**Model-based Dose Escalation Designs in R with crmPack**

**Responses to new Reviewer**

Reviewer comments are copied in italic font below, and responses are in normal font.

***1.*** *The operating characteristics of the CRM design is examined by generating the probabilities of DLT based on a logistic function:*

*myTruth <- function(dose){model@prob(dose, alpha0 = 4.5, alpha1 = 8)}.*

*The package should allow users to directly specify the probability of DLT for each dose based on animal data or clinical judgement. Users should also be able to compute the probability of DLT based on other dose toxicity models. These options will help users to test the robustness of the CRM design in case the logistic model cannot adequately describe the dose toxicity curve.*

Thank you for these suggestions.

In fact, it is trivially possible to directly specify the probability of DLT for each dose in order to examine operating characteristics not based on any statistical model. For example, assume 5 doses are used with probabilities of DLT of 0.01, 0.02, 0.04, 0.06, 0.09, then the following code can be used:

doseProbMatrix <- cbind(c(1, 2, 3, 4, 5), c(0.01, 0.02, 0.04, 0.06, 0.09))

myTruth <- function(dose){doseProbMatrix[match(dose, doseProbMatrix[, 1]), 2]}

In general, any possible R function returning a vector of probabilities upon input of the dose vector can be used. This also of course comprises probabilities of DLT based on other dose toxicity models. We added this information to the subsection “Simulating operating characteristics”.

***2.*** *For the Effmodel, what is nu? Nu should be described the first time it appears in the text.*

Thank you for finding, we now included the following sentence in the manuscript:  
“The argument nu specifies a Gamma prior distribution with shape 1 and rate 0.025 for the precision parameter of the pseudo efficacy responses.”