Kolloquium „Statistische Methoden in der empirischen Forschung"

Wann: 22. Oktober 2019, 17:00 – 18:30 Uhr

Wo: Robert Koch-Institut | Nordufer 20 | 13353 Berlin (Wedding)

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Restricted randomization methods and some extensions

Using adequate randomization methods is an important prerequisite in conducting a clinical trial. Over the years various restricted randomization methods such as permuted block design, biased coin design, urn design or big stick design have been proposed as well as covariate-adaptive and response-adaptive randomization techniques. In this talk, I will discuss the performance of different restricted randomization methods regarding their treatment balance behavior and propose a general measure for imbalance in case of more than two groups or unequal allocation rates.

However, it is not only important to have different methods available but also to have suitable software to allow use of these methods in practice. I will present a web-based randomization tool for multi-centre clinical studies ("Randomizer" – www.randomizer.at) which was developed and is maintained by the Institute for Medical Informatics, Statistics and Documentation, Medical University of Graz, Austria. This tool facilitates efficient management of the randomization process including allocation concealment, stratification, audit trails etc. and can also be used for simulation of different randomization designs.