## Integrate biological replicates from different assay plates

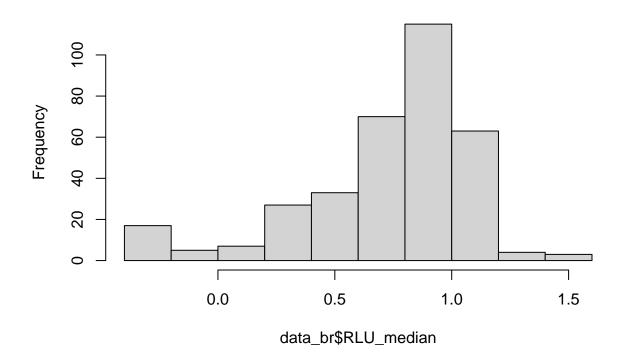
#### JN

#### Sat Feb 17 13:27:45 2024

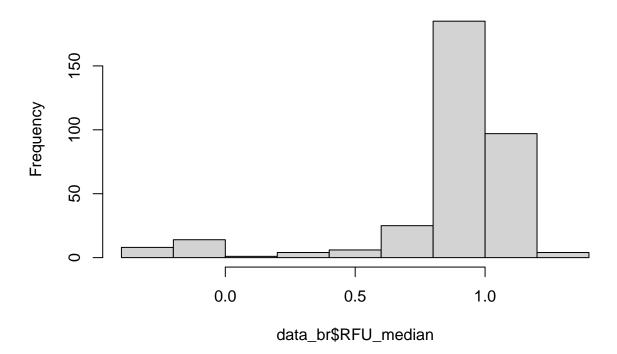
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## [1] "all raw data xlsx files in the directory, absolute paths: "
## [2] "C:/Users/jahn_/Desktop/analyses/infection_demonstration_dataset/input/plate02.xlsx"
## [3] "C:/Users/jahn_/Desktop/analyses/infection_demonstration_dataset/input/plate03.xlsx"
## [4] "C:/Users/jahn_/Desktop/analyses/infection_demonstration_dataset/input/plate04.xlsx"
## [5] "C:/Users/jahn_/Desktop/analyses/infection_demonstration_dataset/input/plate05.xlsx"
## [6] "C:/Users/jahn_/Desktop/analyses/infection_demonstration_dataset/input/plate06.xlsx"
## [7] "C:/Users/jahn_/Desktop/analyses/infection_demonstration_dataset/input/plate07.xlsx"
## [1] "all raw data xlsx files in the directory: "
## [2] "plate02.xlsx"
## [3] "plate03.xlsx"
## [4] "plate04.xlsx"
## [5] "plate05.xlsx"
## [6] "plate06.xlsx"
## [7] "plate07.xlsx"
## [1] "all corresponding RData files in the directory: "
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## [3] "C:/Users/jahn_/Desktop/analyses/infection_demonstration_dataset/output/plate_data_plate03.xlsx.
## [4] "C:/Users/jahn_/Desktop/analyses/infection_demonstration_dataset/output/plate_data_plate04.xlsx.
## [5] "C:/Users/jahn_/Desktop/analyses/infection_demonstration_dataset/output/plate_data_plate05.xlsx.
## [6] "C:/Users/jahn_/Desktop/analyses/infection_demonstration_dataset/output/plate_data_plate06.xlsx.
## [7] "C:/Users/jahn_/Desktop/analyses/infection_demonstration_dataset/output/plate_data_plate07.xlsx.
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## pdf
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## [1] 768
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## pdf
##
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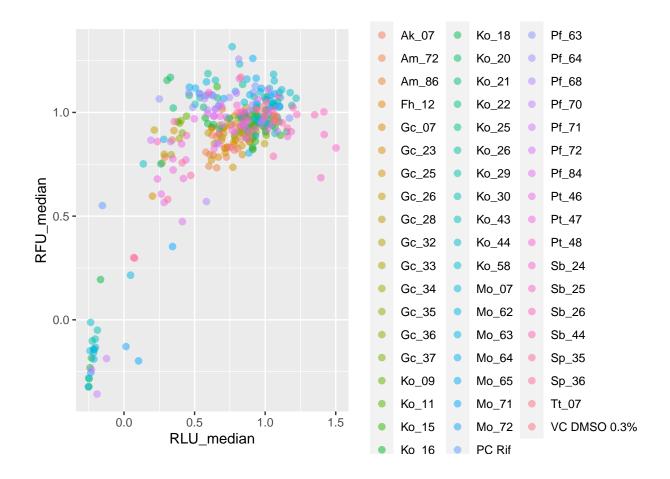
## pdf ## 2 ## pdf ## 2 ## pdf ## 2

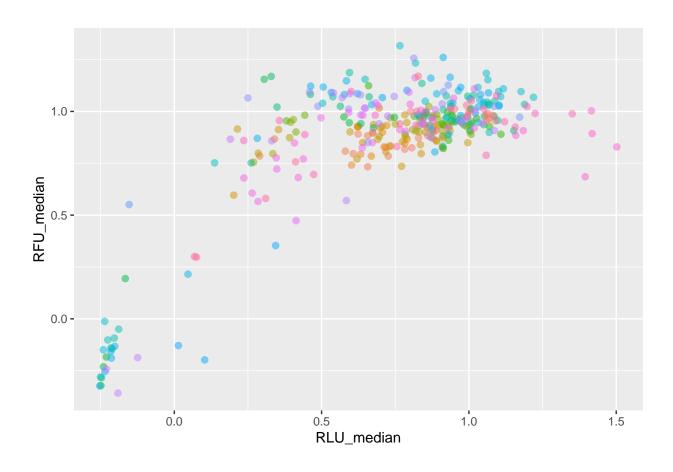
# Histogram of data\_br\$RLU\_median



## Histogram of data\_br\$RFU\_median

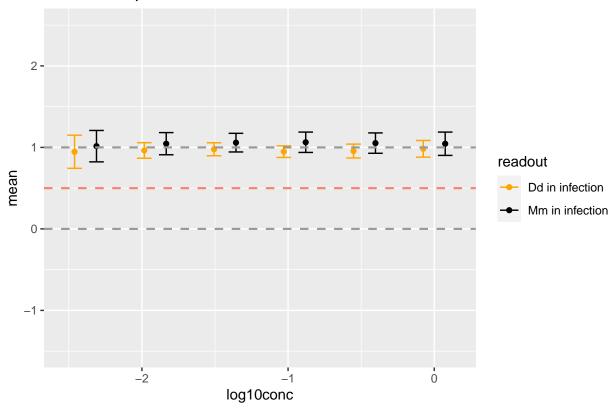




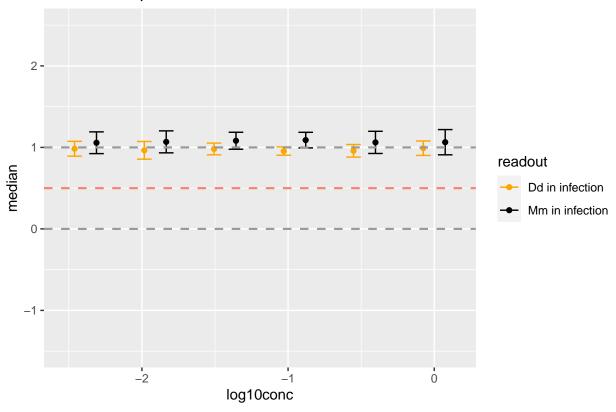


•	-	•	Ko_17	•	Pf_62
•	Ak_07	•	Ko_18	•	Pf_63
•	Am_72	•	Ko_20		Pf_64
•	Am_86	•	Ko_21	•	Pf_68
•	Fh_12	•	Ko_22	•	Pf_70
•	Gc_07	•	Ko_25		Pf_71
•	Gc_23	•	Ko_26		Pf_72
•	Gc_25	•	Ko_29		Pf_84
•	Gc_26	•	Ko_30		Pt_46
•	Gc_28	•	Ko_43	•	Pt_47
•	Gc_32	•	Ko_44	•	Pt_48
•	Gc_33	•	Ko_58	•	Sb_24
•	Gc_34	•	Mo_07	•	Sb_25
•	Gc_35	•	Mo_62	•	Sb_26
•	Gc_36	•	Mo_63	•	Sb_44
•	Gc_37	•	Mo_64	•	Sp_35
•	Ko_09	•	Mo_65	•	Sp_36
•	Ko_11	•	Mo_71	•	Tt_07
•	Ko_15	•	Mo_72	•	VC DMSO 0.3%

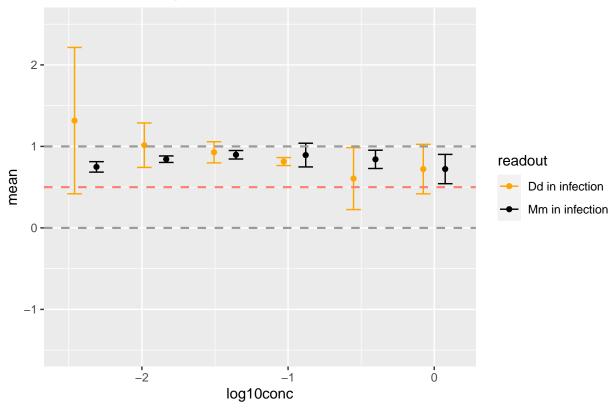
### -: dose response curve, mean & sd

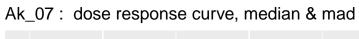


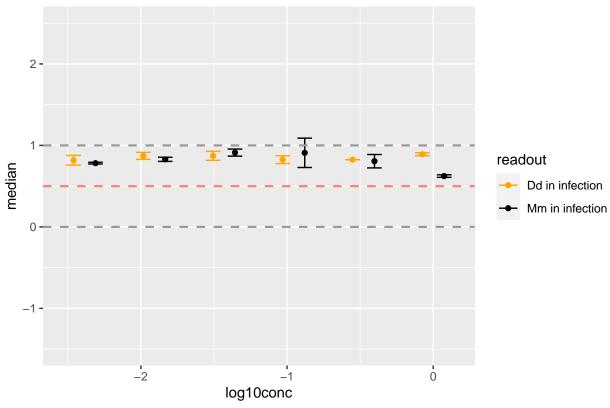
### -: dose response curve, median & mad

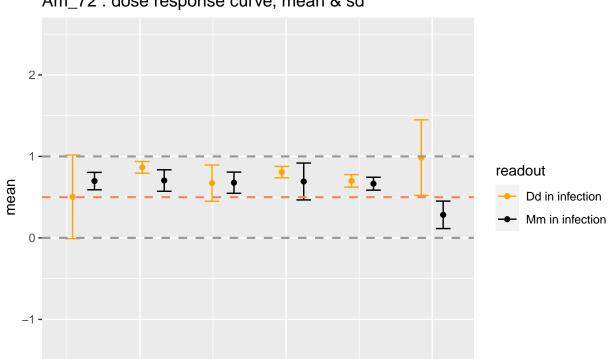








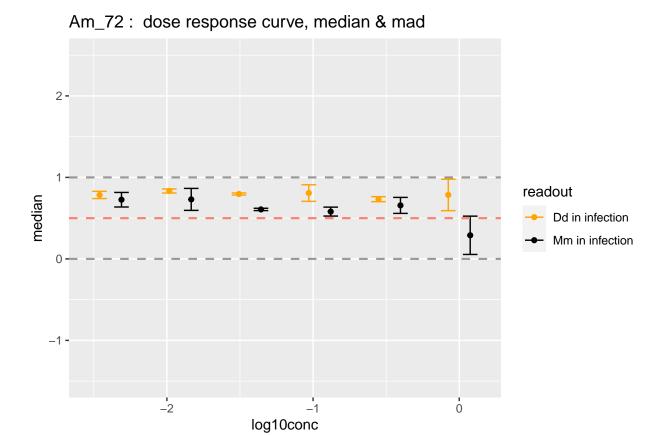




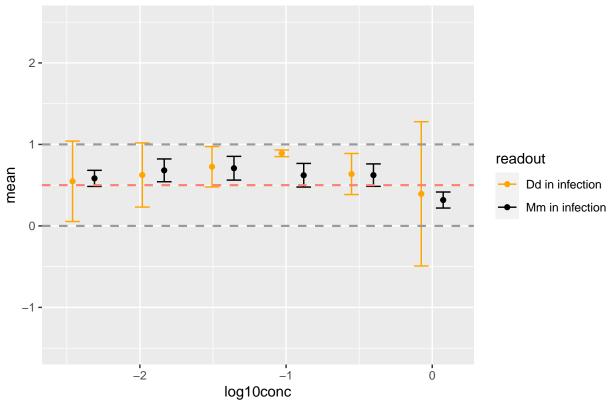
log10conc

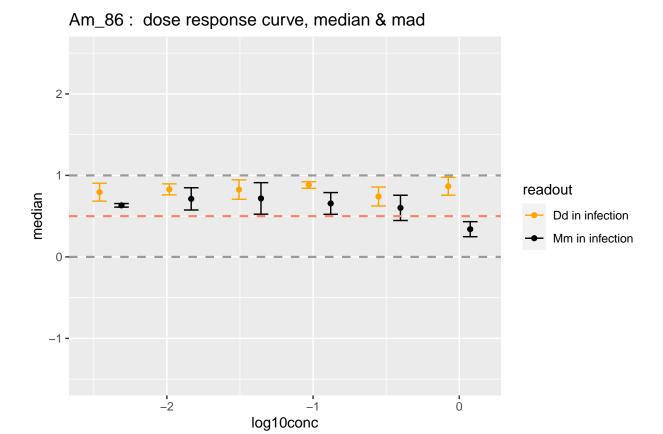
Am\_72 : dose response curve, mean & sd

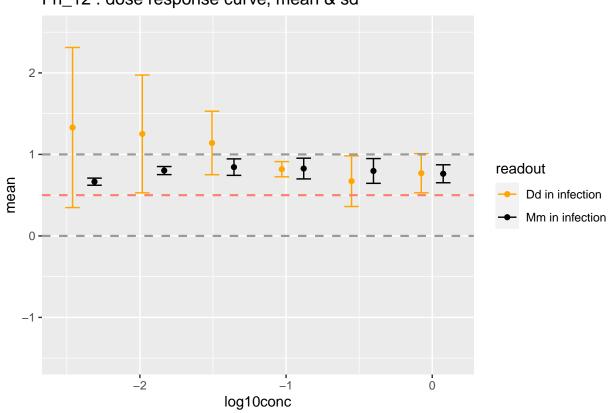
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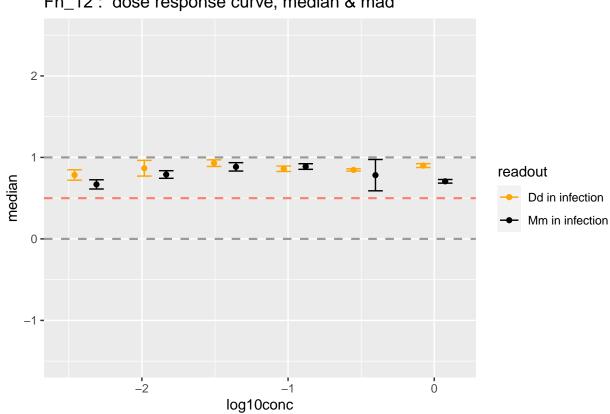






