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)

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

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- 😁 treat each patient ethically (dose best supported by the current evidence)
- 😁 *prior* knowledge
- 😁 sequential Bayesian: online update of the posterior

increasingly used (but still minority...)

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: exercise 7