# MICHAEL SEO

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in LinkedIn 

Personal Website

Output

Description:

#### 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