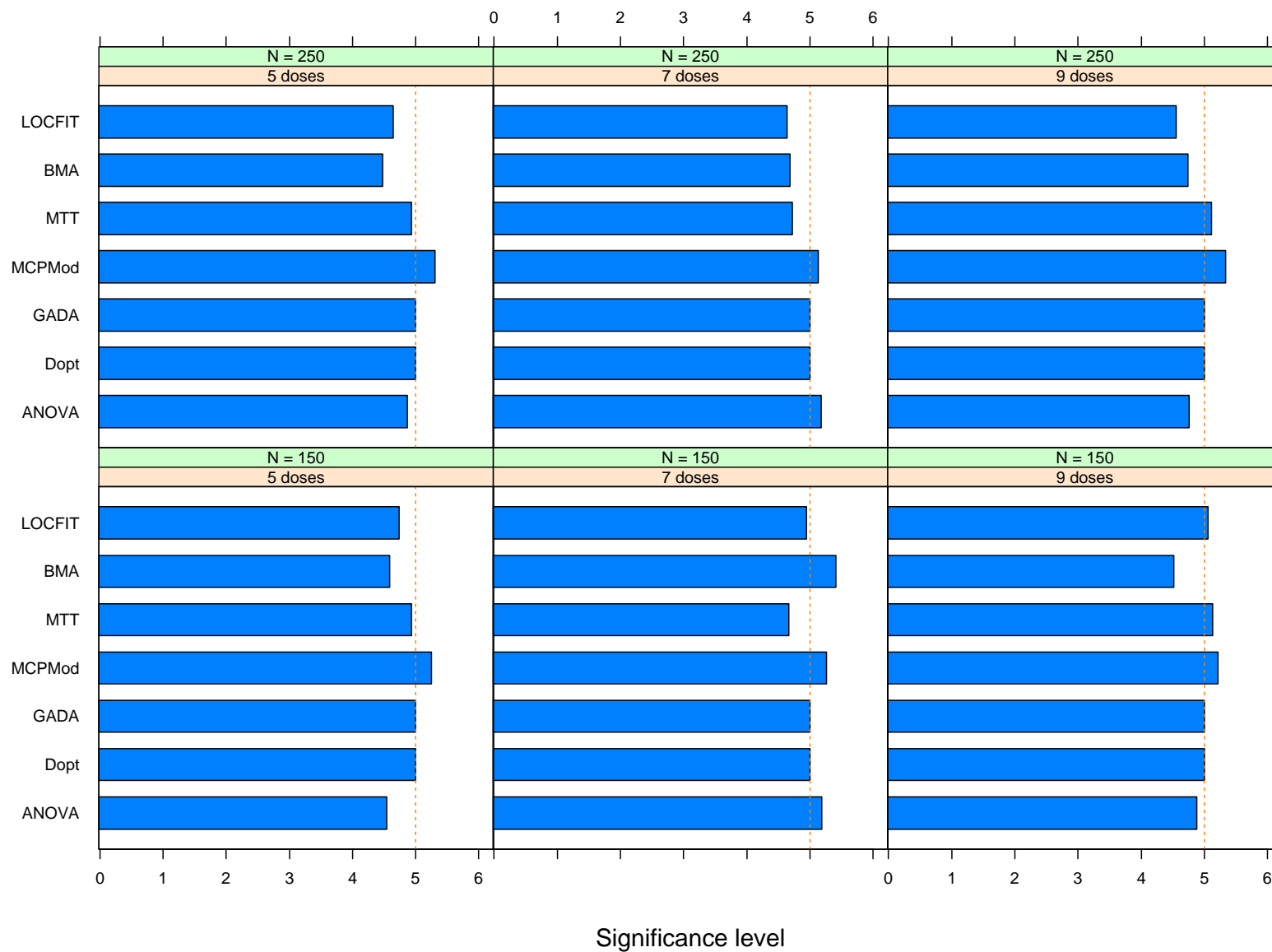


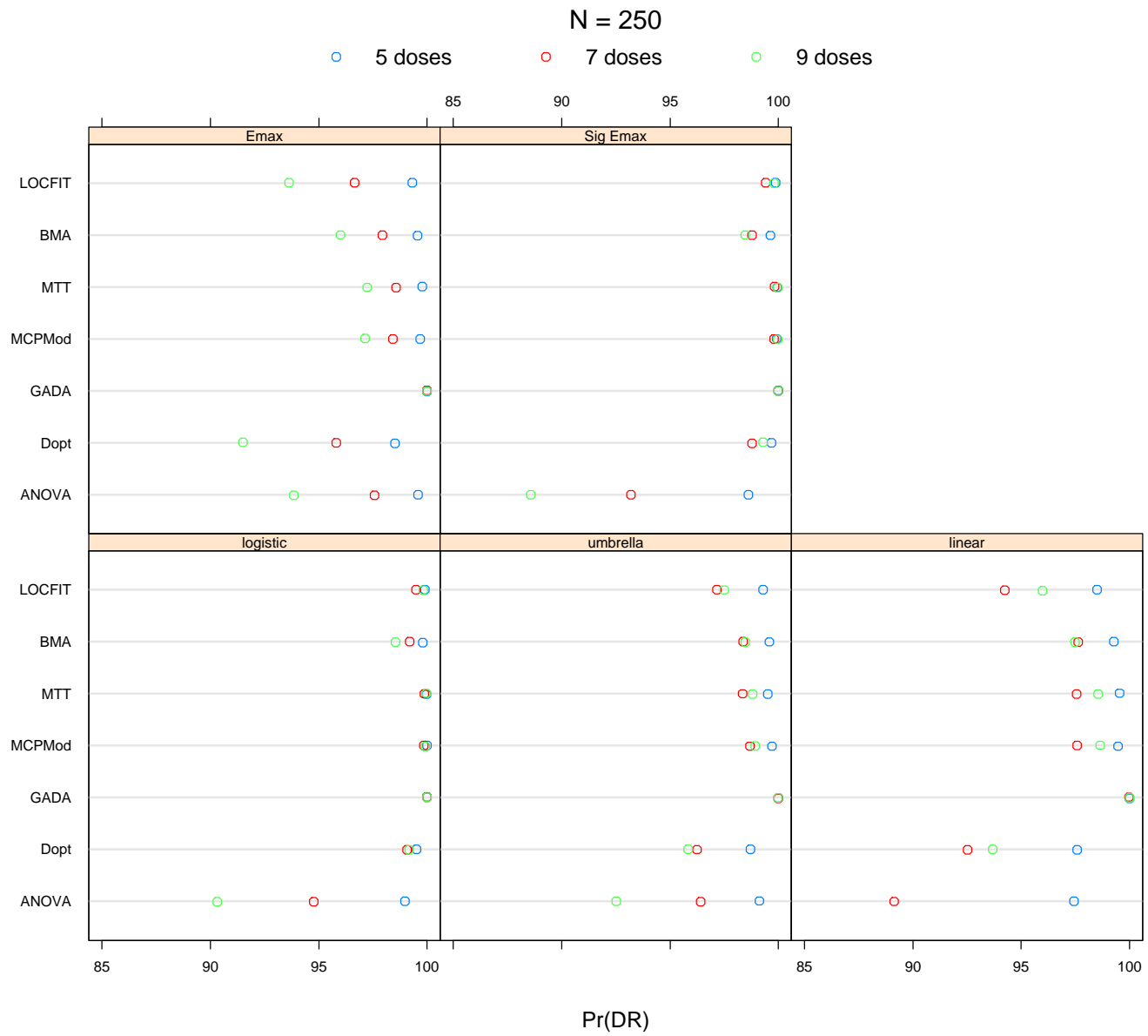
PhRMA PISC Rolling Dose Studies Working Group