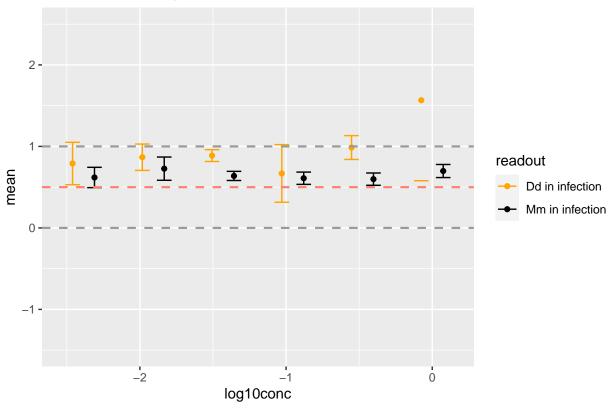


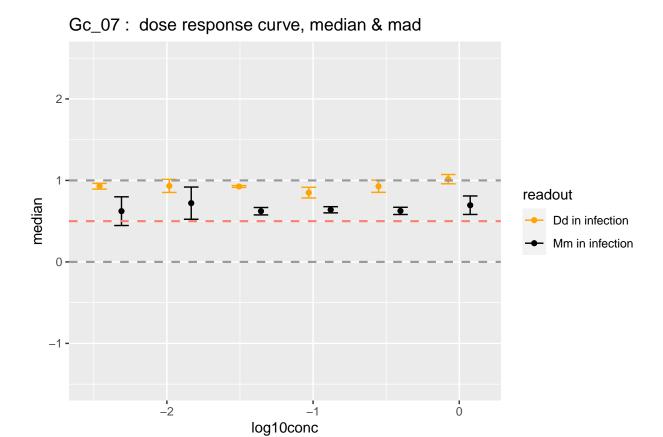
Fh\_12 : dose response curve, mean & sd

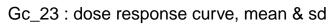


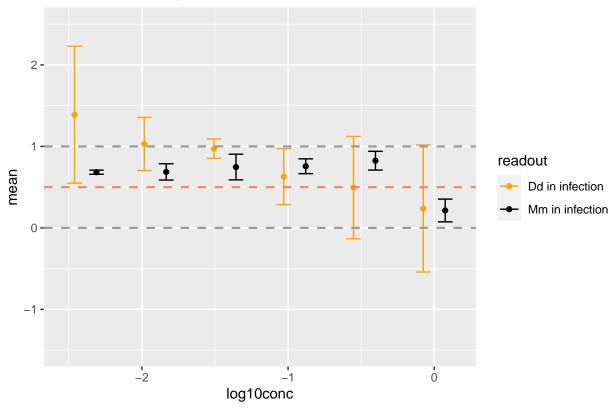
Fh\_12: dose response curve, median & mad

