Introduction to meta-analysis

# BONUS content: CRM dose-escalation



#### CRM dose-escalation

### Continuous Reassessment method

CRM [O'Quigley at al., 1990]

**Objective:** identify the optimal dose (i.e. Minimum Efficient Dose or Maximum Tolerated Dose)

⇒ select iteratively the dose for the next (batch of) recruited patient(s) based accumulating observations from previously included patients

CRM dose-escalation

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treat each patient ethically (dose best supported by the current evidence)

😂 prior knowledge

😁 sequential Bayesian: online update of the posterior

#### CRM dose-escalation

## Your turn !



**Read** F Kaguelidou *et al.* Dose-Finding Study of Omeprazole on Gastric pH in Neonates with Gastro-Esophageal Acid Reflux Using a Bayesian Sequential Approach, *PLOS ONE* 11(12):e0166207, 2016. [DOI:10.1371/journal.pone.0166207]

Practical: BONUS exercise 9