

Drifa

BELHADI, PhD

Statistical Methodologist

 drifa.belhadi@saryga.com

EDUCATION

PhD in biostatistics and biomathematics

✓ Université Paris Cité
 2019 – 2023

Engineering diploma (MSc equivalent) in statistics

✓ Ensai (National School for Statistics
and Information Analysis), Rennes
 2011 – 2014

MSc in Health economics

✓ Aix-Marseille School of Economics
 2013 – 2014

Post-secondary preparatory classes (classes préparatoires aux grandes écoles)

✓ Lycée du Parc, Lyon
 2009 – 2011

High school diploma equivalent (Baccalauréat Scientifique)

✓ Lycée Lacassagne, Lyon
 2009

LANGUAGES

- French: Mother tongue
- English: Fluent
- German: Intermediary
- Chinese: Basic knowledge

ICT

- Microsoft Office Suite, OpenOffice, LaTeX
- Statistical softwares: R, SAS, Winbugs, VBA

PROFESSIONAL EXPERIENCE

Statistical methodologist

Saryga, Statistics & Methodology • 2024 – Present

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

Senior research engineer in biostatistics

AP-HP.Nord Hôpital Bichat • 2018 – 2024

- Participation to the writing of study protocols (study design, sample size determination)
- Participation in the setup of the clinical study in collaboration with the clinical team: randomization scheme, case report form review
- Writing of the statistical analysis plan, conduct of the statistical analyses, writing of the statistical analysis report
- Participation in the design and analysis of the DisCoVeRy platform trial for the evaluation of COVID-19 treatments

PhD in biostatistics and biomathematics

Université Paris Cité • 2019 – 2023

- Bayesian decision analysis to design clinical trial in the context of a viral haemorrhagic fever

Mission officer

Haute Autorité de Santé (HAS) • 2019 – 2023

- Meta-analysis in the context of a dossier to evaluate the performance and the place of the tomosynthesis mammography in the national program of breast cancer screening
- Critical review of statistical analyses conducted in the context of an efficiency dossier for a medical device

Senior statistical analyst (2017-2018),

Statistical analyst (2014-2016)

Amaris (London, Paris) • 2014 – 2018

- HTA submissions (NICE, HAS) :
 - Network meta-analysis and systematic literature review
 - Statistical analyses to generate efficacy, safety and quality of life data
- Exploratory analyses and survival analyses on clinical trials data in oncology
- Analyses of real-world evidence and survey data

Statistical analyst (intern)

OptumInsight (London) • 2013

- Statistical methods to adjust for crossover in clinical trials in oncology

TEACHING EXPERIENCE

Aix-Marseille University, Marseille (2018 – 2023)

- 12 hours per scholar year – Lecture on Big data and health

Ensai, Rennes (2018 – 2022)

- 18 hours per scholar year – Lecture on Meta-analysis

Université Paris Diderot, U.F.R. de Médecine, Paris (2018 – 2019)

- 46 hours - Practical sessions on biostatistics for 1st year medical school students