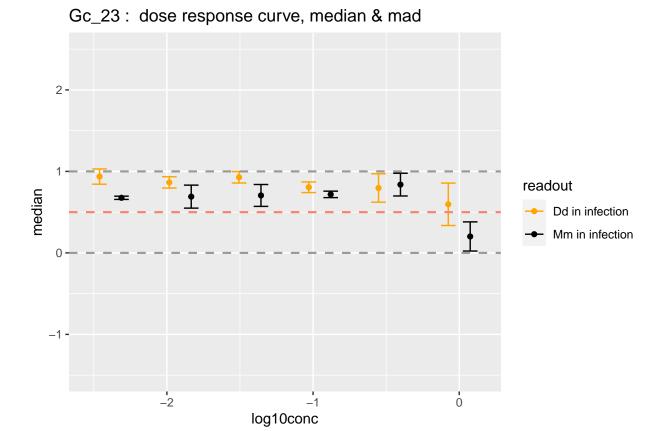




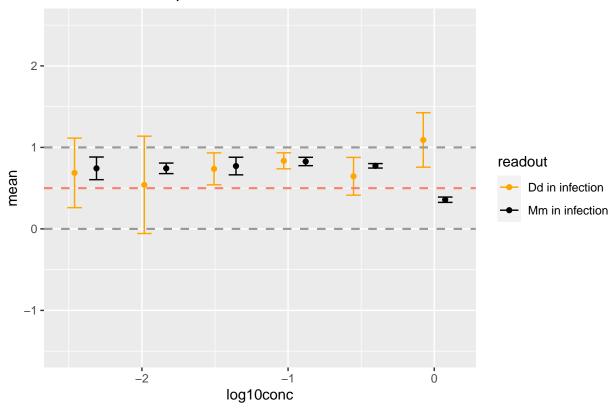


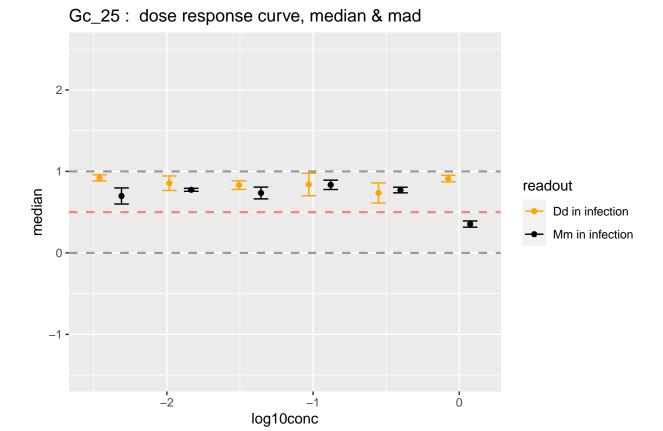




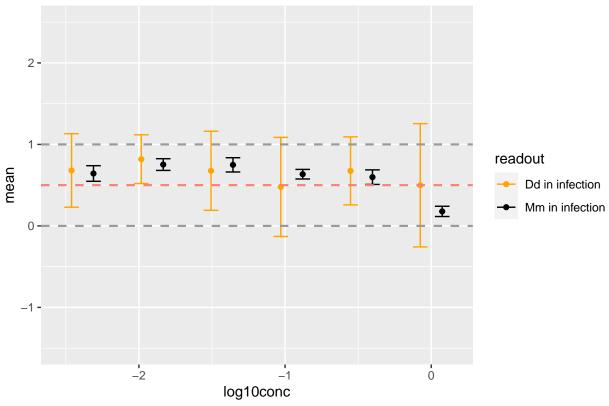


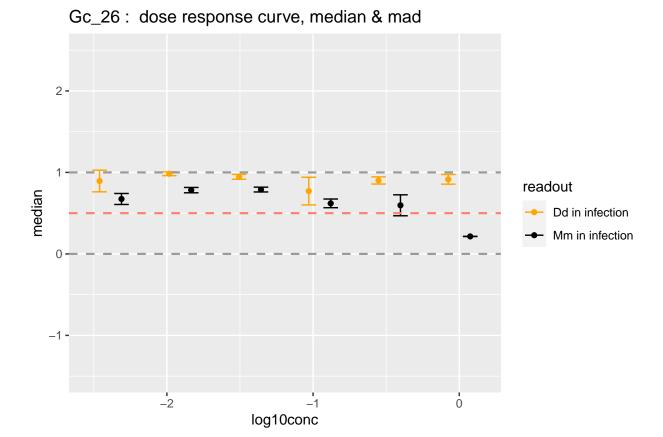


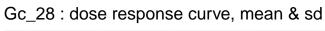


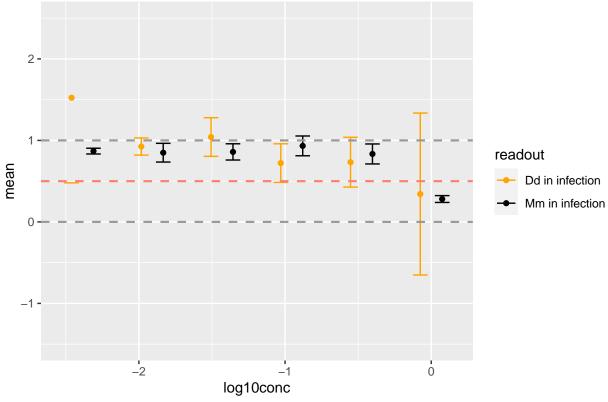


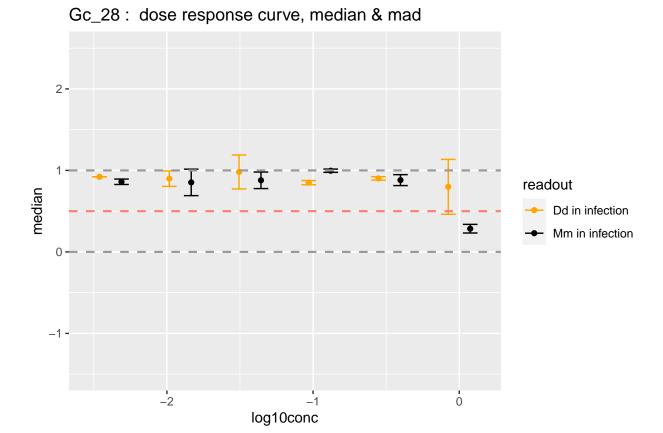




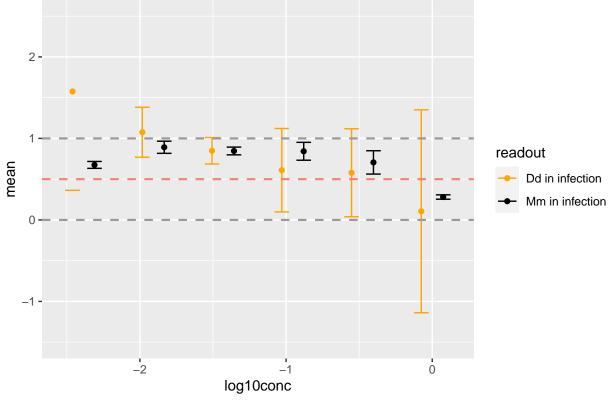


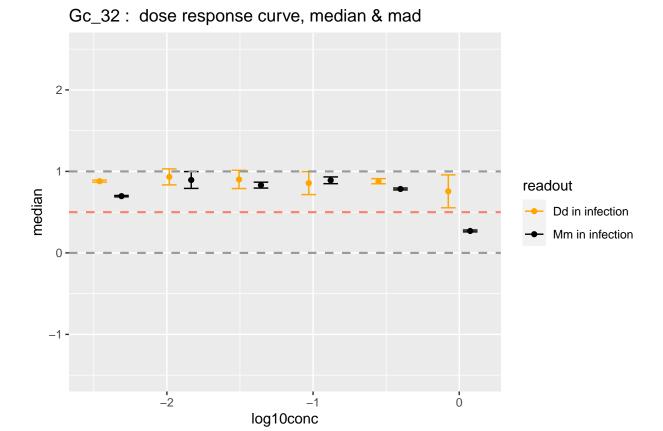


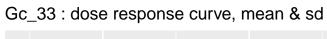


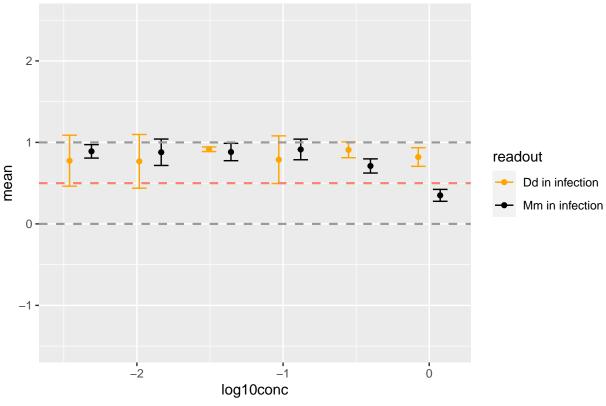


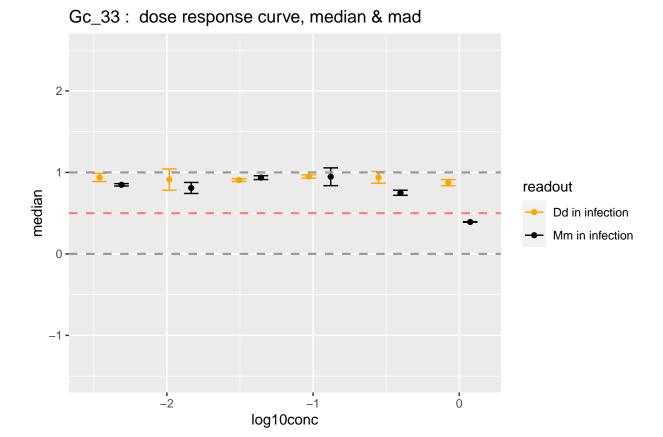


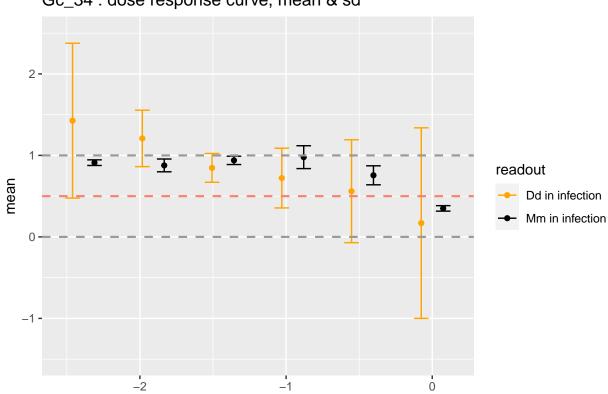






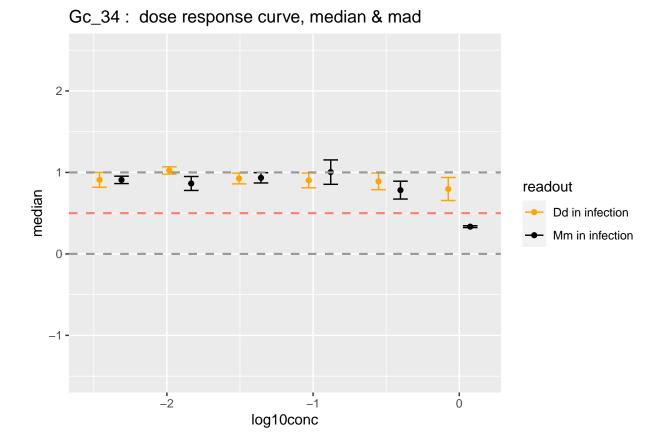




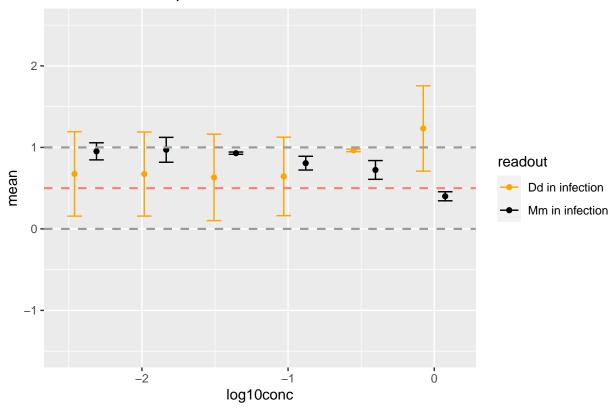


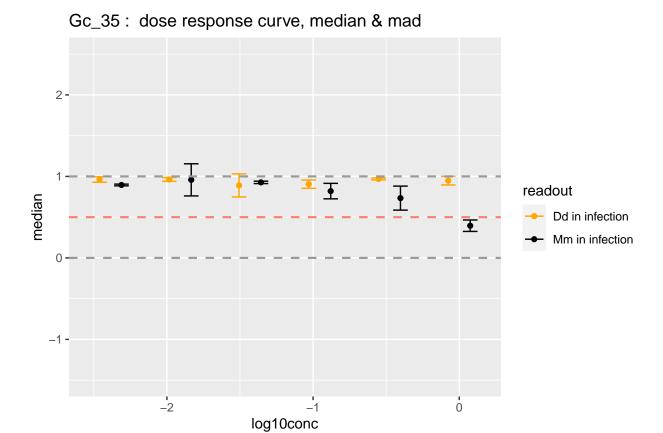
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Gc\_34 : dose response curve, mean & sd

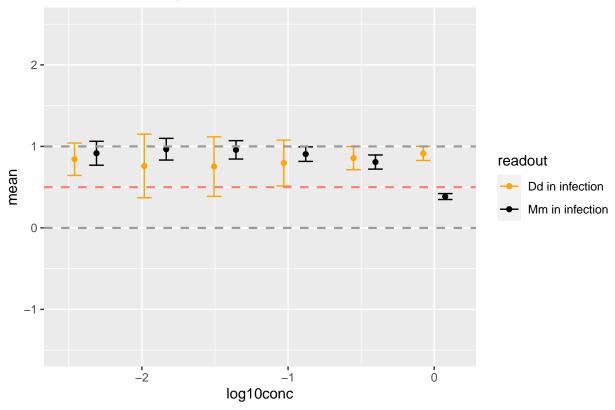


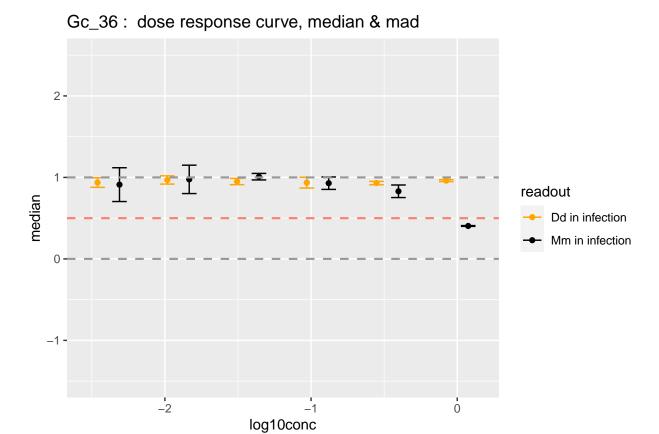




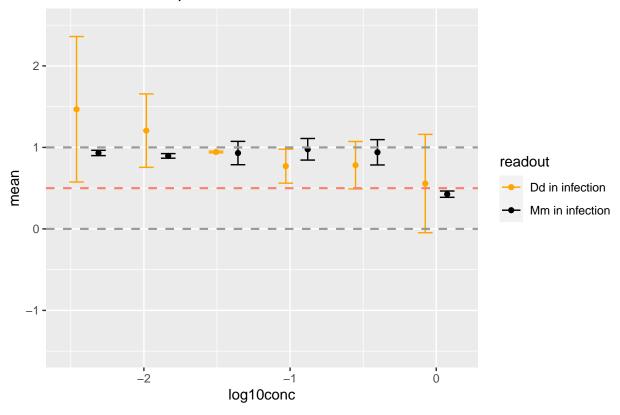


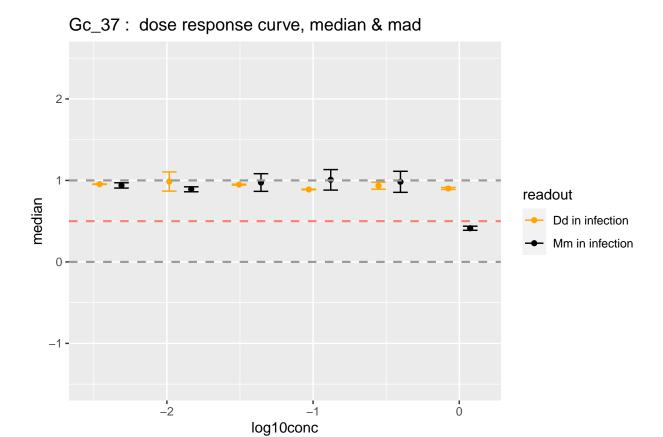




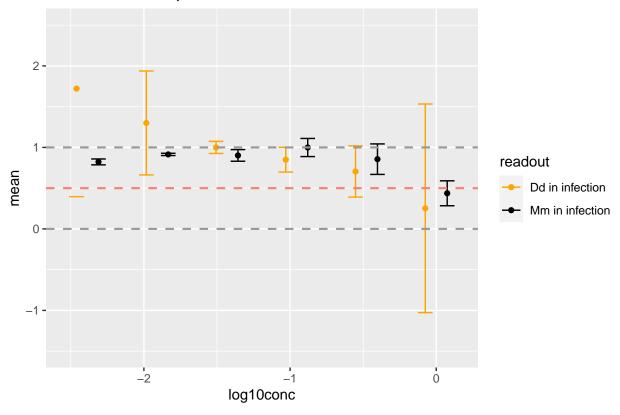


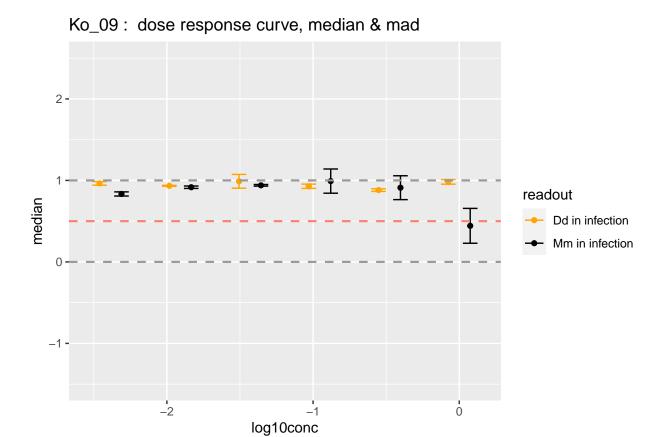


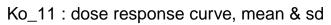


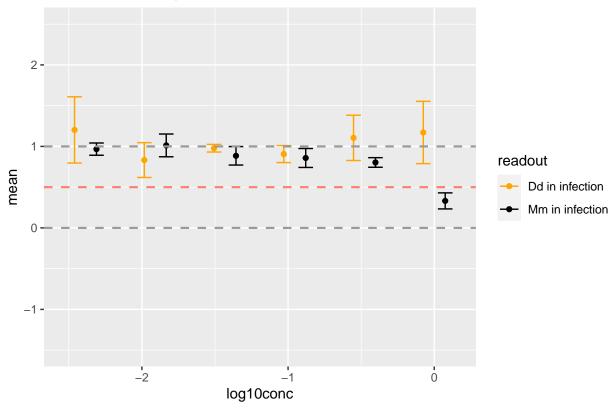


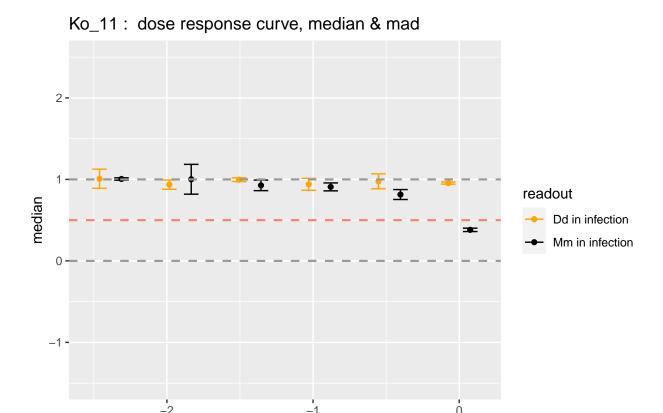






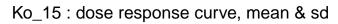


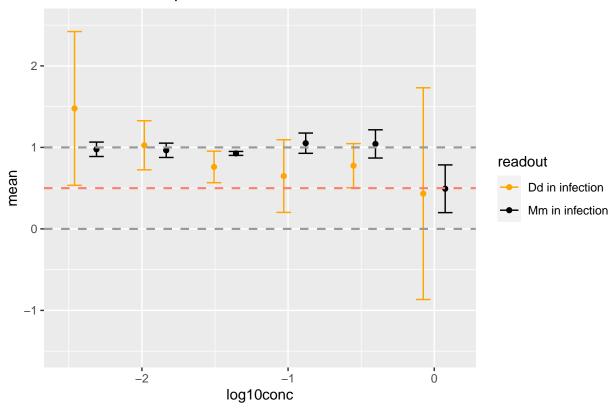


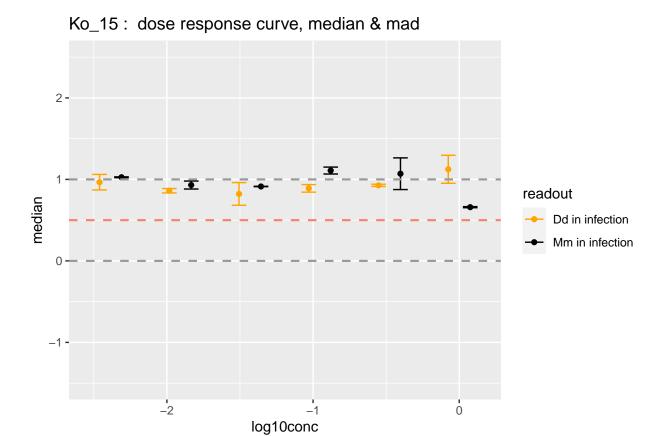


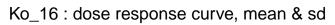
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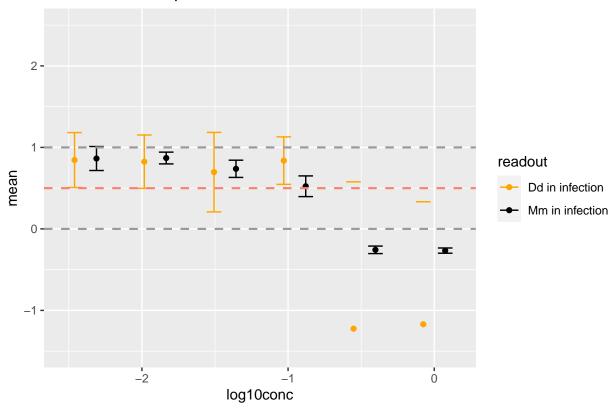
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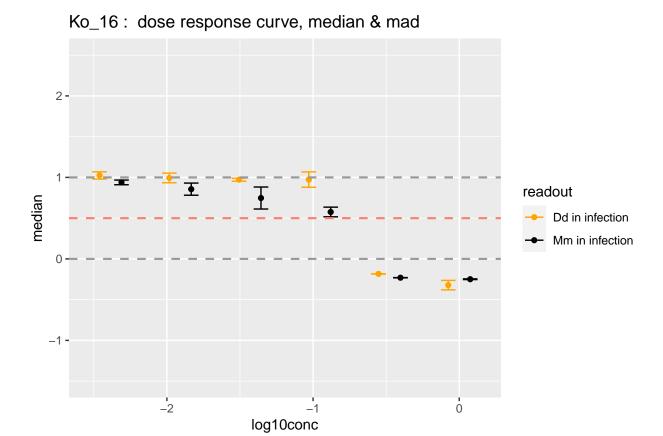




