

## Einladung zum Biometrischen Kolloquium

### ELS GENBRUGGE,

European Organization for Research and Treatment of Cancer  
(EORTC), Brüssel, Belgien

**16. April 2018, 13:30h s.t.**

Informatikbibliothek der MUW, Spitalgasse 23, Raum 88.03.806, Medizinischen  
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### BAYESIAN ADAPTIVE RANDOMIZATION

#### ABSTRACT:

Bayesian adaptive randomization in clinical trials: yes or no? Adaptive designs are gaining popularity in the field of clinical trials. They introduce the flexibility to modify several features of a design during the course of the trial based on interim results. This mid-trial learning is a promising tool for more efficient trials. Adaptive randomization however, remains controversial. Bayesian outcome-adaptive randomization (BAR) allows the randomization probability to be updated in favour of the more efficacious treatment(s). Hereby the exposure to less successful or more harmful treatments is minimized. This is in line with individual ethics and fits in the framework of personalized medicine. But at which cost does flexibility and personalized benefit come? In this presentation the concept of BAR will be introduced in the context of clinical trial. Its principles will be explained together with an overview of the methodology, which will be further illustrated using examples in oncology. Finally, its advantages, disadvantages and challenges will be discussed.