NHS
National Institute for Health Research

Early Phase Clinical Trials

Simon Bond, Cambridge CTU

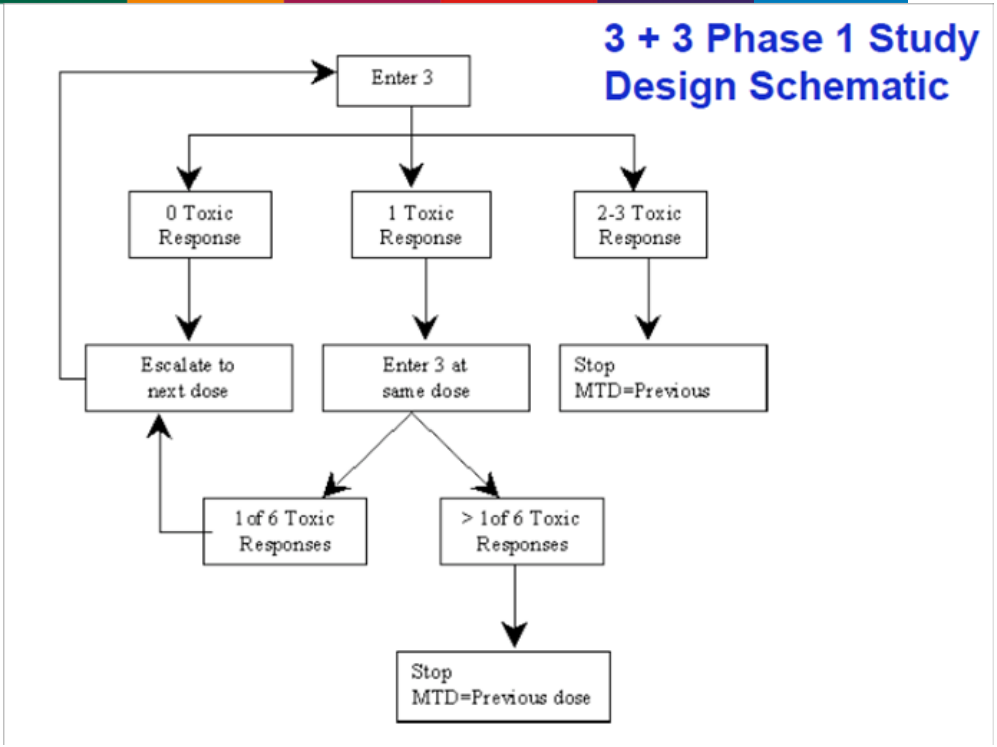
Background

NHS
National Institute for Health Research

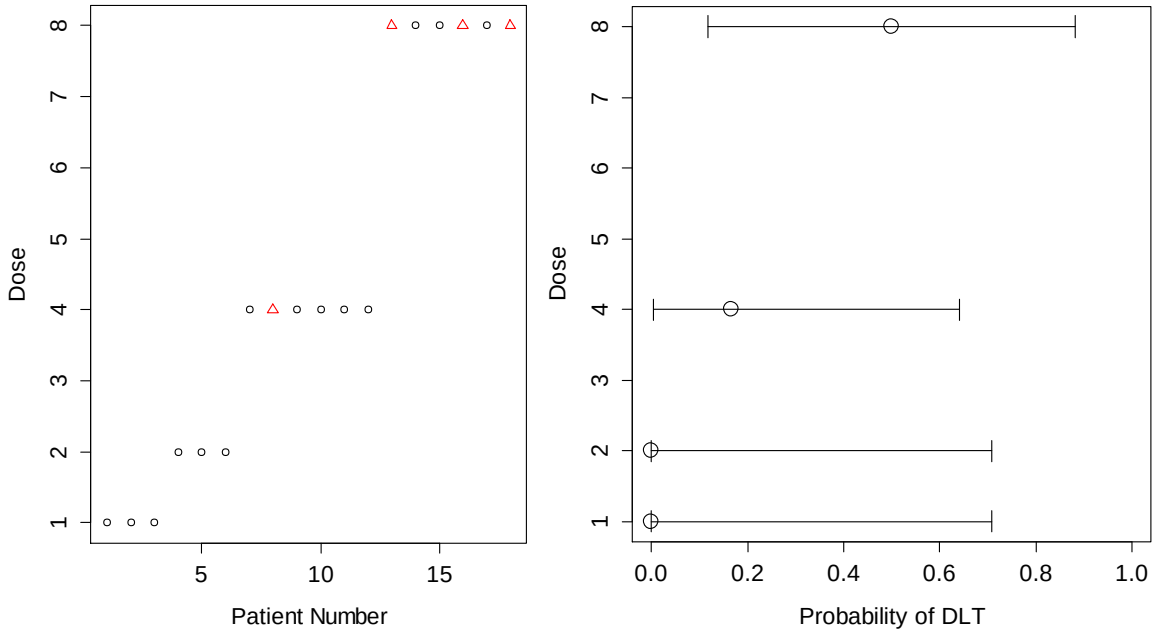
- What dose of a new drug causes serious effects - dose limiting toxicity
- Very common design used by clinicians : 3+3
- Statistical community has identified for decades serious issues with the design
- Impasse reached in changing practice.