Summary of Simulation Results

June 16, 2006

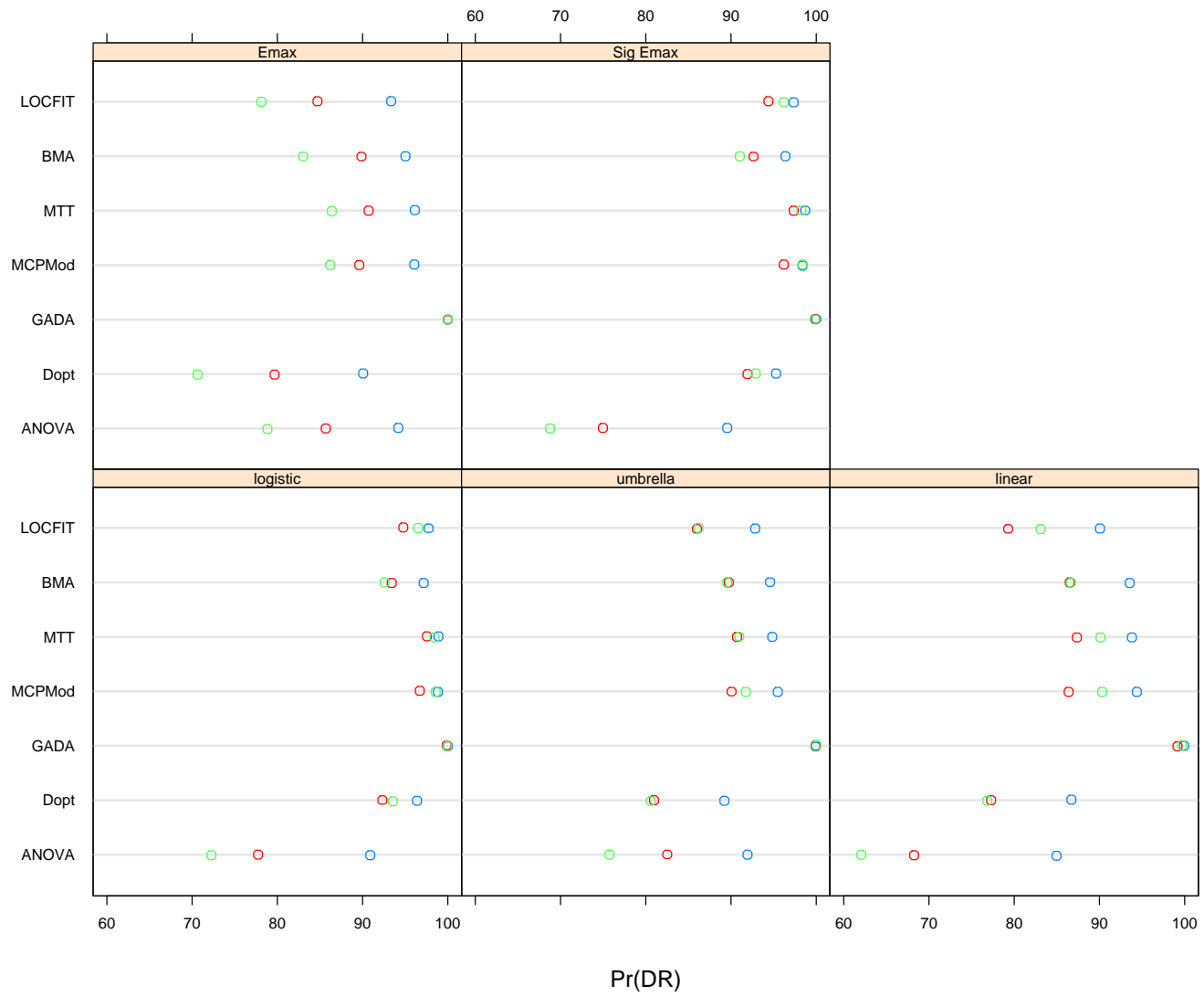
Dose Response Identification



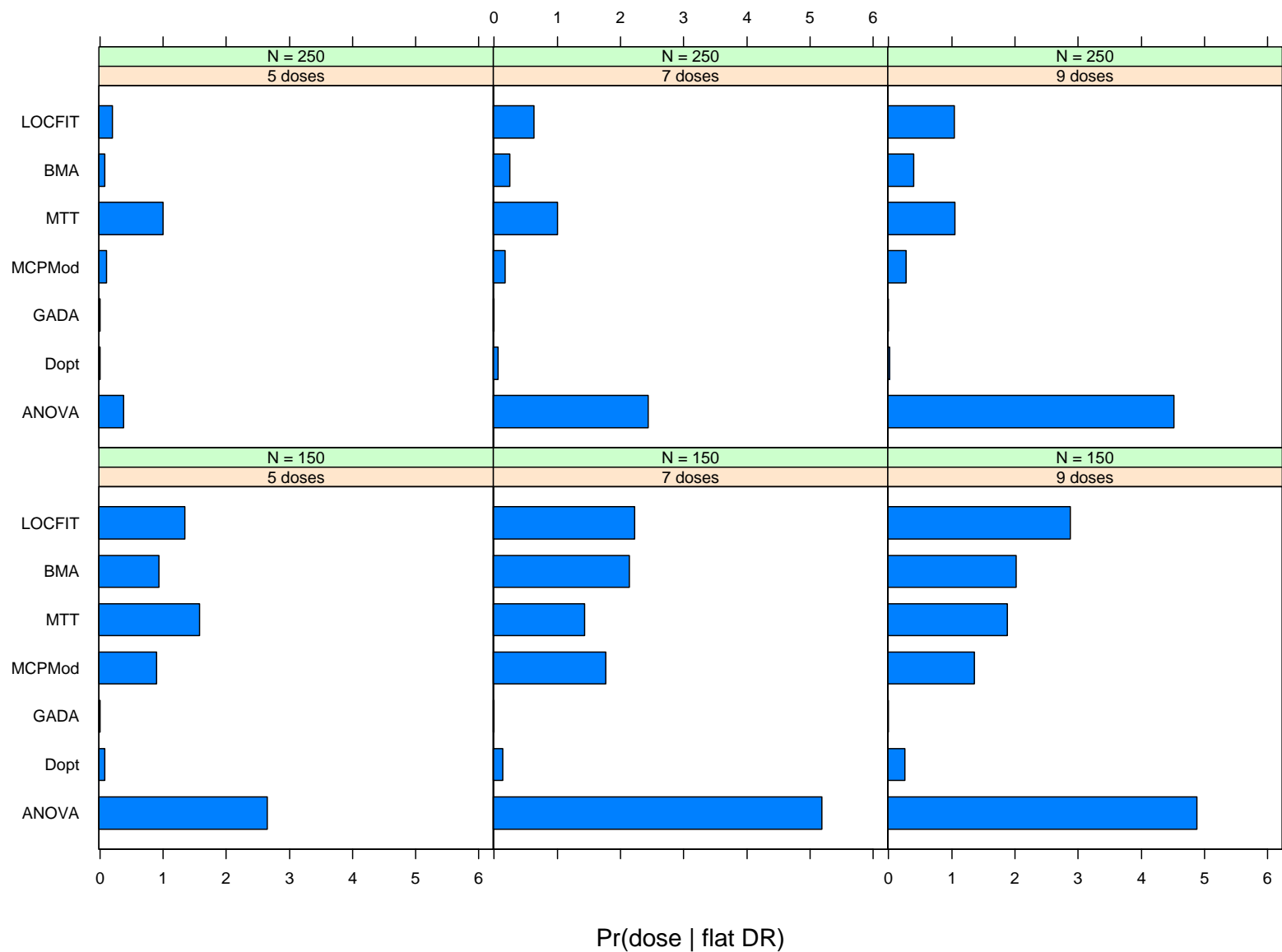


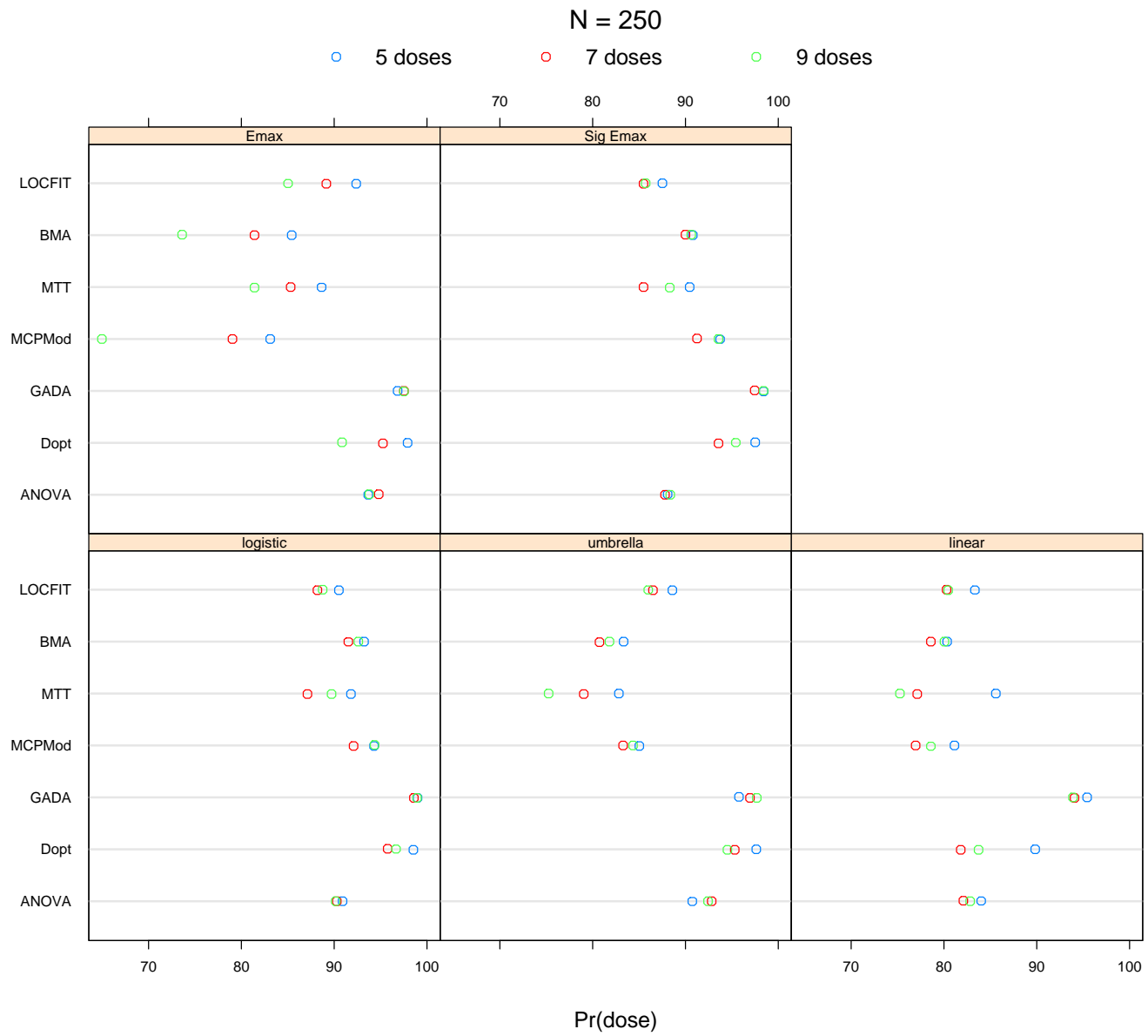
N = 150

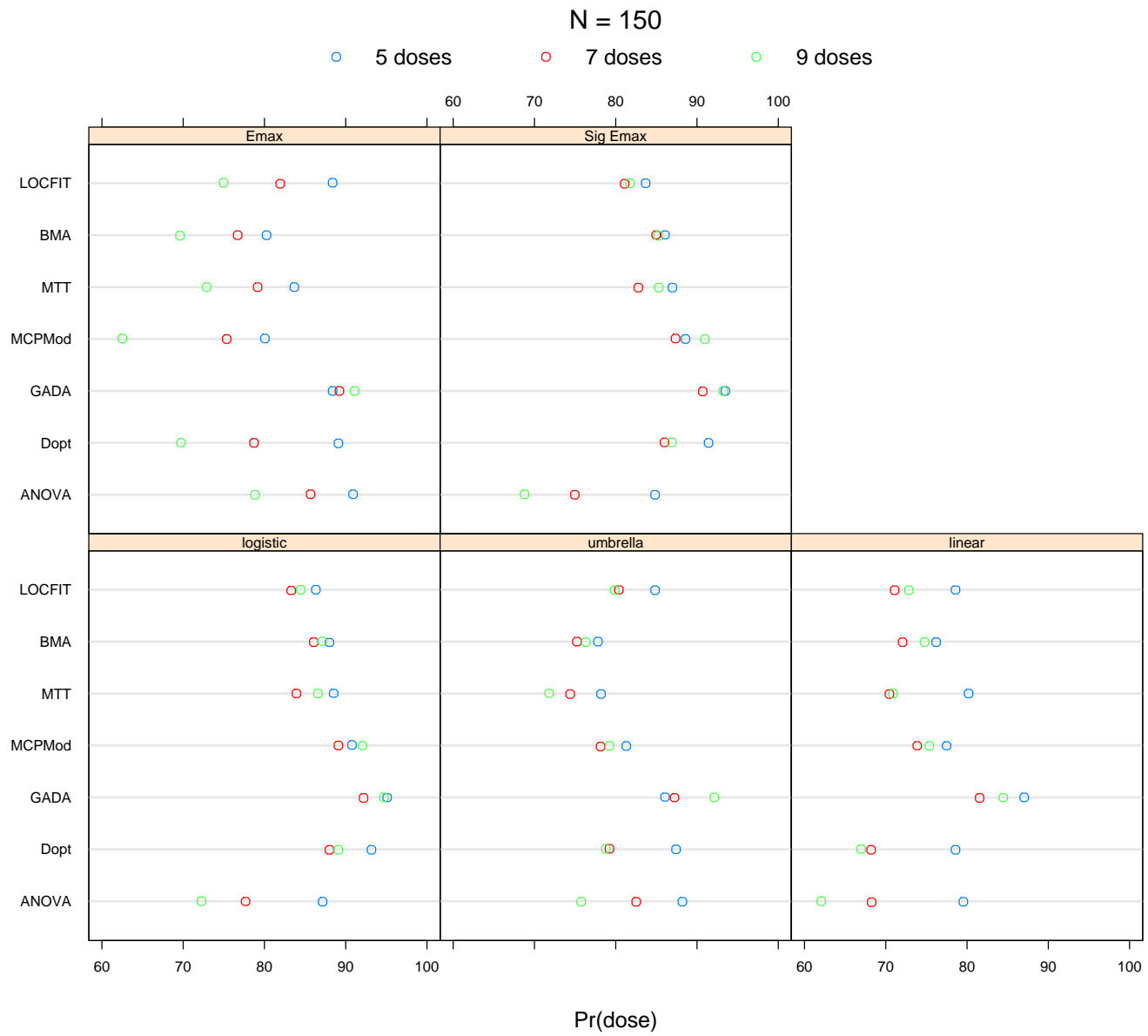
○ 5 doses ○ 7 doses ○ 9 doses



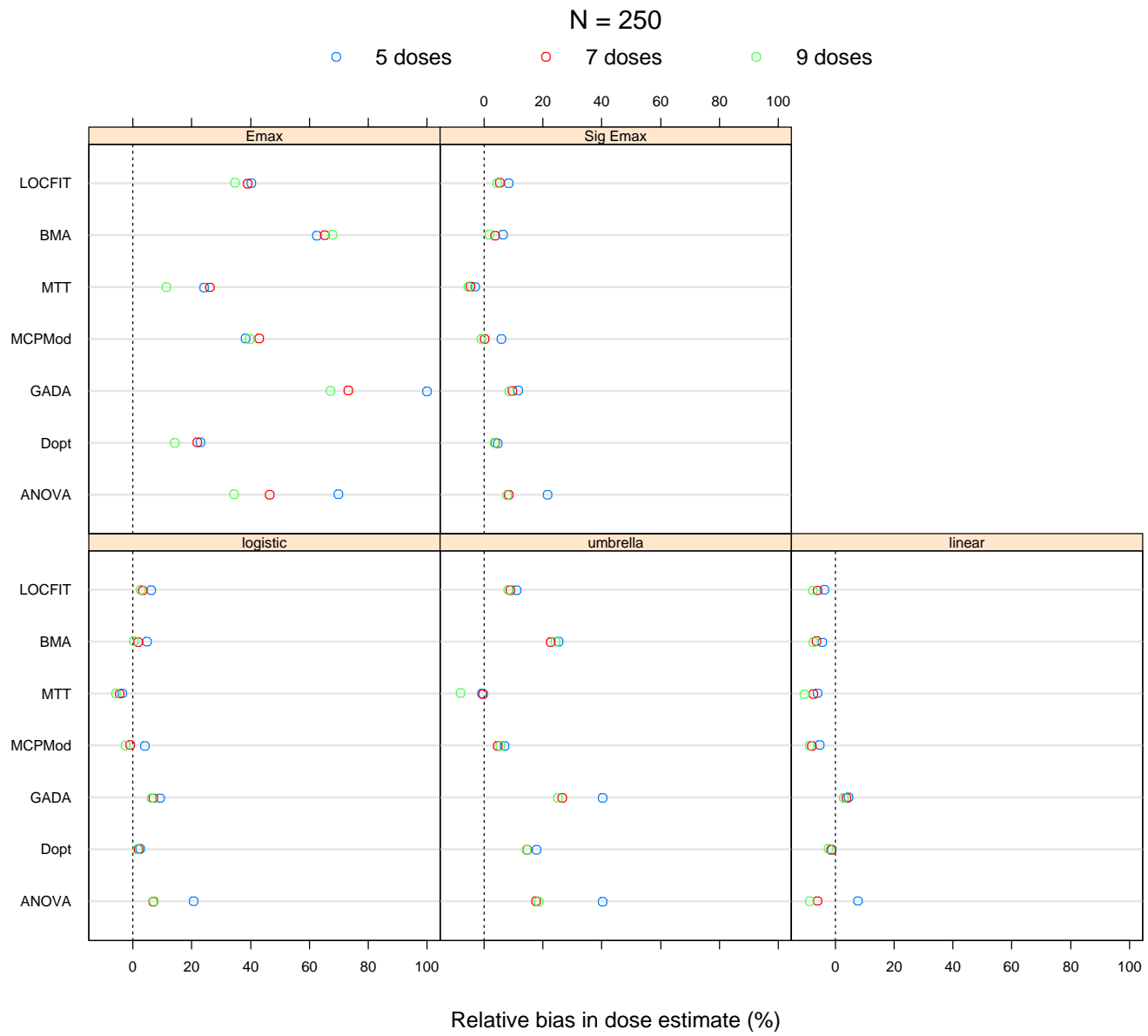
Probability of Dose Selection

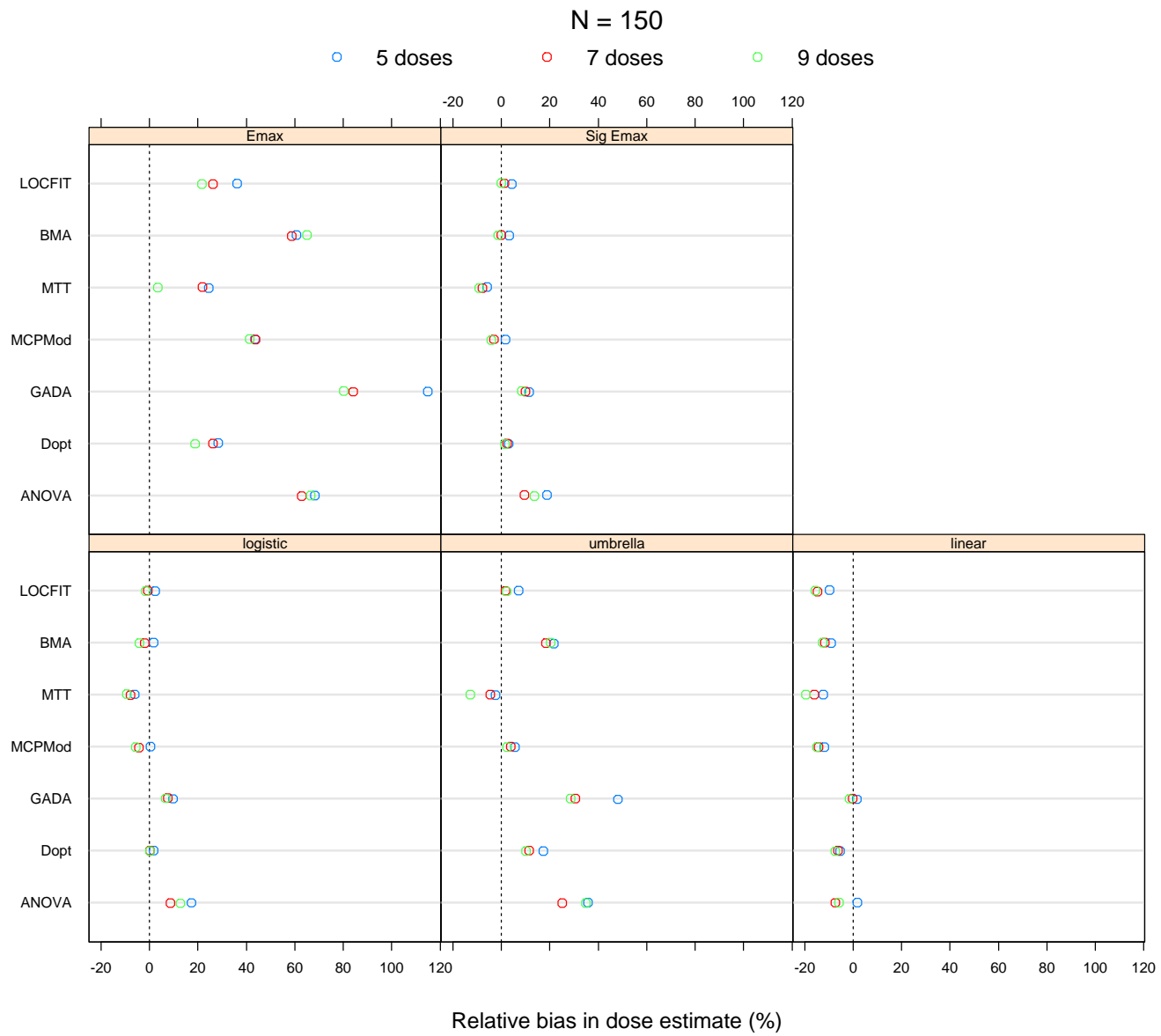


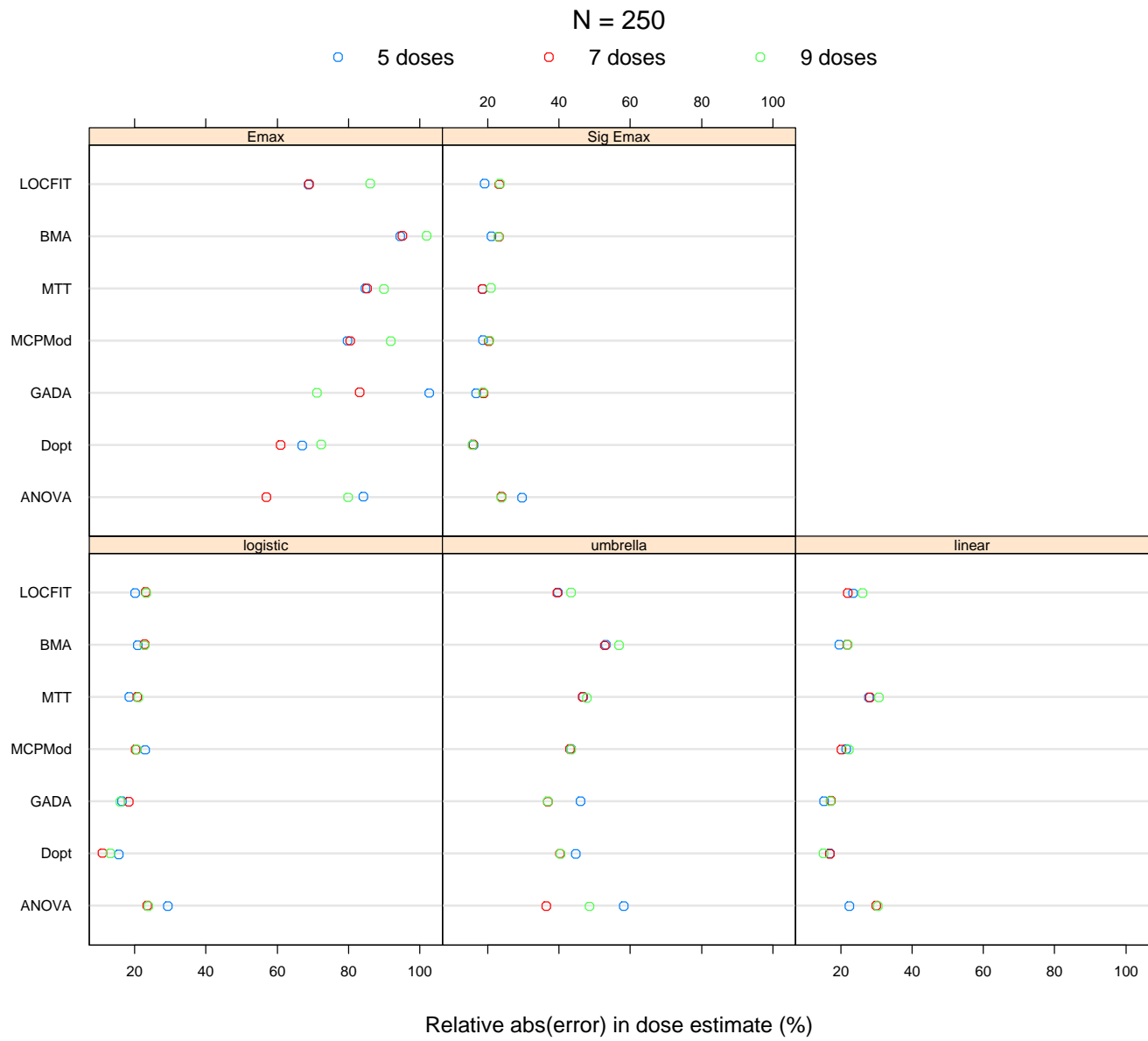


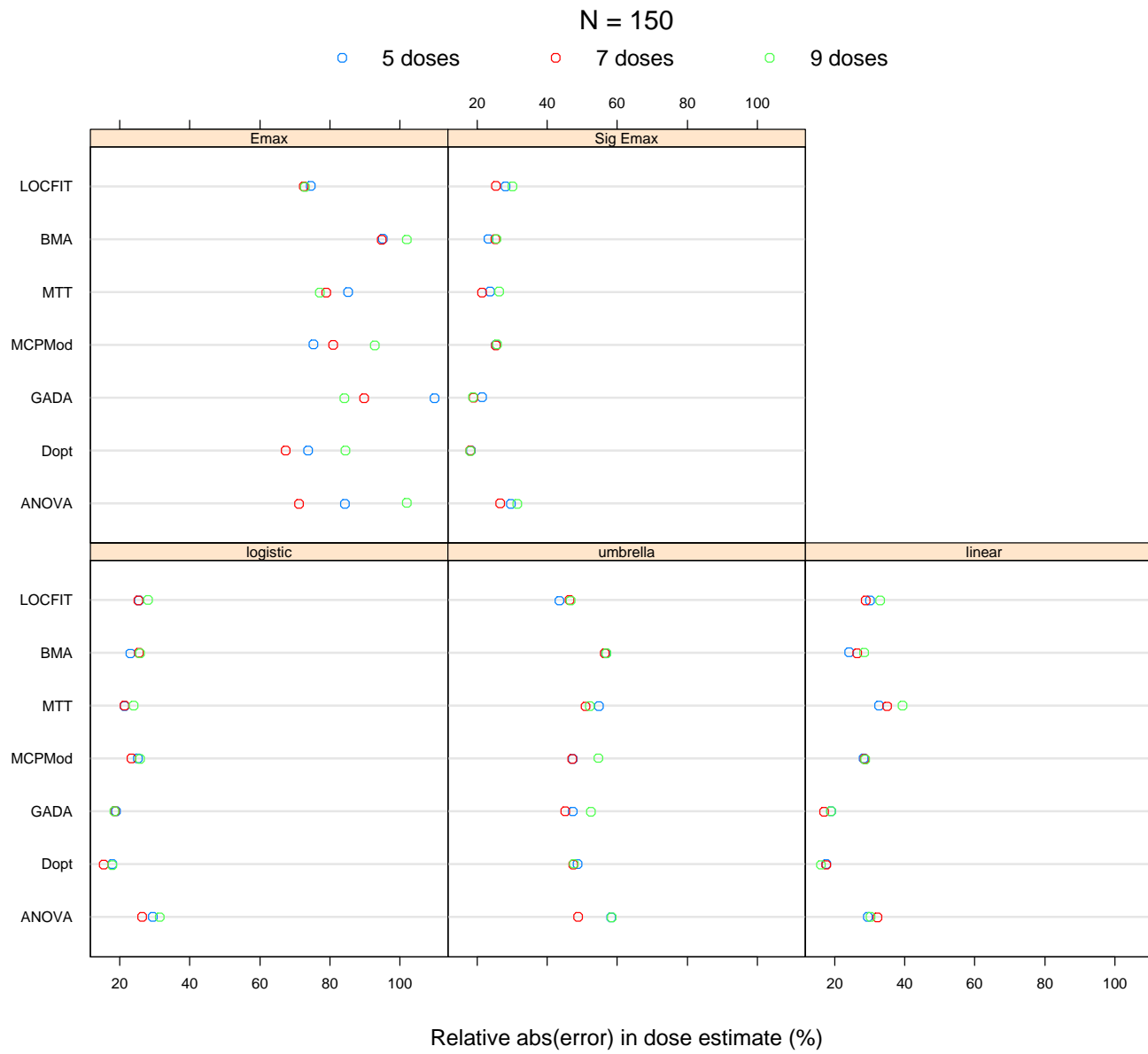


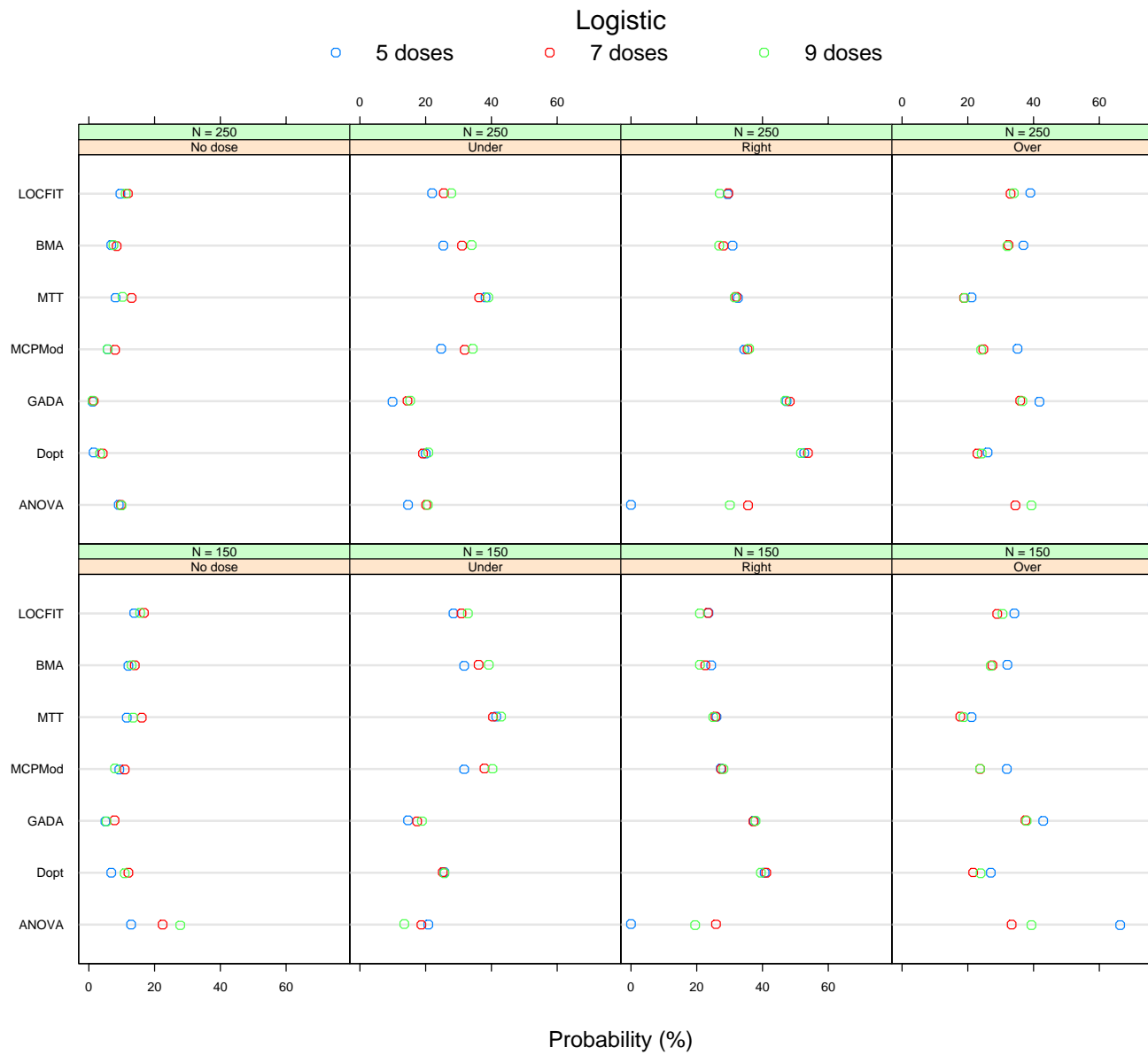
Target Dose Estimation

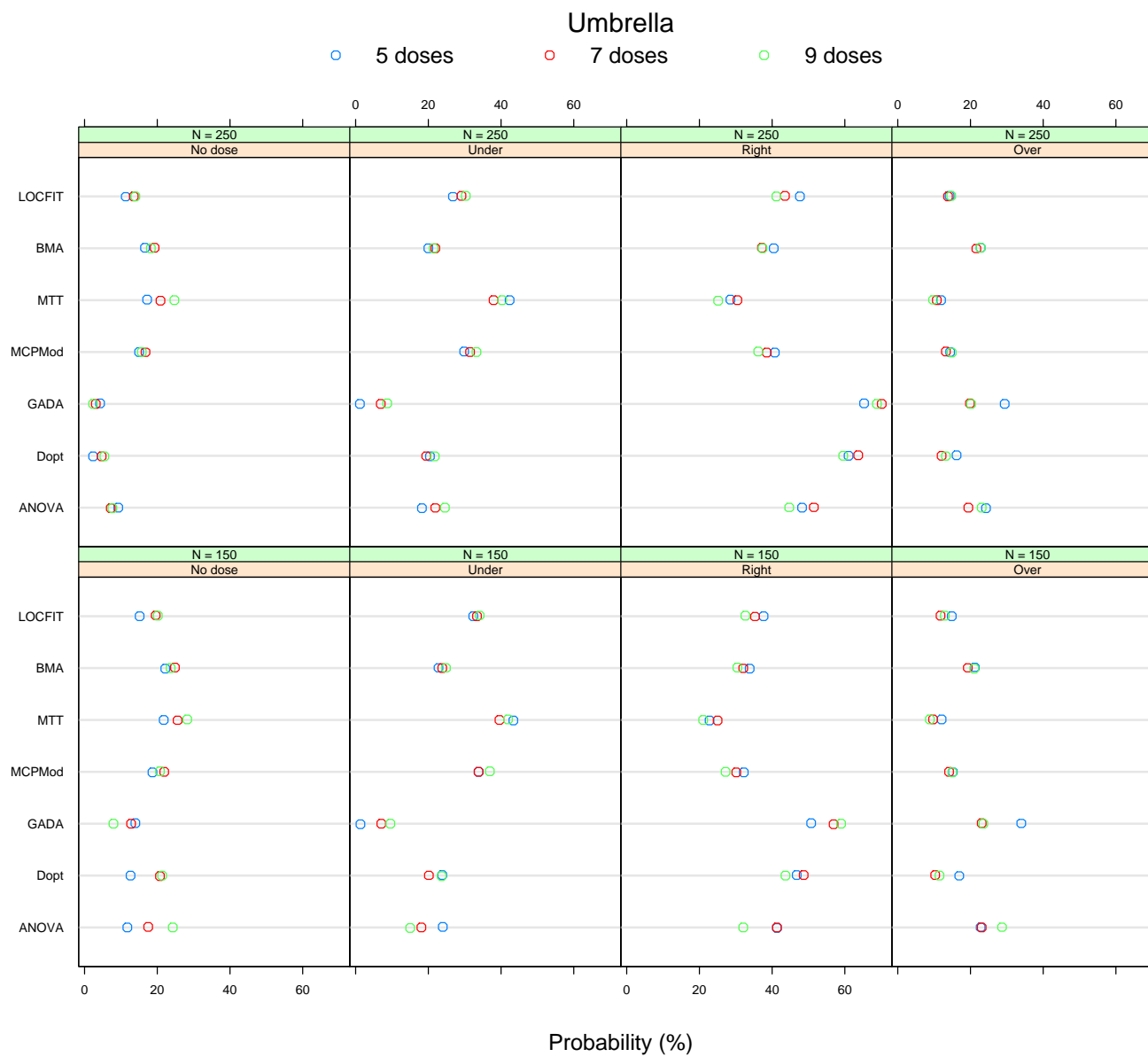