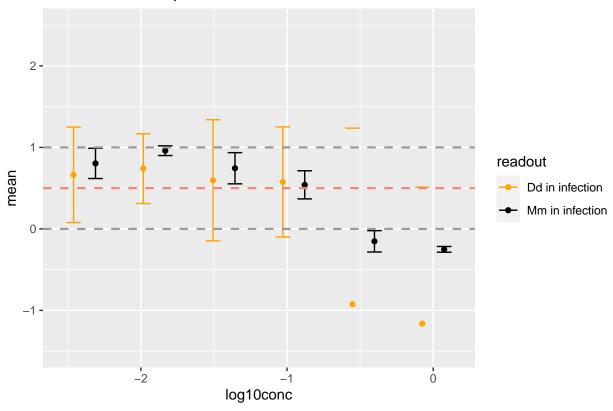


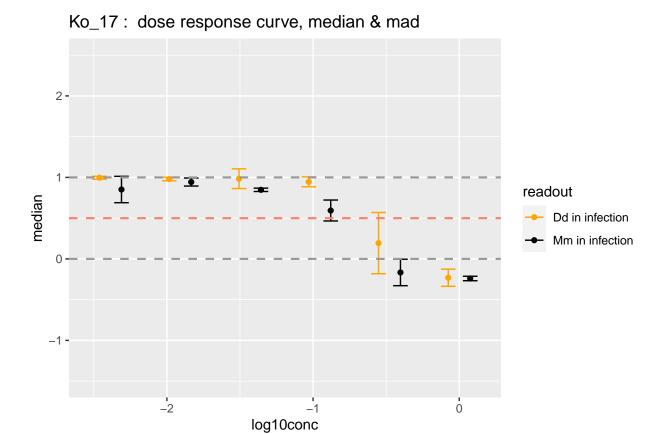




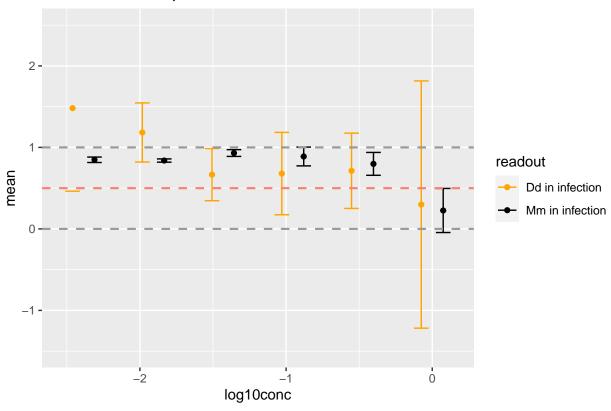


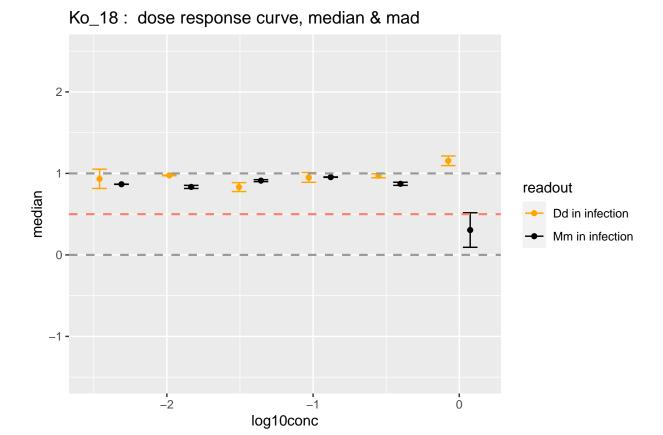




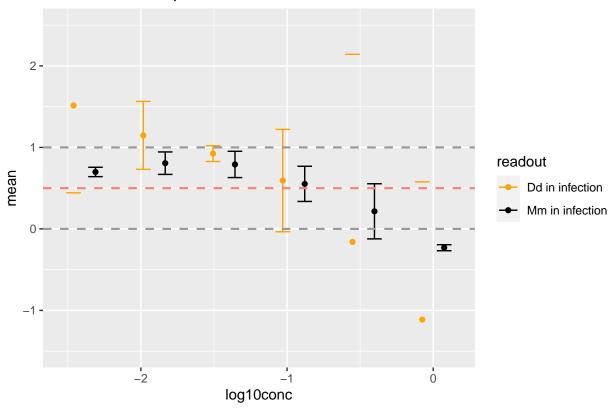


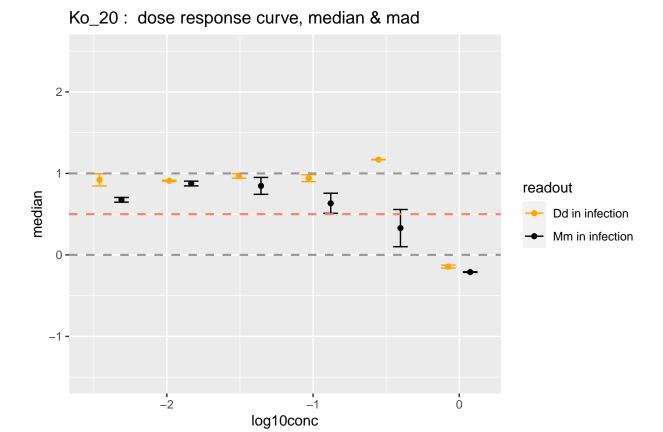


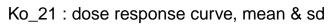


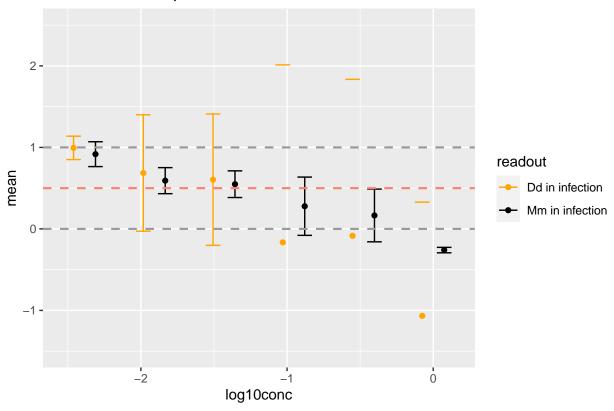


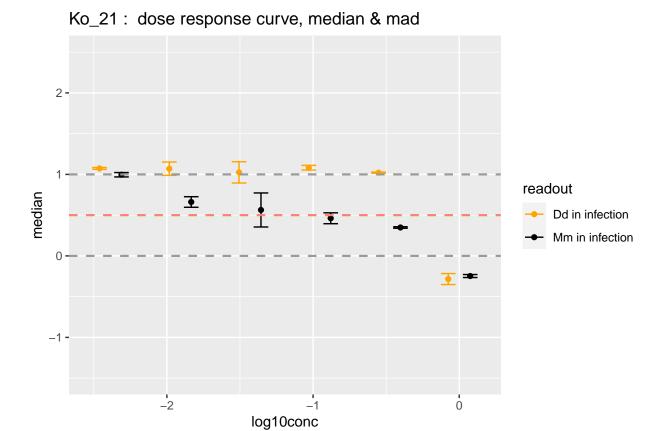


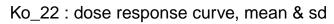


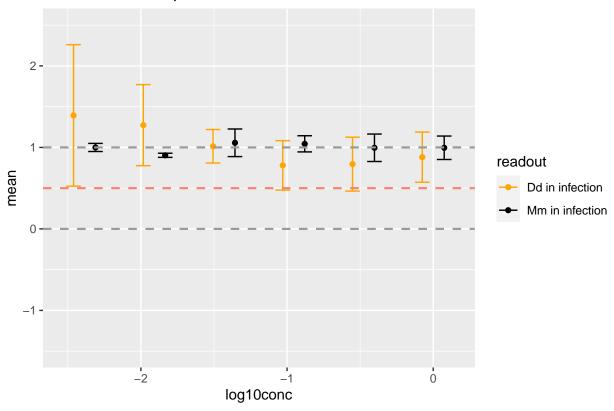


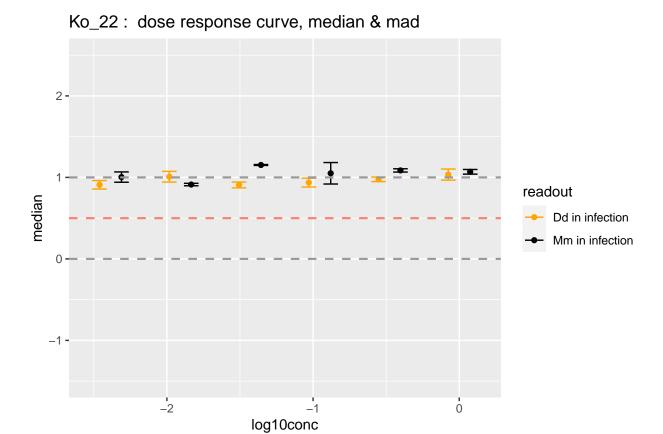


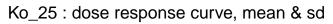


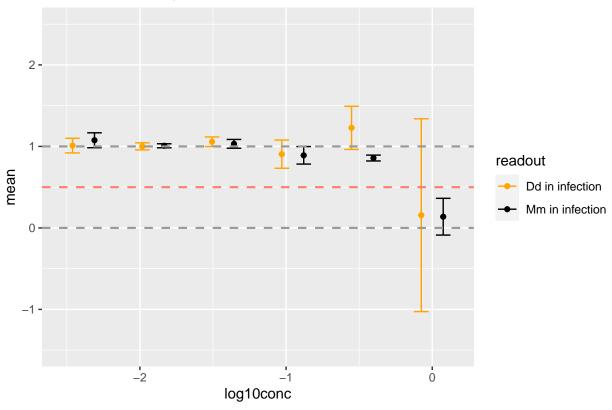


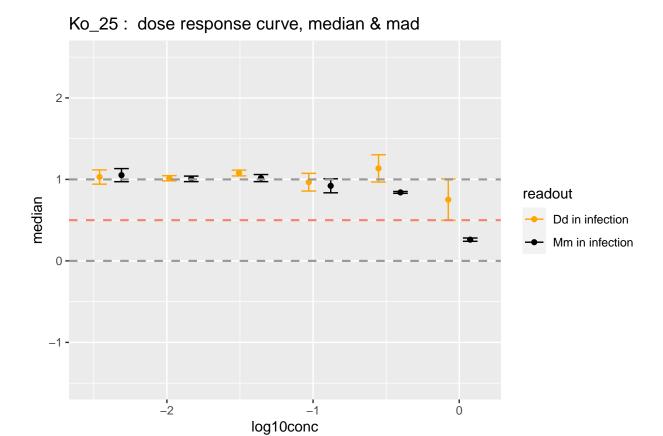


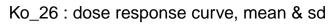


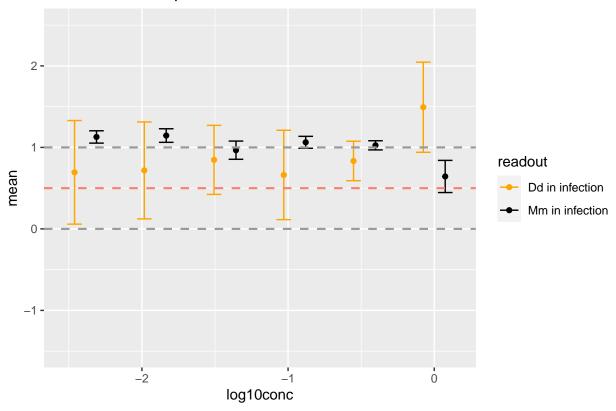


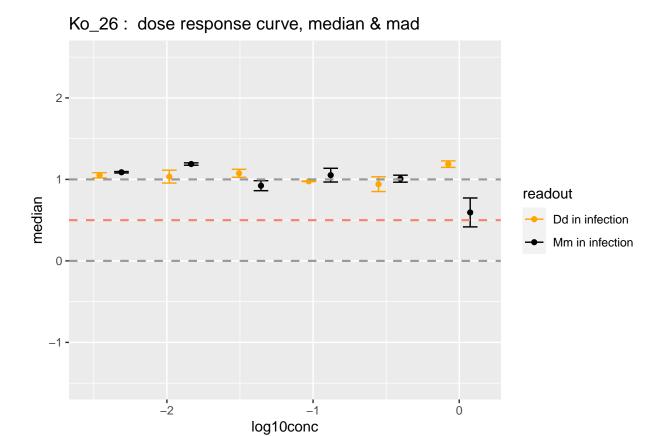


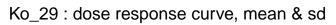


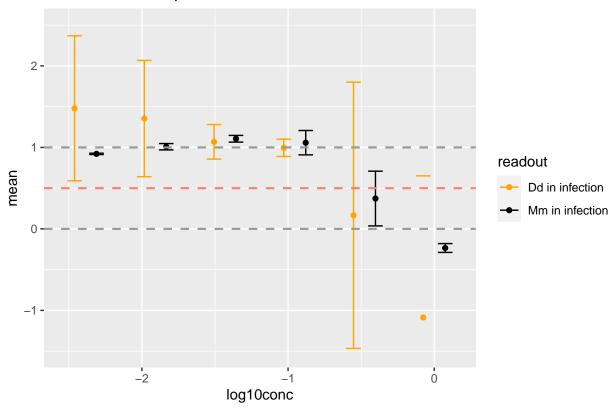


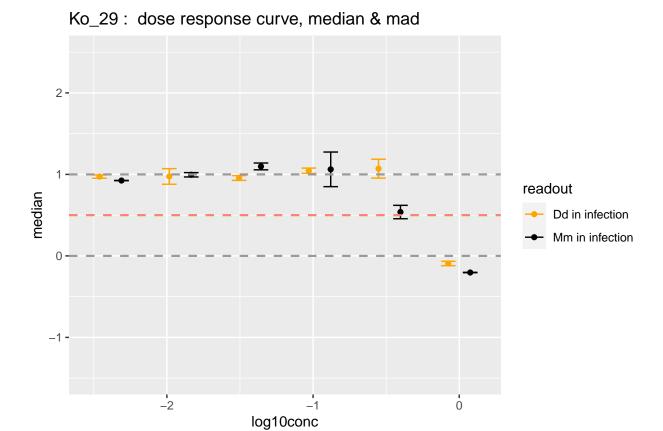




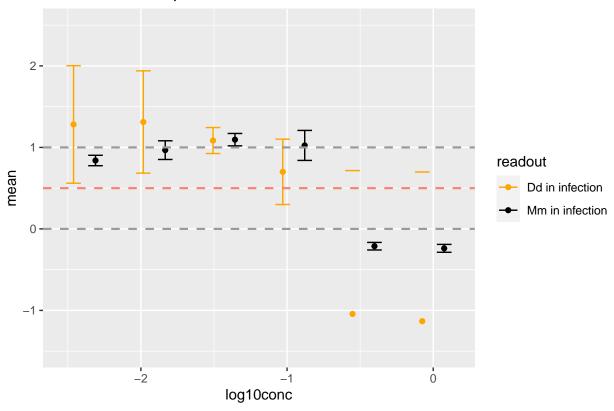


