MICHAEL SEO

 J +41 798350405
 Swj8874[at]gmail.com
 In LinkedIn
 ○ Personal Website

EDUCATION

University of Bern, Switzerland
Bern, Switzerland

Ph.D. Biostatistics and Epidemiology 2019 - 2022

Brown University Rhode Island, USA

M.A. Biostatistics; GPA: 3.6/4.0 2015 - 2017

Stanford University California, USA

M.S. Statistics; GPA: 3.7/4.0 2012 - 2014

Duke University North Carolina, USA

B.S. Statistics, Graduation with High Distinction; GPA: 3.7/4.0 2007 - 2011

WORK EXPERIENCE

Roche 2022 - Present

Access Evidence Lead Basel, Switzerland

- Reviewed systematic literature review and feasibility assessment for indirect treatment comparisons (ITC) and wrote statistical analysis plans that outline the ITC analysis needed for the HTA reimbursement submissions.
- Performed matching-adjusted indirect comparison (MAIC) for comparisons with only aggregate summaries of the comparator studies and inverse probability of treatment weighting and matching methods for studies with full individual patient data.
- Developed an R package for MAIC which implements comprehensive analysis and visualization tools, including unanchored and anchored comparisons, continuous, binary and survival outcomes, and robust sandwich and bootstrap variance estimators.

Institute of Social and Preventive Medicine, University of Bern

2019 - 2022

Ph.D. Student in Biostatistics and Epidemiology

Bern. Switzerland

- Compared variable selection and shrinkage methods for estimating patient-specific treatment effects in individual patient data meta-analysis.
- Developed models that combine individual patient data from randomized controlled trials and observational studies when aiming to predict outcomes for a set of treatments.
- Explored methods of addressing the systematically missing predictors problem, when the aim is to build a prediction model using data from multiple studies.

LLX Solutions 2018 - 2019

Biostatistician Massachusetts, USA

- Drafted statistical analysis plans for Phase I trials which address study designs and methods on how to evaluate safety of the new drug in development.
- Transformed raw clinical data into datasets that meet FDA standards using PROC SQL.

Department of Biostatistics, Brown University

2015 - 2017

Ph.D. Student in Biostatistics

Rhode Island, USA

- Developed an R package for Bayesian network meta-analysis which allows simultaneous comparison of multiple treatments.
- Developed a Bayesian statistical tool to analyze single patient trials with crossover design and applied it to give individualized recommendations of carbohydrate diet for patients with inflammatory bowel disease.

SKILLS

Programming: R, Python, SAS

Statistics: Bayesian methods, (network) meta-analysis, causal inference