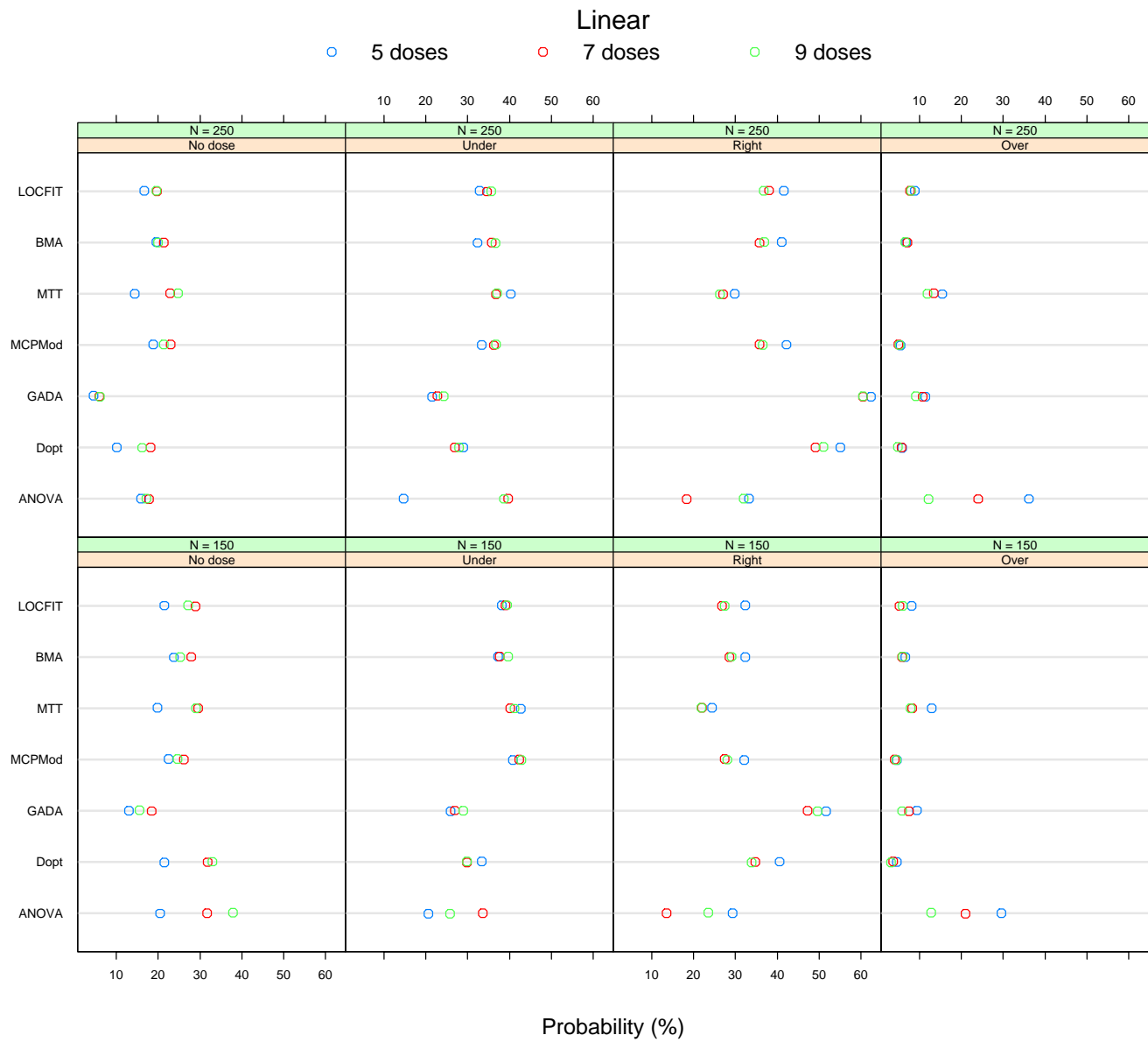


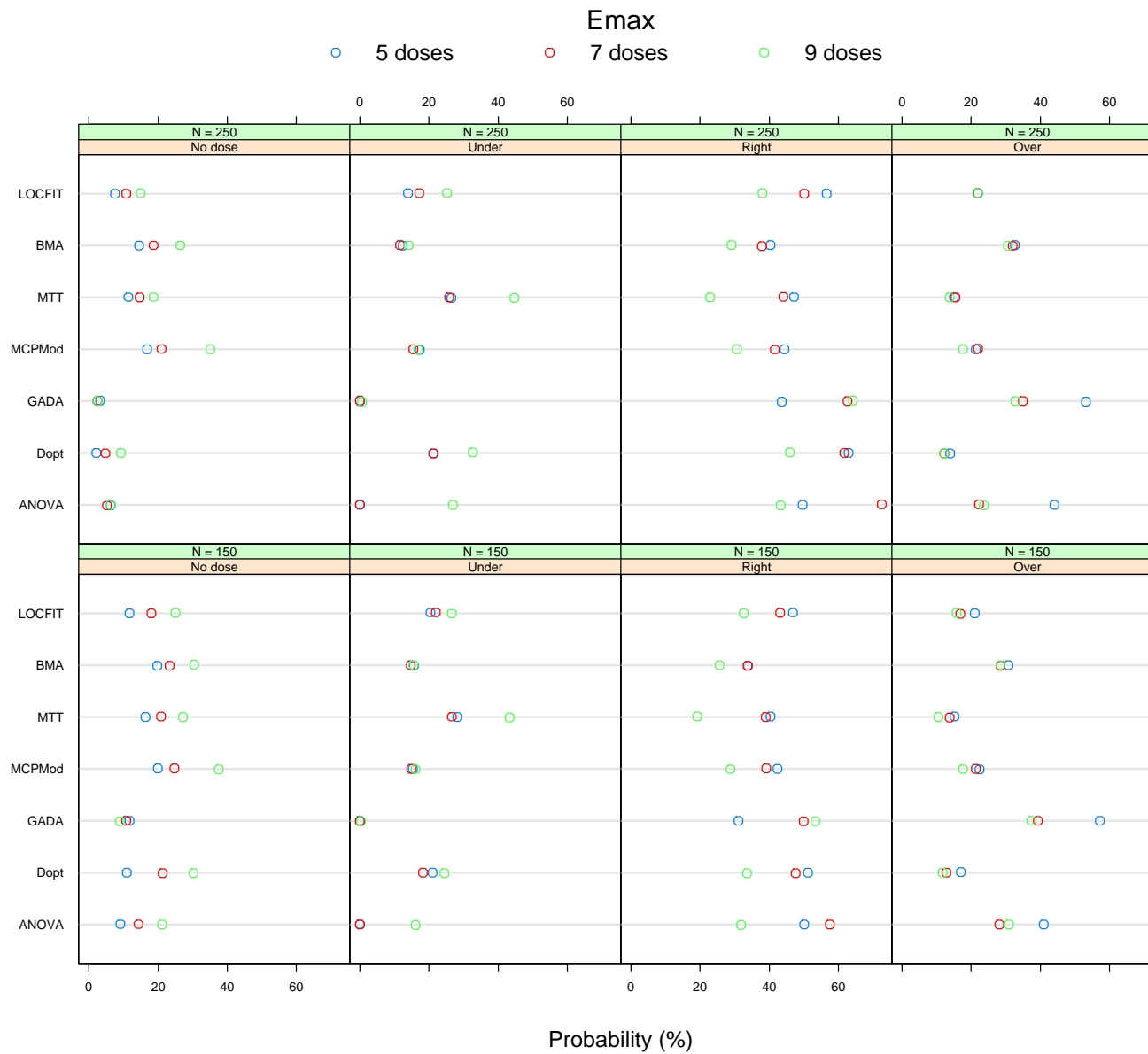






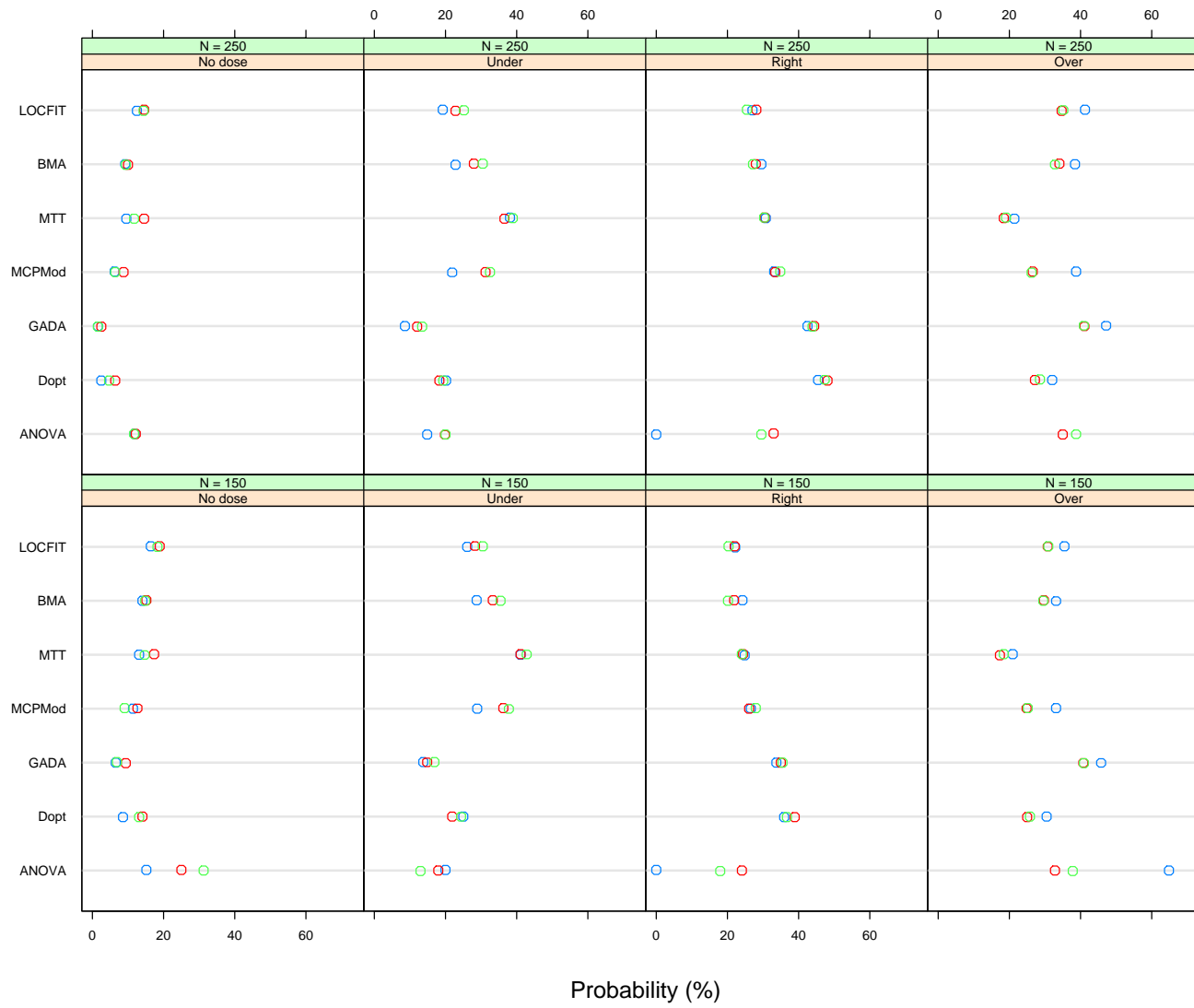






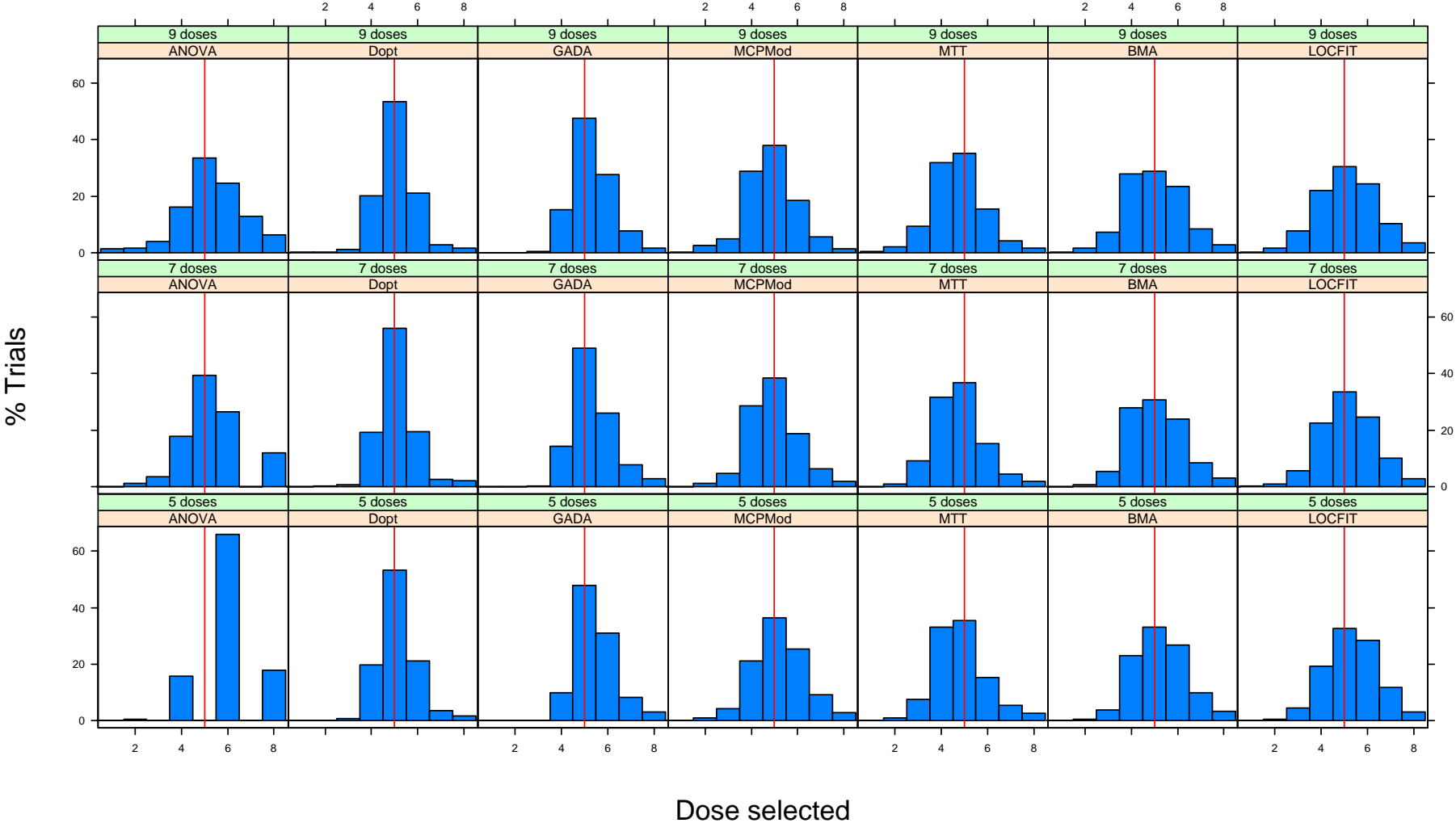
Sigmoid Emax

○ 5 doses ○ 7 doses ○ 9 doses

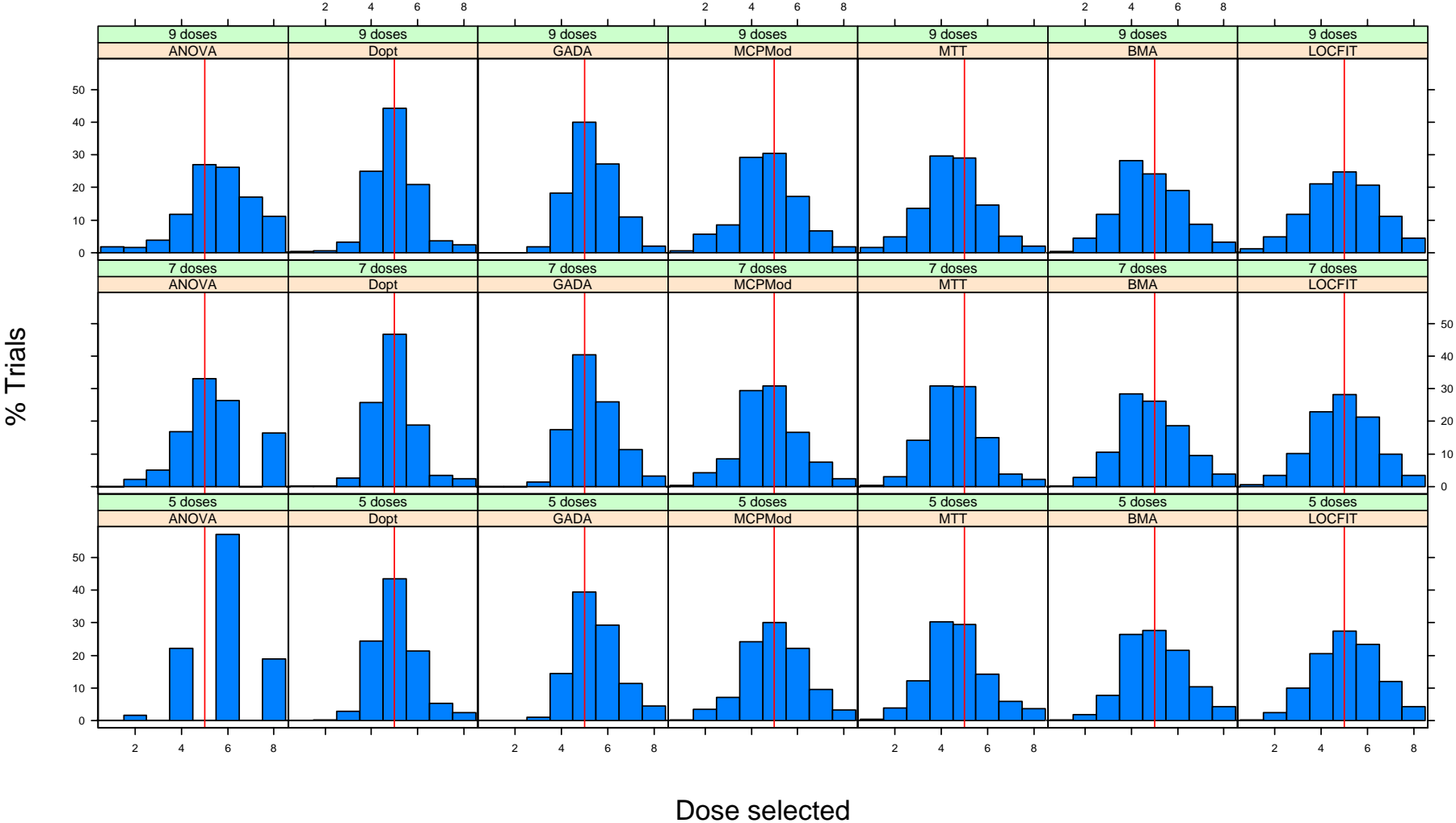


Distribution of Estimated Dose

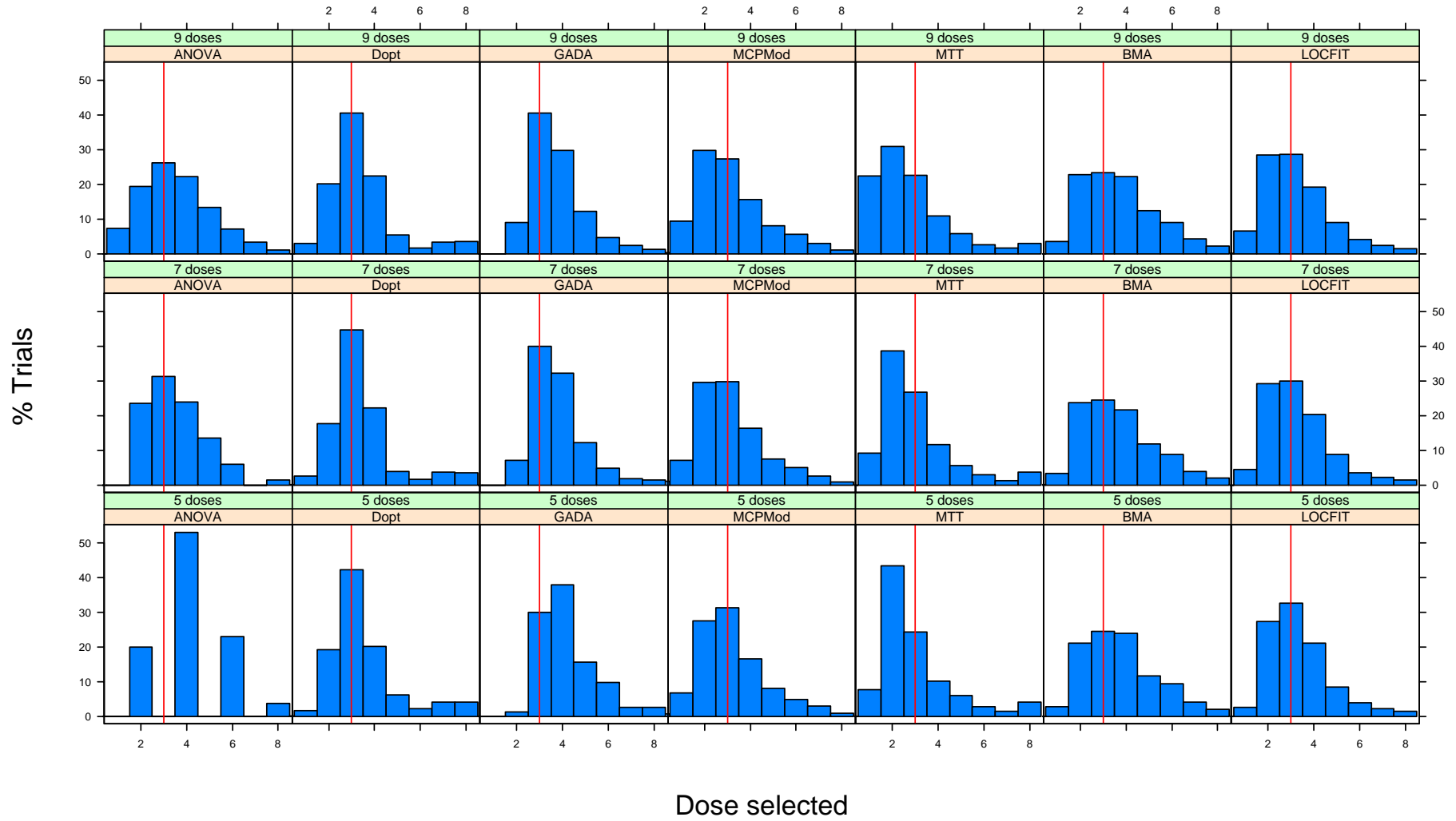
Logistic, N = 250



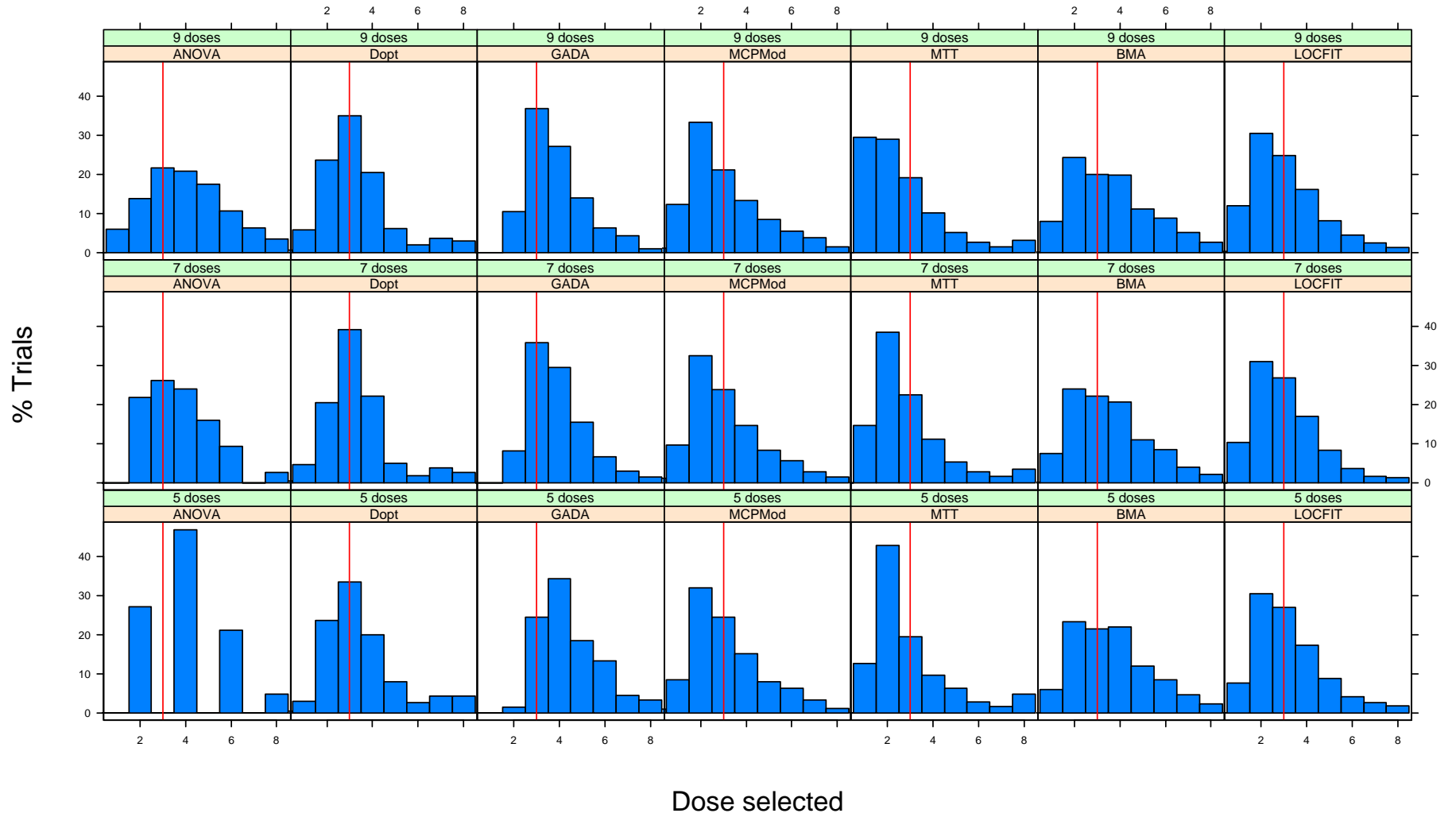
Logistic, N = 150



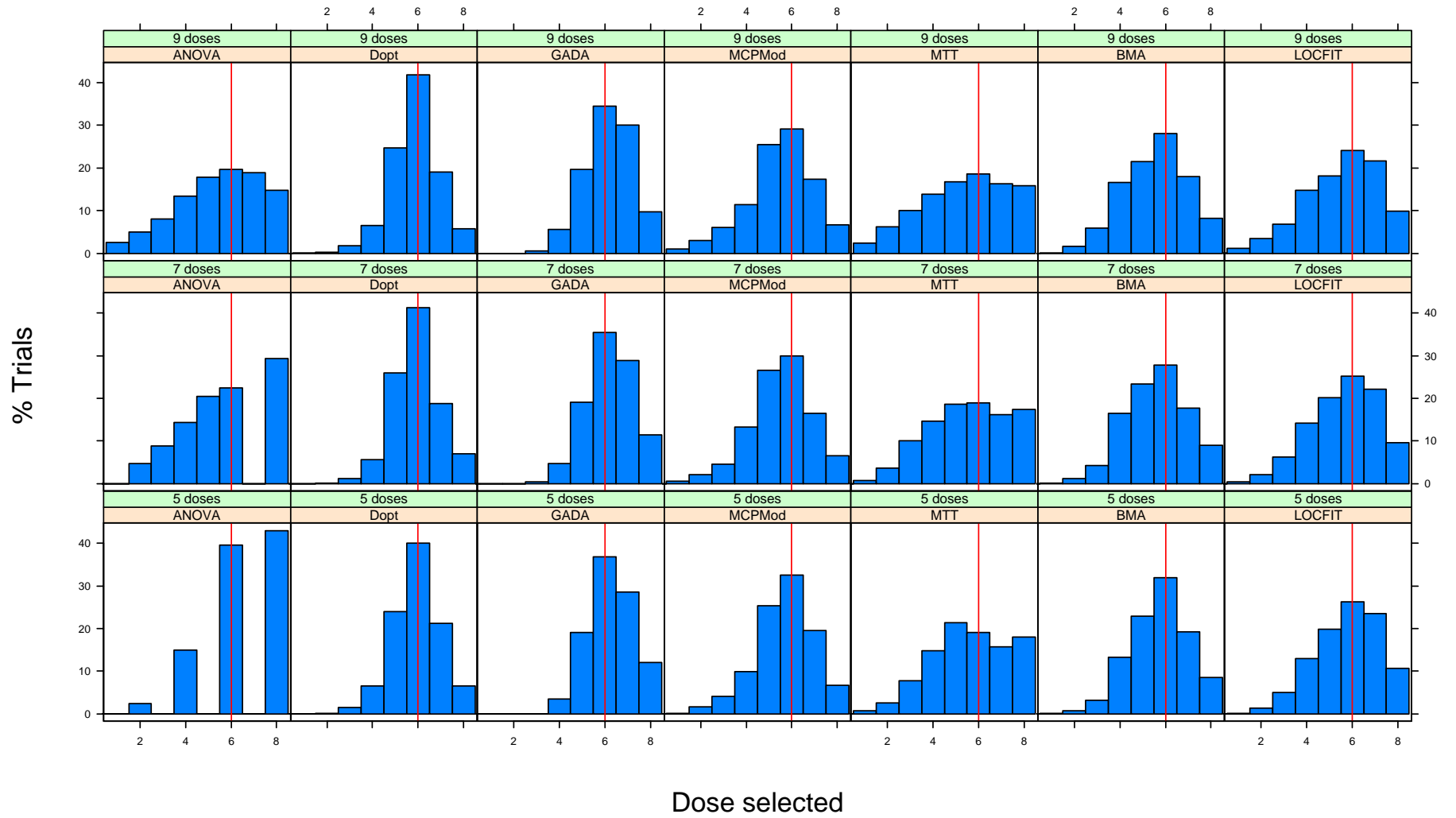
Umbrella, N = 250



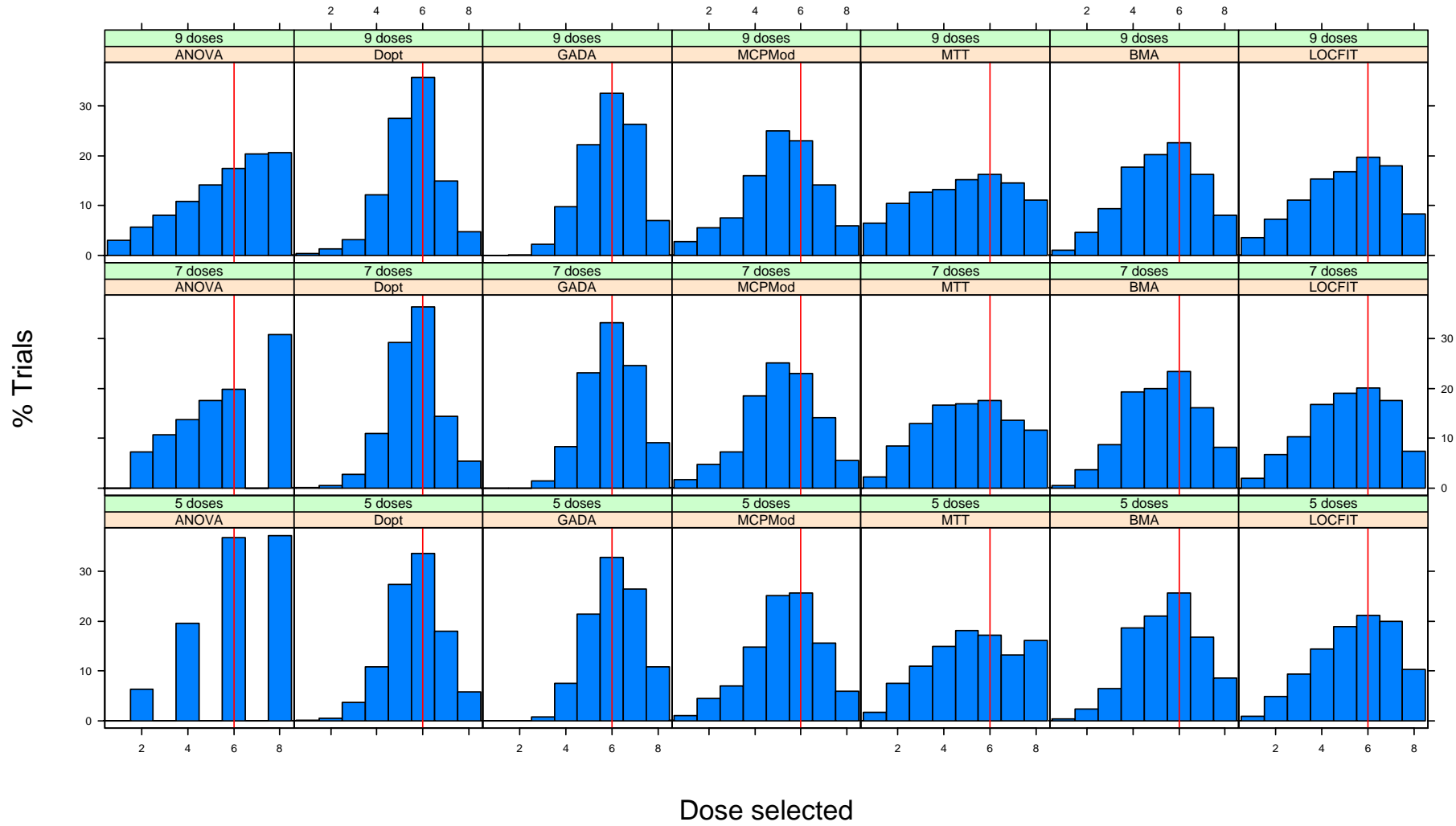
Umbrella, N = 150



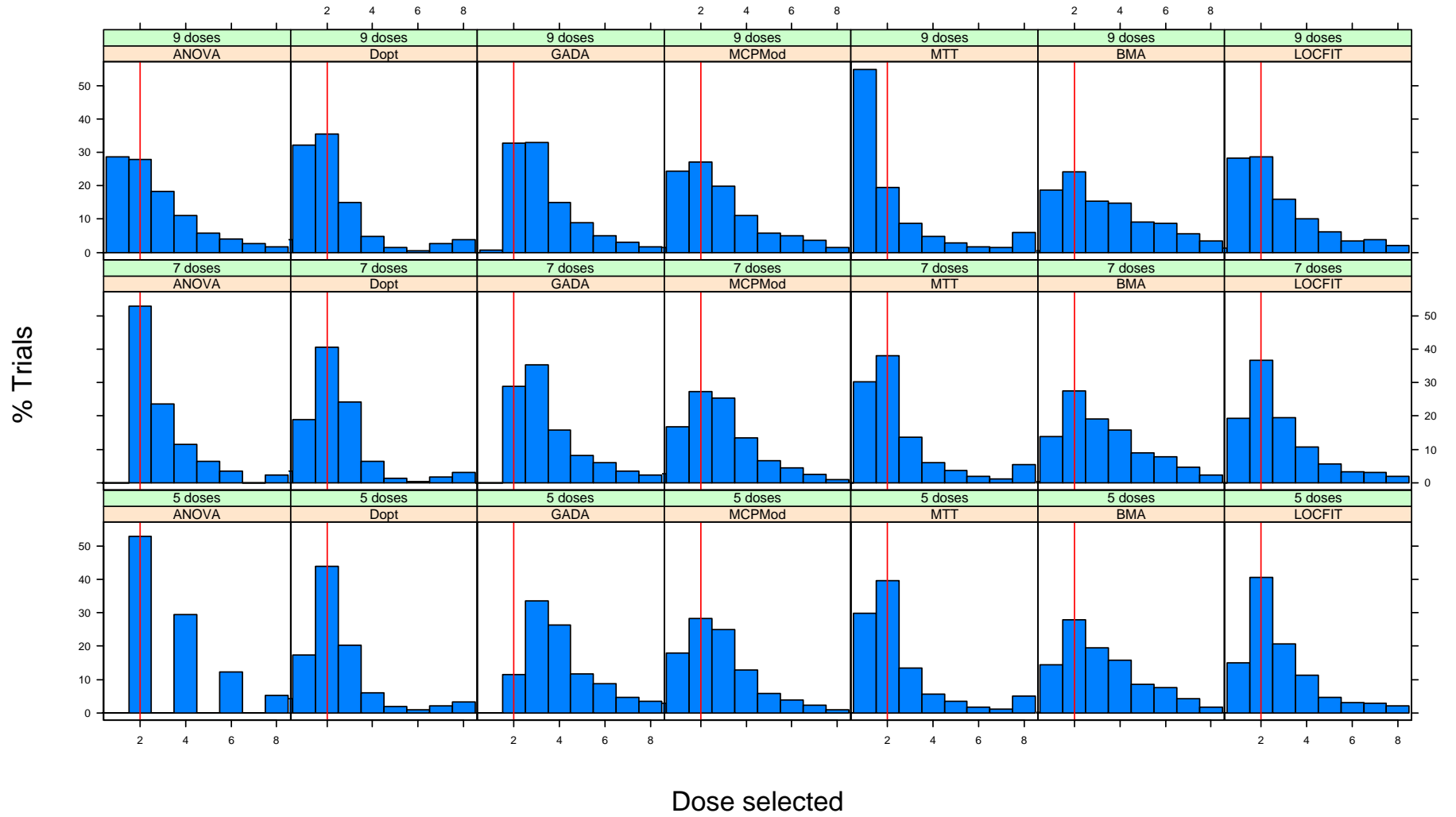