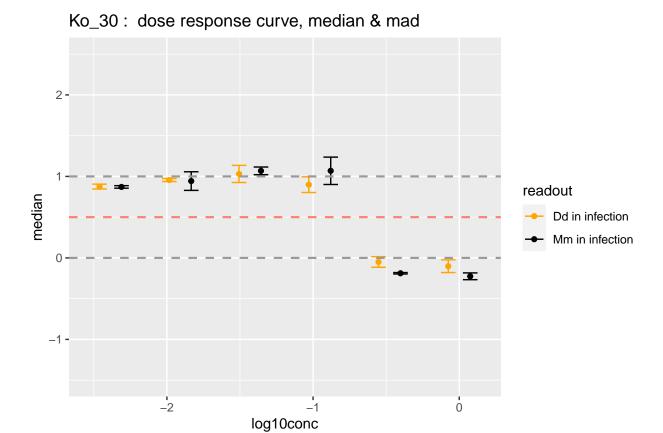


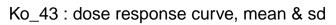


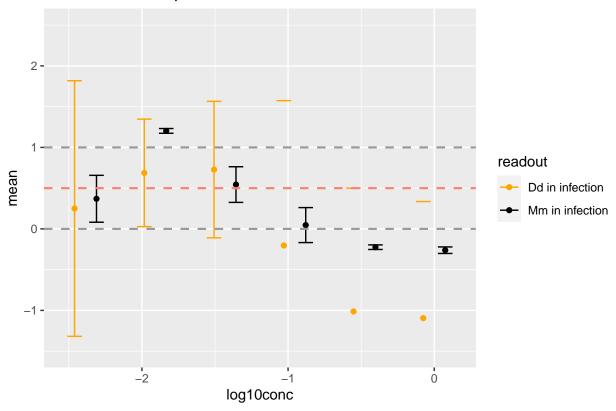


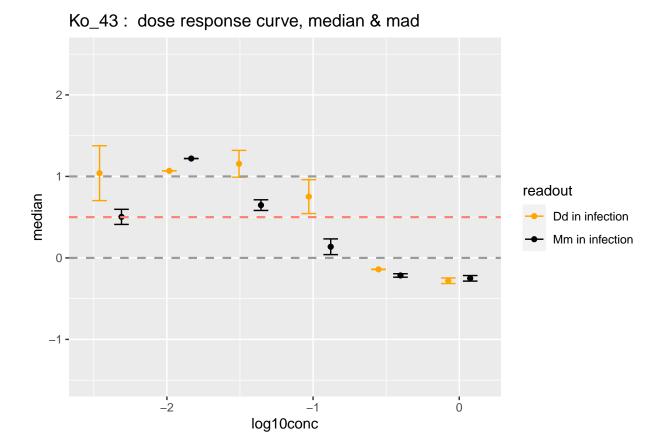


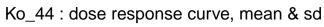


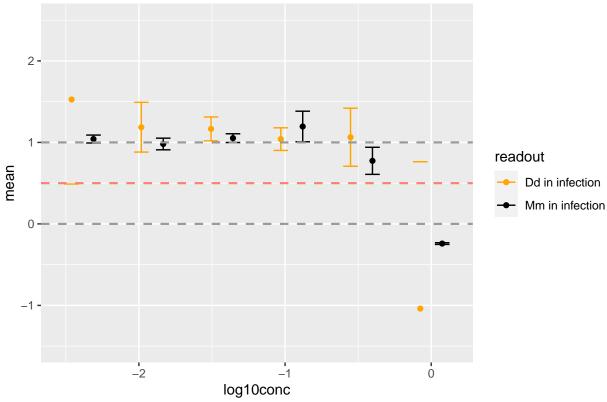


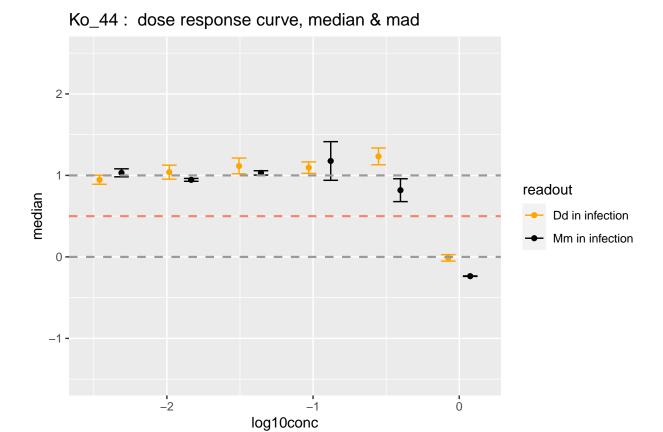


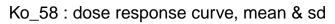


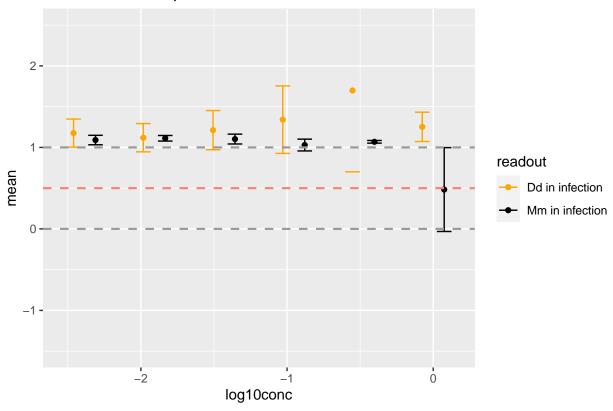


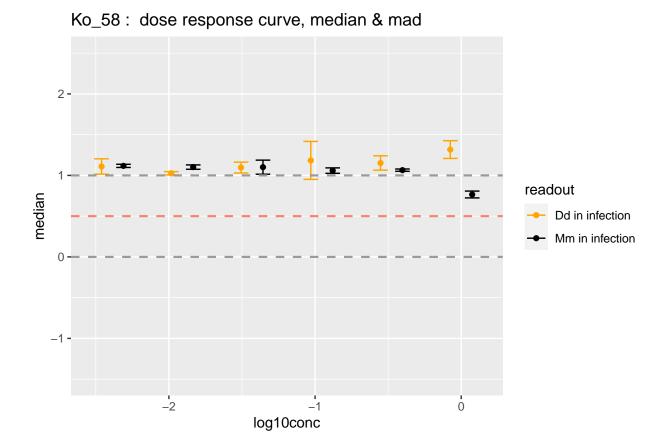




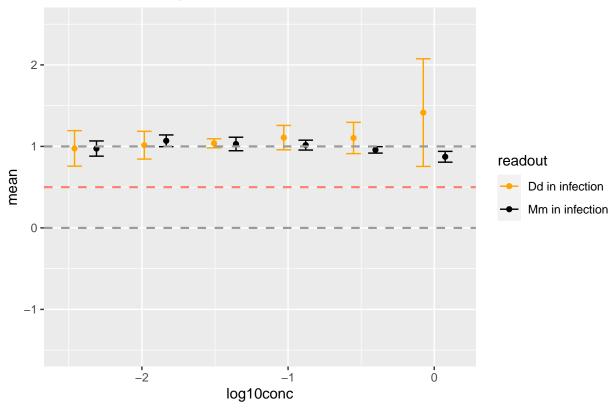


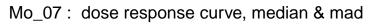


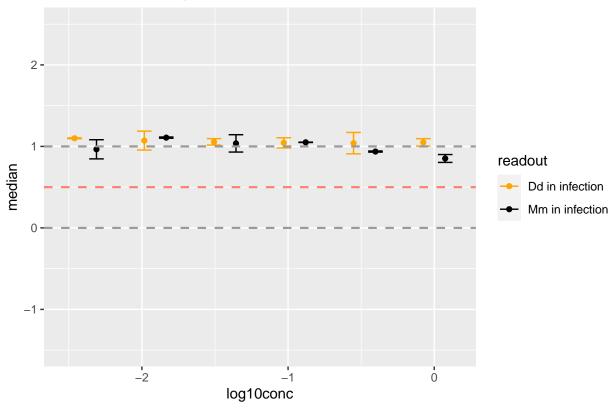




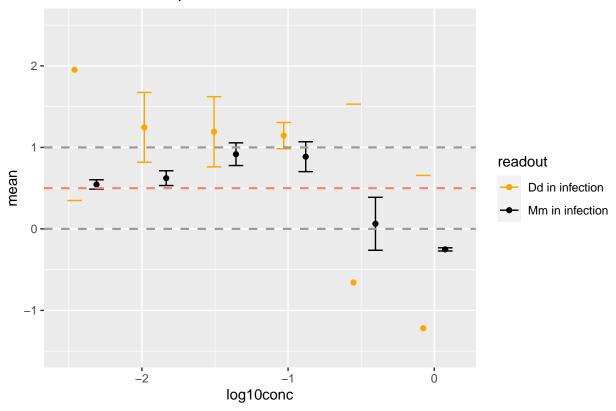


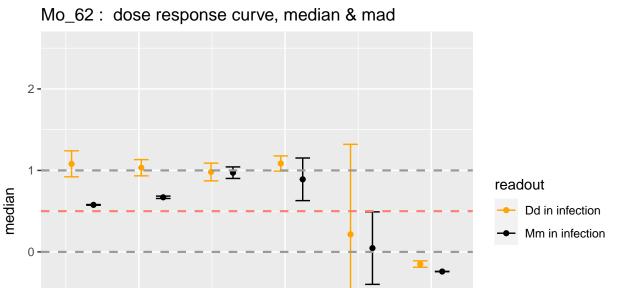








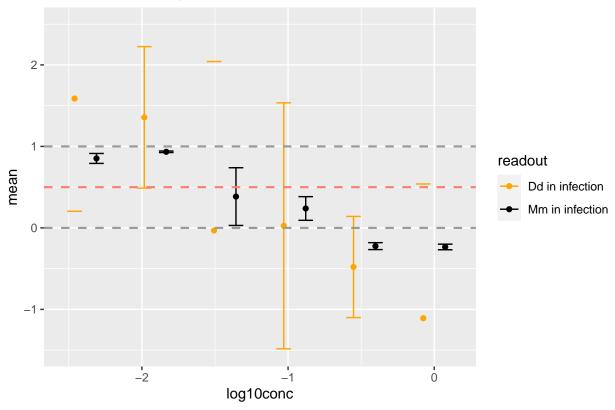


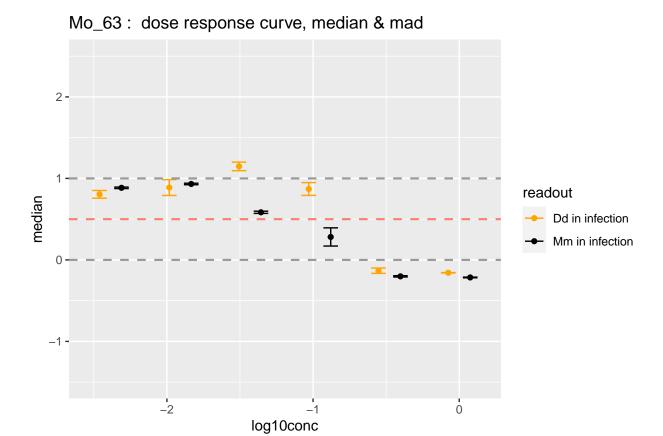


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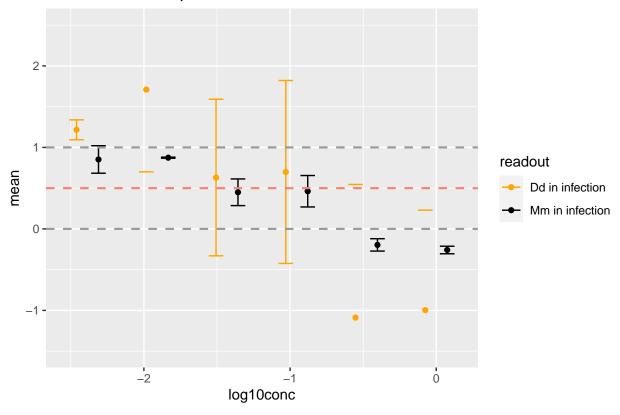
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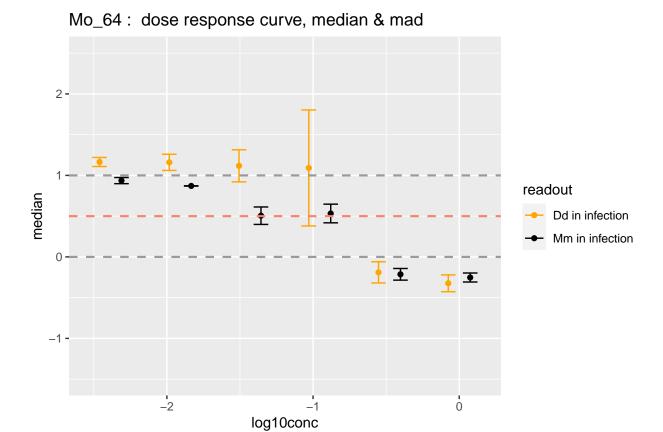




