)
- **P Mozgunov**, S Cro, A Lingford-Hughes, L Paterson, and T Jaki. A dose-finding design for dual-agent trials with patient-specific doses for one agent with application to an opiate detoxification trial. *Pharmaceutical Statistics*, 21(2):476–495, 2022.
DOI: [10.1002/pst.2181](https://doi.org/10.1002/pst.2181)
- L Walker, R FitzGerald, G Saunders, R Lyon, M Fisher, K Martin, I Eberhart, C Woods, **P Mozgunov**, S Ewings, C Hale, et al. An open label, adaptive, phase 1 trial of high-dose oral nitazoxanide in healthy volunteers: an antiviral candidate for sars-cov-2. *Clinical Pharmacology & Therapeutics*, 111(3):585–594, 2022.
DOI: [10.1002/cpt.2463](https://doi.org/10.1002/cpt.2463)
- A Serra, **P Mozgunov**, and T Jaki. An order restricted multi-arm multi-stage clinical trial design. *Statistics in Medicine*, 41(9):1613–1626, 2022.
DOI: [10.1002/sim.9314](https://doi.org/10.1002/sim.9314)
- Gerard E, Zohar S, Thai HT, Lorenzato C, **Riviere MK** (*co-last author), Ursino M. Bayesian dose regimen assessment in early phase oncology incorporating pharmacokinetics and pharmacodynamics, *Biometrics*. 2022, 78(1):300-312.
DOI: [10.1111/biom.13433](https://doi.org/10.1111/biom.13433)
- L Paterson, D Barker, S Cro, **P Mozgunov**, R Phillips, C Smith, L Nahar, S Paterson, and A Lingford-Hughes. Forwards-1: an adaptive, single-blind, placebo-controlled ascending dose study of acute baclofen on safety parameters in opioid dependence during methadone-maintenance treatment—a pharmacokinetic-pharmacodynamic study. *Trials*, 23(1):880, 2022.
DOI: [10.1186/s13063-022-06821-9](https://doi.org/10.1186/s13063-022-06821-9)
- **M. Guhl**, F. Mercier, C. Hofmann, et al., “Impact of model misspecification on model-based tests in PK studies with parallel design: Real case and simulation studies,” *J Pharmacokinet Pharmacodyn*, vol. 49(5), pp. 557–577, 2022.
DOI: [10.1007/s10928-022-09821-z](https://doi.org/10.1007/s10928-022-09821-z)
- 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.
DOI: [10.1016/j.ajo.2022.02.002](https://doi.org/10.1016/j.ajo.2022.02.002)
- 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.
DOI: [10.1111/bjd.21018](https://doi.org/10.1111/bjd.21018)
- Kazuma Mori, **Hugo Hadjur**, Masahiko Haruno. Natural Language Content Mediates the Association Between Active Interactions on Social Network Services and Subjective Well-Being, *Cyberpsychology, Behavior, and Social Networking*, 2022, pp. 678-685.
DOI: [10.1089/cyber.2021.0340](https://doi.org/10.1089/cyber.2021.0340)
- Abellan JJ, Bonnet N, Carlton A, Frewer P, Götte H, Lawo JP, Madsen J, Sailer O, Thömmes G, **Saint-Hilary G**. Points to consider for quantitative decision-making in clinical drug development. *arXiv*. 2022.
- **P Mozgunov**, T Jaki, I Gounaris, T Goddemeier, A Victor, and M Grinberg. Practical implementation of the partial ordering continual reassessment method in a phase i combination-schedule dose-finding trial. *Statistics in Medicine*, 41(30):5789–5809, 2022.
DOI: [10.1002/sim.9594](https://doi.org/10.1002/sim.9594)
- S Ewings, G Saunders, T Jaki, and **P Mozgunov**. Practical recommendations for implementing a Bayesian adaptive phase i design during a pandemic. *BMC Medical Research Methodology*, 22(1):25, 2022.
DOI: [10.1186/s12874-022-01512-0](https://doi.org/10.1186/s12874-022-01512-0)