Linear, N = 250



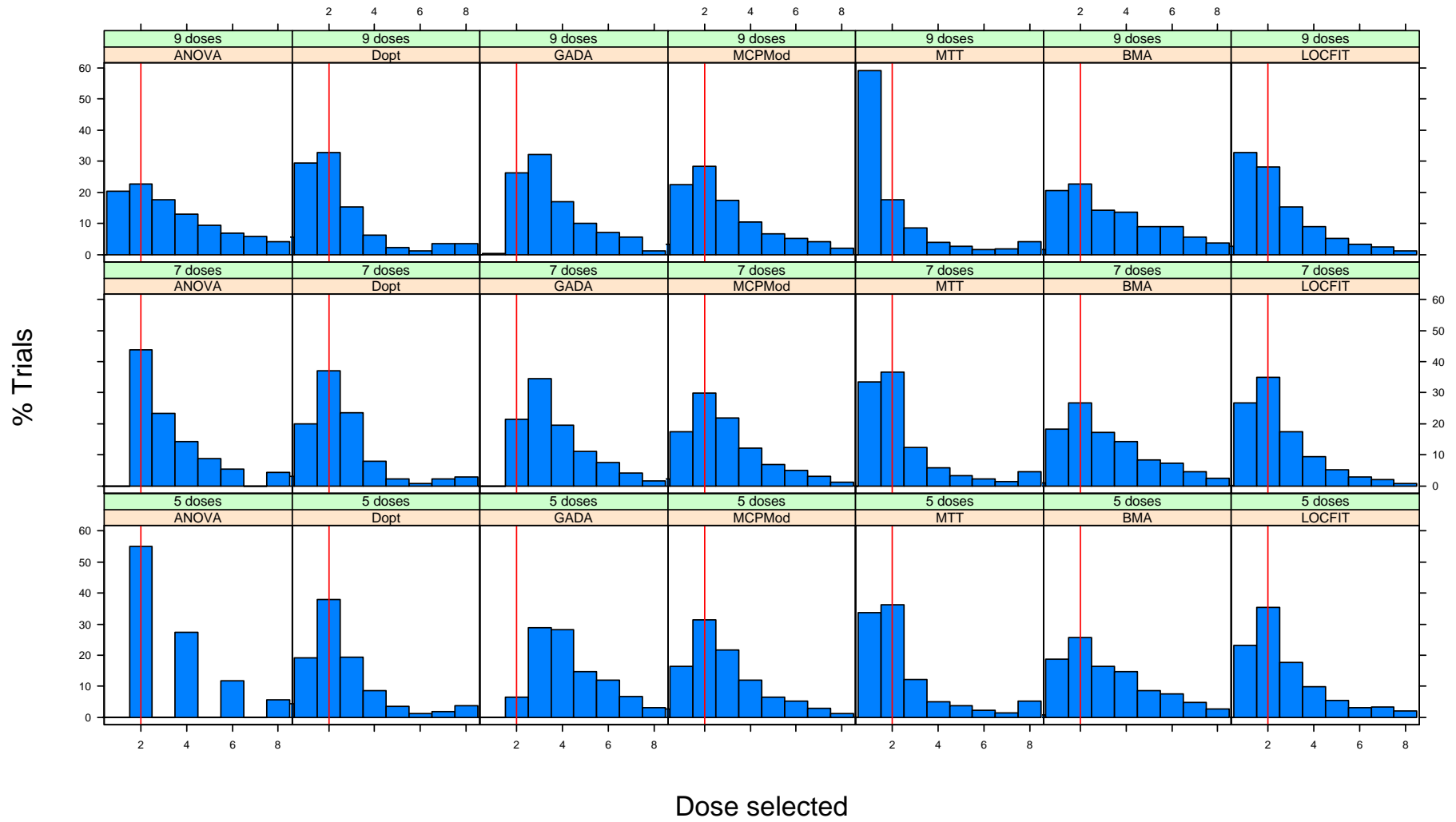
Linear, N = 150



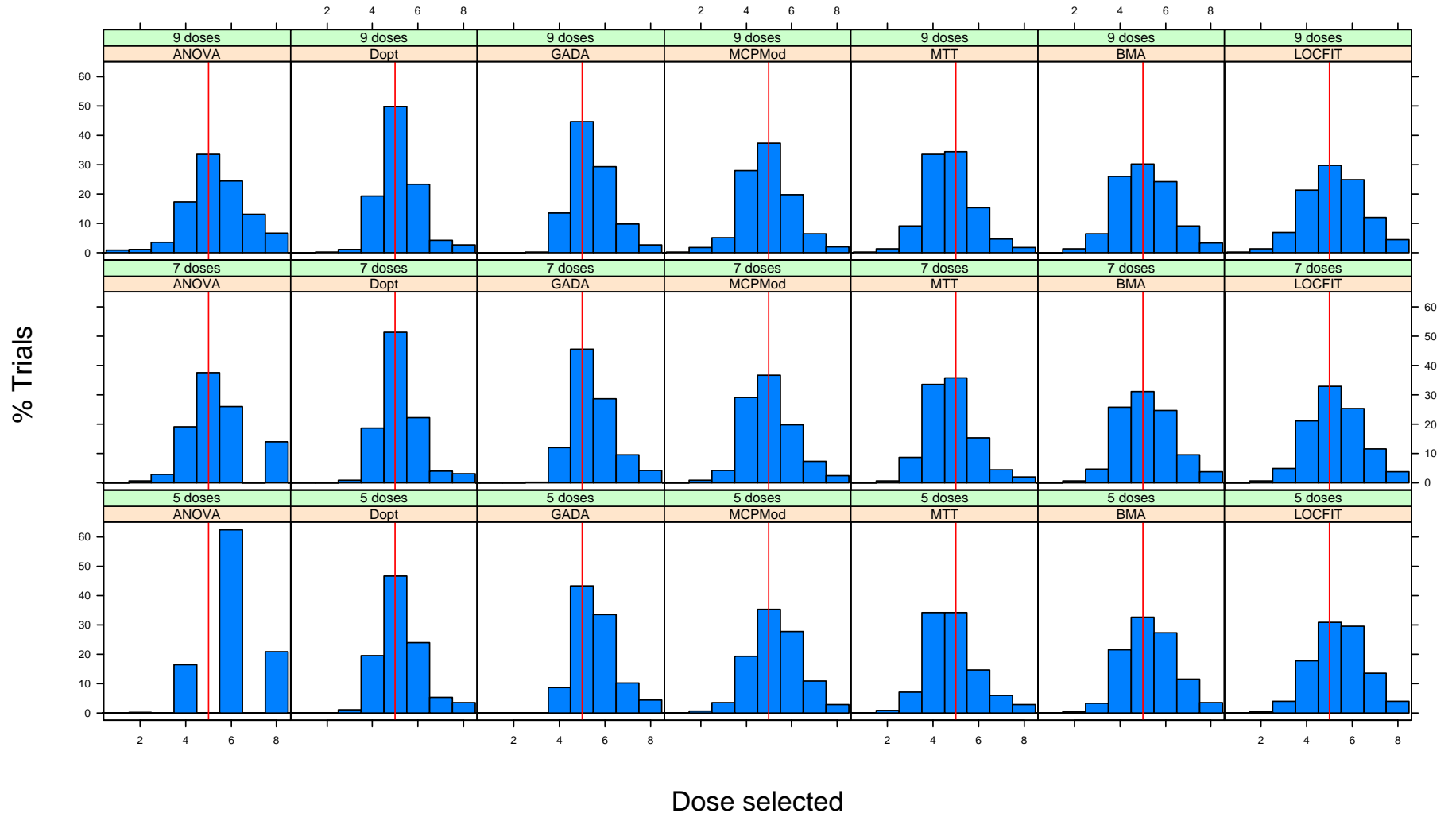
E_{max}, N = 250



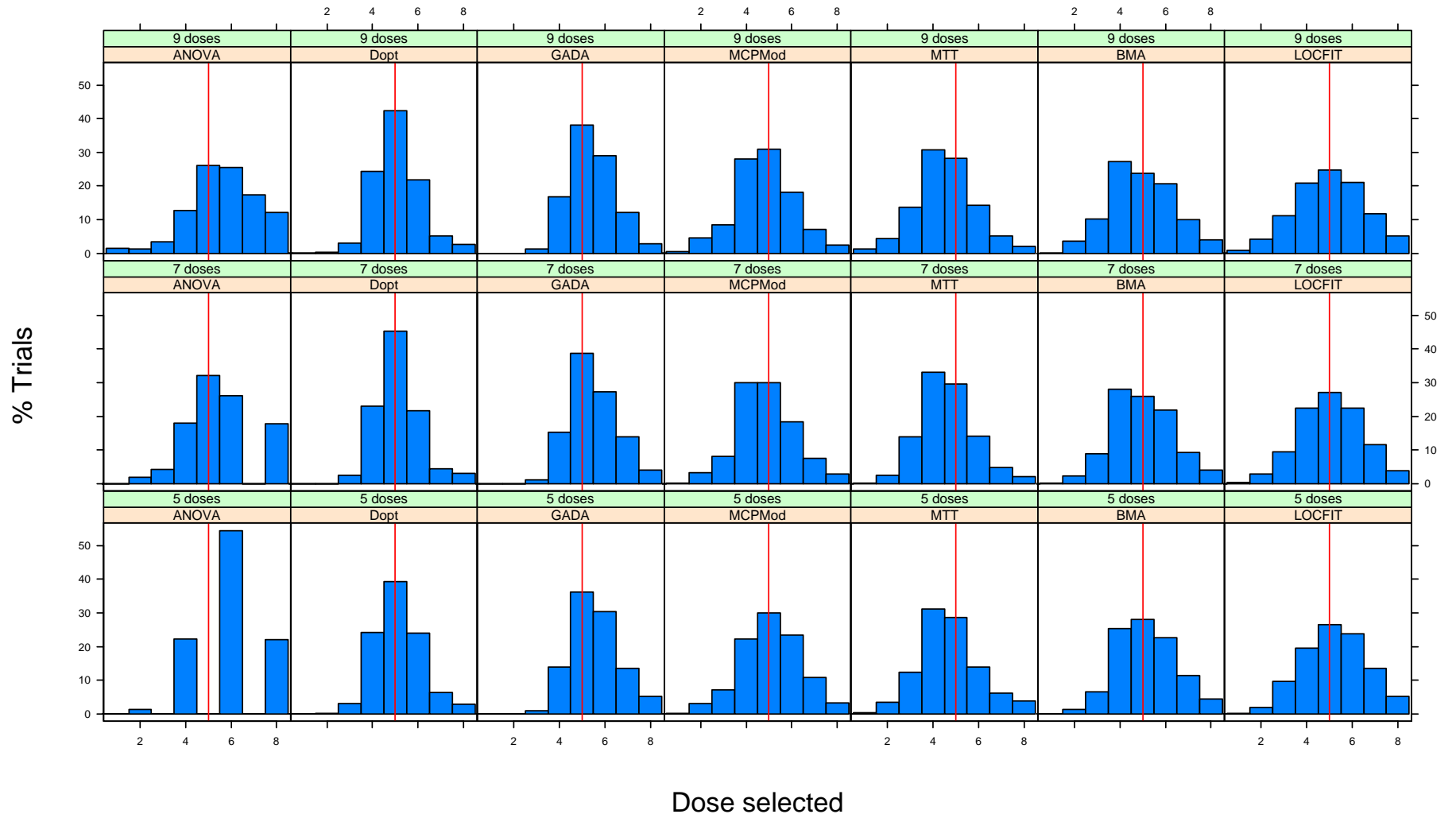
E_{max}, N = 150



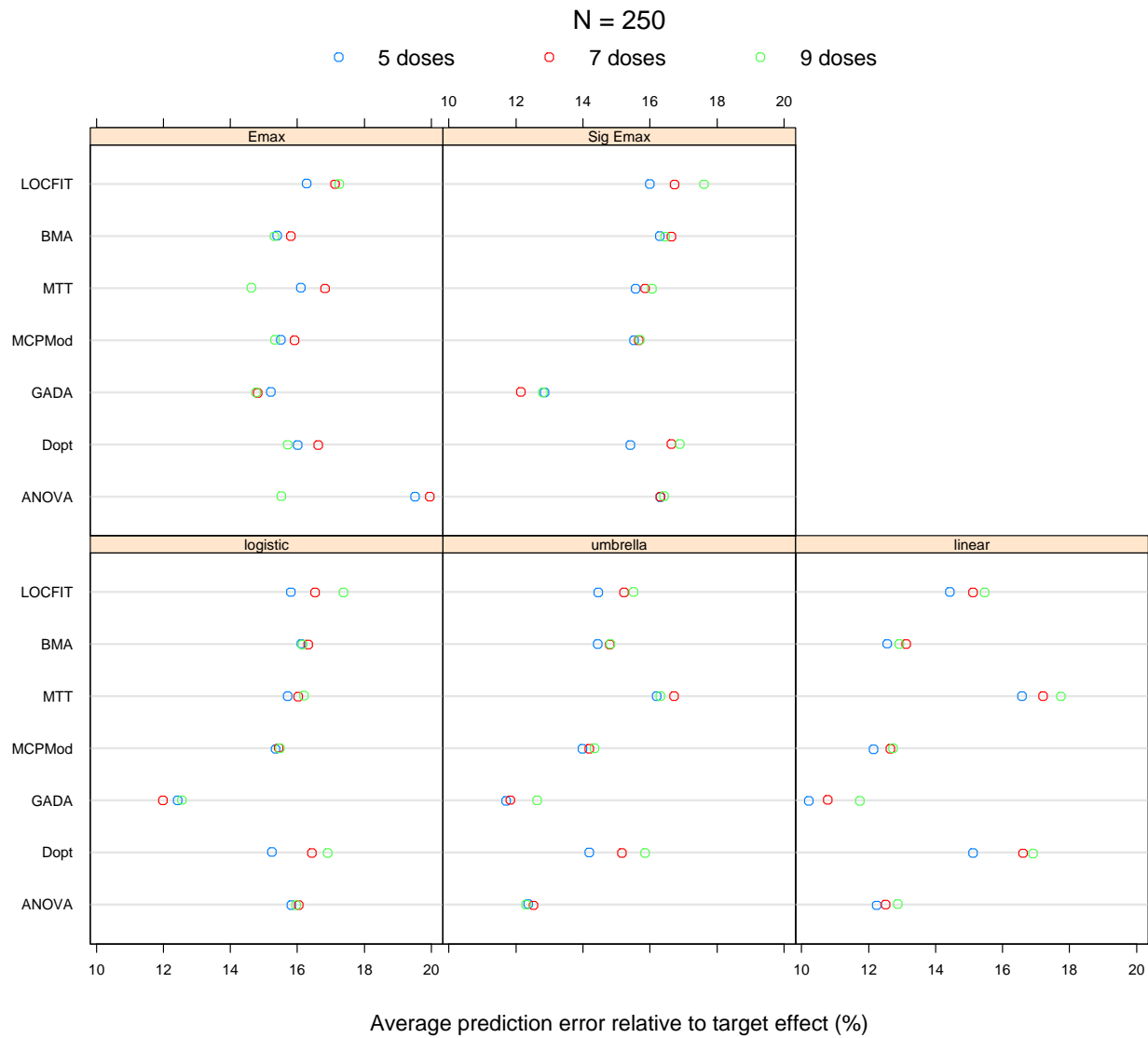
Sigmoid Emax, N = 250

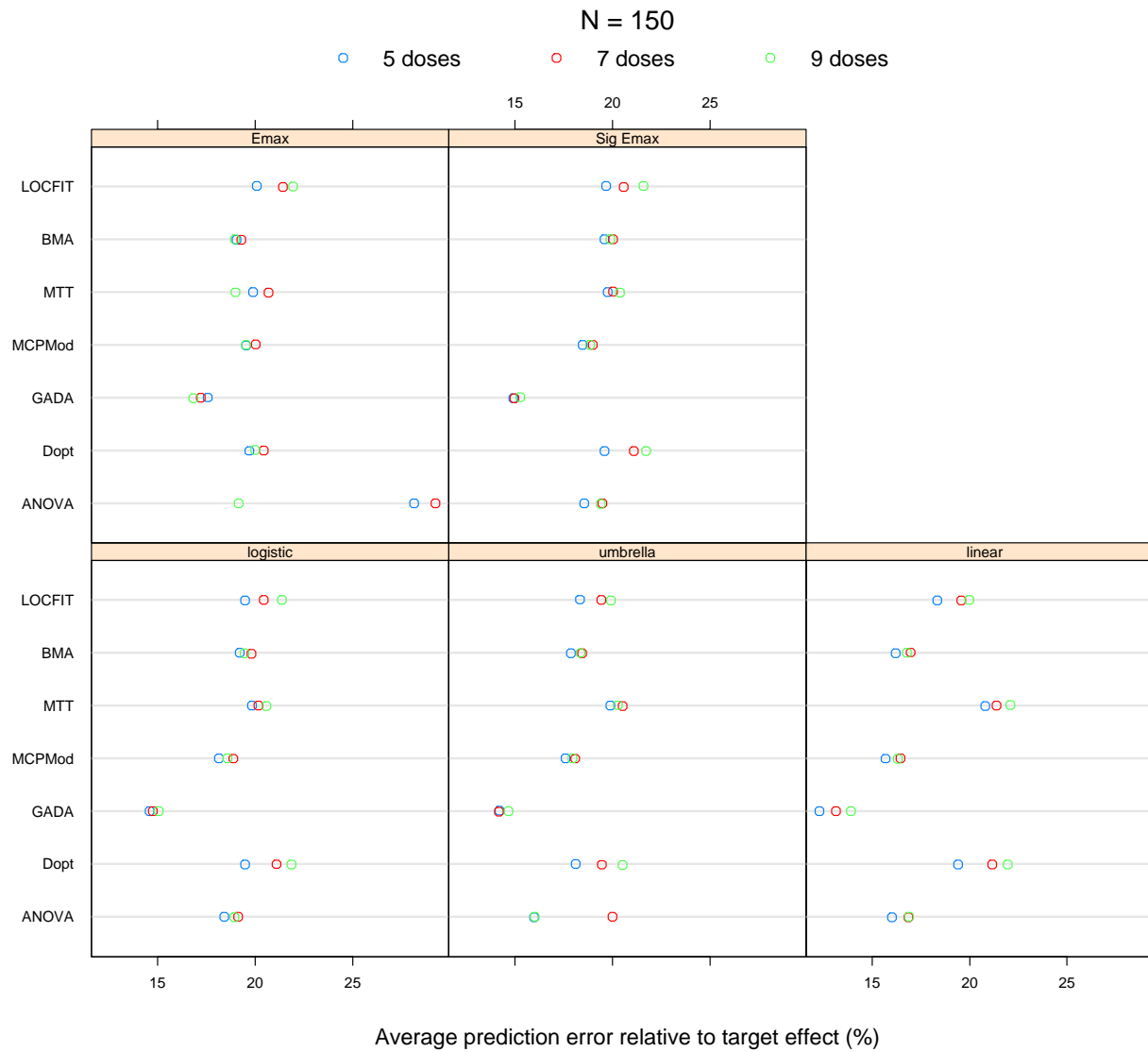


Sigmoid Emax, N = 150



Dose Response Estimation



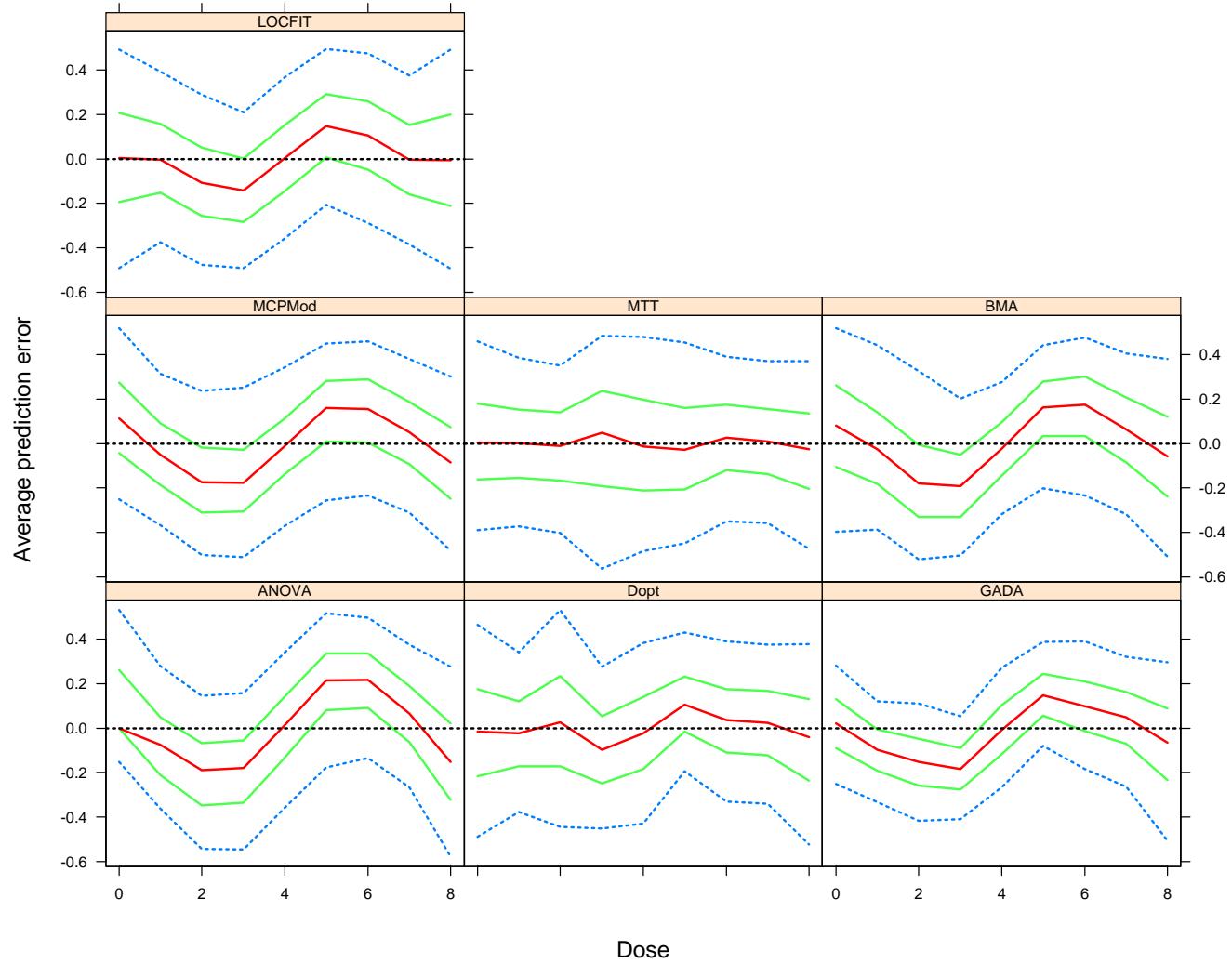


Logistic, N = 250, 5 doses

5%, 95%

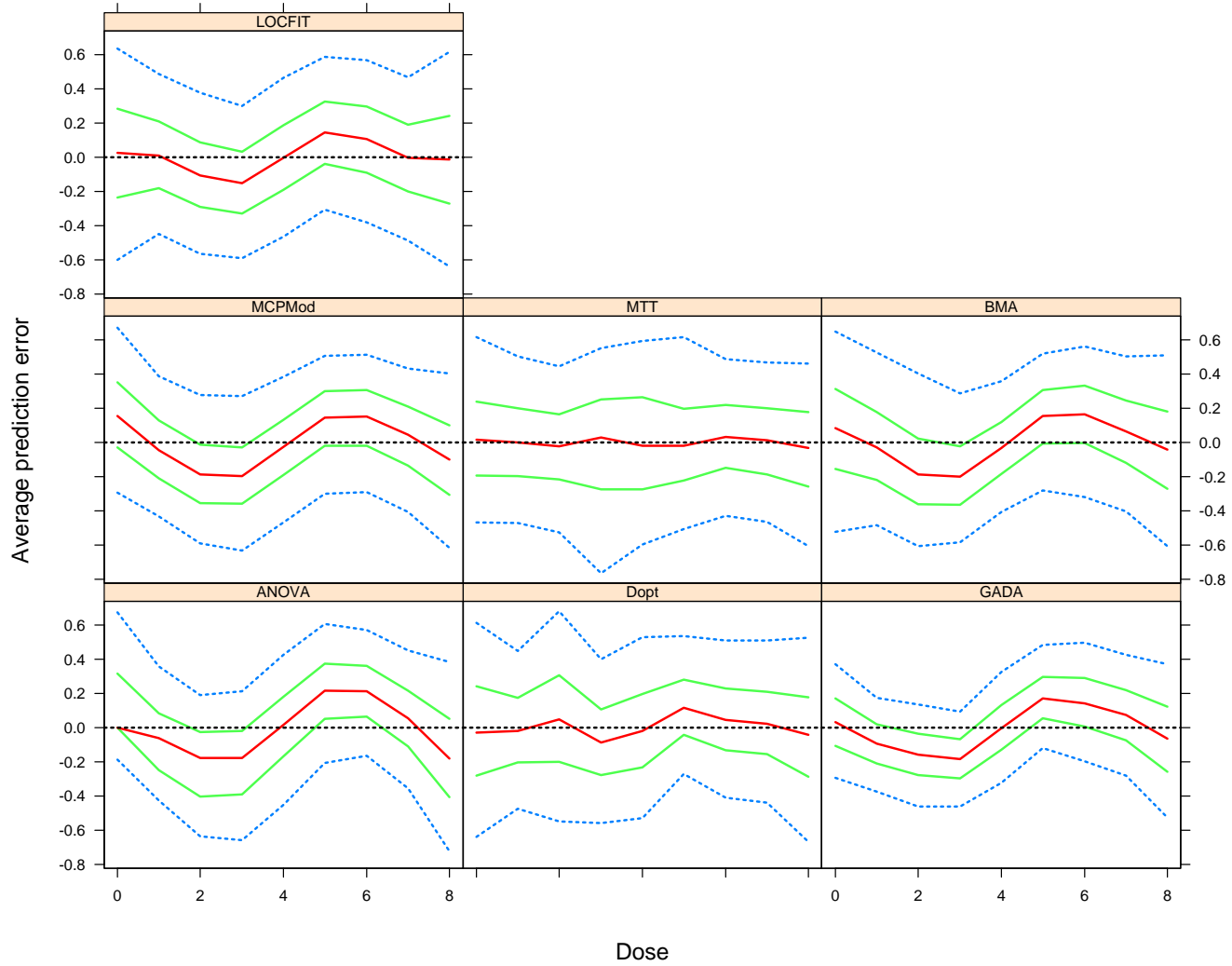
25%, 75%

50%



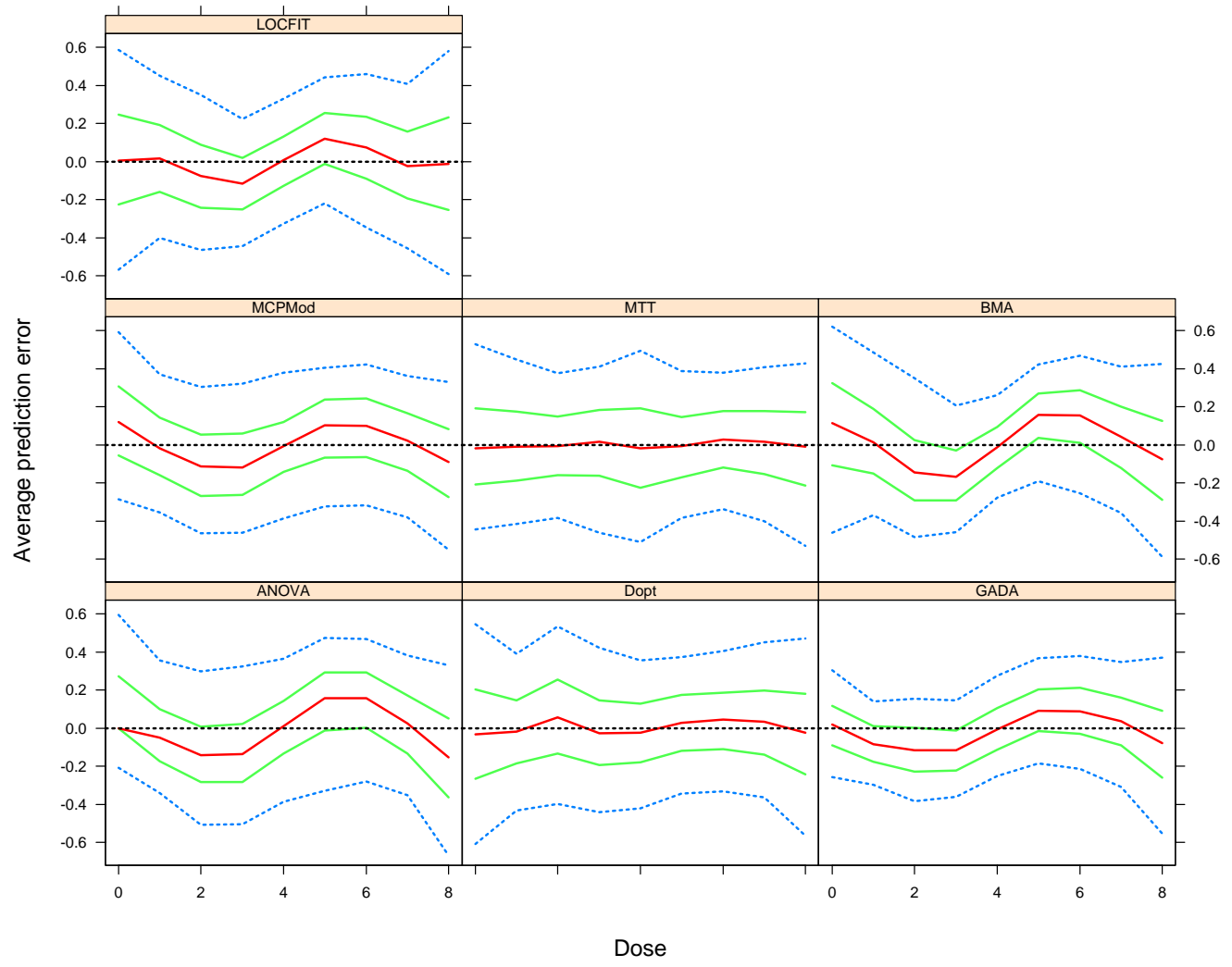
Logistic, N = 150, 5 doses

