

Kolloquium „Statistische Methoden in der empirischen Forschung“

Wann: 21. Januar 2025, 17:00 – 18:30 Uhr

Wo: Online-Übertragung: der Link wird auf der [Website](#) zur Verfügung gestellt

Vortragssprache: Englisch

Ilya Lipkovich (Eli Lilly and Company, Indianapolis, USA)

Modern approaches for evaluating treatment effect heterogeneity

In this talk (based on the recent tutorial of Lipkovich et al. (2024)) I review recent advances in statistical methods for evaluating Heterogeneous Treatment Effects (HTE), including subgroup identification, estimation of conditional average treatment effects, and individualized treatment regimens using data from randomized clinical trials and observational studies. I will present several classes of approaches including traditional indirect approaches based on modeling response surface as a function of treatment and covariates, and various direct recent directly targeting causal estimands of interest. Selected approaches will be illustrated using a synthetic data set with outcomes and baseline covariates from a randomized clinical trial.

Literature

Lipkovich I, Svensson D, Ratitch B, Dmitrienko A. Modern approaches for evaluating treatment effect heterogeneity from clinical trials and observational data. *Statistics in Medicine*. 2024 Sep 30;43(22):4388-4436. doi: 10.1002/sim.10167. Epub 2024 Jul 25. PMID: 39054669.