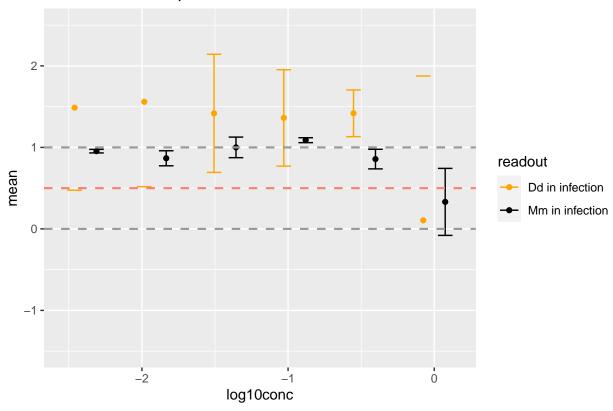


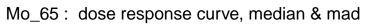


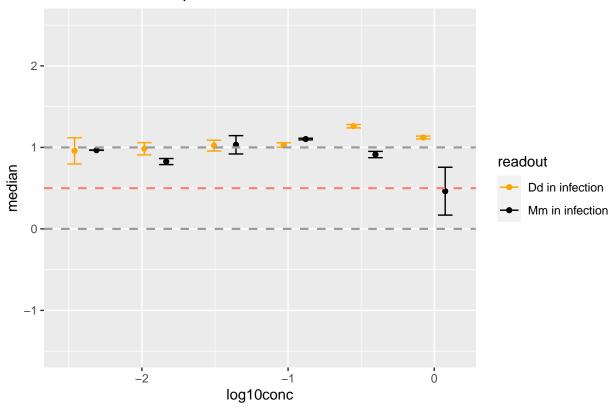




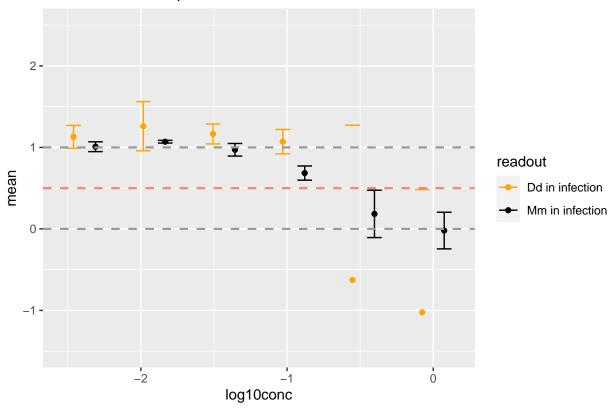


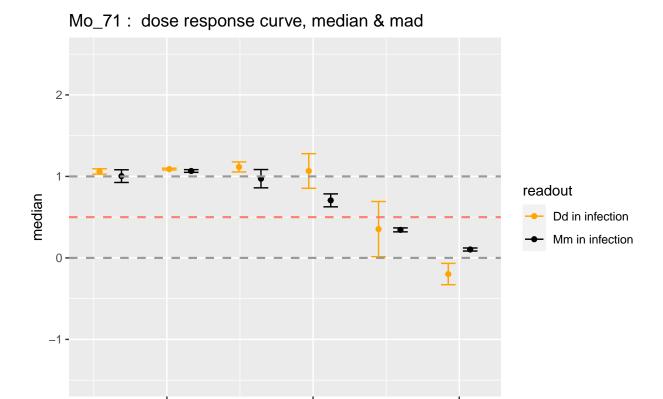




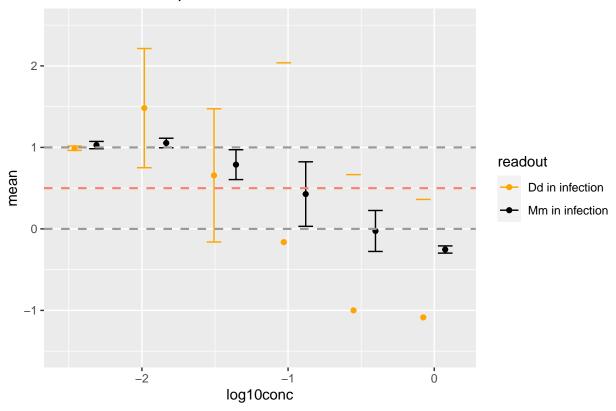


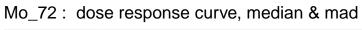


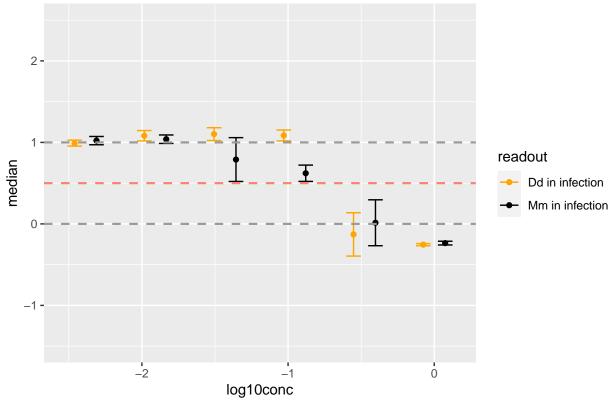




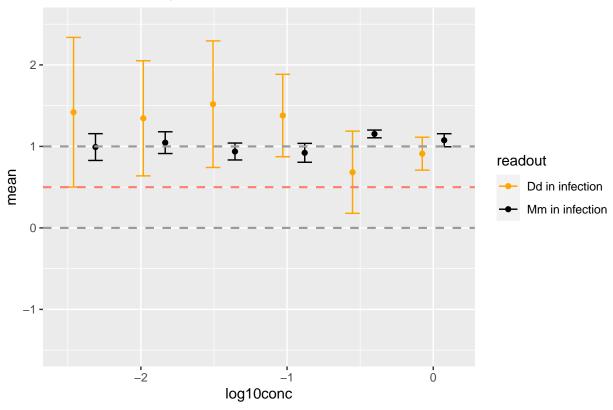


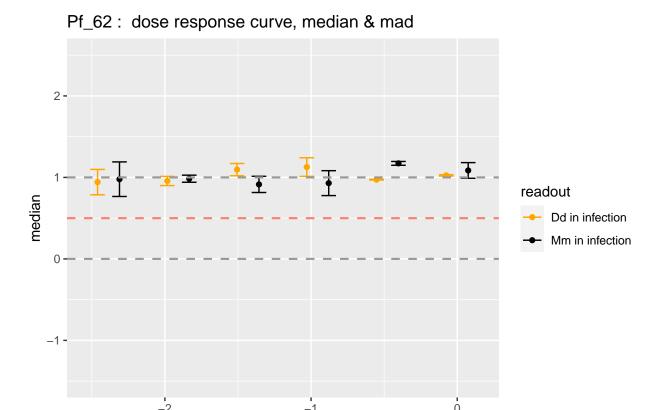




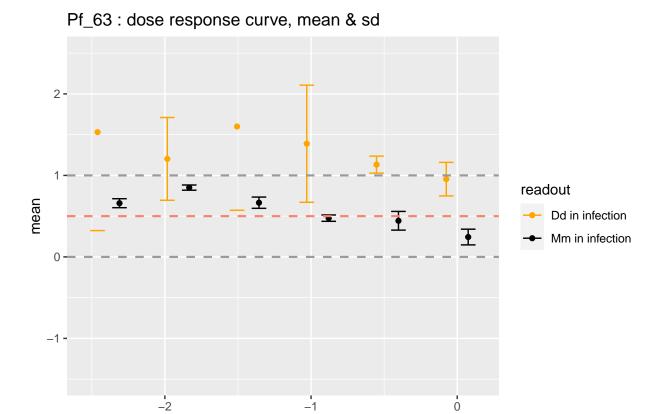




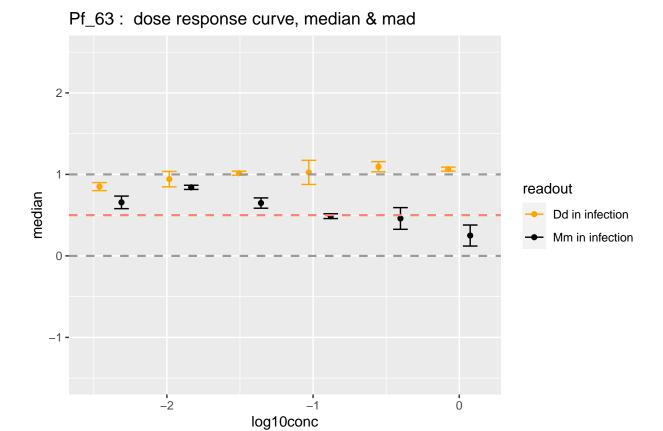


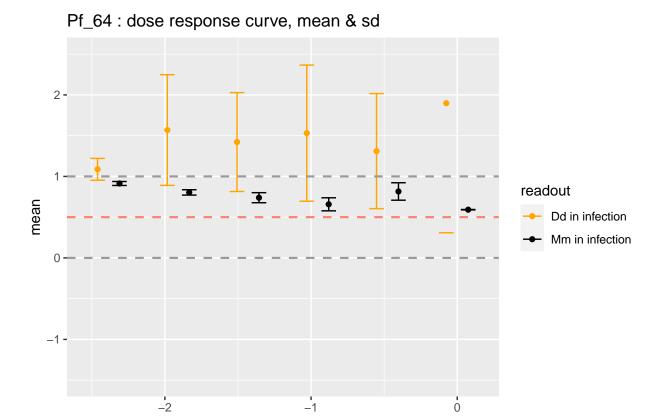


86

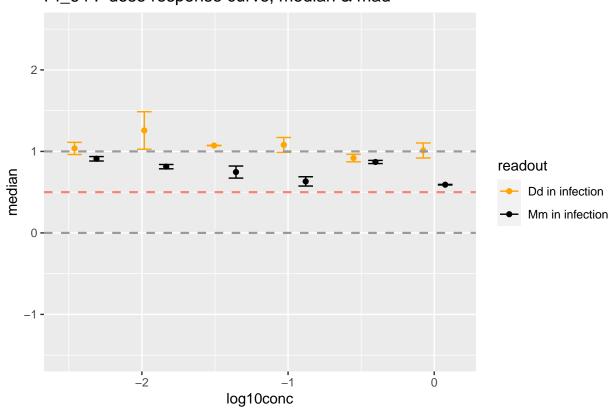


87

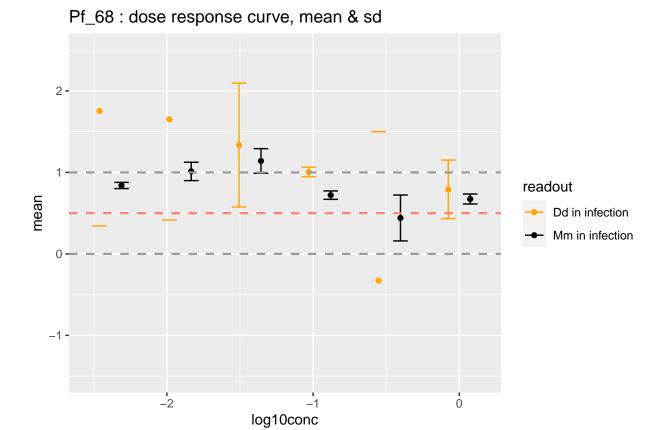


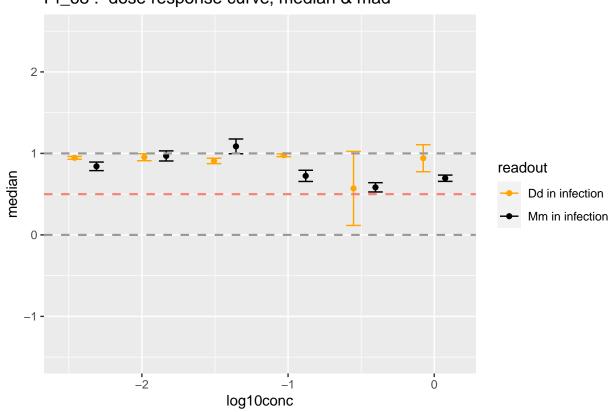


89

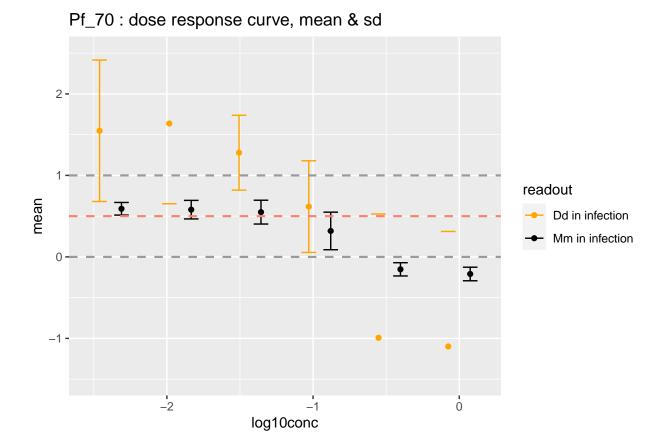


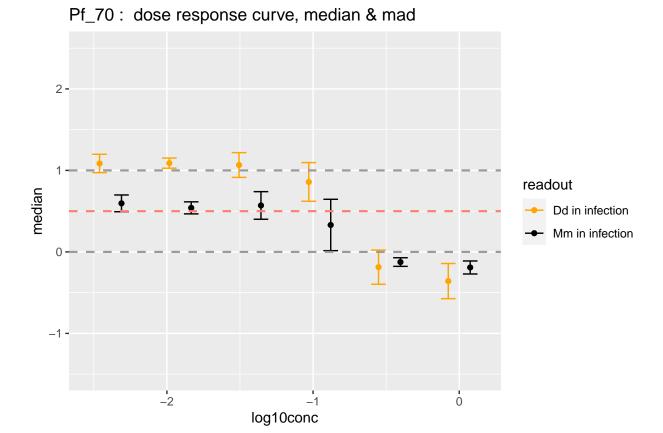
Pf\_64: dose response curve, median & mad