5%, 95% 25%, 75% 50%



Logistic, N = 250, 7 doses

5%, 95% 25%, 75% 50%

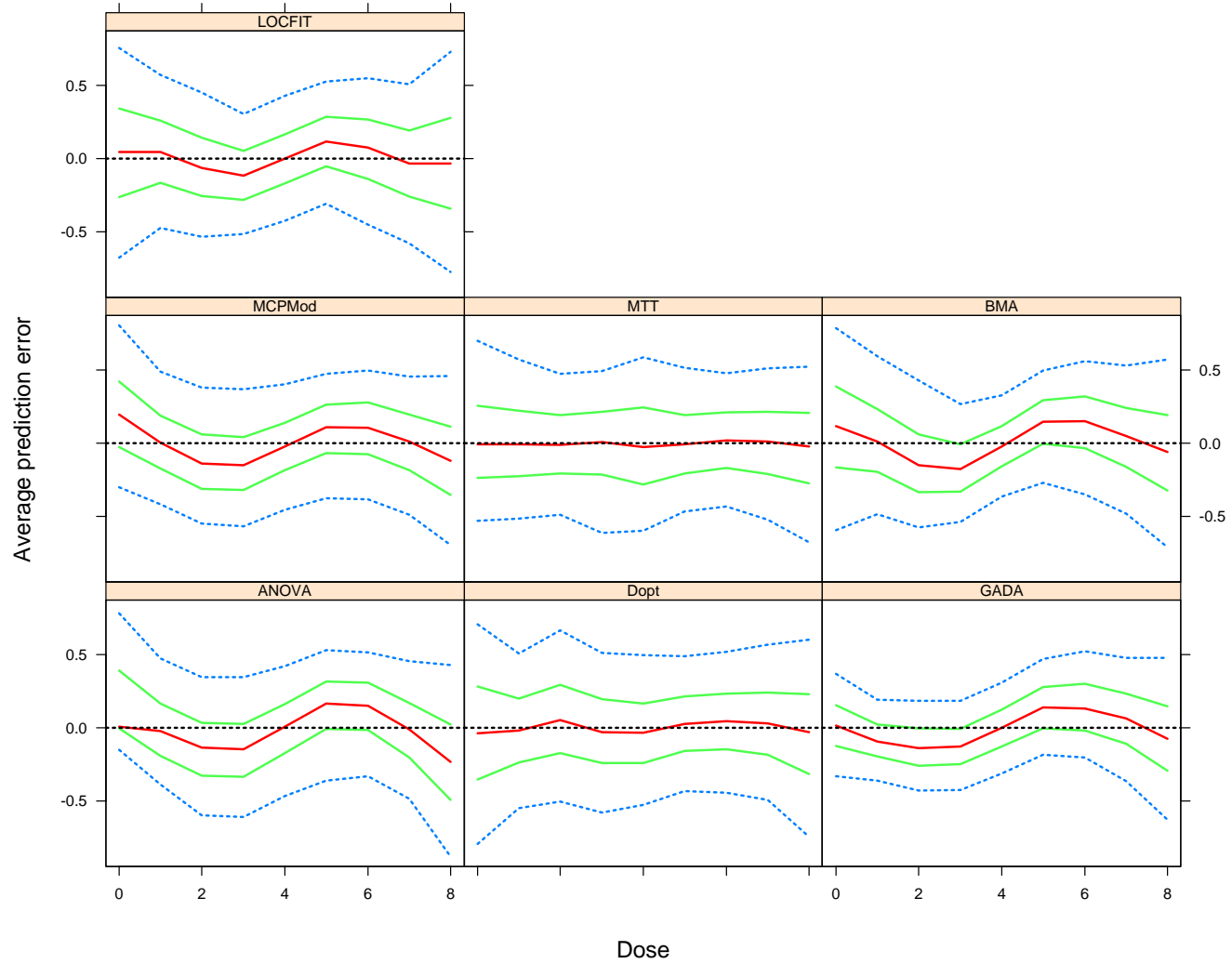


Logistic, N = 150, 7 doses

5%, 95%

25%, 75%

50%

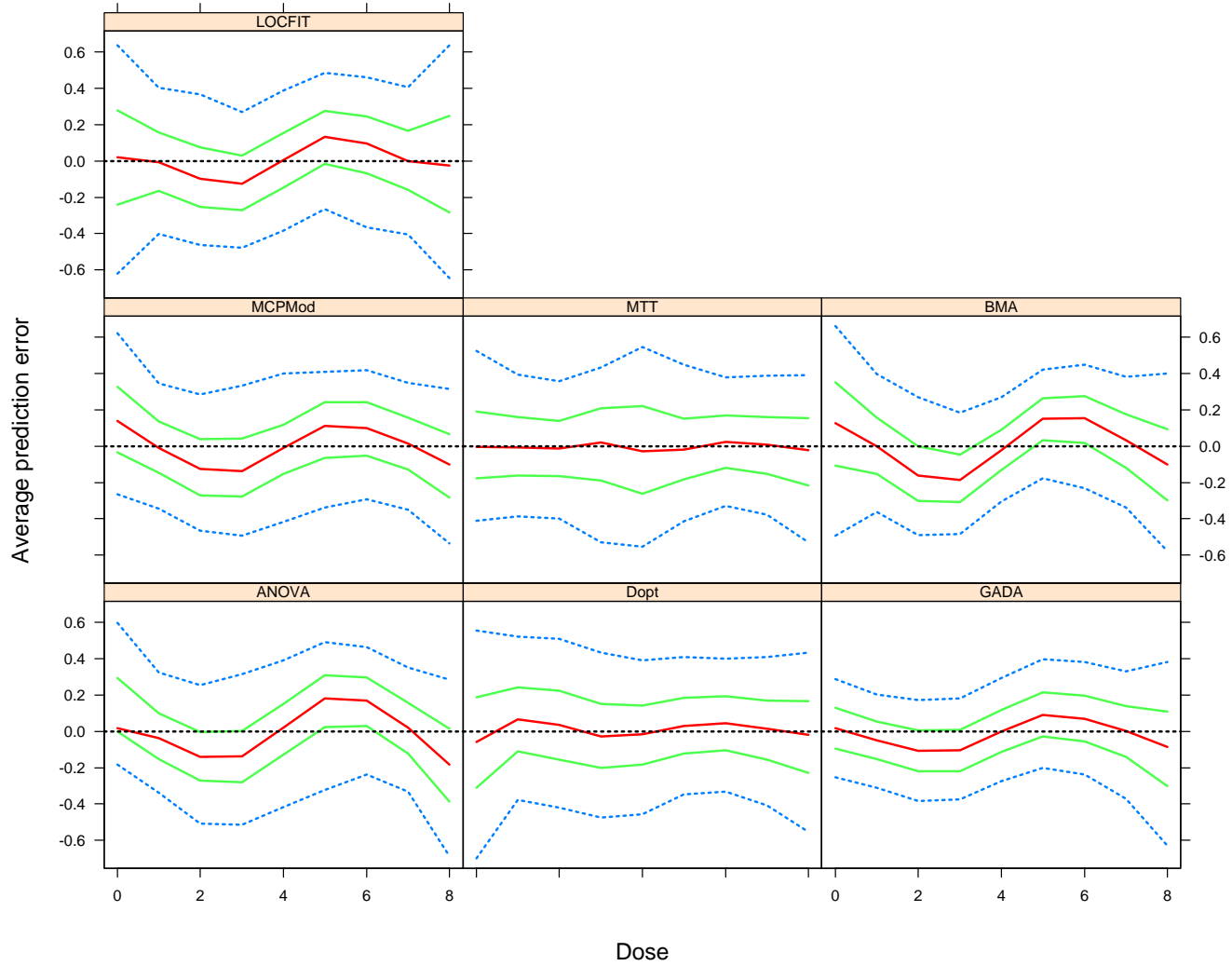


Logistic, N = 250, 9 doses

5%, 95%

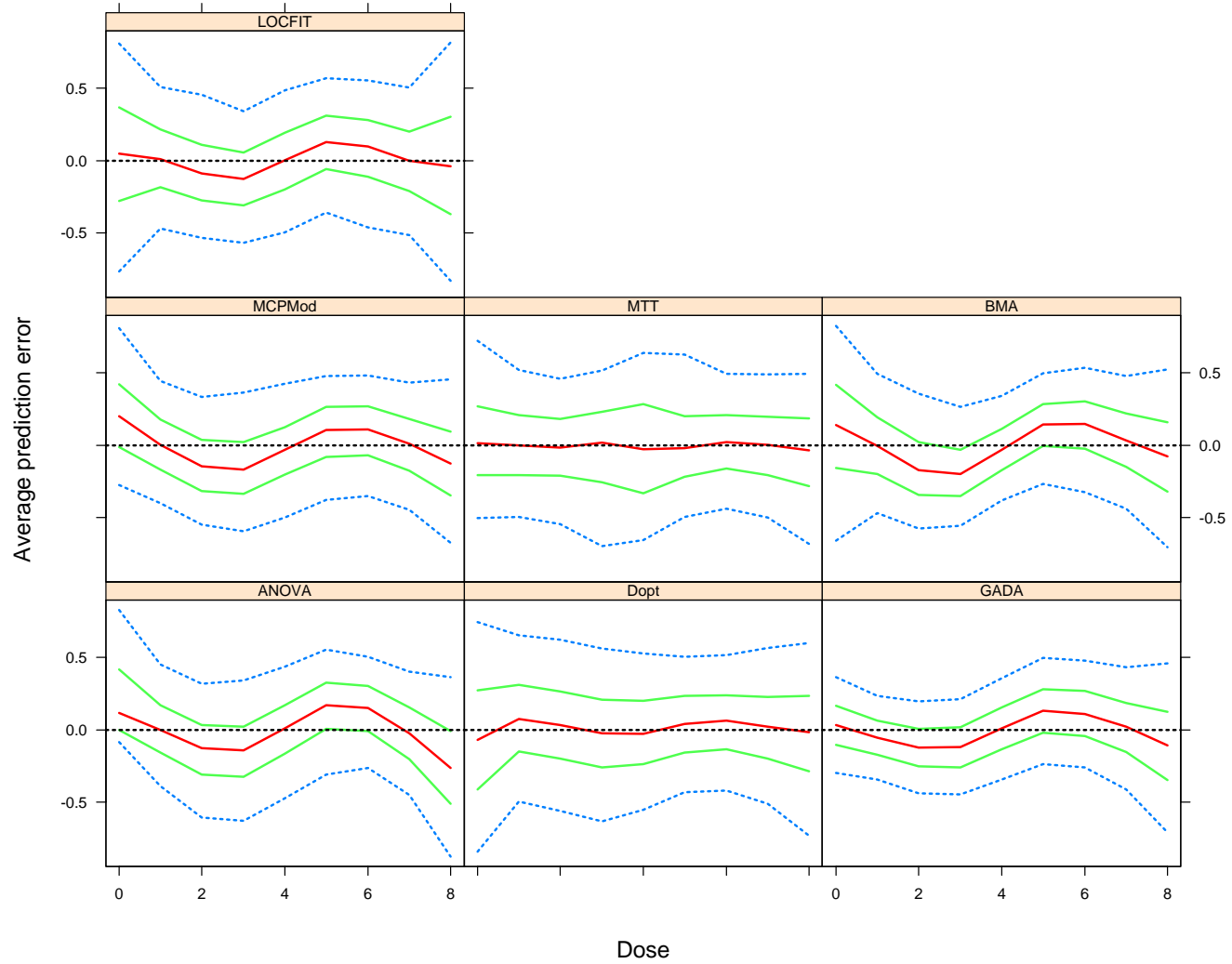
25%, 75%

50%



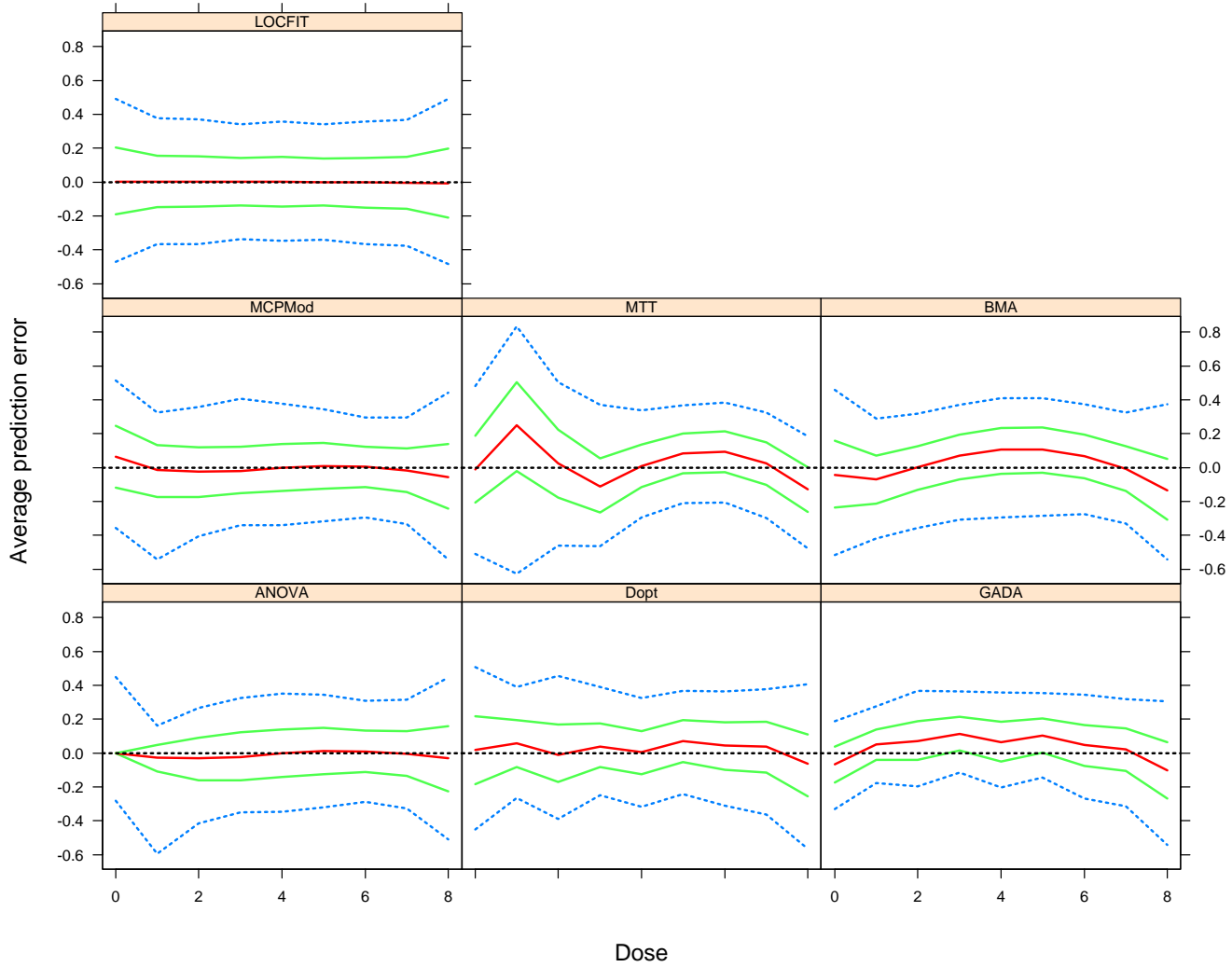
Logistic, N = 150, 9 doses

5%, 95% 25%, 75% 50%



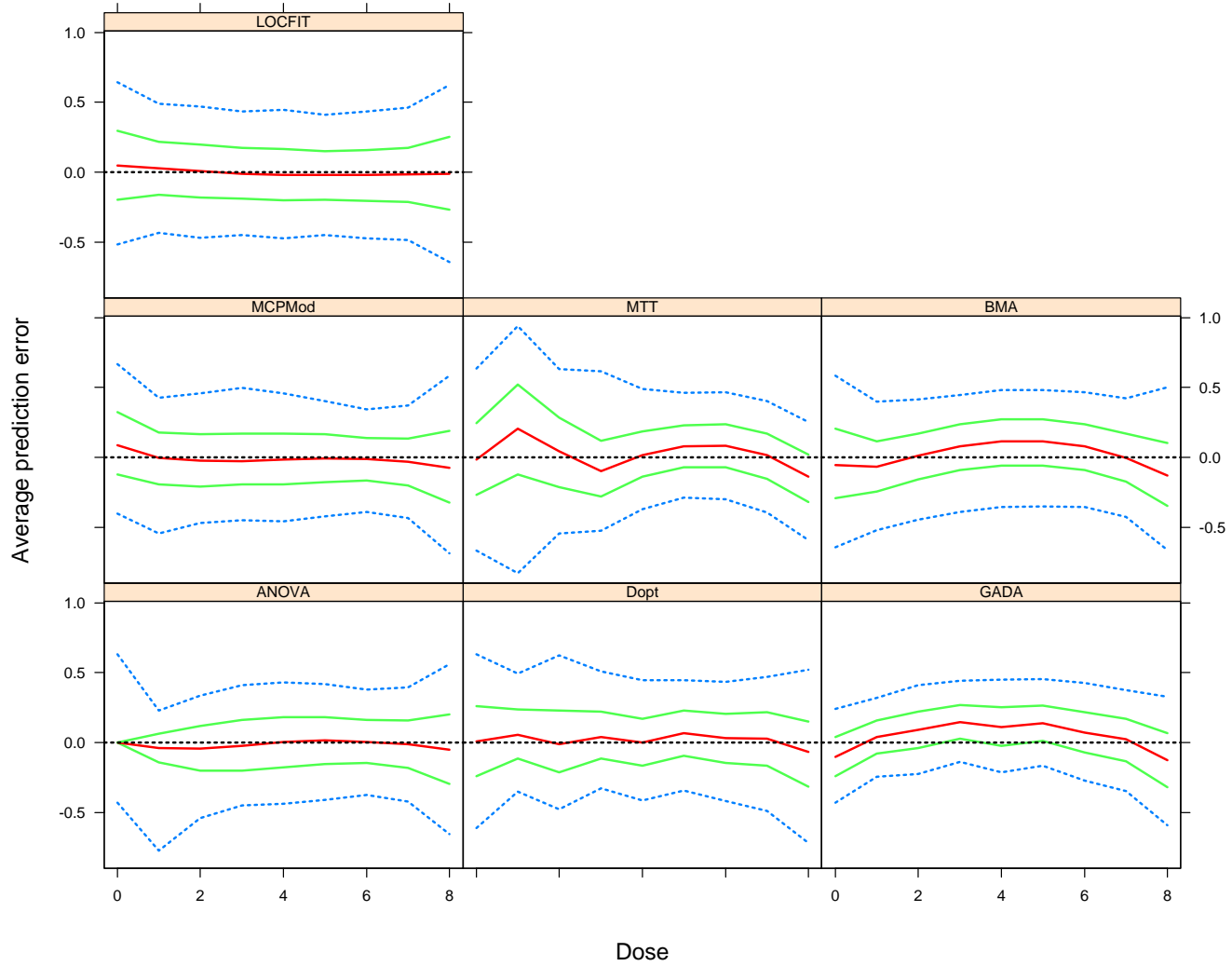
Umbrella, N = 250, 5 doses

5%, 95% 25%, 75% 50%



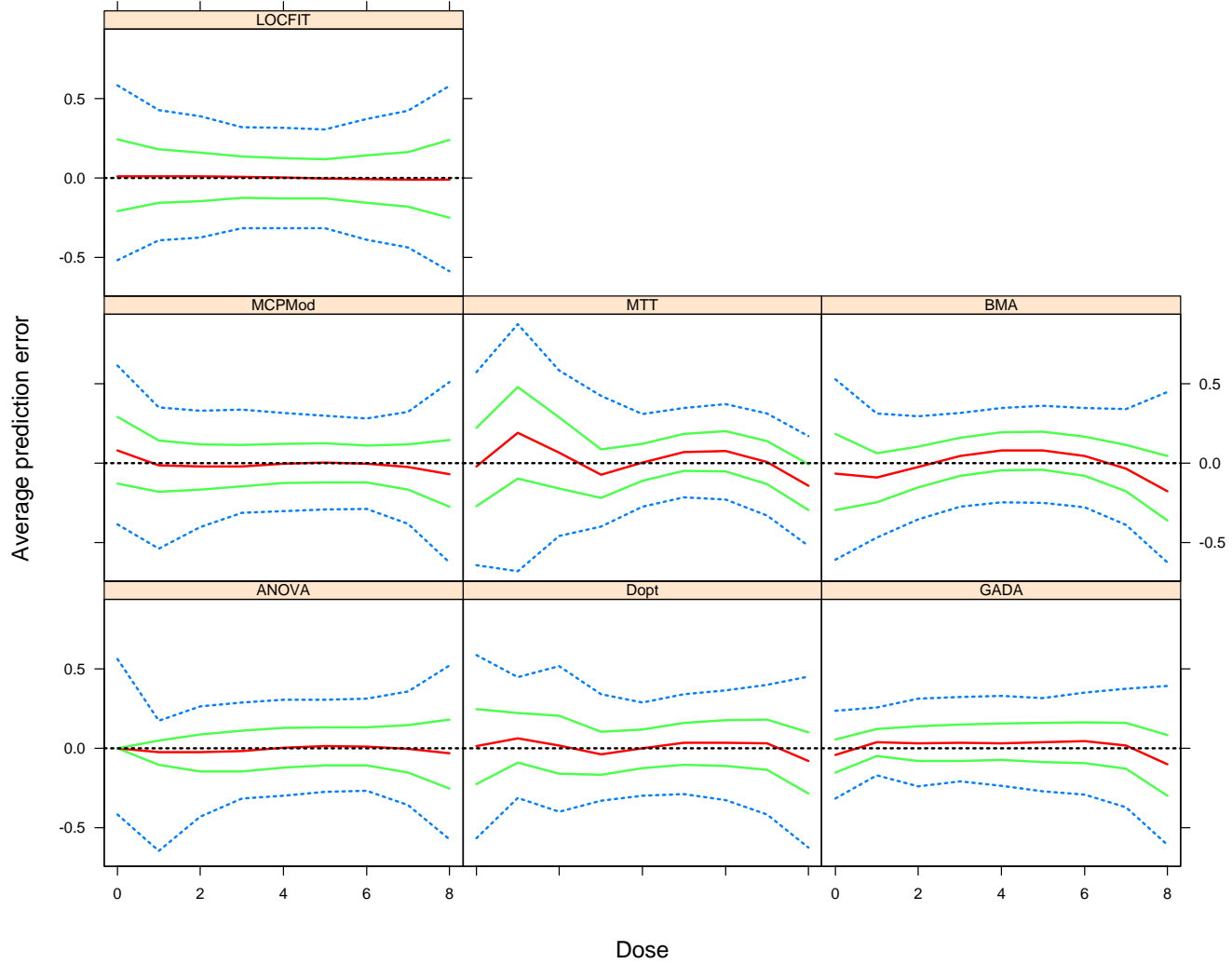
Umbrella, N = 150, 5 doses

5%, 95% 25%, 75% 50%