Rule-Based approach

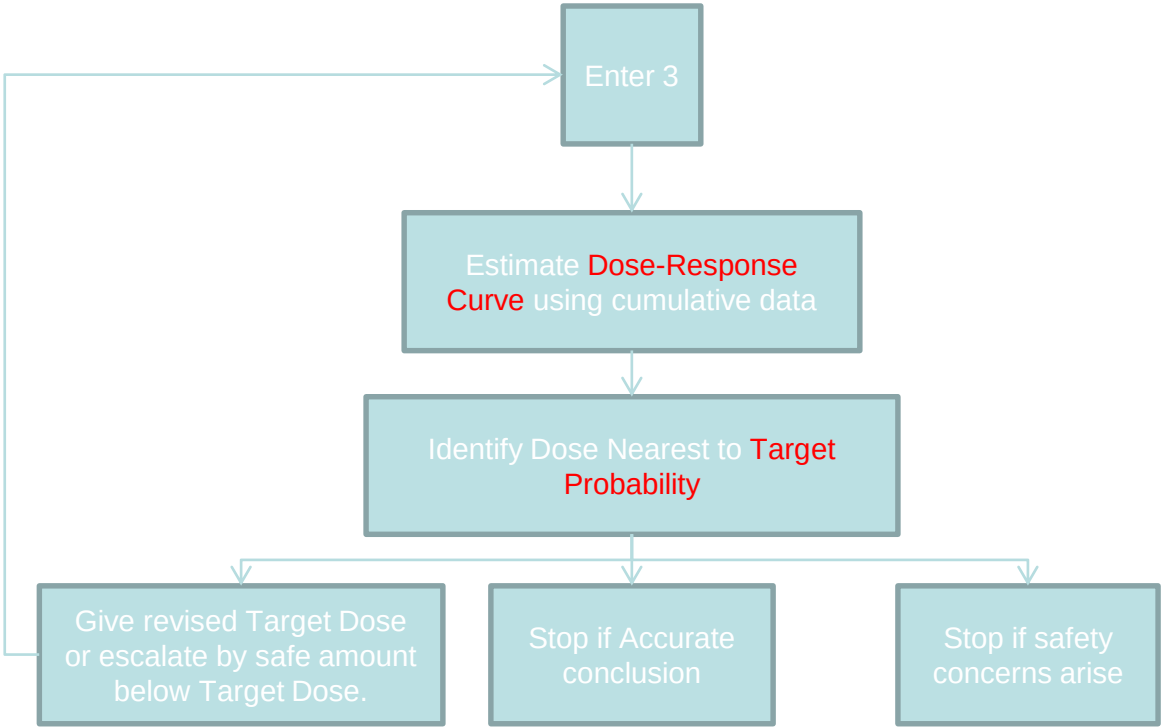
NHS
National Institute for Health Research



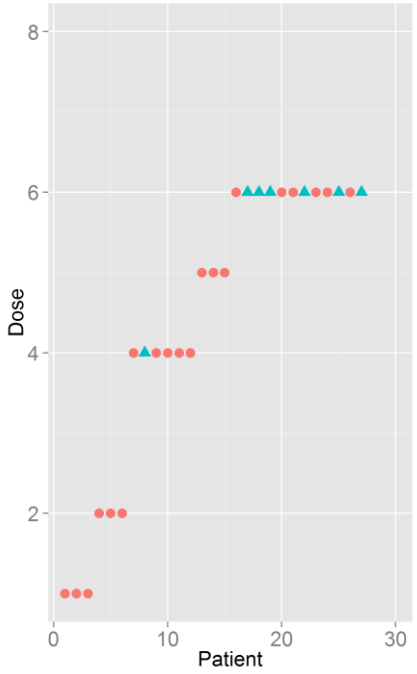
Traditional Design

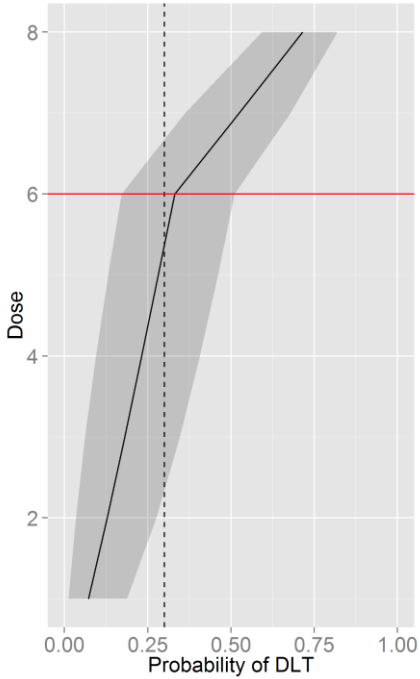


Continual Reassessment Design



Example: Continual Reassessment Method





Workshop

NHS
National Institute for Health Research

- Statisticians and trialists across academia, government and industry
- Talks:
  - Examples where change is achieved
  - Experts in methodology
- Workshop:
  - Scope the problem
  - Identify stakeholders
  - Action plan

