The University of Sheffield  
Faculty of Medicine, Dentistry & Health  
School of Health & Related Research

Non-Inferiority Margin Setting from Indirect Comparisons

**Supervisor:** Steven A. Julious

**Project:**
In a non-inferiority trial to assess a new investigative treatment there may need to be consideration of an indirect comparison with placebo using the active control in the current trial. We can therefore use the fact that both there is a common active control make comparisons the investigative treatment and placebo. In analysing a non-inferiority trial, the ABC of: **Assay sensitivity; Bias minimisation** and **Constancy assumption;** needs to be considered. Often though there can be an effect called placebo creep – where the effect over placebo falls over time – making the ABC assumptions implausible.

The proposed research plan would be to undertake a review of the statistical literature on various types of of setting non-inferiority limits and to investigate the effect of placebo creep from publish systematic reviews with the view to develop new methods.

**Enquiries:**
Interested candidates should in the first instance contact Steven Julious by email s.a.julious@sheffield.ac.uk.

**How to apply:**
Please complete a University Postgraduate Research Application form and provide at least two references. To download the application form please visit: [www.shef.ac.uk/postgraduate/research/apply/pgrform.html](http://www.shef.ac.uk/postgraduate/research/apply/pgrform.html).

Please clearly state the prospective main supervisor in the respective box.

**Scholarship:**
To apply for a University Scholarship you will also need to complete a scholarship application form: [www.sheffield.ac.uk/postgraduate/research/scholarships/faculty](http://www.sheffield.ac.uk/postgraduate/research/scholarships/faculty).

Website: [www.shef.ac.uk/scharr](http://www.shef.ac.uk/scharr)

**Closing date:** 27 January 2012