- **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.
DOI: [10.1002/sim.9591](https://doi.org/10.1002/sim.9591)
- **Hugo Hadjur**, Doreid Ammar, Laurent Lefèvre. Toward an intelligent and efficient beehive: A survey of precision beekeeping systems and services, *Computers and Electronics in Agriculture*, Elsevier, 2022, 192, pp. 1-16. hal-03483914v2.
DOI: [10.1016/j.compag.2021.106604](https://doi.org/10.1016/j.compag.2021.106604)
- A Serra, **P Mozgunov**, T Jaki, and F Rigat. What is the expected benefit of patient-centric clinical development in oncology? *Journal of Biopharmaceutical Statistics*, 32(3):414–426, 2022.
DOI: [10.1080/10543406.2022.2065506](https://doi.org/10.1080/10543406.2022.2065506)

2021

- Aubel P, Antigny M, Fougeray R, Dubois F, **Saint-Hilary G**. A Bayesian approach for event predictions in clinical trials with time-to-event outcomes. *Statistics in Medicine*. 2021; 1-16.
DOI: [10.1002/sim.9186](https://doi.org/10.1002/sim.9186)
- G Griffiths, R FitzGerald, T Jaki, A Corkhill, H Reynolds, S Ewings, S Condie, **P Mozgunov**, E Tilt, L Johnson, M Radford, et al. Agile: a seamless phase i/ia platform for the rapid evaluation of candidates for covid-19 treatment: an update to the structured summary of a study protocol for a randomised platform trial letter. *Trials*, 22:1–5, 2021.
DOI: [10.1186/s13063-021-05458-4](https://doi.org/10.1186/s13063-021-05458-4)
- Leclercq M, **Andrillon A**, Maalouf G, [..], Saadoun D. Anti-Tumor Necrosis Factor α versus Tocilizumab in the Treatment of Refractory Uveitic Macular Edema: A Multicenter Study from the French Uveitis Network. *Ophthalmology*. 2021 Nov.
DOI: [10.1016/j.ophtha.2021.11.013](https://doi.org/10.1016/j.ophtha.2021.11.013)
- Gerard E, Zohar S, Lorenzato C, Ursino M (*co-last author), **Riviere MK**. Bayesian modeling of a bivariate toxicity outcome for early phase oncology trials evaluating dose regimens, *Stat Med*. 2021, 40(23):5096-5114.
DOI: [10.1002/sim.9113](https://doi.org/10.1002/sim.9113)
- F. Gao, C. Languille, K. Karzazi, **M. Guhl**, B. Boukebous, and S. Deguen, “Efficiency of fine scale and spatial regression in modelling associations between healthcare service spatial accessibility and their utilization,” *International Journal of Health Geographics*, vol. 20, no. 1, 2021.
DOI: [10.1186/s12942-021-00276-y](https://doi.org/10.1186/s12942-021-00276-y)
- Aziz M, Kaufmann E, **Riviere MK**. On Multi-Armed Bandit Designs for Dose-Finding Trials, *J Mach Learn Res*. 2021, 22(14):1-38.
Link: <https://jmlr.org/papers/v22/19-228.html>
- S Khoo, R Fitzgerald, T Fletcher, S Ewings, T Jaki, R Lyon, **P Mozgunov**, N Downs, L Walker, O Tansley-Hancock, W Greenhalf, et al. Optimal dose and safety of molnupiravir in patients with early sars-cov-2: a phase i, open-label, dose-escalating, randomized controlled study. *Journal of Antimicrobial Chemotherapy*, 76(12):3286–3295, 2021.
DOI: [10.1093/jac/dkab318](https://doi.org/10.1093/jac/dkab318)
- Y Desai, T Jaki, M Beresford, T Burnett, D Eleftheriou, H Jacobse, V Leone, S Li, **P Mozgunov**, A Ramanan, et al. Prior elicitation of the efficacy and tolerability of methotrexate and mycophenolate mofetil in juvenile localised scleroderma. *AMRC Open Research*, 3, 2021.
DOI: [10.12688/amrcopenres.13008.1](https://doi.org/10.12688/amrcopenres.13008.1)
- K Kasianova, M Kelbert, and **P Mozgunov**. Response adaptive designs for phase ii trials with binary endpoint based on context-dependent information measures. *Computational Statistics & Data Analysis*, 158:107187, 2021.
DOI: [10.1016/j.csda.2021.107187](https://doi.org/10.1016/j.csda.2021.107187)

- **P Mozgunov**, R Knight, H Barnett, and T Jaki. Using an interaction parameter in model-based phase i trials for combination treatments? a simulation study. *International Journal of Environmental Research and Public Health*, 18(1):345, 2021.
DOI: [10.3390/ijerph18010345](https://doi.org/10.3390/ijerph18010345)
- Riviere P, Penel N, Faure K, Marie G, Najem A, **Riviere MK**, Panaget S. Vaccination coverage in cancer outpatients: An interventional multicenter before/after study. *J Clin Oncol* 2021, 39(15).
DOI: [10.1200/JCO.2021.39.15_suppl.e24026](https://doi.org/10.1200/JCO.2021.39.15_suppl.e24026)

