

**Wiener Biometrische Sektion
der Internationalen Biometrischen Gesellschaft
Region Österreich – Schweiz**

<http://www.akh-wien.ac.at/wbs/>

Einladung zum
Biometrischen Kolloquium
am Dienstag, dem 4. Mai 1999, 16:00 Uhr s.t.
im Seminarraum (D800 - Bibliothek) des
Instituts für Medizinische Computerwissenschaften
Spitalgasse 23, 1090 Wien

Es spricht **John Whitehead**, MPS Research Unit, University of Reading, zu folgenden Themen:

1. SEQUENTIAL DESIGNS FOR COMPARATIVE CLINICAL TRIALS

2. SEQUENTIAL TRIALS WITH MORE THAN TWO TREATMENTS OR MORE THAN ONE ENDPOINT

Im Anschluß an die Vorträge findet die Wahl der neuen Leitung der Wiener Biometrischen Sektion statt.

Abstracts:

SEQUENTIAL DESIGNS FOR COMPARATIVE CLINICAL TRIALS

The term "Sequential design" includes any clinical trial design incorporating interim analyses of the primary trial endpoint which might lead to stopping. In this lecture, the advantages that such an approach can bring will be discussed, and the effects on risks of error and on final frequentist analyses pointed out. Methods for constructing stopping rules to satisfy given power specifications and for producing

unbiased and valid frequentist analyses will be described. Emphasis will be placed on the triangular test, and on the software package PEST which allows its straightforward implementation. The talk will be illustrated using examples of completed sequential studies.

SEQUENTIAL TRIALS WITH MORE THAN TWO TREATMENTS OR MORE THAN ONE ENDPOINT

A comparison of two treatments in respect of a single endpoint leads to consideration of a single test statistic. In a sequential design, the score statistic might be chosen, and repeatedly recalculated at each interim analysis. When k active treatments are being simultaneously compared with control, then k correlated comparative score statistics are considered, and the same occurs when two treatments are compared in respect of k different endpoints.

This lecture will concern stopping rules based on k correlated score statistics, and the use of recursive numerical integration to evaluate risks of error. The appropriate form of power specification will be considered, and in the case of multiple treatments strategies for eliminating those found to be inferior will be discussed. The material to be discussed results from collaborative work at Reading involving Sue Todd, Nigel Stallard and Emmanuelle Vincent.