Burak Kürsad **Günhan, PhD**

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Experience

Merck Healthcare KGaA   *Darmstadt, Germany*
SENIOR BIOSTATISTICIAN   *Jul. 2021 - Present*
- Trial statistician in early development oncology.

University Medical Center Göttingen   *Göttingen, Germany*
RESEARCH ASSOCIATE AND TEACHING ASSISTANT   *Aug. 2016 - Jun. 2021*
- 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 platfrom	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

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

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

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

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

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

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*