2020

- Jin J, **Riviere MK**, Luo X, Dong Y. Bayesian methods for the analysis of early-phase oncology basket trials with information borrowing across cancer types, *Stat Med*. 2020, 39(25):3459-3475.
DOI: [10.1002/sim.8675](https://doi.org/10.1002/sim.8675)
- **P Mozgunov**, T Jaki, and X Paoletti. A benchmark for dose finding studies with continuous outcomes. *Biostatistics*, 21(2):189–201, 2020.
DOI: [10.1093/biostatistics/kxy045](https://doi.org/10.1093/biostatistics/kxy045)
- R Abbas, C Rossoni, T Jaki, X Paoletti, and **P Mozgunov**. A comparison of phase i dose-finding designs in clinical trials with monotonicity assumption violation. *Clinical Trials*, 17(5):522–534, 2020.
DOI: [10.1177/1740774520932130](https://doi.org/10.1177/1740774520932130)
- **P Mozgunov**, M Gasparini, and T Jaki. A surface-free design for phase i dual-agent combination trials. *Statistical Methods in Medical Research*, 29(10):3093–3109, 2020.
DOI: [10.1177/0962280220919450](https://doi.org/10.1177/0962280220919450)
- T Burnett, **P Mozgunov**, P Pallmann, S Villar, G Wheeler, and T Jaki. Adding flexibility to clinical trial designs: an example-based guide to the practical use of adaptive designs. *BMC Medicine*, 18:1–21, 2020.
DOI: [10.1186/s12916-020-01808-2](https://doi.org/10.1186/s12916-020-01808-2)
- **P Mozgunov** and T Jaki. An information theoretic approach for selecting arms in clinical trials. *Journal of the Royal Statistical Society Series B: Statistical Methodology*, 82(5):1223–1247, 2020.
DOI: [10.1111/rssb.12391](https://doi.org/10.1111/rssb.12391)
- **Hugo Hadjur**, Doreid Ammar, Laurent Lefèvre. Analysis of Energy Consumption in a Precision Beekeeping System. *IoT '20 - 10th International Conference on the Internet of Things*, Oct 2020, Malmö, Sweden. pp. 1-11 hal-02973772.
DOI: [10.1145/3410992.3411010](https://doi.org/10.1145/3410992.3411010)
- Iannaccone M, Abdirashid M, Annone U, **Saint-Hilary G**, et al. Comparison between functional and intravascular imaging approaches guiding percutaneous coronary intervention: A network meta-analysis of randomized and propensity matching studies. *Catheterization and Cardiovascular Interventions*. 2020; 95(7): 1259-1266.
DOI: [10.1002/ccd.28410](https://doi.org/10.1002/ccd.28410)
- **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.
DOI: [10.1080/10543406.2020.1821702](https://doi.org/10.1080/10543406.2020.1821702)
- Demirtas, S., Houssais, C., **Tanniou, J.**, Misery, L., Brenaut, E. (2020). Effectiveness of a music intervention on pruritus: an open randomized prospective study. *J Eur Acad Dermatol Venereol*, 34(6):1280-1285.
DOI: [10.1111/jdv.16149](https://doi.org/10.1111/jdv.16149)
- N Stallard, L Hampson, N Benda, W Brannath, T Burnett, T Friede, P Kimani, F Koenig, J Krisam, **P Mozgunov**, M Posch, J Wason, G Wassmer, J Whitehead, F Williamson, S Zohar, and T Jaki. Efficient adaptive designs for clinical trials of interventions for covid-19. *Statistics in Biopharmaceutical Research*, 12(4):483–497, 2020.