Output so far

NHS
National Institute for Health Research

- Papers
  - Identification of barriers. Survey results.
  - How to implement main alternative method
- ICTMC conference
  - Use of pre-prepared analysis tool
  - Posters
- Identification of clinical leaders willing to change unilaterally

British Journal of Cancer

www.nature.com/bjc/journal/vaop/ncurrent/full/bjc2017186a.html

Apps | BBC News | News Fro | http://www.google.co | Imported From Firefo | Heatmiser | BBC News | News Fro | Imported | Suggested Sites

BJC British Journal of Cancer

Login Cart

Search go Advanced search

Journal home > Advance online publication > 29 June 2017 > Full text

Home For authors Services

Full Paper

British Journal of Cancer advance online publication 29 June 2017; doi: 10.1038/bjc.2017.186

BJC OPEN

Embracing model-based designs for dose-finding trials

Sharon B Love[1], Sarah Brown[2], Christopher J Weir[3], Chris Harbron[4], Christina Yap[5], Birgit Gaschler-Markefski[6], James Matcham[7], Louise Caffrey[8], Christopher McKevitt[9], Sally Clive[10], Charlie Craddock[11], James Spicer[12] and Victoria Cornelius[13]

[1]Oxford Clinical Trials Research Unit, Centre for Statistics in Medicine, NDORMS, University of Oxford, Botnar Research Centre, Windmill Road, Oxford OX3 7LD, UK
[2]Clinical Trials Research Unit, Leeds Institute of Clinical Trials Research, University of Leeds, Leeds LS2 9JT, UK
[3]Edinburgh Clinical Trials Unit, Usher Institute of Population Health Sciences and Informatics, University of Edinburgh Medical School, Teviot Place, Edinburgh EH8 9AG, UK
[4]Roche Pharmaceuticals, 6 Falcon Way, Shire Park, Welwyn Garden City AL7 1TW, UK
[5]Cancer Research UK Clinical Trials Unit, Institute of Cancer and Genomic Sciences, College of Medical and Dental Sciences, University of Birmingham, Birmingham B15 2TT, UK
[6]Boehringer Ingelheim Pharma GmbH & Co. KG, Biostatistics and Data Sciences, Birkendorfer Strasse 65, Biberach an der Riss 88400, Germany
[7]AstraZeneca, DaVinci Building, Melbourn Science Park, Royston SG8 6HB, UK
[8]School of Social Work and Social Policy, Trinity College Dublin, College Green, Dublin 2, Ireland
[9]Division of Health and Social Care Research, Faculty of Life Sciences and Medicine, King's College London, London, UK
[10]Edinburgh Cancer Centre, Western General Hospital, Edinburgh EX4 2XU, UK
[11]Centre for Clinical Haematology, Haematology – University Hospitals Birmingham NHS Foundation Trust, Queen Elizabeth Hospital, Queen Elizabeth Medical Centre, Birmingham B15 2TH, UK
[12]Division of Cancer Studies, Bermondsey Wing, Guy's Hospital, Great Maze Pond, London SE1 9RT, UK
[13]Imperial Clinical Trials Unit, Imperial College London, Stadium House, 68 Wood Lane, London W12 7RH, UK

Correspondence: SB Love, E-mail: sharon.love@csm.ox.ac.uk

Received 24 January 2017; Revised 27 April 2017; Accepted 31 May 2017
Advance online publication 29 June 2017

Abstract ▲ Top

FULL TEXT

Table of contents
Download PDF
Share this article
View interactive PDF in ReadCube
Rights and permissions
Abstract
Materials and methods
Results
Discussion
Conclusion
Conflict of interest
References
Acknowledgements
Figures and Tables
Supplementary info
Export citation
Export references
Papers by Love
Papers by Cornelius

Submitted

NHS
National Institute for Health Research

How to design a dose-finding study using the Continual Reassessment Method

Running title: Designing a dose-finding study using the CRM

Graham M. Wheeler[1,2], Adrian P. Mander[2], Alun Bedding[3], Kristian Brock[4], Victoria Cornelius[5], Andrew P. Grieve[6], Thomas Jaki[7], Sharon B. Love[8], Lang'o Odondi[8], Christopher J. Weir[9], Christina Yap[4] and Simon J. Bond[2,10]