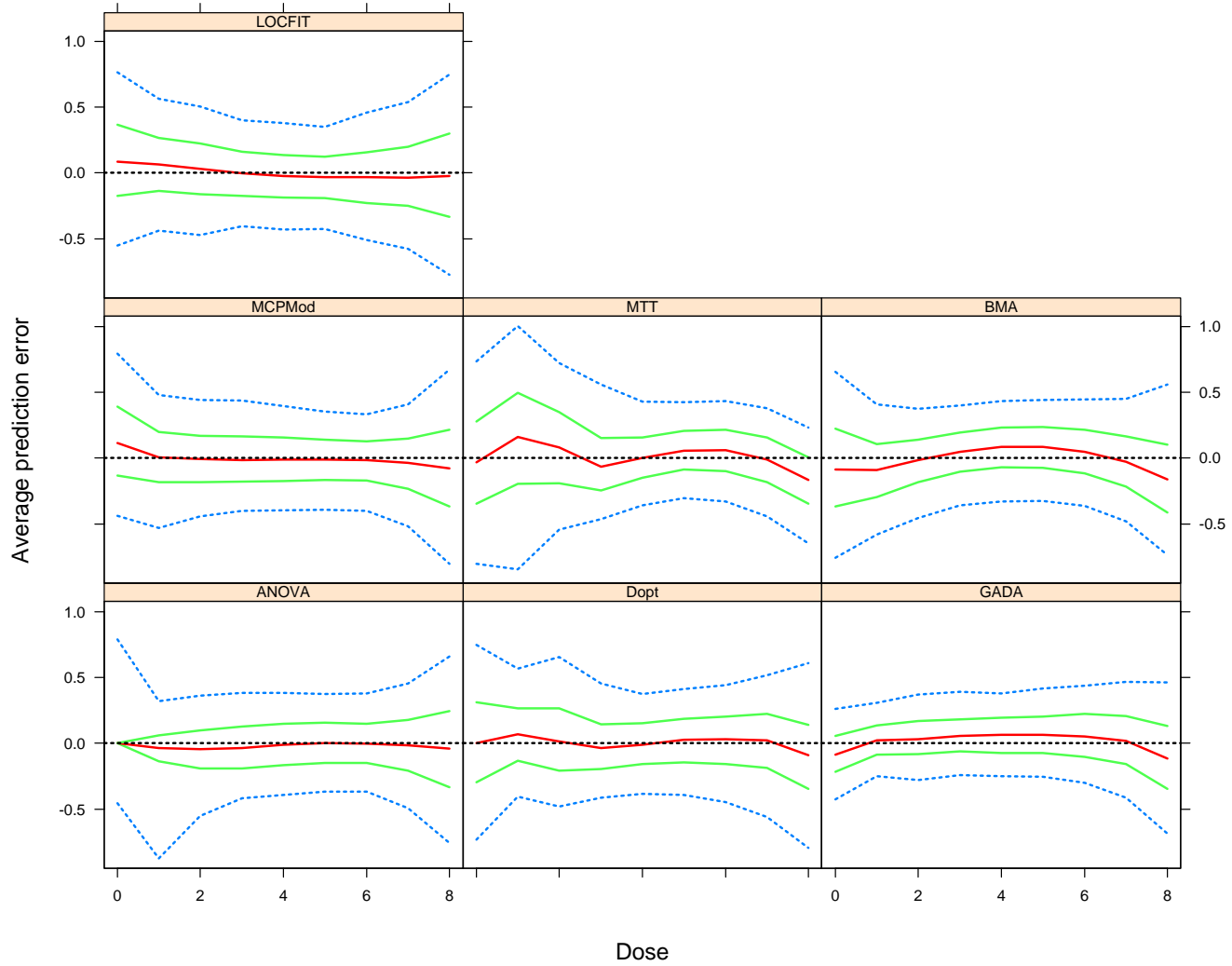
Umbrella, N = 250, 7 doses

5%, 95% 25%, 75% 50%



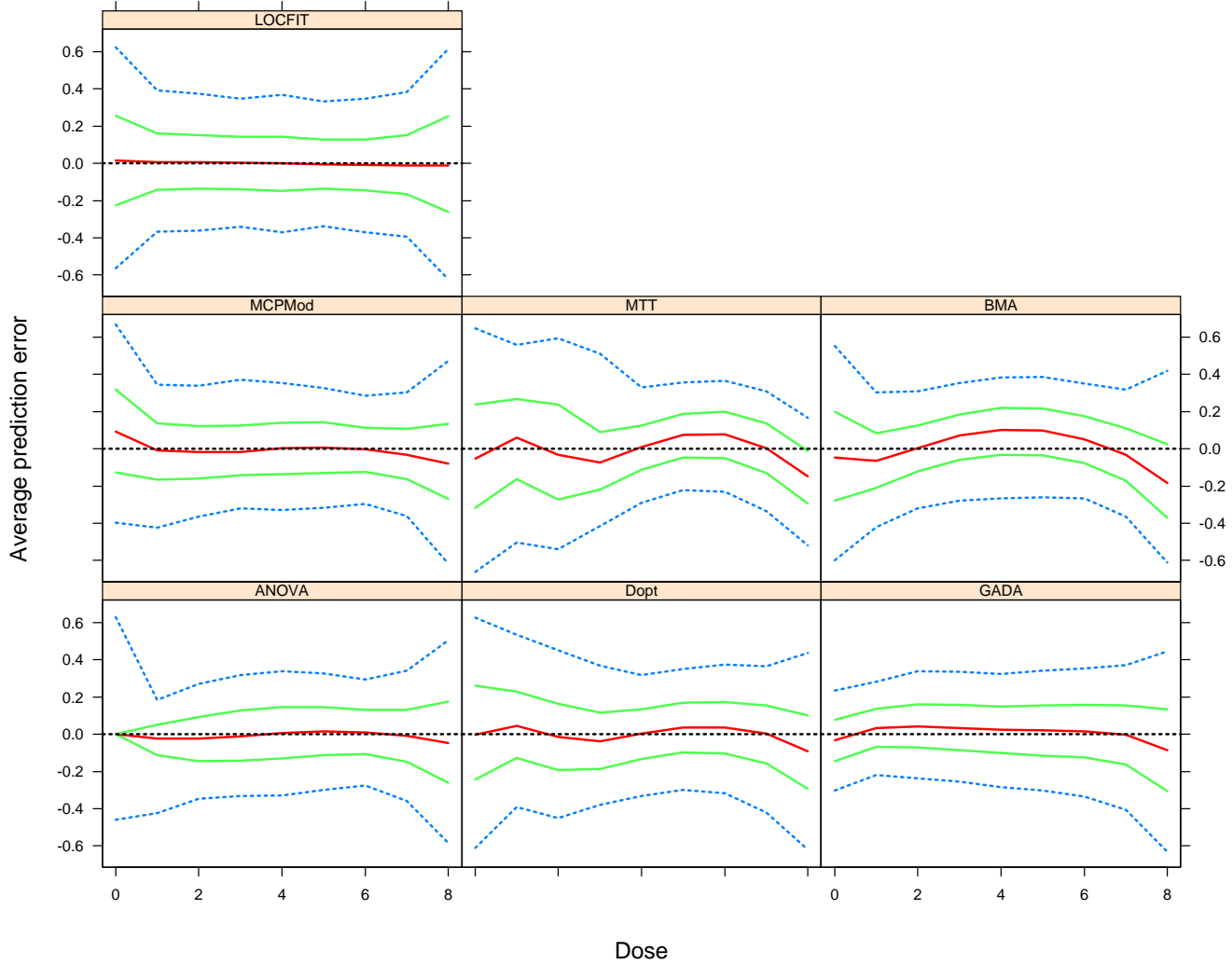
Umbrella, N = 150, 7 doses

5%, 95% 25%, 75% 50%



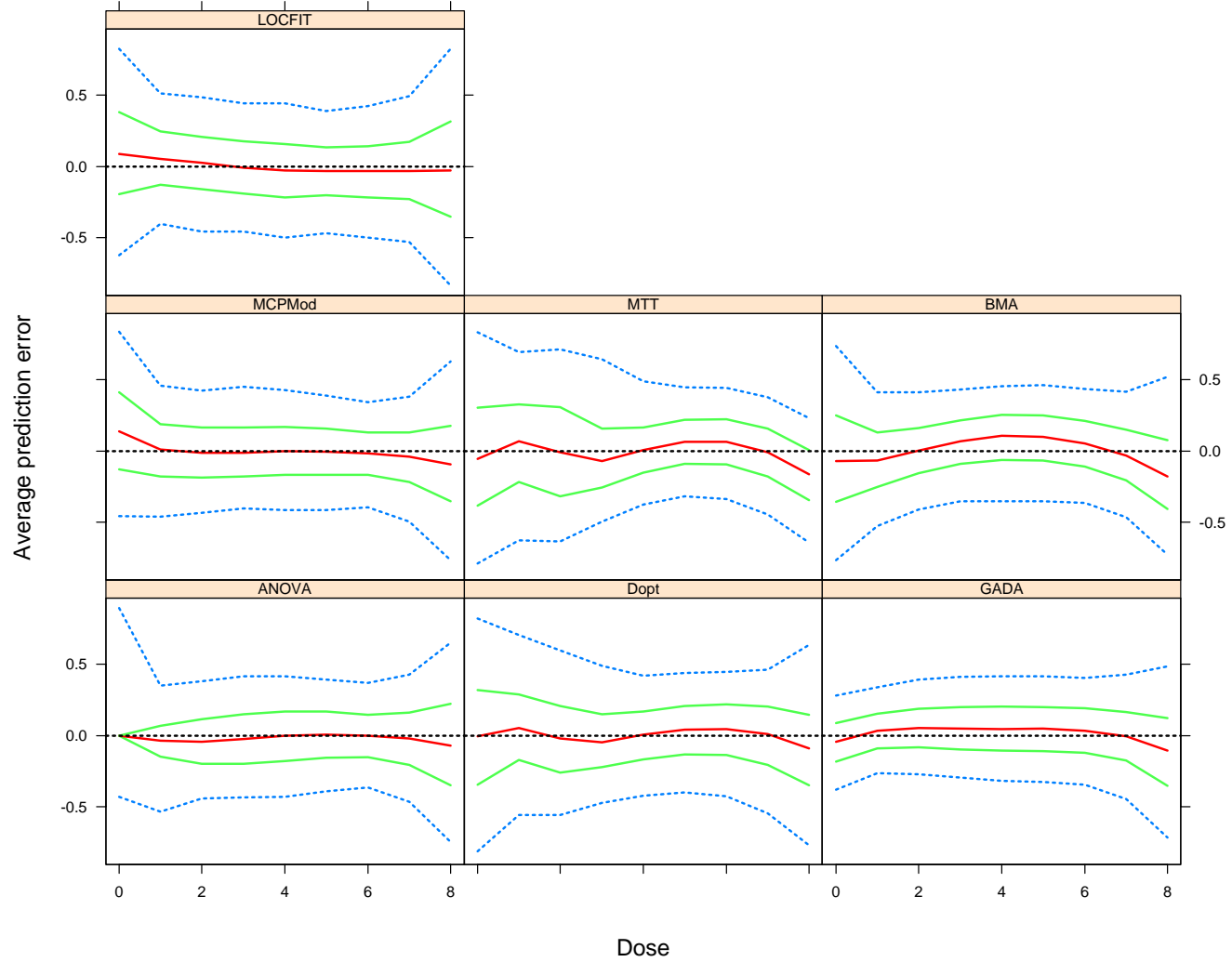
Umbrella, N = 250, 9 doses

5%, 95% 25%, 75% 50%



Umbrella, N = 150, 9 doses

5%, 95% 25%, 75% 50%

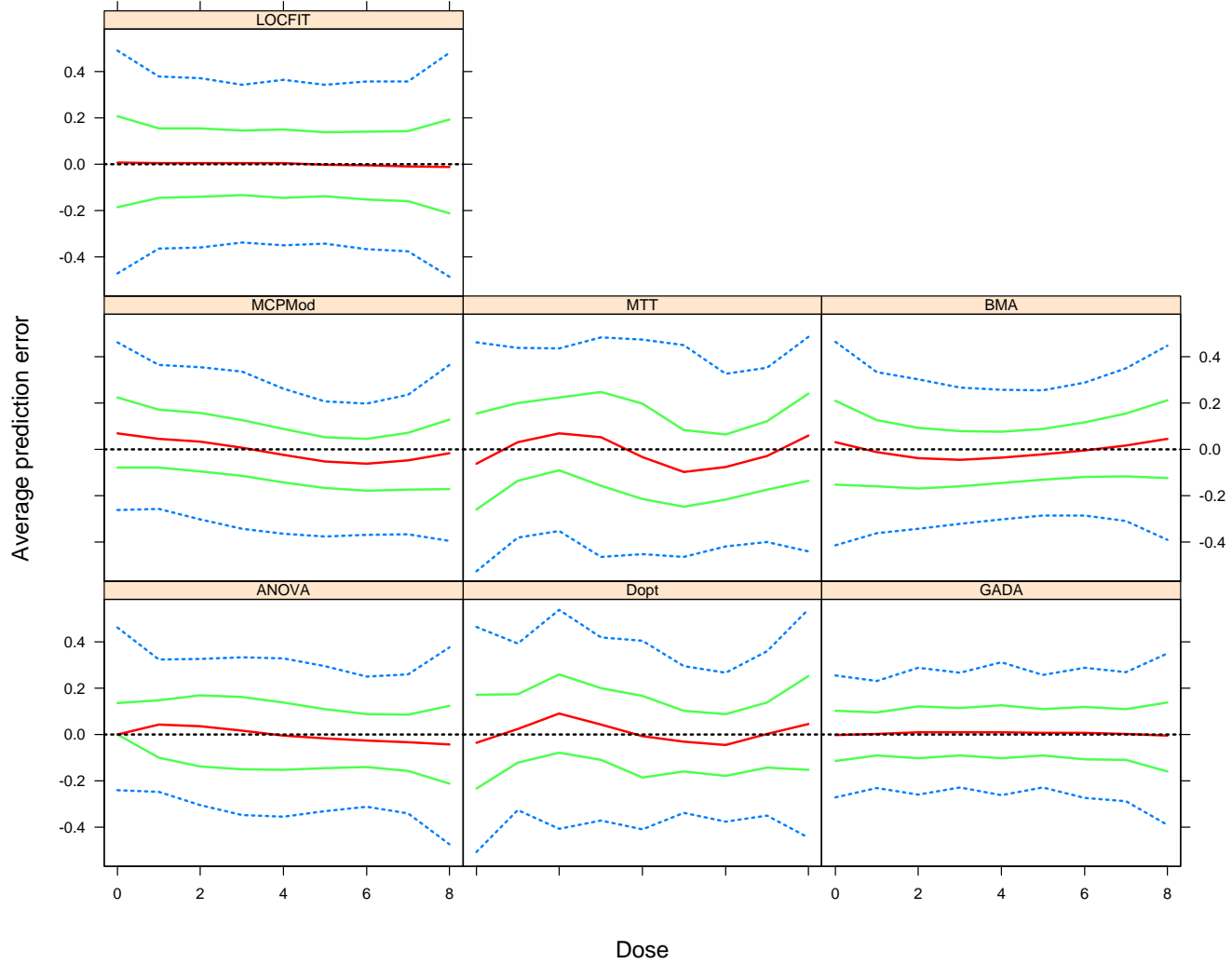


Linear, N = 250, 5 doses

5%, 95%

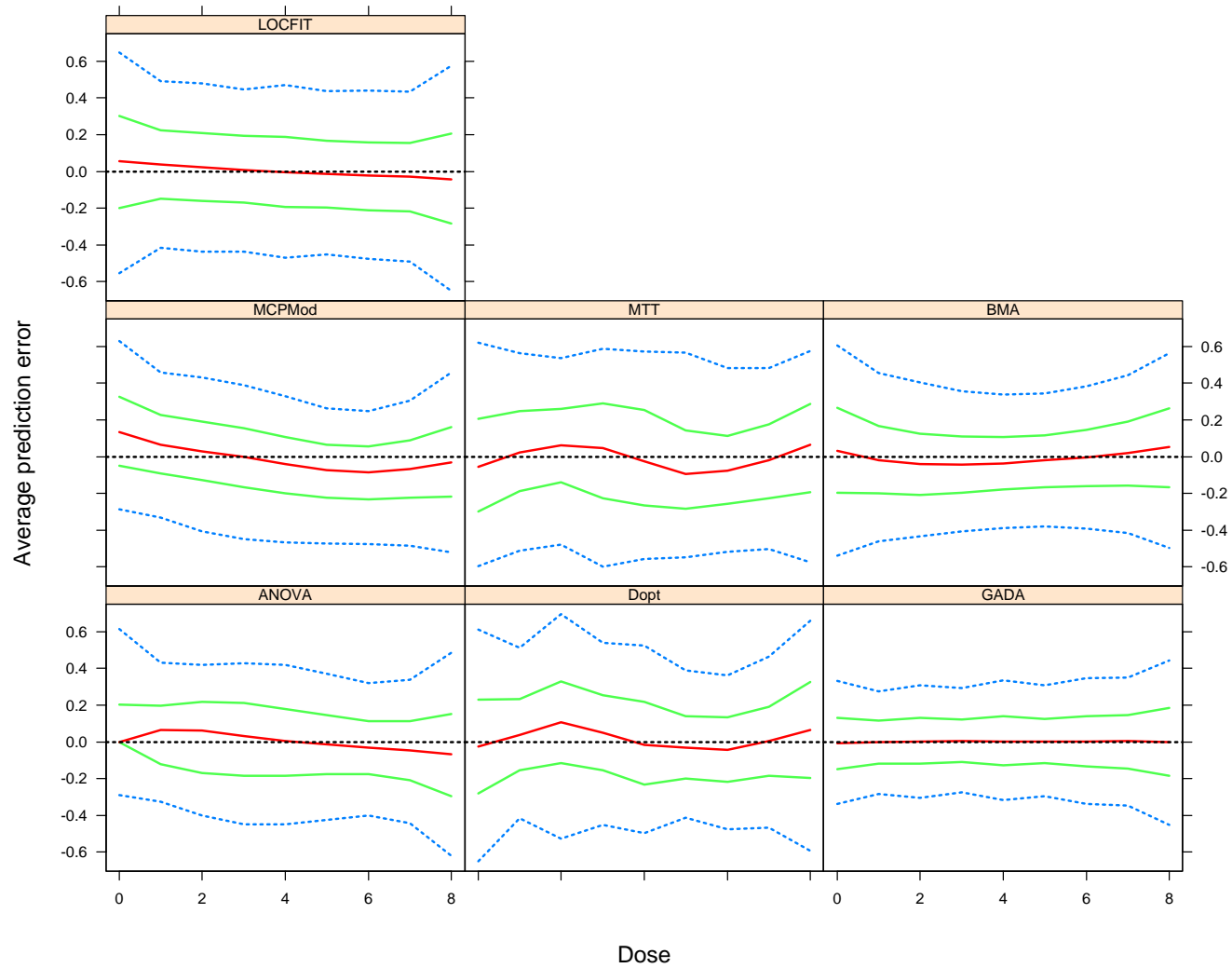
25%, 75%

50%



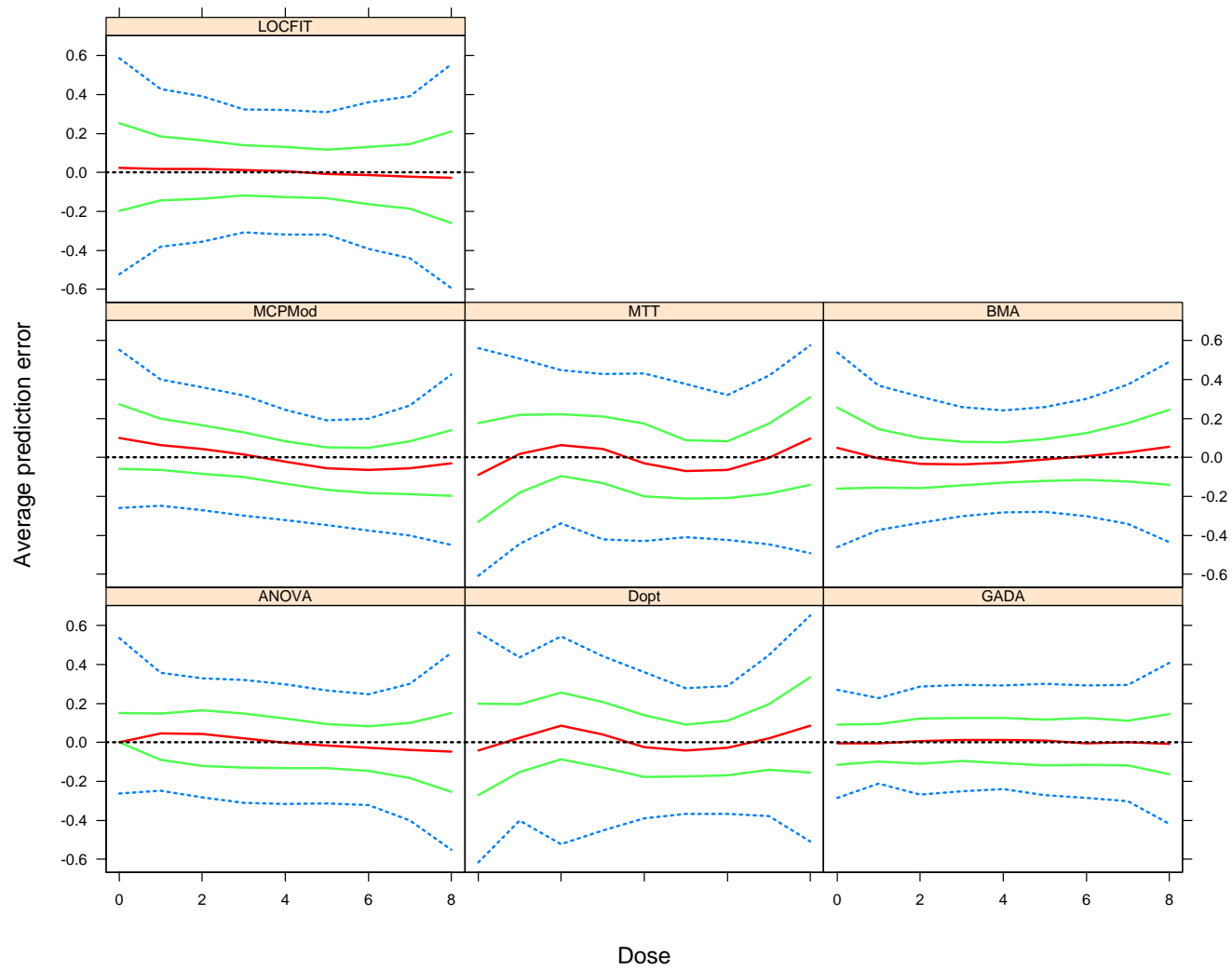
Linear, N = 150, 5 doses

5%, 95% 25%, 75% 50%



Linear, N = 250, 7 doses

