### DOCTORAL THESIS

## Developments to established dose-finding methodologies for application in trials with complex and innovative designs

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### Abstract

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by Amit PATEL

Insert abstract here...

## Acknowledgements

Acknowledge people here ...

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### Chapter 1

# Implementing the TITE-CRM in the Presence of Partial Orders into the ADePT-DDR Trial

### 1.1 Draft Structure

- Introduction
  - Basic biological background
  - Main objective of the trial
  - Introduce the new TD notation link to previous trial designs
  - Paragraph on traditional dose finding trial designs 3+3, CRM etc.
  - Methodological issues which arise due to investigating combination of drugs/varying parameters (new concept by Piers)
  - Necessity of time-to-event components for DLTs which may occur later

- Other possible methodologies in this area which may be of use to solve this problem
- Mini literature search will do a citation search for both methodology papers (potentially use a table/figure to summarise)
- Detail whats to come in the chapter
- The PO-TITE-CRM Design
- PO-TITE-CRM in ADePT-DDR
- Modifications to the specification to improve operating characteristics

### 1.2 Introduction

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Published clinical trial designs in this arena include extensions of CRM. Braun's

### 1.2.1 Subsection 1

into the ADePT-DDR Trial

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#### 1.2.2 Subsection 2

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### 1.3 Main Section 2

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## Appendix A

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