PUBLICATIONS

- Terzić, V, Miantezila Basilua, J, Billard, N, de Gastines, L, **Belhadi, D**, Fougrou-Leurent, C, ... & Diallo, A. (2024). Cardiac Adverse Events and Remdesivir in Hospitalized Patients with Coronavirus Disease 2019 (COVID-19): A Post Hoc Safety Analysis of the Randomized DisCoVeRy Trial. *Clinical Infectious Diseases*, ciae170.
- Siempos II, Kalil AC, **Belhadi D**, Veiga VC, Cavalcanti AB, Branch-Elliman W, Papoutsis E, Gkirkiris K, Xixi NA, Kotanidou A, Hermine O. Immunomodulators for immunocompromised patients hospitalized for COVID-19: a meta-analysis of randomized controlled trials. *EClinicalMedicine*. 2024 Mar 1;69.
- Hites, M, Massonnaud, C, Lapique, EL, **Belhadi, D**, et al. Tixagevimab-cilgavimab (AZD7442) for the treatment of patients hospitalized with COVID-19 (DisCoVeRy): A phase 3, randomized, double-blind, placebo-controlled trial. *Journal of Infection*, 2024, vol. 88, no 3.
- Néant N, Lingas G, Gaymard A, **Belhadi D**, Hites M, Staub T, Greil R, Paiva JA, Poissy J, Peiffer-Smadja N, Costagliola D. Association between SARS-CoV-2 viral kinetics and clinical score evolution in hospitalized patients. *CPT: Pharmacometrics & Systems Pharmacology*. 2023 Sep 20.
- Fougrou-Leurent C, Delmas C, Saillard J, Dumousseaux M, Ferrane A, Mercier N, Terzic V, Le Mestre S, Dechanet A, **Belhadi D**, Metois A. Ensuring quality control in a COVID-19 clinical trial during the pandemic: The experience of the Inserm C20–15 DisCoVeRy study. *Contemporary Clinical Trials*. 2023 Jun 9;107267.
- Mercier N, **Belhadi D**, DeChanet A, Delmas C, Saillard J, Dumousseaux M, Le Mestre S, Fougrou-Leurent C, Ferrane A, Burdet C, Espérou H. Management of pharmacovigilance during the COVID-19 pandemic crisis by the safety department of an academic sponsor: Lessons learnt and challenges from the EU DisCoVeRy clinical trial. *Pharmacology Research & Perspectives*. 2023 Jun;11(3):e01072.
- Amstutz A, Speich B, Mentré F, Rueegg CS, **Belhadi D**, Assoumou L, Burdet C, Murthy S, Dodd LE, Wang Y, Tikkinen KA. Effects of remdesivir in patients hospitalised with COVID-19: a systematic review and individual patient data meta-analysis of randomised controlled trials. *The Lancet Respiratory Medicine*. 2023 May 1;11(5):453-64.
- David C, Duployez N, Eloy P, **Belhadi D**, Chezel J, Guern VL, Laouénan C, Fenwarth L, Rouzaud D, Mathian A, de Almeida Chaves S. Clonal haematopoiesis of indeterminate potential and cardiovascular events in systemic lupus erythematosus (HEMATOPLUS study). *Rheumatology*. 2022 Nov 1;61(11):4355-63.
- Belhadi D**, El Baied M, Mulier G, Malvy D, Mentré F, Laouénan C. The number of cases, mortality and treatments of viral hemorrhagic fevers: A systematic review. *PLOS Neglected Tropical Diseases*. 2022 Oct 31;16(10):e0010889.
- David C, Costedoat-Chalumeau N, **Belhadi D**, Laouénan C, Boutten A, Chezel J, Rouzaud D, Dehoux M, Guern VL, Mathian A, Chaves SD. Soluble CD163 and incident cardiovascular events in patients with systemic lupus erythematosus: An observational cohort study. *Journal of Internal Medicine*. 2022 Sep;292(3):536-9.
- Dauriat G, Reynaud-Gaubert M, Cottin V, Lamia B, Montani D, **Belhadi D**, Humbert M, Laouenan C, Mal H. Severe pulmonary hypertension associated with COPD: long-term results of a prospective French multicentre cohort. *European Respiratory Journal*. 2022 Jul 1;60(1).
- Lingas G, Néant N, Gaymard A, **Belhadi D**, Peytavin G, Hites M, Staub T, Greil R, Paiva JA, Poissy J, Peiffer-Smadja N. Effect of remdesivir on viral dynamics in COVID-19 hospitalized patients: a modelling analysis of the randomized, controlled, open-label DisCoVeRy trial. *Journal of Antimicrobial Chemotherapy*. 2022 May 1;77(5):1404-12.
- Ader F, Bouscambert-Duchamp M, Hites M, Peiffer-Smadja N, Poissy J, **Belhadi D**, Lê MP, Peytavin G, Staub T, Greil R, Guedj J. Remdesivir plus standard of care versus standard of care alone for the treatment of patients admitted to hospital with COVID-19 (DisCoVeRy): a phase 3, randomised, controlled, open-label trial. *The Lancet Infectious Diseases*. 2022 Feb 1;22(2):209-21.
- Périllaud-Dubois C, **Belhadi D**, Laouénan C, Mandelbrot L, Picone O, Vauloup-Fellous C. Current practices of management of maternal and congenital Cytomegalovirus infection during pregnancy after a maternal primary infection occurring in first trimester of pregnancy: Systematic review. *Plos one*. 2021 Dec 3;16(12):e0261011.
- Dauriat G, Reynaud-Gaubert M, Cottin V, Lamia B, Montani D, Canuet M, Boissin C, Tromeur C, Chaouat A, Degano B, Bergot E, Sanchez O, Prevot G, Sitbon O, Thabut G, **Belhadi D**, de Beauregard YC, Bencherif A, Humbert M, Simonneau G, Laouenan C, Mal H. Severe pulmonary hypertension associated with chronic obstructive pulmonary disease: A prospective French multicenter cohort. *J Heart Lung Transplant*. 2021 Sep;40(9):1009-1018.
- Ader F, Peiffer-Smadja N, Poissy J, Bouscambert-Duchamp M, **Belhadi D**, Diallo A, Delmas C, Saillard J, Dechanet A, Mercier N,

