| 1 | Doses under investigation? | 5 doses: |
|---|--|---|
| | | 1. 5mg |
| | | 2. 10mg |
| | | 3. 25mg |
| | | 4. 50mg |
| | | 5. 75mg |
| | | |
| 2 | Target toxicity level (TTL)? | 20% |
| 3 | Skeleton? | 0.016, 0.049, 0.111, 0.200, 0.308 |
| | If no skeleton, which dose do you expect to be the MTD? You can use dfcrm::getprior to generate a prior. E.g. | Prior MTD guess is d4. |
| | getprior(halfwidth = 0.05, target = 0.2, nu = 4, nlevel = 5) | |
| | will generate prior that anticipates dose-level 4 of 5 is the sought dose with associated Prob(DLT) = | |
| | 0.2. Tweak halfwidth to get a prior that you agree with. | |
| 4 | Starting dose? | 2 |
| | This might be lower than your guess at MTD. | |
| | Do you have doses to de-escalate to, if your assumptions are wrong? Painful to stop a trial due to | |
| | poor planning. | |
| 5 | Model type? | Empiric |
| 6 | Model parameters, including prior hyperparameters? | beta ~ N(0, 0.5), so that SD of beta is |
| | | sqrt(0.5) = 0.71 |
| 7 | How to select dose? | Dose nearest to target. |
| | | No skipping in escalation. |
| | Describe constraints, like "no skipping in escalation" or "at least two complete negative DLT evaluations before escalation" | Skipping OK in de-escalation. |
| 8 | How to know when to stop? | • Max patients in dose-finding = 24. |
| | Describe constraints like "use no more than 30 patients" or "stop early if lowest dose is too toxic" | • Stop and declare once 12 |

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| | | • Stop if 90% sure lowest dose is more toxic than target. |
|----|--|--|
| 9 | Length of DLT assessment window? | 1st cycle = 28 days |
| | | |
| | If using non-time-to-event method: | |
| 10 | How to select cohort size? | NA, using TITE-CRM |
| | If time-to-event method | |
| 11 | How to calculate weight of observation from length of follow-up? | Use linear weight function. E.g. if a patient departs for non-treatment- related reasons on day 14 without DLT, they would yield 14 / 28 = 0.5 tolerance events. |
| | For simulation: | |
| 12 | What is assumed true Prob(Tox)? | Sc1 (0.20, 0.35, 0.45, 0.55, 0.65) Sc2 (0.10, 0.20, 0.35, 0.45, 0.55) Sc3 (0.07, 0.10, 0.20, 0.35, 0.45) Sc4 (0.03, 0.05, 0.07, 0.20, 0.35) Sc5 (0.01, 0.03, 0.05, 0.07, 0.20) |
| | If time-to-event method: | |
| 13 | How to sample time between consecutive patients? | Assume 1-2 patients pcm. |
| 14 | How to sample time of toxicity, given that toxicity happened? | Uniform |