

Please join the Biometric Colloquium

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RESPONSE-ADAPTIVE RANDOMIZATION IN CLINICAL TRIALS: FROM MYTHS TO PRACTICAL CONSIDERATIONS

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Schulungsraum Center for Medical Data Science (previously CeMSIS),
Spitalgasse 23, Room 88.03.512
Medical University of Vienna, 1090 Wien

Host: Martin Posch und Franz König

Abstract:

Response-Adaptive Randomization (RAR) is part of a wider class of data-dependent sampling algorithms, for which clinical trials are typically used as a motivating application. In that context, patient allocation to treatments is determined by randomization probabilities that change based on the accrued response data in order to achieve experimental goals. RAR has received abundant theoretical attention from the biostatistical literature since the 1930s and has been the subject of numerous debates. In the last decade, it has received renewed consideration from the applied and methodological communities, driven by well-known practical examples and its widespread use in machine learning. Papers on the subject present different views on its usefulness, and these are not easy to reconcile. In this talk, we present a recent review of methodological and practical issues to consider when debating the use of RAR in clinical trials.