THE CAMBRIDGE STATISTICS DISCUSSION GROUP
(PLEASE NOTE CHANGE OF DATE FOR THIS TALK)
Tuesday 9th February 2010 7:15 for 7:45

Department of Applied Mathematics and Theoretical Physics,
Centre for Mathematical Sciences,
Wilberforce Road,
Cambridge

Predicting the Probability of Developing a Successful Cancer Therapy

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Abstract: A key component of the drug development process is to stop the development of poor therapies as soon as possible and to advance only those therapies that are safe and effective. This avoids giving patients ineffective therapies and enables funds and other resources to be allocated to more promising treatments. Historically the drug development success rate for cancer therapies has been inferior to other therapeutic areas, with many therapies failing right at the end of the development process after conducting extremely large and lengthy phase 3 trials. A key consideration in the decision to start phase 3 trials is the expectation of a high probability of success. In this presentation I will describe the use of a Bayesian decision making framework designed to predict the probability of achieving a successful frequentist demonstration of efficacy in a future pancreatic cancer phase 3 study.

Speaker: Tony has been working as a statistician in the pharmaceutical industry for the last 15 years. For the first 4 years of his career he worked at Astra pharmaceuticals in the respiratory therapeutic area. Tony then moved to GSK where he spent 5 years within the clinical pharmacology group working across a fairly wide variety of therapeutic areas including migraine, bi-polar disease, epilepsy, and respiratory disorders. He then spent a further two years at GSK working on various new therapies for diseases of the developing world before moving to Amgen in Cambridge, where he has been working as the Global Statistical Leader for a novel oncology therapeutic for the last 4 years.

Directions: The main entrance is reached from Clarkson Road by going along the footpath to the right of the Newton Institute, and turning left through the gatehouse towards the main building (Pavilion A), which has a glass front and a curved grassed roof. The main entrance is in the middle of the glass front. Free Parking is available after 5pm on Clarkson and Wilberforce Roads and by entering the site off Wilberforce Road. Admittance may be difficult after 7:45.

Provisional Next Meetings: (Please note change of date for Bill Janeway's talk for which many apologies).
2nd March – Bill Janeway (Warburg Pincus & Cambridge University) on 'Six impossible things before dinner'.
30th March – Doug Easton (CRUK Genetic Epidemiology Unit).
10th May – Tim Sparks (Formerly Centre for Ecology & Hydrology).
October – Martin Gibson (Formerly EMC Europe, Director of Lean Six Sigma) on 'The Good, The Bad and the Ugly of Lean Six Sigma'.

Supper: Some members eat regularly in the University Centre before each meeting at **5-45pm**. Feel free to join them.
Subscriptions: of 1 pound are now due for attending the 2009-2010 session.
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Take a look at our website: http://www.mrc-cbu.cam.ac.uk/people/peter.watson/csdg.html