DOI: [10.1080/19466315.2020.1790415](https://doi.org/10.1080/19466315.2020.1790415)

- **P Mozgunov** and T Jaki. Improving safety of the continual reassessment method via a modified allocation rule. *Statistics in Medicine*, 39(7):906–922, 2020.
DOI: [10.1002/sim.8450](https://doi.org/10.1002/sim.8450)
- **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.
DOI: [10.1177/0962280219887196](https://doi.org/10.1177/0962280219887196)
- Loingeville F, Nguyen TT, **Riviere MK**, Mentré F. Robust designs in longitudinal studies accounting for parameter and model uncertainties - Application to count data, *J Biopharm Stat*. 2020, 30(1):31-4.
DOI: [10.1080/10543406.2019.1607367](https://doi.org/10.1080/10543406.2019.1607367)
- **P Mozgunov**, T Jaki, and X Paoletti. Using a dose-finding benchmark to quantify the loss incurred by dichotomization in phase ii dose-ranging studies. *Biometrical Journal*, 62(7):1717–1729, 2020.
DOI: [10.1002/bimj.201900332](https://doi.org/10.1002/bimj.201900332)

2019

- **P Mozgunov** and T Jaki. A flexible design for advanced phase i/ii clinical trials with continuous efficacy endpoints. *Biometrical Journal*, 61(6):1477–1492, 2019.
DOI: [10.1002/bimj.201800313](https://doi.org/10.1002/bimj.201800313)
- **Saint-Hilary G**, Robert V, Gasparini M, Jaki T, and **Mozgunov P**. A novel measure of drug benefit-risk assessment based on Scale Loss Score. *Statistical Methods in Medical Research*. 2019; 28(9): 2738-2753.
DOI: [10.1177/0962280218786526](https://doi.org/10.1177/0962280218786526)
- **P Mozgunov** and T Jaki. An information theoretic phase I–II design for molecularly targeted agents that does not require an assumption of monotonicity. *Journal of the Royal Statistical Society Series C: Applied Statistics*, 68(2):347–367, 2019.
DOI: [10.1111/rssc.12293](https://doi.org/10.1111/rssc.12293)
- **Tanniou, J.**, Smid, S., van der Tweel, I., Teerenstra, S., and Roes, K. C. B. (2019). Level of evidence for promising subgroup findings: the case of trends and multiple subgroups. *Stat Med*, 38:2561–2572.
DOI: [10.1002/sim.8133](https://doi.org/10.1002/sim.8133)
- **P Mozgunov**, T Jaki, and M Gasparini. Loss functions in restricted parameter spaces and their bayesian applications. *Journal of Applied Statistics*, 46(13):2314–2337, 2019.
DOI: [10.1080/02664763.2019.1586848](https://doi.org/10.1080/02664763.2019.1586848)
- **Saint-Hilary G**, Barboux V, Pannaux M, Gasparini M, Robert V, Mastrantonio G. Predictive probability of success using surrogate endpoints. *Statistics in Medicine*. 2019; 38(10): 1753-1774.
DOI: [10.1002/sim.8060](https://doi.org/10.1002/sim.8060)
- Gaudino M, Lorusso R, (. . .), **Saint-Hilary G**, (. . .), et al. Radial Artery Versus Right Internal Thoracic Artery Versus Saphenous Vein as the Second Conduit for Coronary Artery Bypass Surgery: A Network Meta-Analysis of Clinical Outcomes. *Journal of the American Heart Association*. 2019; 8(2): e010839.
DOI: [10.1161/JAHA.118.010839](https://doi.org/10.1161/JAHA.118.010839)
- **P Mozgunov**, T Jaki, and X Paoletti. Randomized dose-escalation designs for drug combination cancer trials with immunotherapy. *Journal of Biopharmaceutical Statistics*, 29(2):359–377, 2019.
DOI: [10.1080/10543406.2018.1535503](https://doi.org/10.1080/10543406.2018.1535503)