5%, 95% 25%, 75% 50%

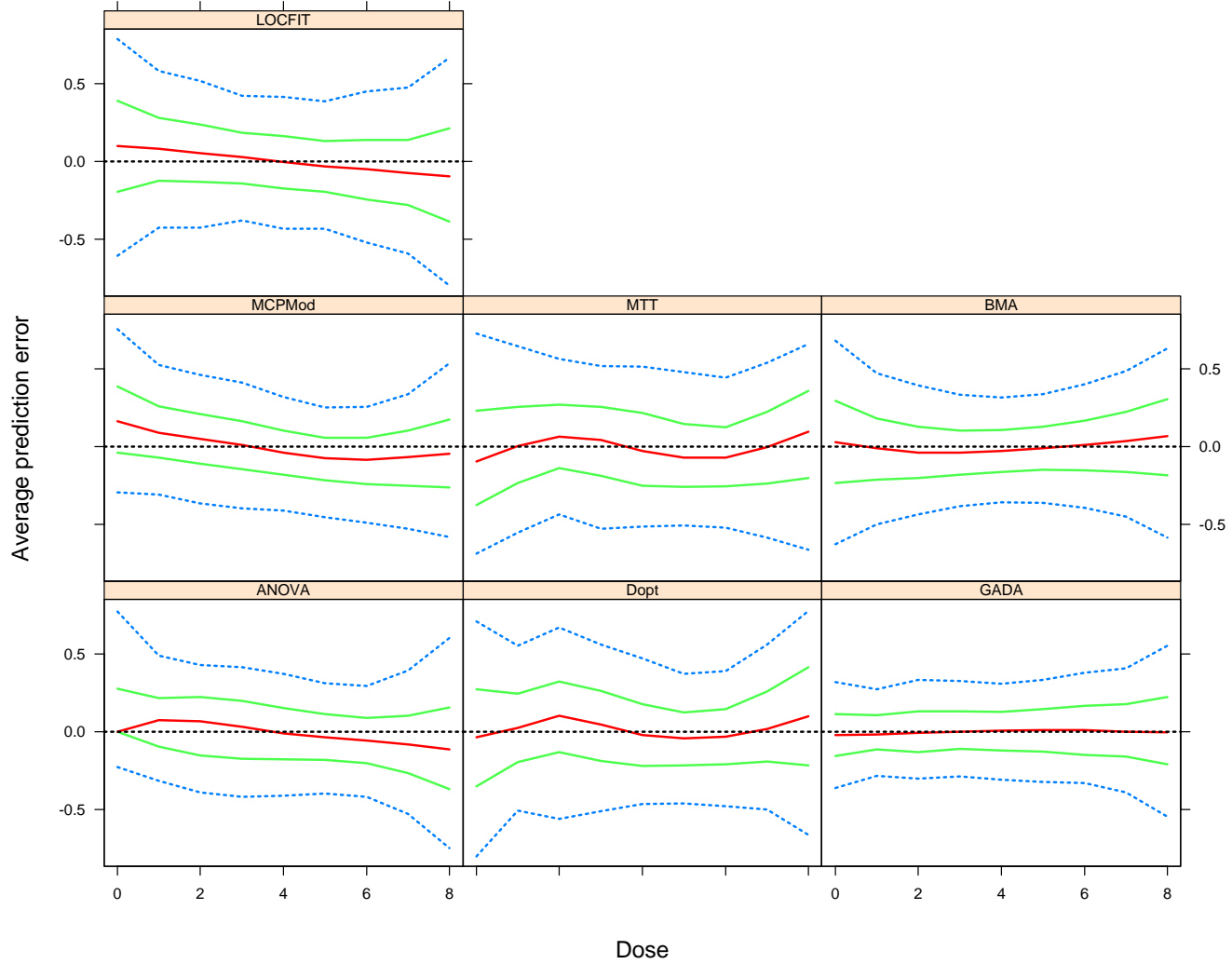


Linear, N = 150, 7 doses

5%, 95%

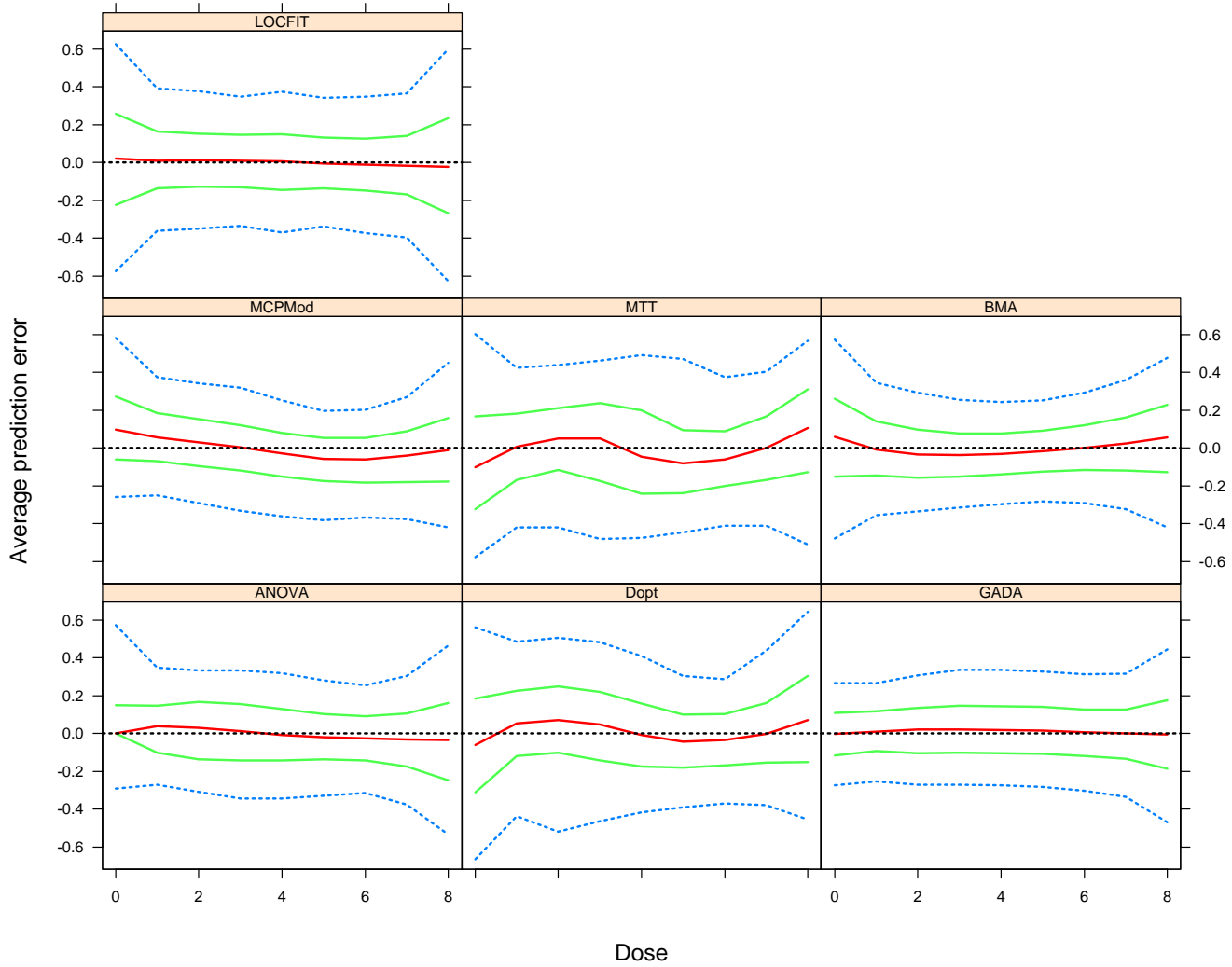
25%, 75%

50%



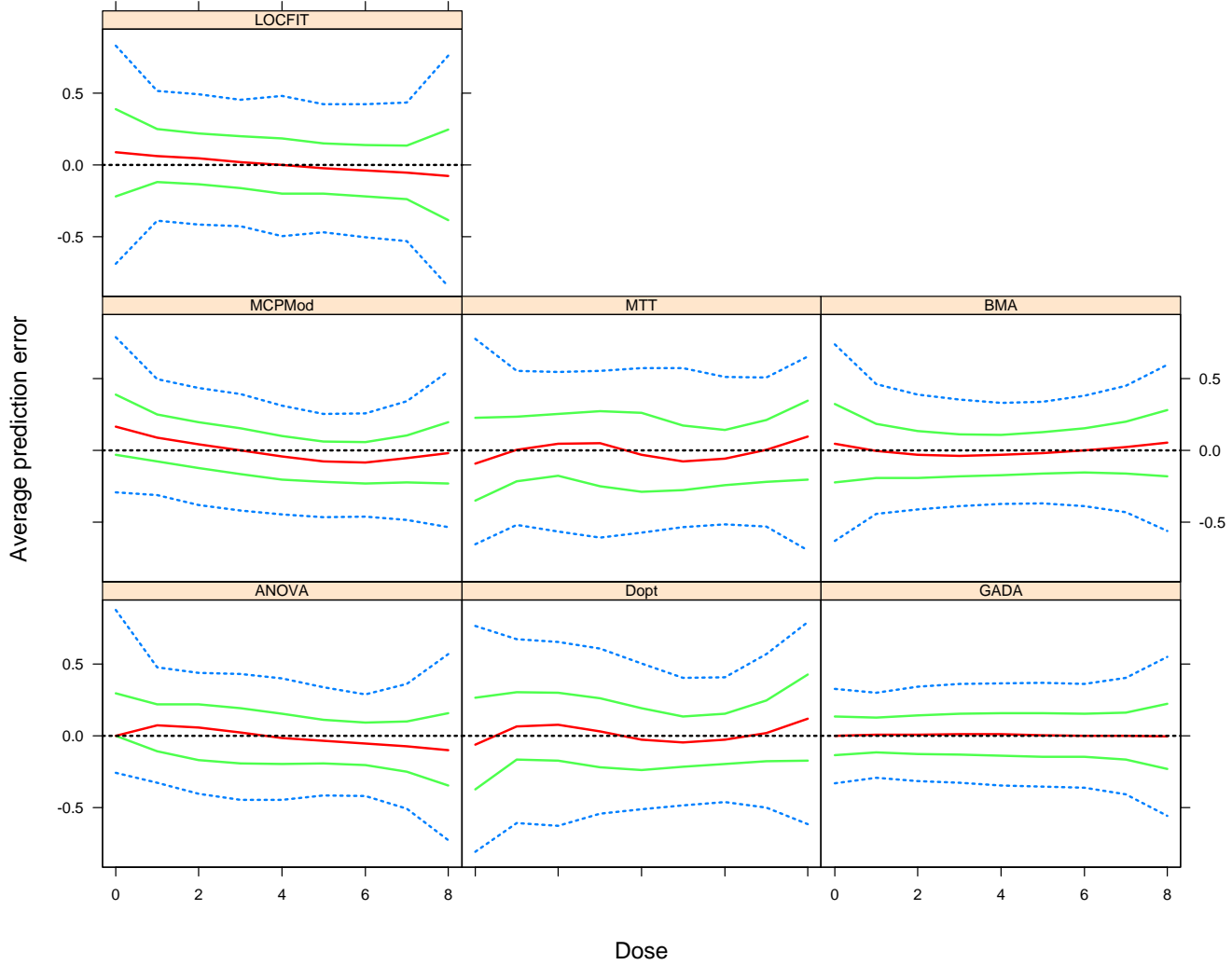
Linear, N = 250, 9 doses

5%, 95% 25%, 75% 50%



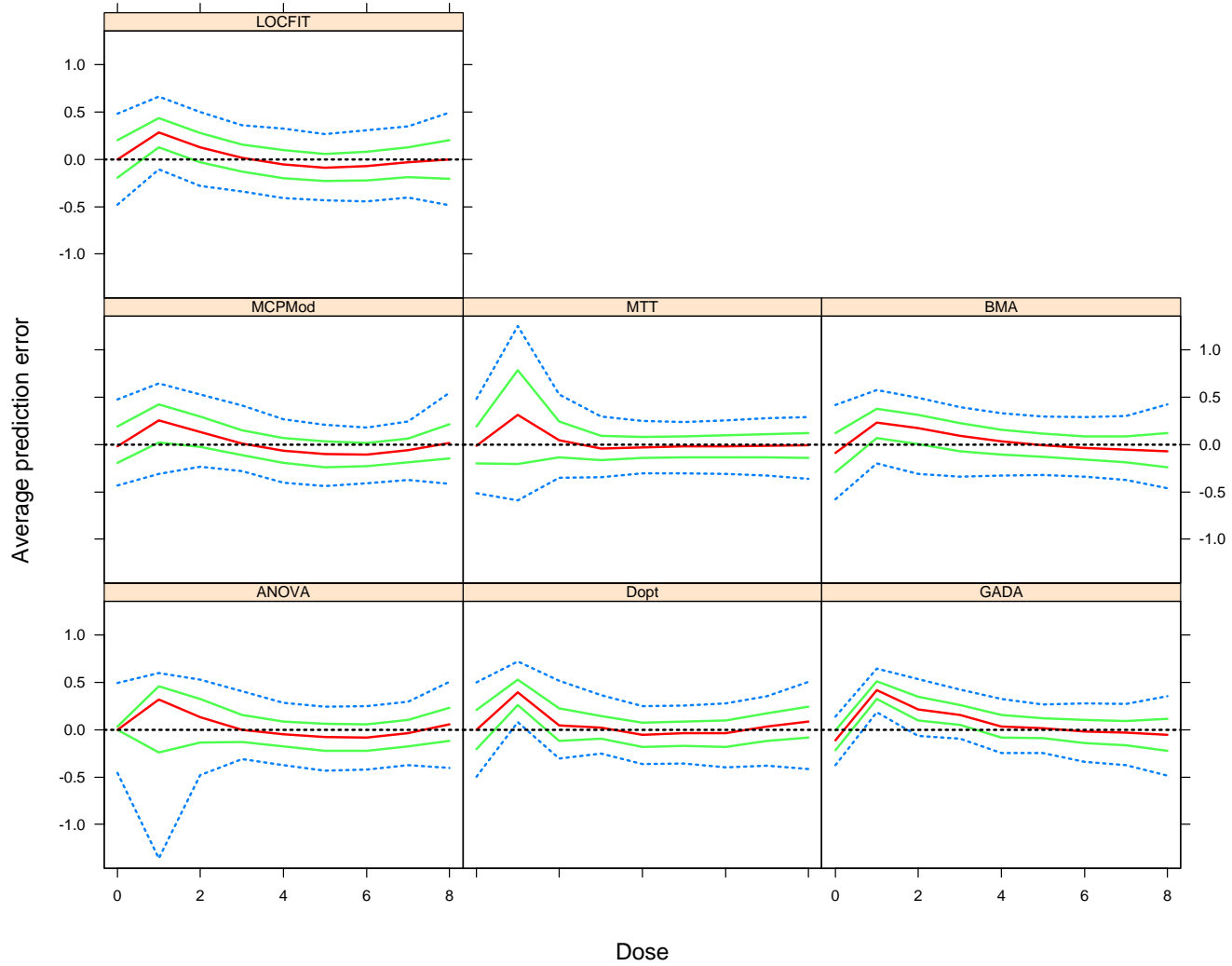
Linear, N = 150, 9 doses

5%, 95% 25%, 75% 50%



Emax, N = 250, 5 doses

5%, 95% 25%, 75% 50%

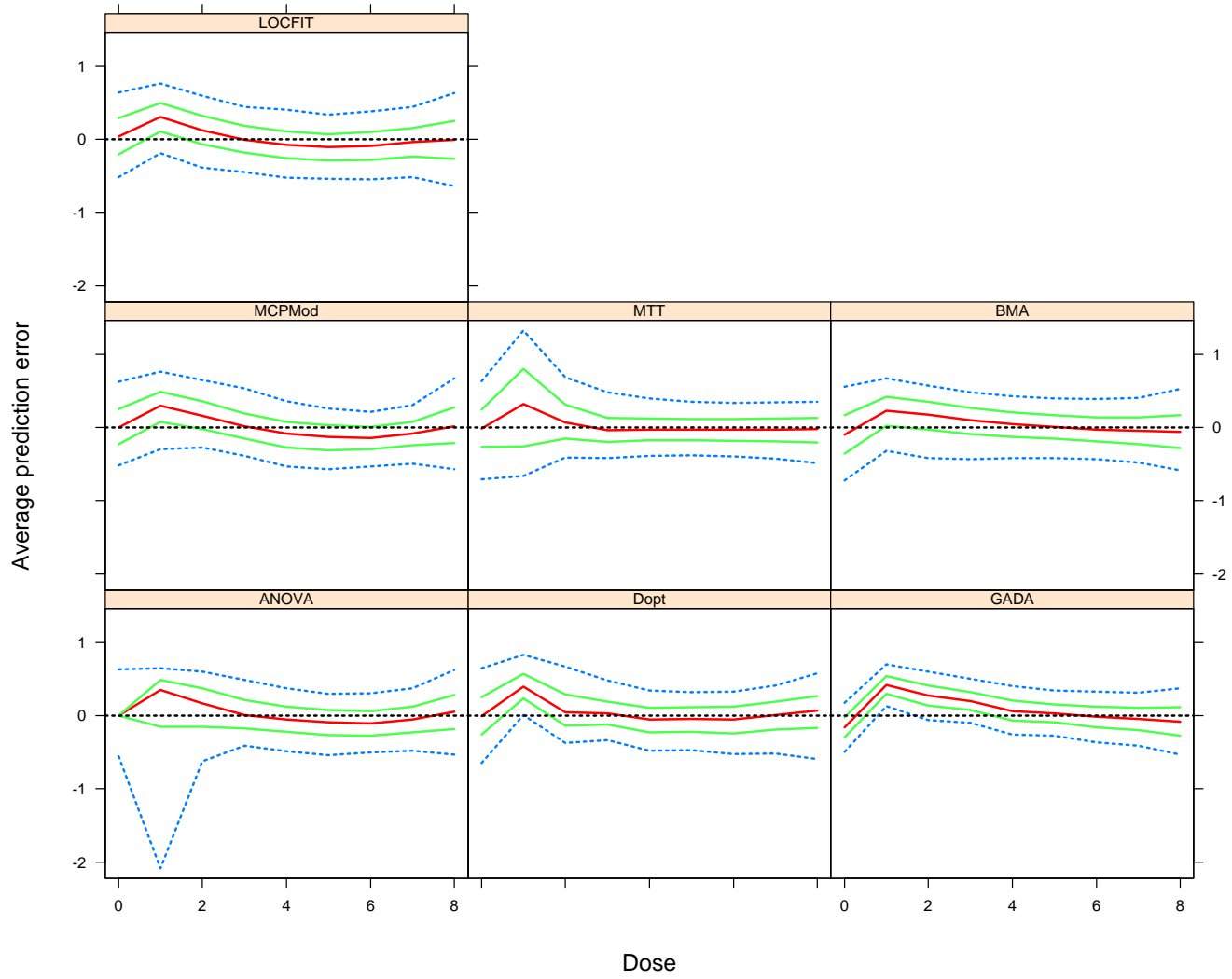


Emax, N = 150, 5 doses

5%, 95%

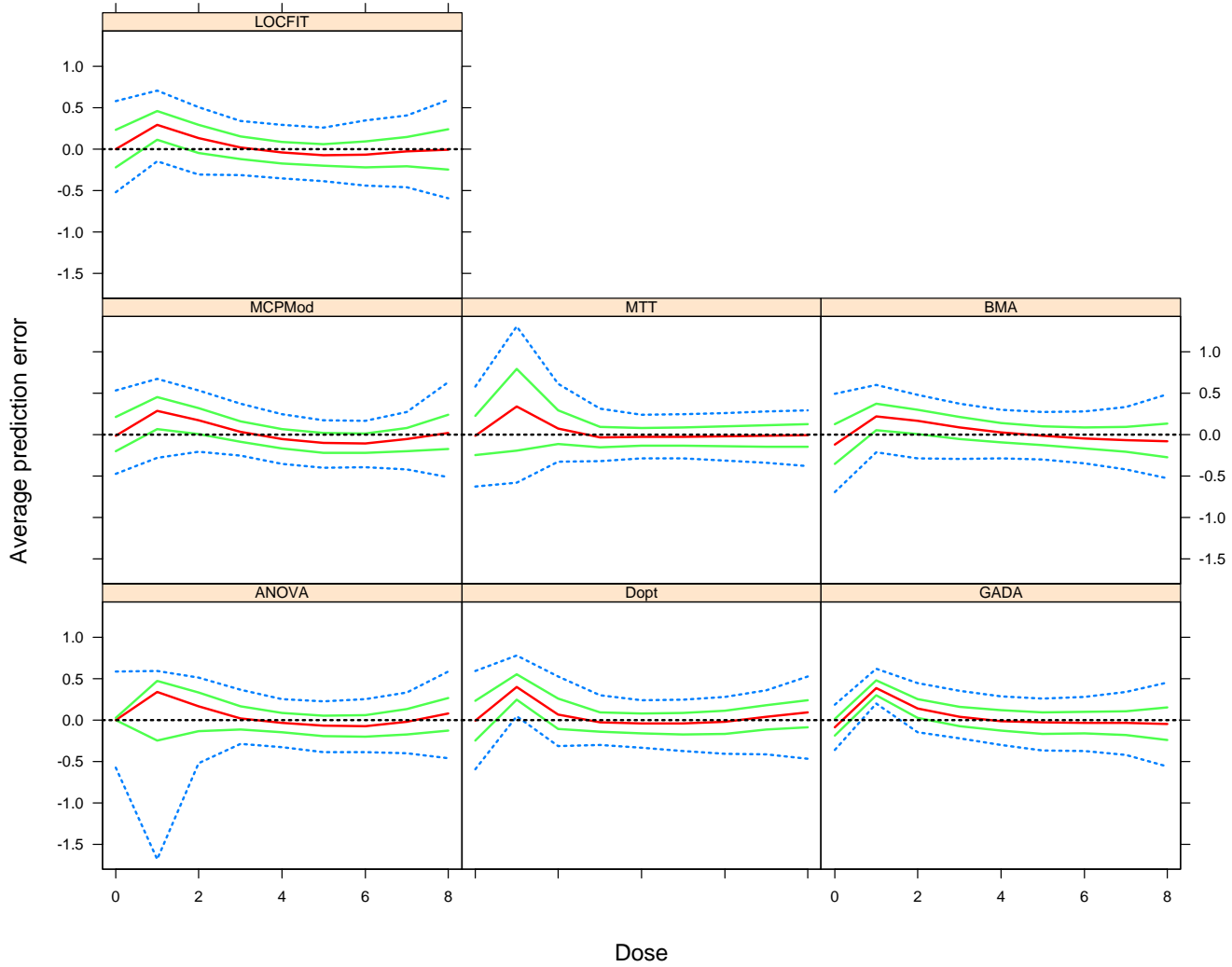
25%, 75%

50%



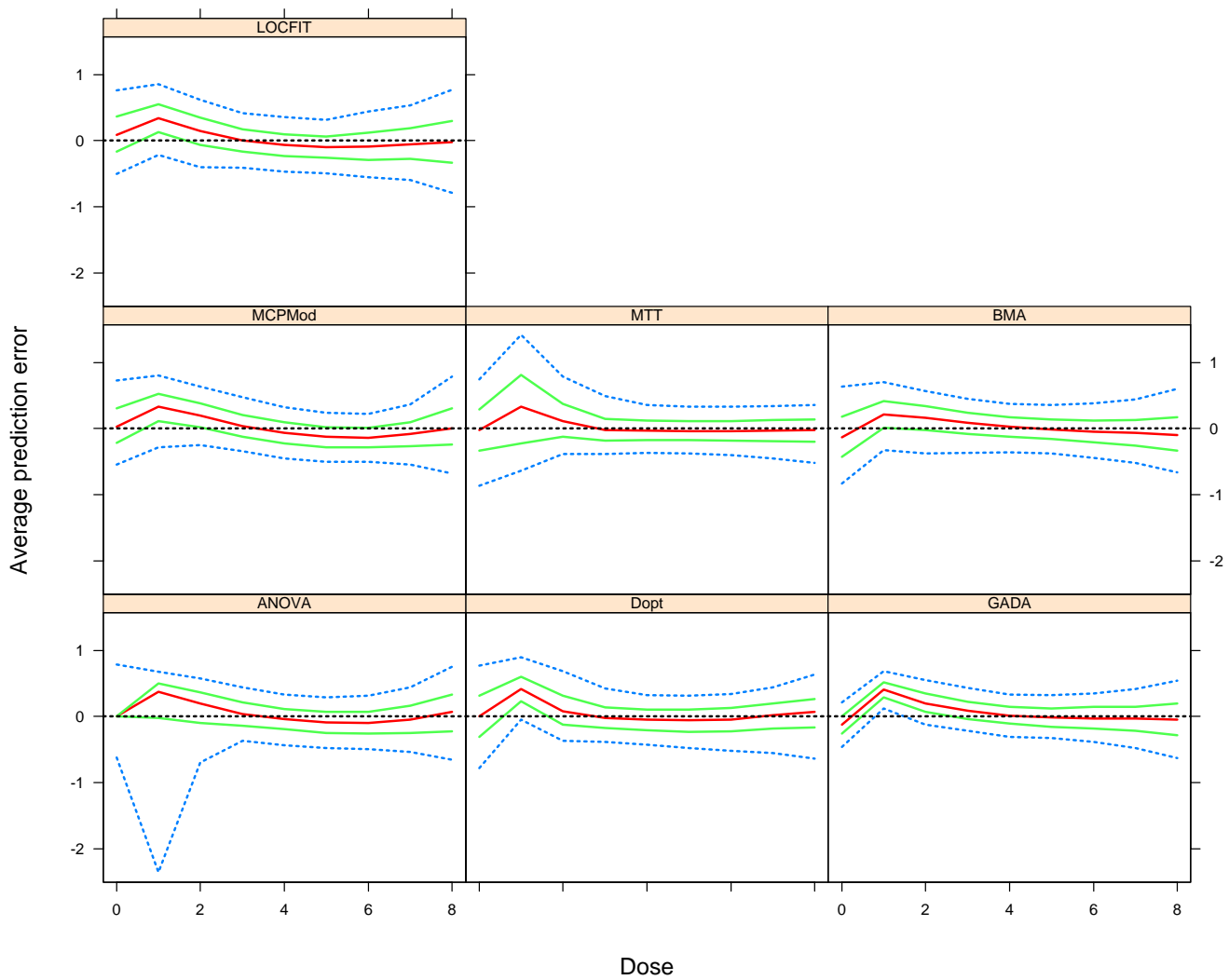
Emax, N = 250, 7 doses

