Wiener Biometrische Sektion
der Internationalen Biometrischen Gesellschaft
Region Österreich – Schweiz
http://www.meduniwien.ac.at/wbs/

Einladung zum

BIOMETRISCHEN KOLLOQUIUM

Am **Donnerstag, 6. Juni 2013** um **16:00 Uhr** (s.t.)

im Schulungsraum (Ebene 3, Raum 88.03.512) des
Zentrums für Medizinische Statistik, Informatik und Intelligente Systeme (CeMSIIS)
der Medizinischen Universität Wien, Spitalgasse 23, 1090 Wien
(Plan siehe http://www.muw.ac.at/cemsiis/allgemeines/anschrift/)

Vortragender:

DR. DOMINIC MAGIRR

Department of Mathematics and Statistics
Lancaster University

FLEXIBLE SEQUENTIAL DESIGNS FOR MULTI-ARM CLINICAL TRIALS

Wir freuen uns auf zahlreichen Besuch.

Gerhard Svolba
Präsident

Franz König
Sekretär

FLEXIBLE SEQUENTIAL DESIGNS FOR MULTI-ARM CLINICAL TRIALS

DR. DOMINIC MAGIRR

Department of Mathematics and Statistics
Lancaster University

Abstract:

We consider a clinical trial comparing several experimental treatments with a common control. An adaptive strategy often seems sensible in this situation, with the accumulating data dictating which treatment arms should be dropped from the study and which should be continued.

Adaptive designs that are based on group-sequential approaches have the benefit of being efficient as stopping boundaries can be found that lead to good operating characteristics with test decisions based solely on sufficient statistics. The drawback of these so called "pre-planned adaptive" designs is that unexpected design changes are not possible without impacting the error rates. "Flexible adaptive designs" on the other hand can cope with a large number of contingencies at the cost of reduced efficiency. In this work we focus on two different approaches for multi-arm multi-stage trials which are based on group-sequential ideas and discuss how these pre-planned adaptive designs can be modified to allow for flexibility. We demonstrate how an impressive overall procedure can be found by combining a well chosen pre-planned design with an application of the conditional error principle to allow flexible treatment selection.