2018

- **P Mozgunov**, M Beccuti, A Horvath, T Jaki, R Sirovich, and E Bibbona. A review of the deterministic and diffusion approximations for stochastic chemical reaction networks. *Reaction Kinetics, Mechanisms and Catalysis*, 123:289–312, 2018.
DOI: [10.1007/s11144-018-1351-y](https://doi.org/10.1007/s11144-018-1351-y)
- **P Mozgunov** and T Jaki. Book review: Handbook of methods for designing, monitoring, and analyzing dose-finding trials. *Journal of the American Statistical Association*, 113:948–953, 2018.
DOI: [10.1080/01621459.2018.1486071](https://doi.org/10.1080/01621459.2018.1486071)
- Williams TA, Burrello J, **Saint-Hilary G**, et al. Computed tomography and adrenal venous sampling in the diagnosis of unilateral primary aldosteronism. *Hypertension*. 2018; 72(3): 641-649.
DOI: [10.1161/HYPERTENSIONAHA.118.11382](https://doi.org/10.1161/HYPERTENSIONAHA.118.11382)
- **Saint-Hilary G**, Robert V, Gasparini M. Decision making in drug development using a composite definition of success. *Pharmaceutical Statistics*. 2018; 17(5):555-569.
DOI: [10.1002/pst.1870](https://doi.org/10.1002/pst.1870)
- Bertaina M, Ferraro I, Omedè P, Conrotto F, **Saint-Hilary G**, et al. Meta-Analysis Comparing Complete or Culprit Only Revascularization in Patients With Multivessel Disease Presenting With Cardiogenic Shock. *American Journal of Cardiology*. 2018; 122(10): 1661-1669.
DOI: [10.1016/j.amjcard.2018.08.003](https://doi.org/10.1016/j.amjcard.2018.08.003)
- Iannaccone M, **Saint-Hilary G**, Menardi D, et al. Network meta-analysis of studies comparing closure devices for femoral access after percutaneous coronary intervention. *Journal of Cardiovascular Medicine*. 2018; 19(10): 586-596.
DOI: [10.2459/JCM.0000000000000697](https://doi.org/10.2459/JCM.0000000000000697)
- Burrello J, Erhardt EM, **Saint-Hilary G**, et al. Pharmacological treatment of arterial hypertension in children and adolescents: a network meta-analysis. *Hypertension*. 2018; 72(2): 306-313.
DOI: [10.1161/HYPERTENSIONAHA.118.10862](https://doi.org/10.1161/HYPERTENSIONAHA.118.10862)
- **Riviere MK**, Yuan Y, Jourdan JH, Dubois F, Zohar S. Phase I/II Dose-Finding Design for Molecularly Targeted Agent: Plateau Determination using Adaptive Randomization, *Stat Methods Med Res*. 2018, 27(2):466-479.
DOI: [10.1177/0962280216631763](https://doi.org/10.1177/0962280216631763)

2017

- **Saint-Hilary G**, Cadour S, Robert V, and Gasparini M. A simple way to unify multicriteria decision analysis (MCDA) and stochastic multicriteria acceptability analysis (SMAA) using a Dirichlet distribution in benefit-risk assessment. *Biometrical Journal*. 2017; 59(3): 567-578.
DOI: [10.1002/bimj.201600113](https://doi.org/10.1002/bimj.201600113)
- **Tanniou, J.**, van der Tweel, I., Teerenstra, S., and Roes, K. C. B. (2017). Estimates of subgroup treatment effects in overall nonsignificant trials: To what extent should we believe in them? *Pharm Stat*, 16(4):280–295.
DOI: [10.1002/pst.1810](https://doi.org/10.1002/pst.1810)
- **Tanniou, J.**, Teerenstra, S., Hassan, S., Elferink, A., van der Tweel, I., Gispen-de Wied, C., and Roes, K. C. B. (2017). European regulatory use and impact of subgroup evaluation in marketing authorisation applications. *Drug Discov Today*, 22(12):1760–1764.
DOI: [10.1016/j.drudis.2017.09.012](https://doi.org/10.1016/j.drudis.2017.09.012)
- M Kelbert and **P Mozgunov**. Generalization of Cramér-rao and Bhattacharyya inequalities for the weighted covariance matrix. *Mathematical Communications*, 22(1):25–40, 2017.
Link: <https://www.mathos.unios.hr/mc/index.php/mc/article/view/1634>
- D'Ascenzo F, Iannaccone M, **Saint-Hilary G**, et al. Impact of design of coronary stents and length of dual antiplatelet therapies on ischaemic and bleeding events: a network meta-analysis of 64 randomized controlled trials and 102 735 patients. *European Heart Journal*. 2017; 38(42): 3160-3172.
DOI: [10.1093/eurheartj/ehx437](https://doi.org/10.1093/eurheartj/ehx437)

- Rosetta, L., Thalabard, J. C., **Tanniou, J.**, Ducot, B., Maitrot-Mantelet, L., Rousset-Jablonski, C., Bohet, A., Bouyer, J., Chimenes, A., and Slama, R. (2017). Ovulatory status and menstrual cycle duration assessed by self-collection of urine on pH strips in a population-based sample of French women not using hormonal contraception. *Eur J Contracept Reprod Health Care*, 22(6):450–458.
DOI: [10.1080/13625187.2017.1410881](https://doi.org/10.1080/13625187.2017.1410881)

