

Burak Kürsad Günhan, PhD

Stephanstraße 4, 64295 Darmstadt, Germany

✉ burakgunhan@gmail.com | 🏠 bkguenhan.rbind.io | 📱 gunhanb | 🌐 gunhanb

Experience

Merck Healthcare KGaA

SENIOR BIOSTATISTICIAN

- Trial statistician in early development oncology.

Darmstadt, Germany

Jul. 2021 - Present

University Medical Center Göttingen

RESEARCH ASSOCIATE AND TEACHING ASSISTANT

- Responsibilities include methodological research in Bayesian statistics applied in early/translational clinical trials and (network) meta-analysis, statistical programming, and teaching. Also, working on a Phase Ib dose-escalation study for the safety of Vorinostat in patients with mild Alzheimer (ClinicalTrials.gov ID: NCT03056495).

Göttingen, Germany

Aug. 2016 - Jun. 2021

Galapagos NV

BIOSTATISTICIAN INTERN

- Developed a shrinkage estimation method for phase II trials with multiple treatment schedules.

Mechelen, Belgium

Aug. 2019 - Oct. 2019

Novartis Pharma AG

BIOSTATISTICIAN INTERN AT ONCOLOGY EARLY DEVELOPMENT

- Developed a Bayesian method for simultaneously optimizing dose and schedule in phase I oncology dose-escalation trials.
- Implemented the developed method in **Stan** and **R**.

Basel, Switzerland

Aug. 2017 - Nov. 2017

F. Hoffmann-La Roche AG

BIOSTATISTICIAN INTERN

- Implemented nonlinear mixed effect models and pharmacokinetic pharmacodynamic models in **Stan**.

Basel, Switzerland

Mar. 2016 - Jun. 2016

Education

University Medical Center Göttingen

PHD IN BIOSTATISTICS

- Thesis: Bayesian methods for borrowing information in clinical drug development
- Supervisor: Prof. Dr. Tim Friede

Göttingen, Germany

Jan. 2017 - Dec. 2020

University of Zurich

MSC IN BIOSTATISTICS

- Thesis: Network meta-analysis with integrated nested Laplace approximations
- Supervisors: Prof. Dr. Leonhard Held and Dr. Rafael Sauter

Zurich, Switzerland

Sept. 2013 - Jul. 2016

Bogazici University

BSC IN MATHEMATICS

Istanbul, Turkey

Sept. 2007 - Jul. 2012

Skills

Programming R, Git/Github, Shiny, BASH

Document preparation \LaTeX , Rmarkdown, knitr

Bayesian inference WinBUGS/JAGS, Stan, INLA

OS platform Windows, Macintosh, Linux (Ubuntu)

Languages English (Fluent), Turkish (Native), German (Intermediate)

Publications

Phase I dose-escalation oncology trials with sequential multiple schedules

B. K. Günhan, S. Weber, A. Seroutou, T. Friede

BMC Medical Research Methodology (2021). URL: [HTTPS://DOI.ORG/10.1186/s12874-021-01218-9](https://doi.org/10.1186/s12874-021-01218-9)

Shrinkage estimation for dose-response modeling in phase II trials with multiple dose regimens

B. K. Günhan, P. Meyvish, T. Friede

Statistics in Biopharmaceutical Research (2020). URL: [HTTPS://DOI.ORG/10.1080/19466315.2020.1850519](https://doi.org/10.1080/19466315.2020.1850519)

A Bayesian time-to-event pharmacokinetic model for phase I dose-escalation trials with multiple schedules

B. K. Günhan, S. Weber, T. Friede

Statistics in Medicine (2020). URL: [HTTPS://DOI.ORG/10.1002/SIM.8703](https://doi.org/10.1002/sim.8703)

Random-effects meta-analysis of few studies involving rare events

B. K. Günhan, C. Röver, T. Friede

Research Synthesis Methods (2019) PP. 1–17. URL: [HTTPS://DOI.ORG/10.1002/JRSM.1370](https://doi.org/10.1002/jrsm.1370)

A design-by-treatment interaction model for network meta-analysis and meta-regression with integrated nested Laplace approximations

B. K. Günhan, T. Friede, L. Held

Research Synthesis Methods 9.2 (2018) PP. 179–194. URL: [HTTPS://DOI.ORG/10.1002/JRSM.1285](https://doi.org/10.1002/jrsm.1285)

Recent advances in methodology for clinical trials in small populations: the InSPiRe project

T. Friede, M. Posch, S. Zohar, and 19 others including B. K. Günhan

Orphanet Journal of Rare Diseases 13.1 (2018). URL: [HTTPS://DOI.ORG/10.1186/S13023-018-0919-Y](https://doi.org/10.1186/s13023-018-0919-y)

Software packages

MetaStan: Bayesian Meta-Analysis via ‘Stan’

DEVELOPER AND MAINTAINER

2018

<https://CRAN.R-project.org/package=MetaStan>

nmaINLA: An R package for fitting Bayesian network meta-analysis models using INLA

DEVELOPER AND MAINTAINER

2017

<https://CRAN.R-project.org/package=nmaINLA>

Presentations

ORAL PRESENTATIONS

GMDS and CEN-IBS 2020

Online

SHRINKAGE ESTIMATION FOR DOSE-RESPONSE MODELING IN PHASE II TRIALS WITH MULTIPLE DOSE REGIMENS

Sept. 2020

Applied Bayesian Biostatistics Conference

Lyon, France

MODEL-BASED META-ANALYSIS USING ARM-BASED MODELS

May. 2019

Workshop of the IBS-DR working group “Bayes Methods”

Göttingen, Germany

PHASE I DOSE-ESCALATION TRIALS WITH MORE THAN ONE DOSING REGIMEN

Dec. 2018

64. Biometrisches Kolloquium, International Biometric Society (German Region)

Frankfurt, Germany

A DESIGN-BY-TREATMENT INTERACTION MODEL FOR NETWORK META-ANALYSIS AND META-REGRESSION WITH INTEGRATED NESTED LAPLACE APPROXIMATIONS,

Mar. 2018

POSTER PRESENTATIONS

International Biometric Conference (IBC)

Barcelona, Spain

GUIDING PHASE I DOSE-ESCALATION TRIALS WITH MORE THAN ONE DOSING REGIMEN

Jul. 2018

Statisticians in the Pharmaceutical Industry (PSI)

Amsterdam, Netherlands

META-ANALYSIS OF RARE EVENTS WITH FEW STUDIES

Jun. 2018

Teaching

Analysis of Time-to-Event data

Fall Semester

MSC. IN APPLIED STATISTICS, GEORG-AUGUST UNIVERSITY OF GÖTTINGEN

2018/19, 2019/20

Introduction to Statistics

Fall Semester

MSC. IN NEUROSCIENCE, GEORG-AUGUST UNIVERSITY OF GÖTTINGEN

2017/18, 2018/19, 2019/20, 2020/21