

Burak Kürsüd Günhan

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Experience

University Medical Center Göttingen

Göttingen, Germany

RESEARCH ASSOCIATE AND TEACHING ASSISTANT

Aug. 2016 - Present

- 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).

Galapagos NV

Mechelen, Belgium

BIostatistician Intern

Aug. 2019 - Oct. 2019

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

Novartis Pharma AG

Basel, Switzerland

BIostatistician Intern at Oncology Early Development

Aug. 2017 - Nov. 2017

- 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**.

F. Hoffmann-La Roche AG

Basel, Switzerland

BIostatistician Intern

Mar. 2016 - Jun. 2016

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

Education

University Medical Center Göttingen

Göttingen, Germany

PHD IN BIostatISTICS

Jan. 2017 - Dec. 2020

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

University of Zurich

Zurich, Switzerland

MSC IN BIostatISTICS

Sept. 2013 - Jul. 2016

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

Bogazici University

Istanbul, Turkey

BSC IN MATHEMATICS

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

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

B. K. Günhan, P. Meyvisch, 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)

Sequential phase I dose-escalation trials with multiple schedules

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

Under Review (2020). URL: [HTTPS://ARXIV.ORG/ABS/1811.09433](https://arxiv.org/abs/1811.09433)

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

Workshop: Analysis of adverse events in the context of estimands

Heidelberg, Germany

META-ANALYSIS OF ADVERSE EVENTS AND PRACTICALS IN R

Delayed due to Covid-19

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

Novartis Biostatistics Conference

Basel, Switzerland

GUIDING PHASE I DOSE-ESCALATION TRIALS WITH DOSE REGIMEN CHANGES (BEST POSTER AWARD)

Oct. 2017

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