2016

- **Riviere MK**, Ueckert S, Mentré F. An MCMC method for the evaluation of the Fisher information matrix for non-linear mixed effect models, *Biostatistics*. 2016, 17(4):737-750.
DOI: [10.1093/biostatistics/kxw020](https://doi.org/10.1093/biostatistics/kxw020)
- **Riviere MK**, Zohar S. Comments on 'A comparative study of adaptive dose-finding designs for phase I oncology trials of combination therapies', *Stat Med*. 2016, 35(3):475-478.
DOI: [10.1002/sim.6630](https://doi.org/10.1002/sim.6630)
- **Riviere MK**, Jourdan JH, Zohar S. dfcomb: An R-package for phase I/II trials of drug combinations, *Comput Methods Programs Biomed*. 2016, 125:117-33.
DOI: [10.1016/j.cmpb.2015.10.018](https://doi.org/10.1016/j.cmpb.2015.10.018)
- **Tanniou, J.**, Tweel, I. V., Teerenstra, S., and Roes, K. C. B. (2016). Level of evidence for promising subgroup findings in an overall non-significant trial. *Stat Methods Med Res*, 25(5):2193–2213.
DOI: [10.1177/0962280213519705](https://doi.org/10.1177/0962280213519705)
- **Tanniou, J.**, van der Tweel, I., Teerenstra, S., and Roes, K. C. B. (2016). Subgroup analyses in confirmatory clinical trials: time to be specific about their purposes. *BMC Med Res Methodol*, 16:20.
DOI: [10.1186/s12874-016-0122-6](https://doi.org/10.1186/s12874-016-0122-6)

2015

- **Riviere MK**, Yuan Y, Dubois F, Zohar S. A Bayesian Dose-finding Design for Clinical Trials Combining a Cytotoxic Agent with a Molecularly Targeted Agent, *JRSS-C*. 2015, 64(1):215–229.
DOI: [10.1111/rssc.12072](https://doi.org/10.1111/rssc.12072)
- M Kelbert and **P Mozgunov**. Asymptotic behaviour of the weighted Renyi, Tsallis and Fisher entropies in a Bayesian problem. *Eurasian Mathematical Journal*, 6(2):6–17, 2015.
- **Riviere MK**, Dubois F, Zohar S. Competing designs for drug combination in phase I dose-finding clinical trials, *Stat Med*. 2015, 34(1):1-12.
DOI: [10.1002/sim.6094](https://doi.org/10.1002/sim.6094)
- **Riviere MK**, Dubois F, Zohar S. Response to 'Comments on Competing designs for drug combination in phase I dose-finding clinical trials' by G. Yin, R. Lin and N. Wages, *Stat Med*. 2015, 34(1):23-26.
DOI: [10.1002/sim.6332](https://doi.org/10.1002/sim.6332)
- M Kelbert and **P Mozgunov**. Shannon's differential entropy asymptotic analysis in a Bayesian problem. *Mathematical Communications*, 20(2):219–228, 2015.

2014

- **Riviere MK**, Yuan Y, Dubois F, Zohar S. A Bayesian dose-finding design for drug combination clinical trials based on the logistic model, *Pharm Stat*. 2014, 13(4):247-257.
DOI: [10.1002/pst.1621](https://doi.org/10.1002/pst.1621)
- Simon Y, Marchadier A, **Riviere MK**, Vandamme K, Trouve A, Koenig F, Lezot F, Benhamou CL, Saffar JL, Berdal A, Nefussi JR. Cephalometric assessment of craniofacial dysmorphologies in relation with Msx2 mutations in mouse, *Orthod Craniofac Res*. 2014, 17(2):92-105.

DOI: [10.1111/ocr.12035](https://doi.org/10.1111/ocr.12035)

- **Riviere MK**, Le Tourneau C, Paoletti X, Dubois F, Zohar S. Designs of drug-combination phase I trials in oncology: a systematic review of the literature, *Annals of Oncology*. 2014, 26(4):669-674.

DOI: [10.1093/annonc/mdu516](https://doi.org/10.1093/annonc/mdu516)

2013

- Gam, C. M., **Tanniou, J.**, Keiding, N., and Løkkegaard, E. L. (2013). A model for the distribution of daily number of births in obstetric clinics based on a descriptive retrospective study. *BMJ Open*, 3(8):e002920.

DOI: [10.1136/bmjopen-2013-002920](https://doi.org/10.1136/bmjopen-2013-002920)