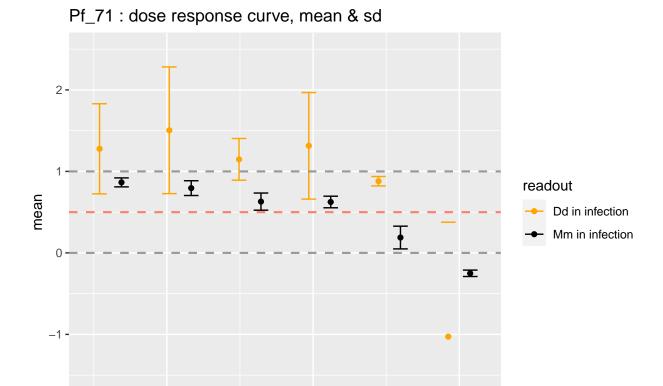




Pf\_68: dose response curve, median & mad

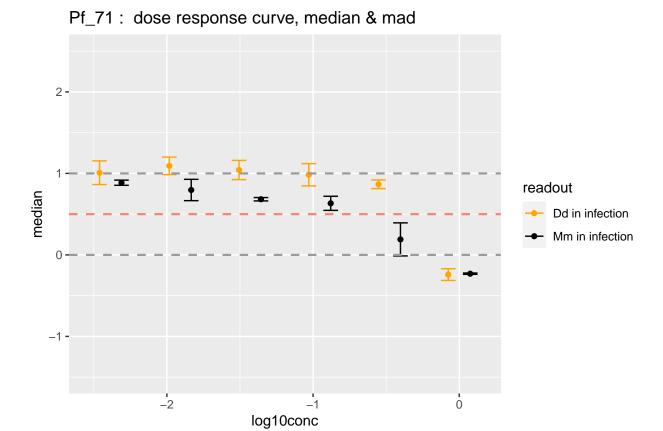


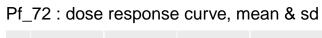


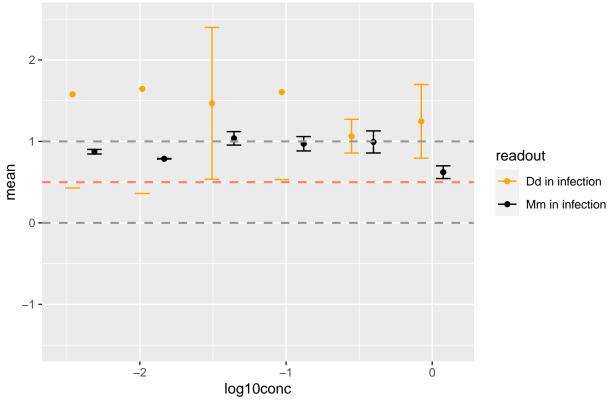


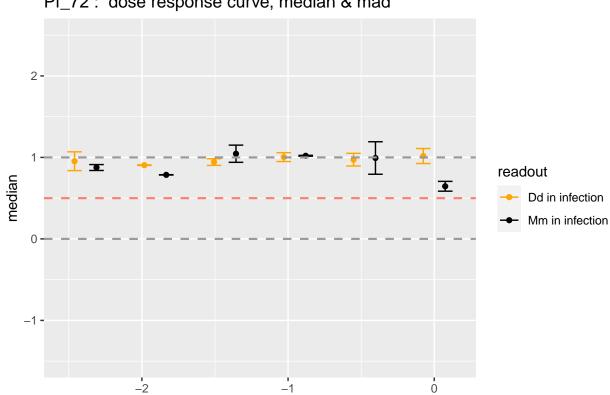
0

-<u>2</u>

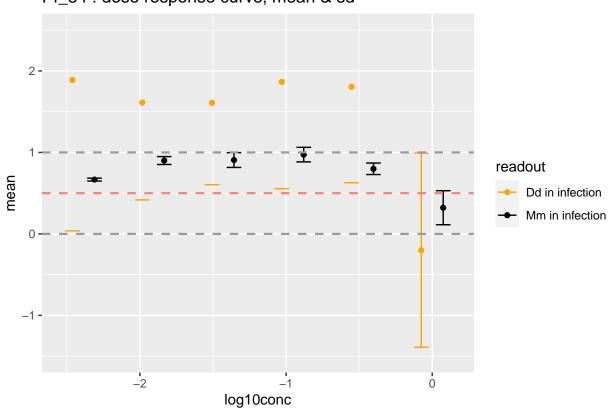




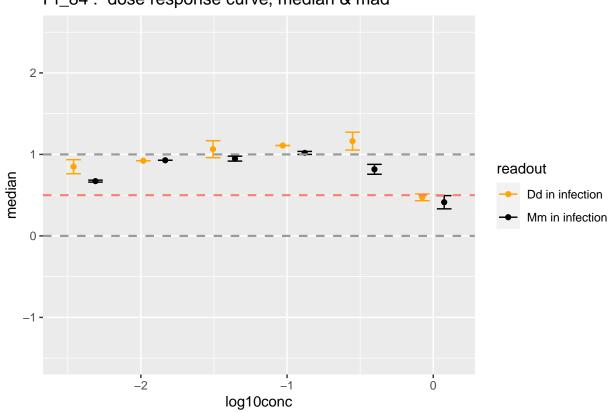




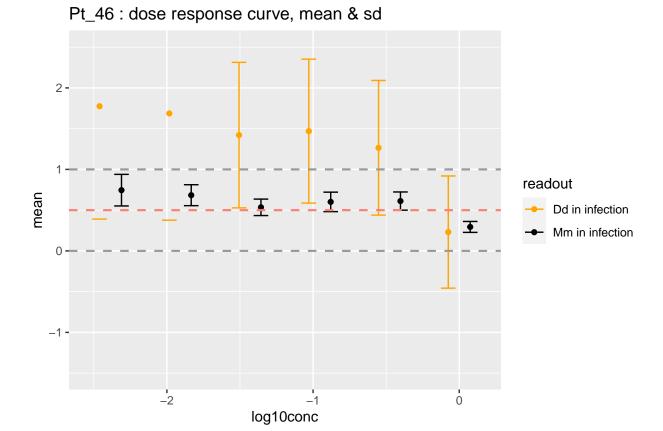
Pf\_72: dose response curve, median & mad

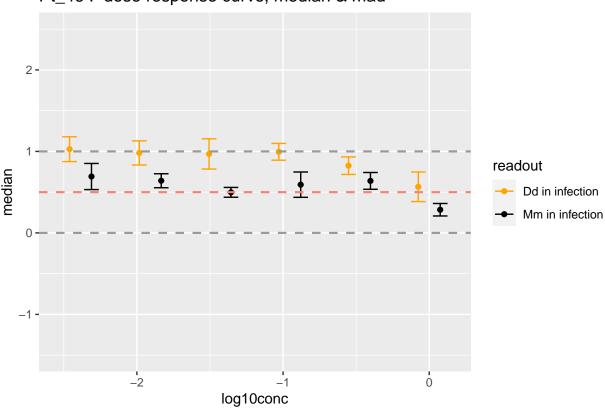


Pf\_84 : dose response curve, mean & sd

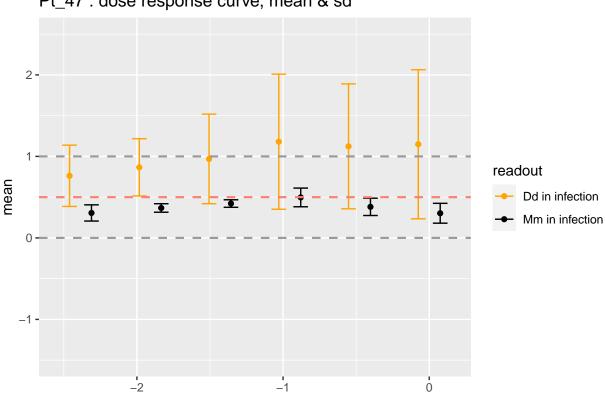


Pf\_84: dose response curve, median & mad

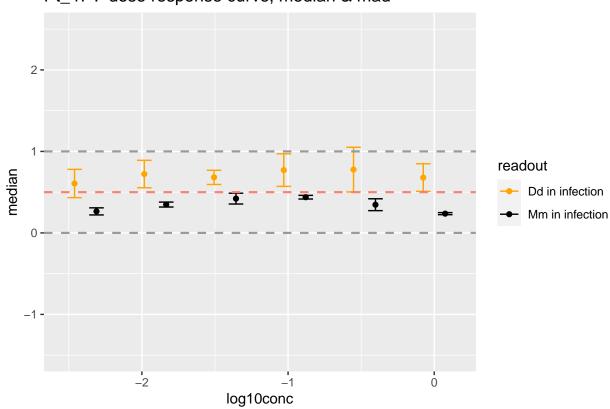




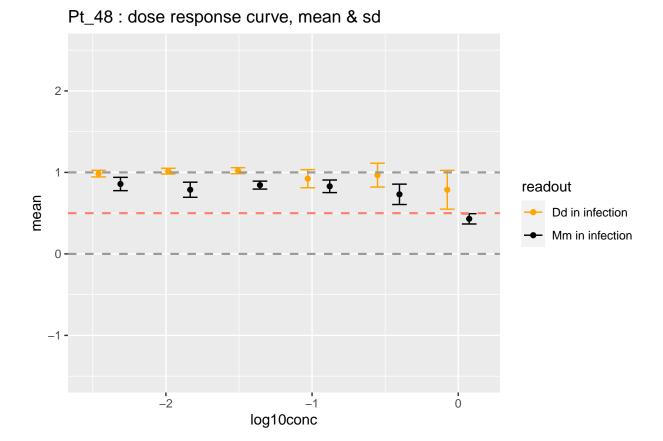
Pt\_46: dose response curve, median & mad

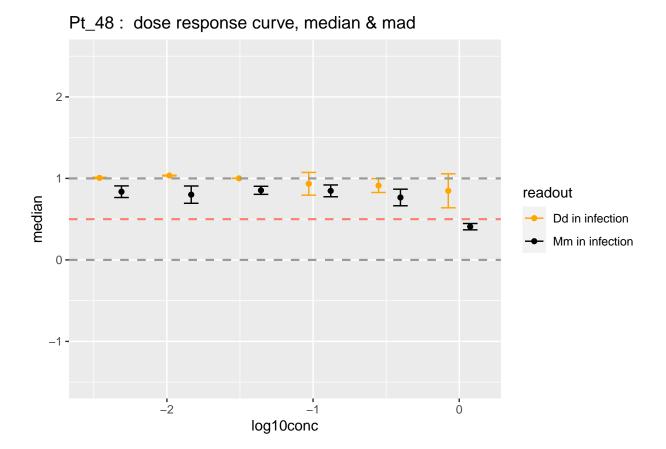


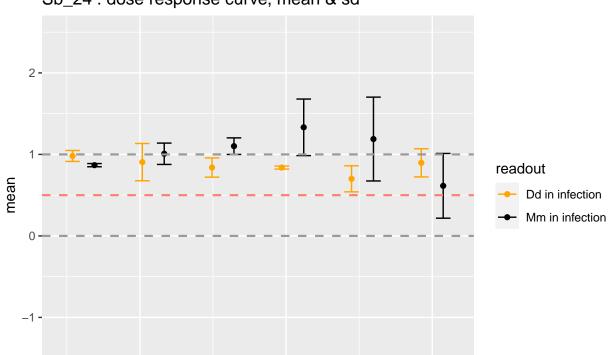
Pt\_47 : dose response curve, mean & sd



Pt\_47: dose response curve, median & mad

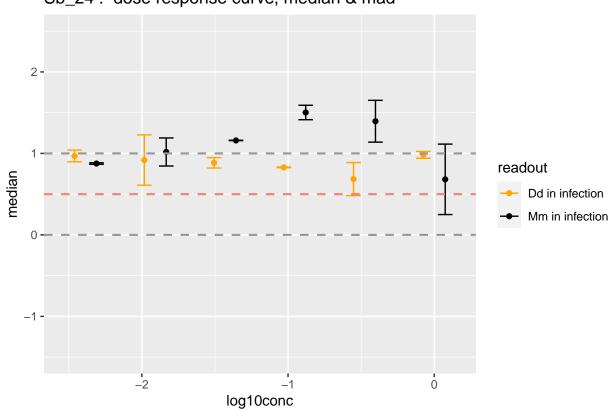






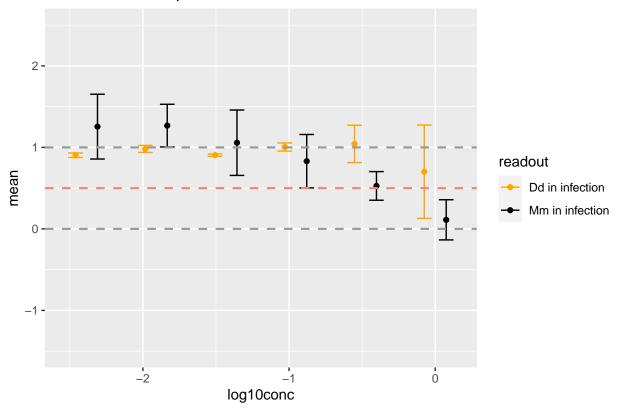
Sb\_24 : dose response curve, mean & sd

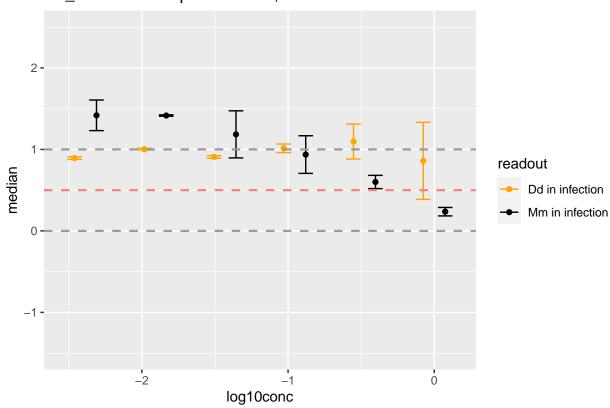
-<u>2</u>



Sb\_24: dose response curve, median & mad

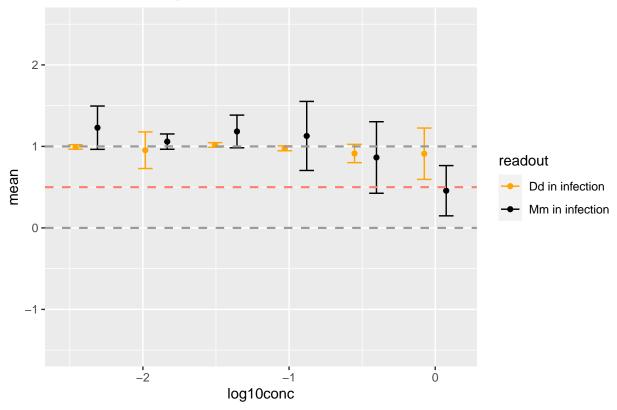
Sb\_25 : dose response curve, mean & sd

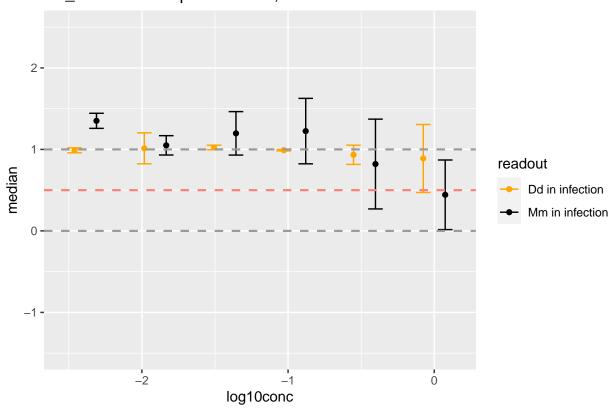




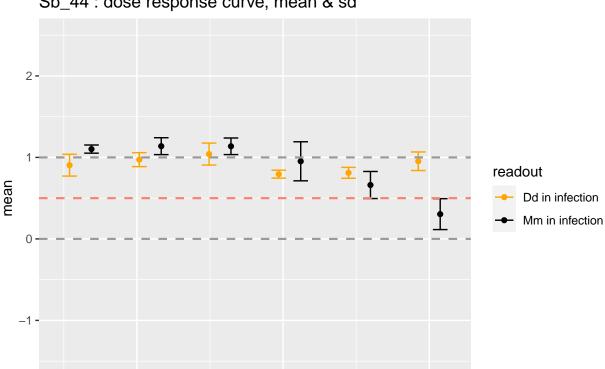
Sb\_25: dose response curve, median & mad