- Dupont A. An open-label randomized controlled trial of the effect of lopinavir/ritonavir, lopinavir/ritonavir plus IFN- β -1a and hydroxychloroquine in hospitalized patients with COVID-19. *Clinical Microbiology and Infection*. 2021 Dec 1;27(12):1826-37.
- Manchon P, **Belhadi D**, Mentré F, Laouénan C. Evaluation by simulation of clinical trial designs for evaluation of treatment during a viral haemorrhagic fever outbreak. *BMC medical research methodology*. 2021 Dec;21(1):1-0.
- Lê MP, Peiffer-Smadja N, Guedj J, Neant N, Mentré F, Ader F, Yazdanpanah Y, Peytavin G; **C-20-15 DisCoVeRy French Steering Committee**. Rationale of a loading dose initiation for hydroxychloroquine treatment in COVID-19 infection in the DisCoVeRy trial-authors' response. *J Antimicrob Chemother*. 2021 Jan 1;76(1):277-279.
- WHO Solidarity Trial Consortium**. Repurposed antiviral drugs for Covid-19—interim WHO solidarity trial results. *New England journal of medicine*. 2021 Feb 11;384(6):497-511.
- Goulas A, **Belhadi D**, Descamps A, Andreumont A, Benoit P, Courtois S, Dagot C, Grall N, Makowski D, Nazaret S, Nelieu S. How effective are strategies to control the dissemination of antibiotic resistance in the environment? A systematic review. *Environmental Evidence*. 2020 Dec;9(1):1-32.
- Dodd LE, Follmann D, Wang J, Koenig F, Korn LL, Schoergenhofer C, Proschan M, Hunsberger S, Bonnett T, Makowski M, **Belhadi D**, Wang Y, Cao B, Mentré F, Jaki T. Endpoints for randomized controlled clinical trials for COVID-19 treatments. *Clin Trials*. 2020 Oct;17(5):472-482.
- Sallard E, **Belhadi D**, Lescure FX, Yazdanpanah Y, Peiffer-Smadja N. Clinical trial protocols of repurposed prophylaxis for COVID-19: A review. *Med Mal Infect*. 2020 Oct 3:S0399-077X(20)30711-3.
- Ader F; **Discovery French Trial Management Team**. Protocol for the DisCoVeRy trial: multicentre, adaptive, randomised trial of the safety and efficacy of treatments for COVID-19 in hospitalised adults. *BMJ Open*. 2020 Sep 21;10(9):e041437.
- Chezel J, Costedoat-Chalumeau N, Laouénan C, Rouzaud D, Chenevier-Gobeaux C, Le Guern V, Mathian A, **Belhadi D**, de Almeida Chaves S, Duhaut P, Fain O, Galicier L, Ghillani-Dalbin P, Kahn JE, Morel N, Perard L, Pha M, Saidoune F, Sarrot-Reynaud F, Aumaitre O, Chasset F, Limal N, Desmurs-Clavel H, Ackermann F, Amoura Z, Papo T, Sacre K. Highly sensitive serum cardiac troponin T and cardiovascular events in patients with systemic lupus erythematosus (TROPOPLUS study). *Rheumatology (Oxford)*. 2020 Sep 9;keaa434.
- Beauplet B, Soulie O, Niemier JY, Pons-Peyneau C, **Belhadi D**, Couffignal C, Fossey-Diaz V. Dealing with the lack of evidence to treat depression in older patients with cancer: French Societies of Geriatric Oncology (SOGOG) and PsychoOncology (SFFPO) position paper based on a systematic review. *Support Care Cancer*. 2020 Sep 1.
- Fragkou PC, **Belhadi D**, Peiffer-Smadja N, Moschopoulos CD, Lescure FX, Janocha H, Karofylakis E, Yazdanpanah Y, Mentré F, Skevaki C, Laouénan C, Tsiodras S; ESCMID Study Group for Respiratory Viruses. Review of trials currently testing treatment and prevention of COVID-19. *Clin Microbiol Infect*. 2020 Aug;26(8):988-998.
- Dupin C, **Belhadi D**, Guilleminault L, Gamez AS, Berger P, De Blay F, Bonniaud P, Leroyer C, Mahay G, Girodet PO, Raherison C, Fry S, Le Bourdellès G, Proust A, Rosencher L, Garcia G, Bourdin A, Chenivresse C, Didier A, Couffignal C, Taillé C. Effectiveness and safety of dupilumab for the treatment of severe asthma in a real-life French multi-centre adult cohort. *Clin Exp Allergy*. 2020 Jul;50(7):789-798.
- Estrella Porter J, Camacho M, Viteri MI, Aguilar K, **Belhadi D**, Bettoli V, Buestán ADR, Dréno B, Endara P, Layton A, Machado N, Mateus R, Tan J, Terán E, Yépez P, Guillemot J. Pilot study for the evaluation and adaptation of a Four Item-Acne-Scar Risk Assessment Tool (4-ASRAT): a resource to estimate the risk of acne-induced scars. *F1000Res*. 2020 Jun 26;9:651.
- Sanai FM, Alghamdi H, Alswat KA, Babatin MA, Ismail MH, Alhamoudi WK, Alalwan AM, Dahlan Y, Alghamdi AS, Alfaleh FZ, Aljumah AA, Altraif IH, Albeladi K, Batwa F, Alshumrani W, **Belhadi D**, Genestier V, Abdo AA. Greater prevalence of comorbidities with increasing age: Cross-sectional analysis of chronic hepatitis B patients in Saudi Arabia. *Saudi J Gastroenterol*. 2019 May-Jun;25(3):194-200.
- Limosin F, **Belhadi D**, Comet D, Pacou M, Bouju S, Van Impe K, Guillon P. Comparison of Paliperidone Palmitate and Risperidone Long-Acting Injection in Schizophrenic patients: Results From a Multicenter Retrospective Cohort Study in France. *J Clin Psychopharmacol*. 2018 Feb;38(1):19-26.