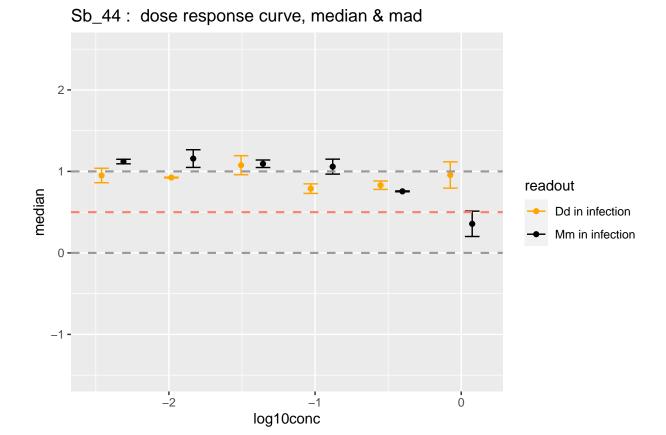


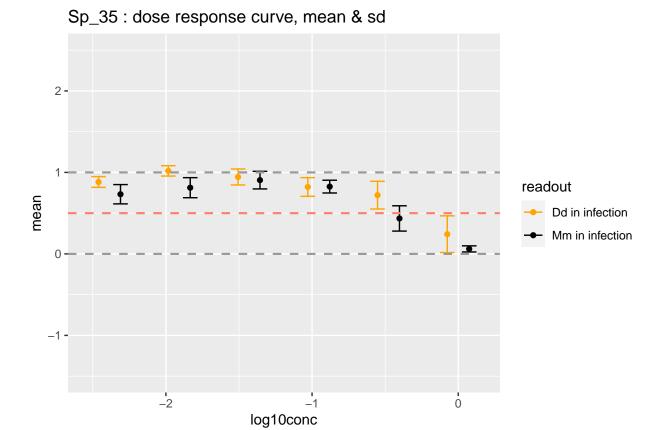
Sb\_26: dose response curve, median & mad

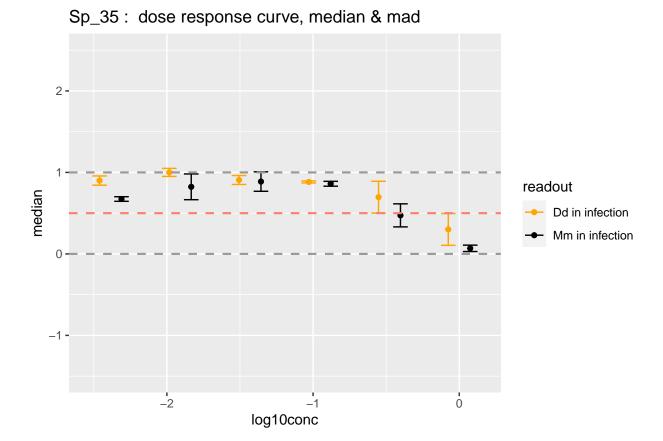


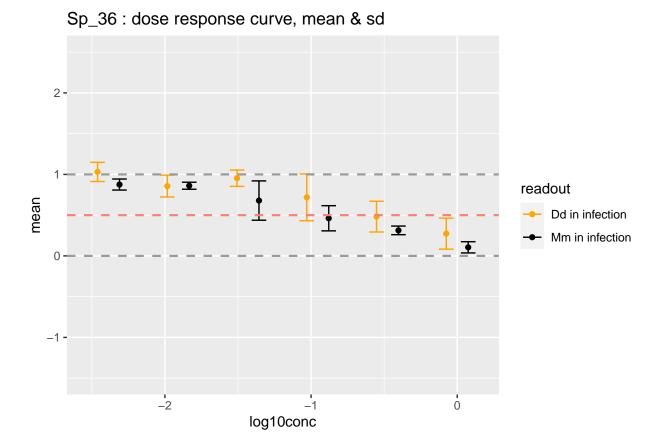
log10conc

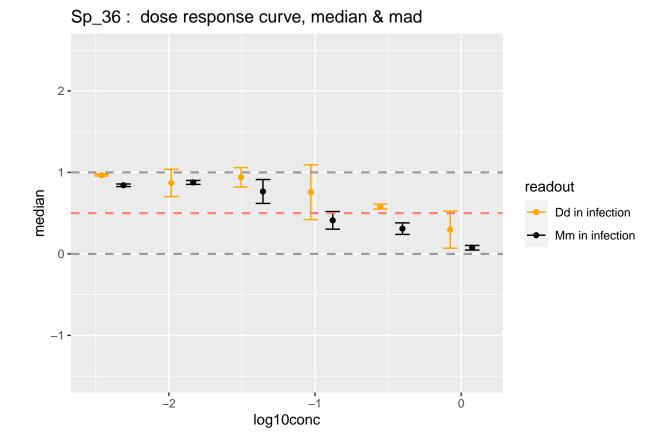
Sb\_44 : dose response curve, mean & sd

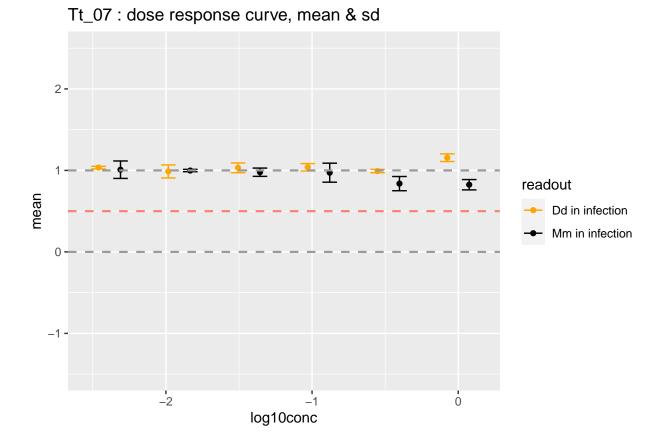


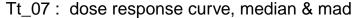


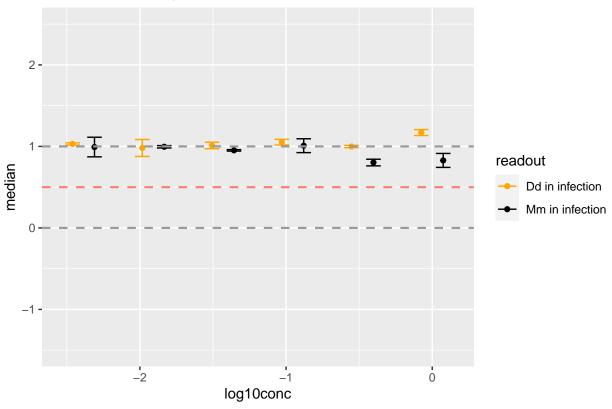












## [1] "rough thresholding by RLU <= 0.5 and RFU >= 0.5"

```
##
       cond
                    conc
## 1
      Am_72 1.000000000 VC DMSO 0.3%
      Am_86 1.000000000 VC DMSO 0.3%
      Gc_23 1.000000000 VC DMSO 0.3%
## 3
## 4
      Gc 25 1.000000000 VC DMSO 0.3%
      Gc_26 1.000000000 VC DMSO 0.3%
## 5
## 6
      Gc_28 1.000000000 VC DMSO 0.3%
      Gc_32 1.000000000 VC DMSO 0.3%
## 7
## 8
      Gc_33 1.000000000 VC DMSO 0.3%
## 9
      Gc_34 1.000000000 VC DMSO 0.3%
## 10 Gc_35 1.000000000 VC DMSO 0.3%
      Gc_36 1.000000000 VC DMSO 0.3%
## 12
     Gc_37 1.000000000 VC DMSO 0.3%
     Ko_09 1.000000000 VC DMSO 0.3%
      Ko_11 1.000000000 VC DMSO 0.3%
## 14
      Ko_18 1.000000000 VC DMSO 0.3%
      Ko_20 0.333333333 VC DMSO 0.3%
## 16
## 17
      Ko_21 0.111111111 VC DMSO 0.3%
## 18
      Ko_21 0.333333333 VC DMSO 0.3%
## 19
     Ko_25 1.000000000 VC DMSO 0.3%
## 20 Ko_43 0.111111111 VC DMSO 0.3%
## 21 Mo 63 0.111111111 VC DMSO 0.3%
## 22 Mo_65 1.000000000 VC DMSO 0.3%
```

```
## 23 PC Rif
                      NA VC DMSO 0.3%
## 24 Pf 63 0.111111111 VC DMSO 0.3%
## 25 Pf 63 0.333333333 VC DMSO 0.3%
## 26 Pf_63 1.000000000 VC DMSO 0.3%
      Pf 70 0.111111111 VC DMSO 0.3%
## 28 Pf 71 0.333333333 VC DMSO 0.3%
## 29 Pt 46 0.037037037 VC DMSO 0.3%
## 30 Pt 46 1.000000000 VC DMSO 0.3%
## 31 Pt 47 0.004115226 VC DMSO 0.3%
## 32 Pt_47 0.012345679 VC DMSO 0.3%
## 33 Pt_47 0.037037037 VC DMSO 0.3%
      Pt_47 0.111111111 VC DMSO 0.3%
## 34
## 35
     Pt_47 0.333333333 VC DMSO 0.3%
## 36 Pt_47 1.000000000 VC DMSO 0.3%
## 37 Pt_48 1.000000000 VC DMSO 0.3%
## 38 Sb_25 1.000000000 VC DMSO 0.3%
## 39 Sb_26 1.000000000 VC DMSO 0.3%
## 40 Sb 44 1.000000000 VC DMSO 0.3%
## 41 Sp_35 0.333333333 VC DMSO 0.3%
## 42 Sp 36 0.111111111 VC DMSO 0.3%
## 43 Sp_36 0.333333333 VC DMSO 0.3%
## R version 4.3.1 (2023-06-16 ucrt)
## Platform: x86_64-w64-mingw32/x64 (64-bit)
## Running under: Windows 10 x64 (build 19045)
## Matrix products: default
##
##
## locale:
## [1] LC_COLLATE=English_Switzerland.utf8 LC_CTYPE=English_Switzerland.utf8
## [3] LC_MONETARY=English_Switzerland.utf8 LC_NUMERIC=C
## [5] LC_TIME=English_Switzerland.utf8
##
## time zone: Europe/Zurich
## tzcode source: internal
##
## attached base packages:
## [1] grid
                           graphics grDevices utils
                                                         datasets methods
                 stats
## [8] base
##
## other attached packages:
## [1] gridExtra 2.3 cowplot 1.1.1 reshape2 1.4.4 tidyr 1.3.0
                                                                   dplyr_1.1.3
## [6] ggplot2_3.4.4 gplots_3.1.3
                                     readxl 1.4.3
                                                    xlsx 0.6.5
##
## loaded via a namespace (and not attached):
## [1] gtable_0.3.4
                           compiler_4.3.1
                                              gtools_3.9.4
                                                                 Rcpp_1.0.11
                           stringr_1.5.0
                                                                 scales 1.2.1
## [5] tidyselect 1.2.0
                                              bitops_1.0-7
## [9] yaml_2.3.7
                           fastmap_1.1.1
                                              plyr_1.8.9
                                                                 R6_2.5.1
## [13] labeling_0.4.3
                           generics_0.1.3
                                              knitr_1.44
                                                                 tibble_3.2.1
## [17] munsell_0.5.0
                           pillar_1.9.0
                                              rlang_1.1.1
                                                                 utf8_1.2.3
## [21] stringi_1.7.12
                           xfun_0.40
                                              caTools_1.18.2
                                                                 cli_3.6.1
## [25] withr_2.5.1
                           magrittr_2.0.3
                                              digest_0.6.33
                                                                 rstudioapi_0.15.0
## [29] rJava_1.0-6
                           lifecycle_1.0.3
                                              vctrs_0.6.3
                                                                 KernSmooth_2.23-21
```

## [33] evaluate_0.22	glue_1.6.2	farver_2.1.1	cellranger_1.1.0
## [37] xlsxjars_0.6.1	fansi_1.0.5	colorspace_2.1-0	rmarkdown_2.25
## [41] purrr_1.0.2	tools_4.3.1	pkgconfig_2.0.3	htmltools_0.5.6.1