5%, 95% 25%, 75% 50%



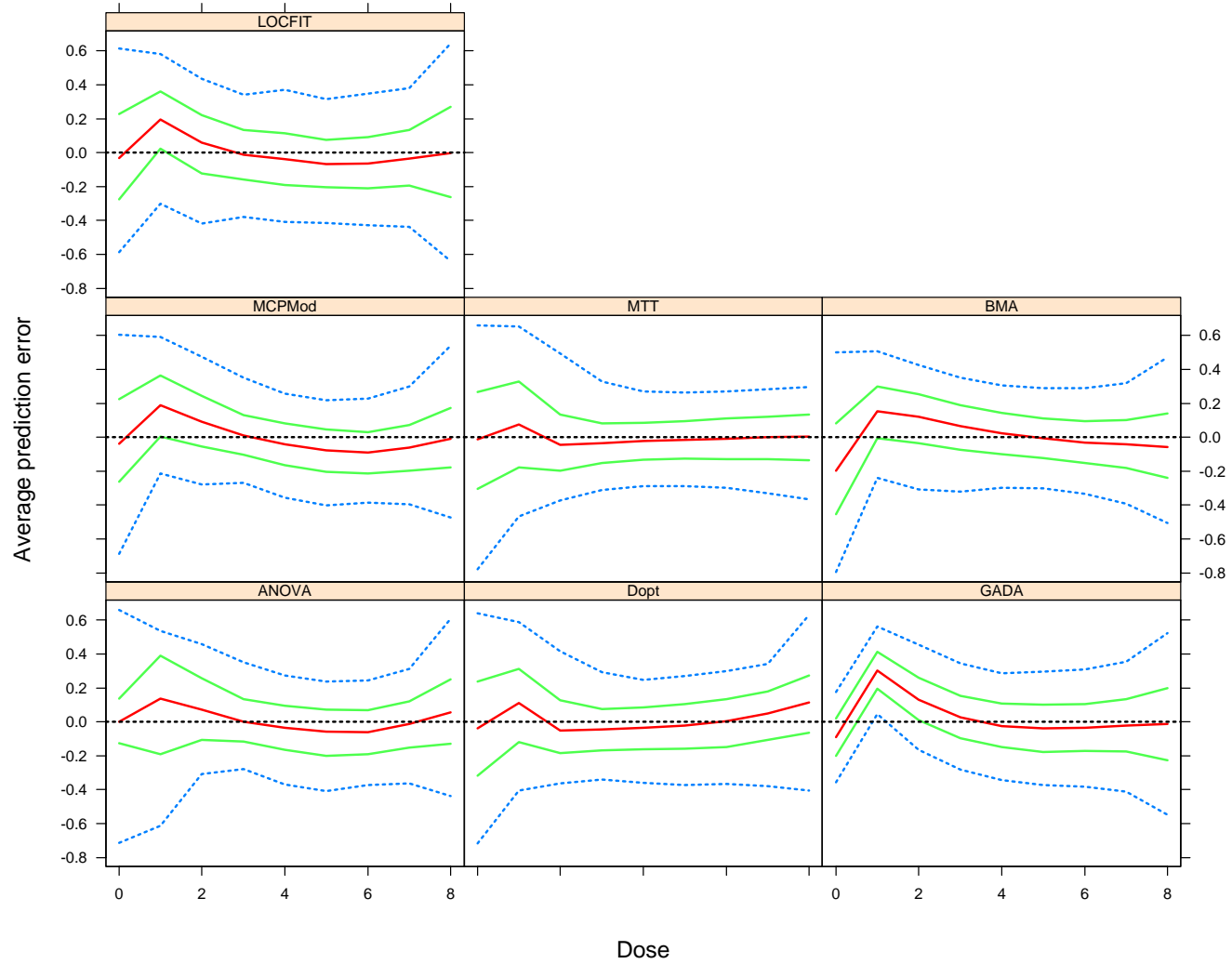
Emax, N = 150, 7 doses

5%, 95% 25%, 75% 50%



E_{max}, N = 250, 9 doses

5%, 95% 25%, 75% 50%

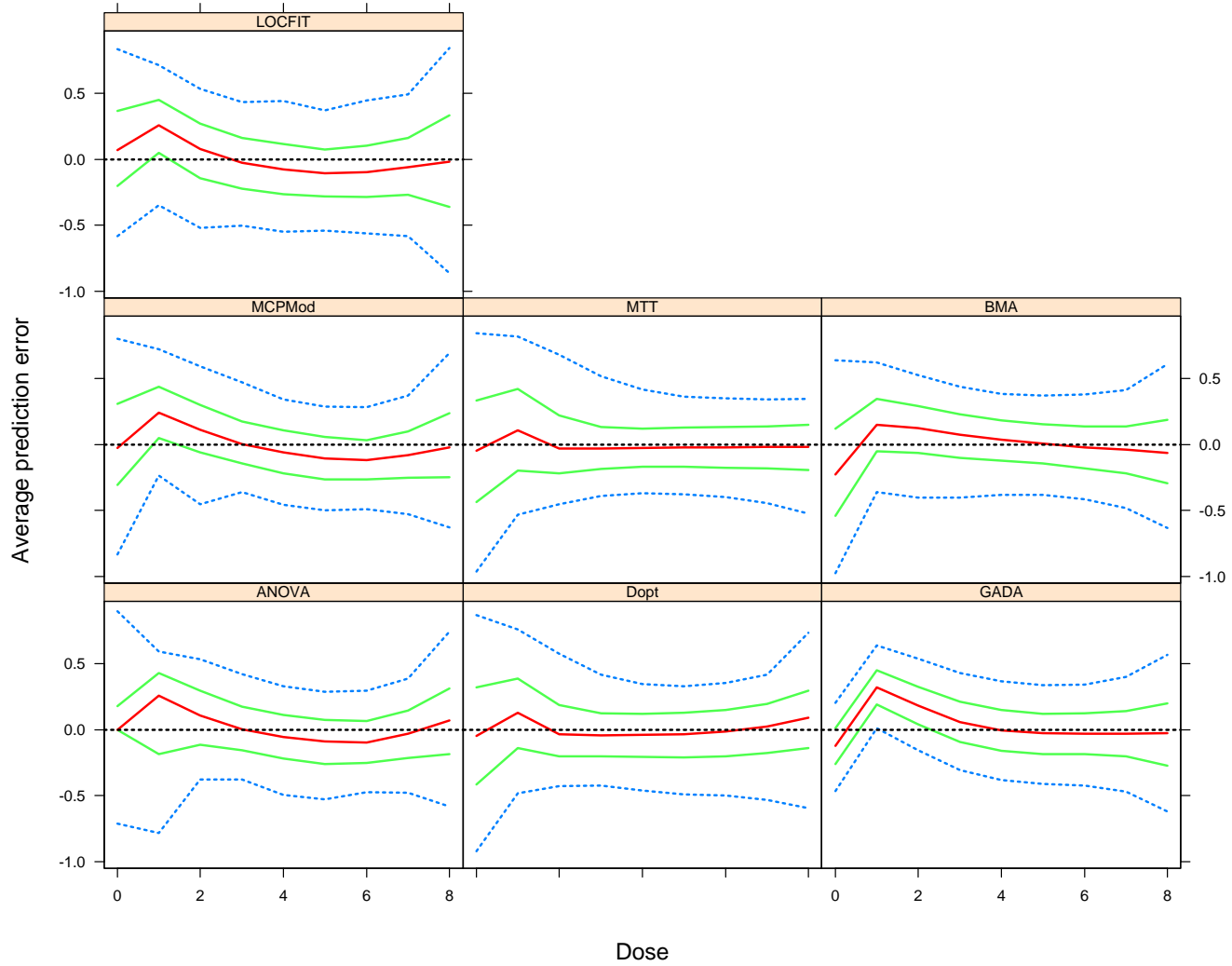


Emax, N = 150, 9 doses

5%, 95%

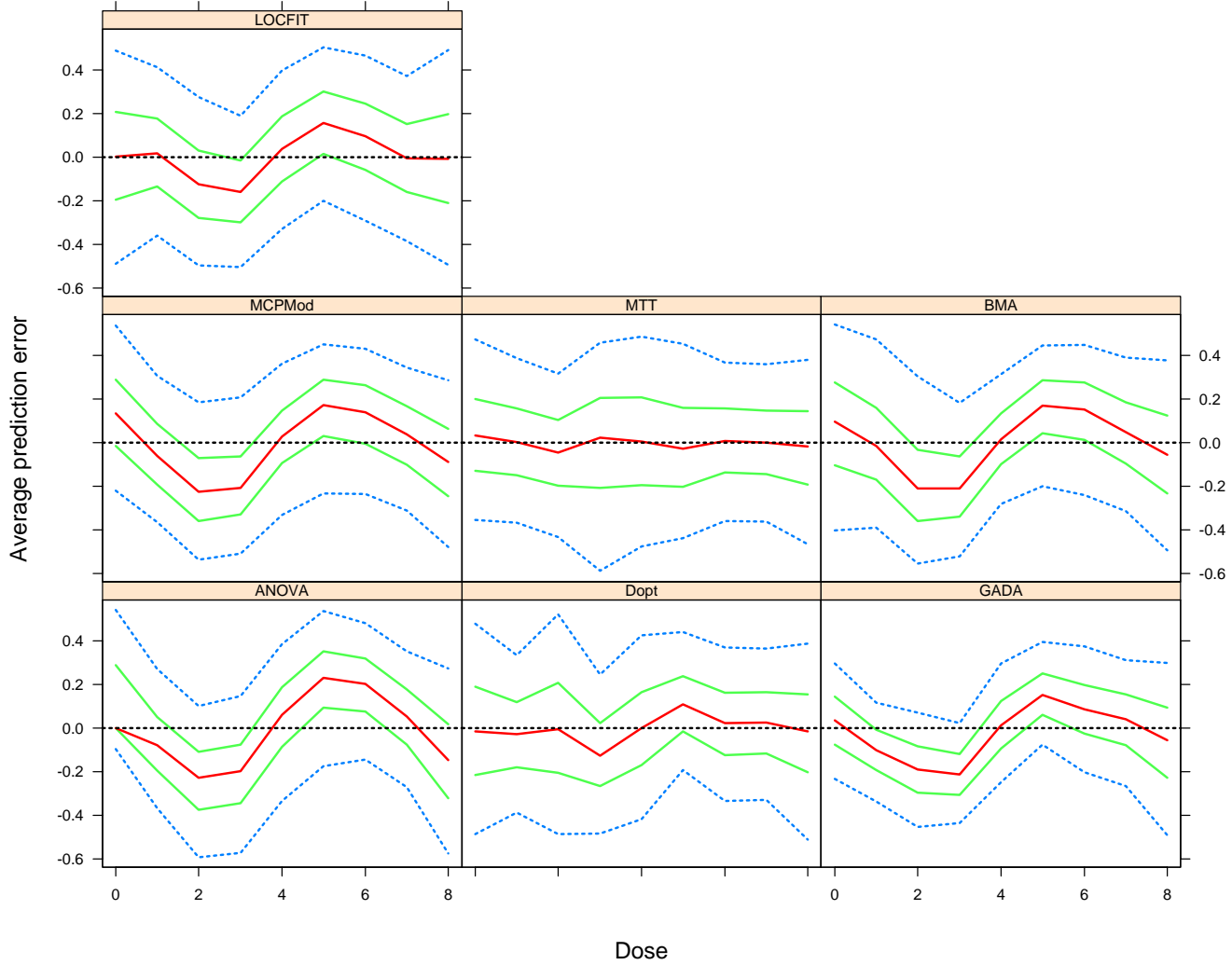
25%, 75%

50%



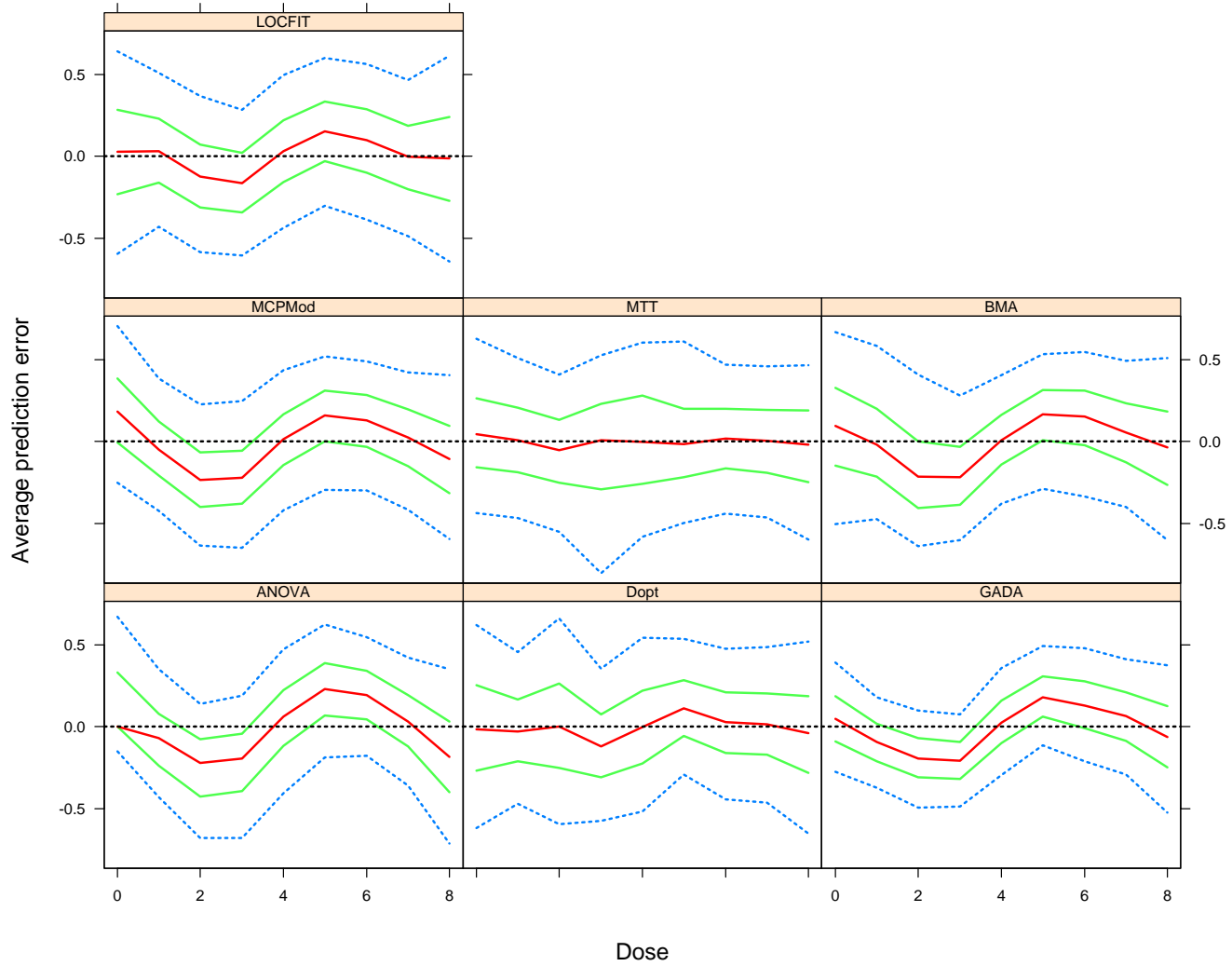
Sigmoid Emax, N = 250, 5 doses

5%, 95% 25%, 75% 50%



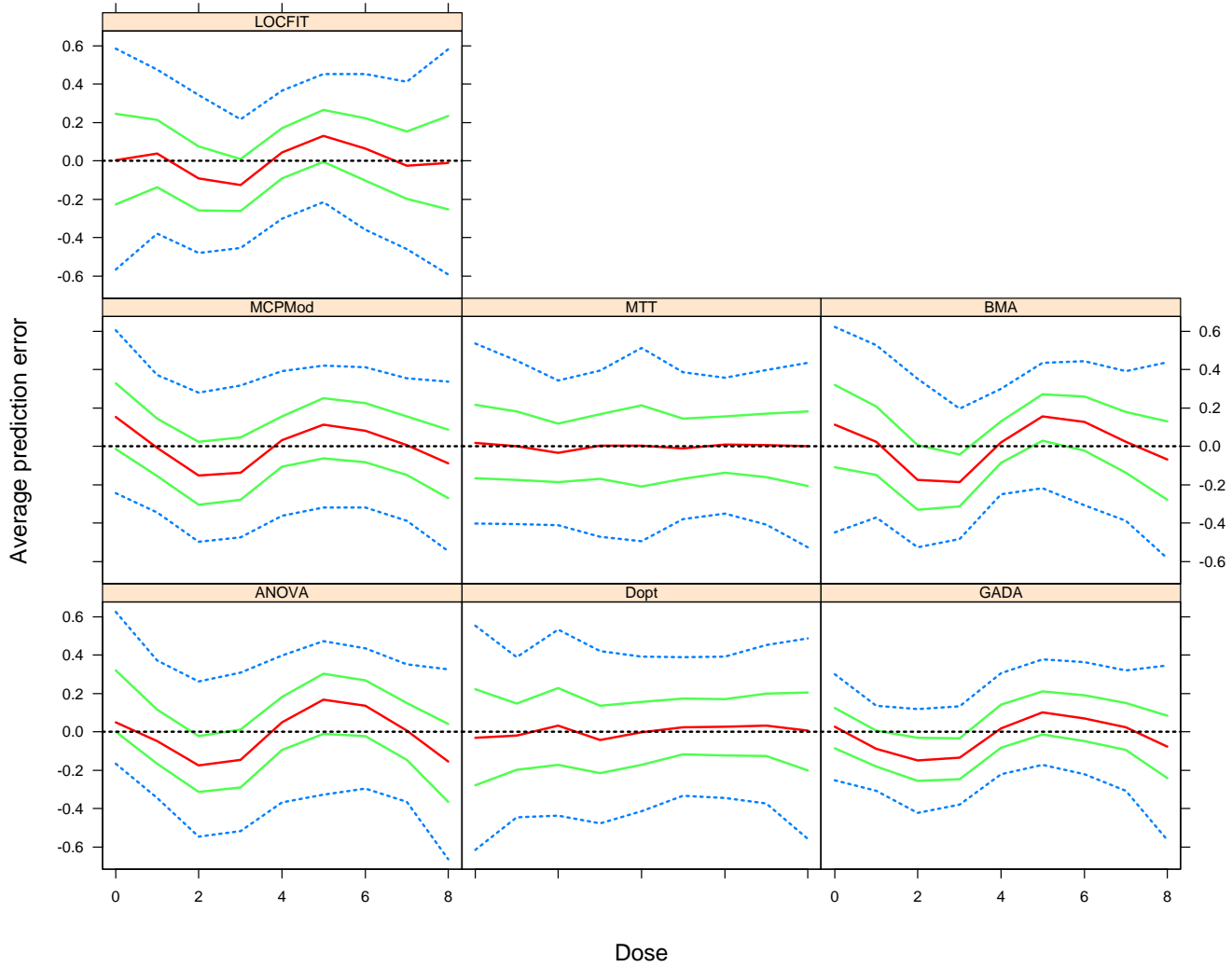
Sigmoid Emax, N = 150, 5 doses

5%, 95% 25%, 75% 50%



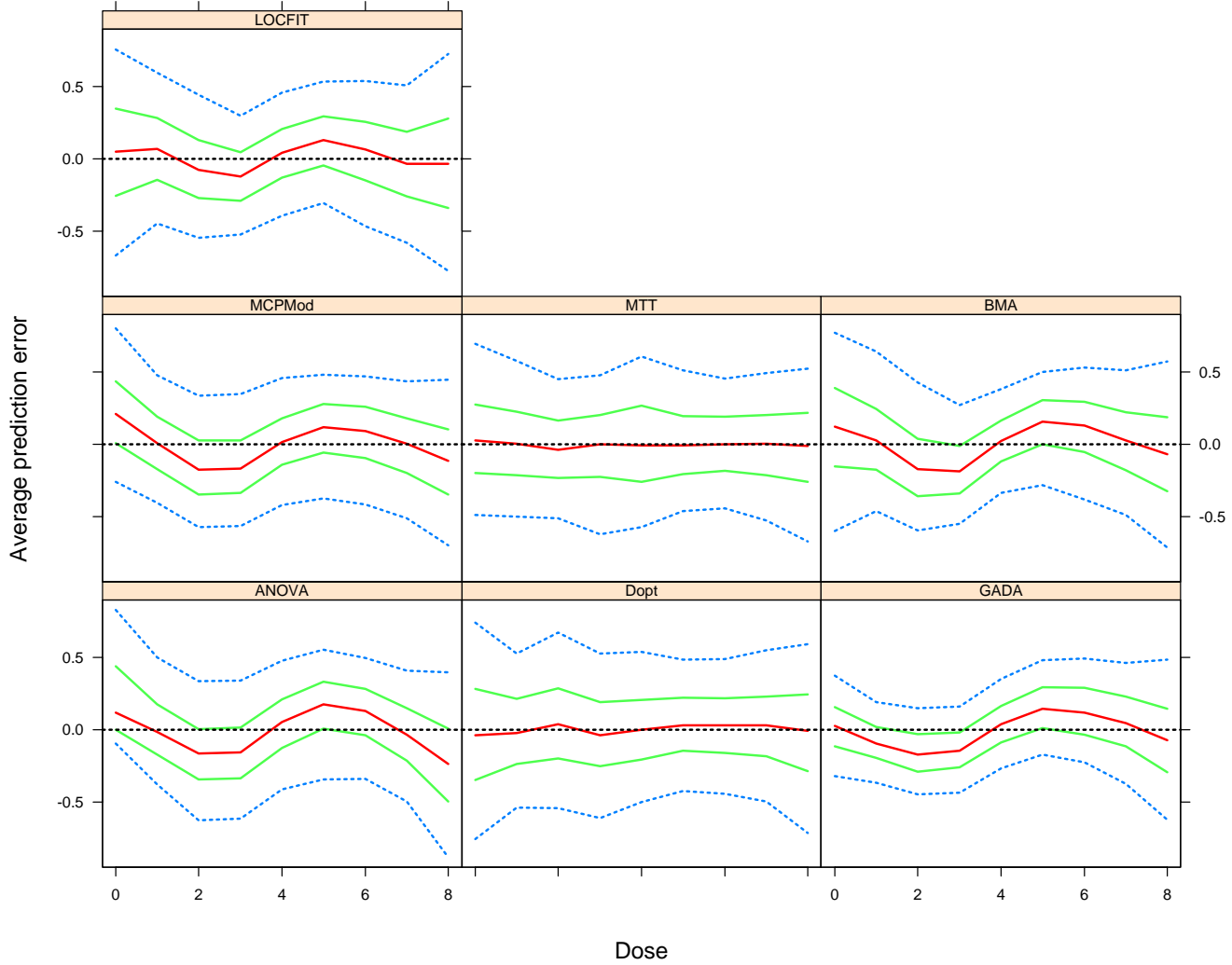
Sigmoid Emax, N = 250, 7 doses

5%, 95% 25%, 75% 50%



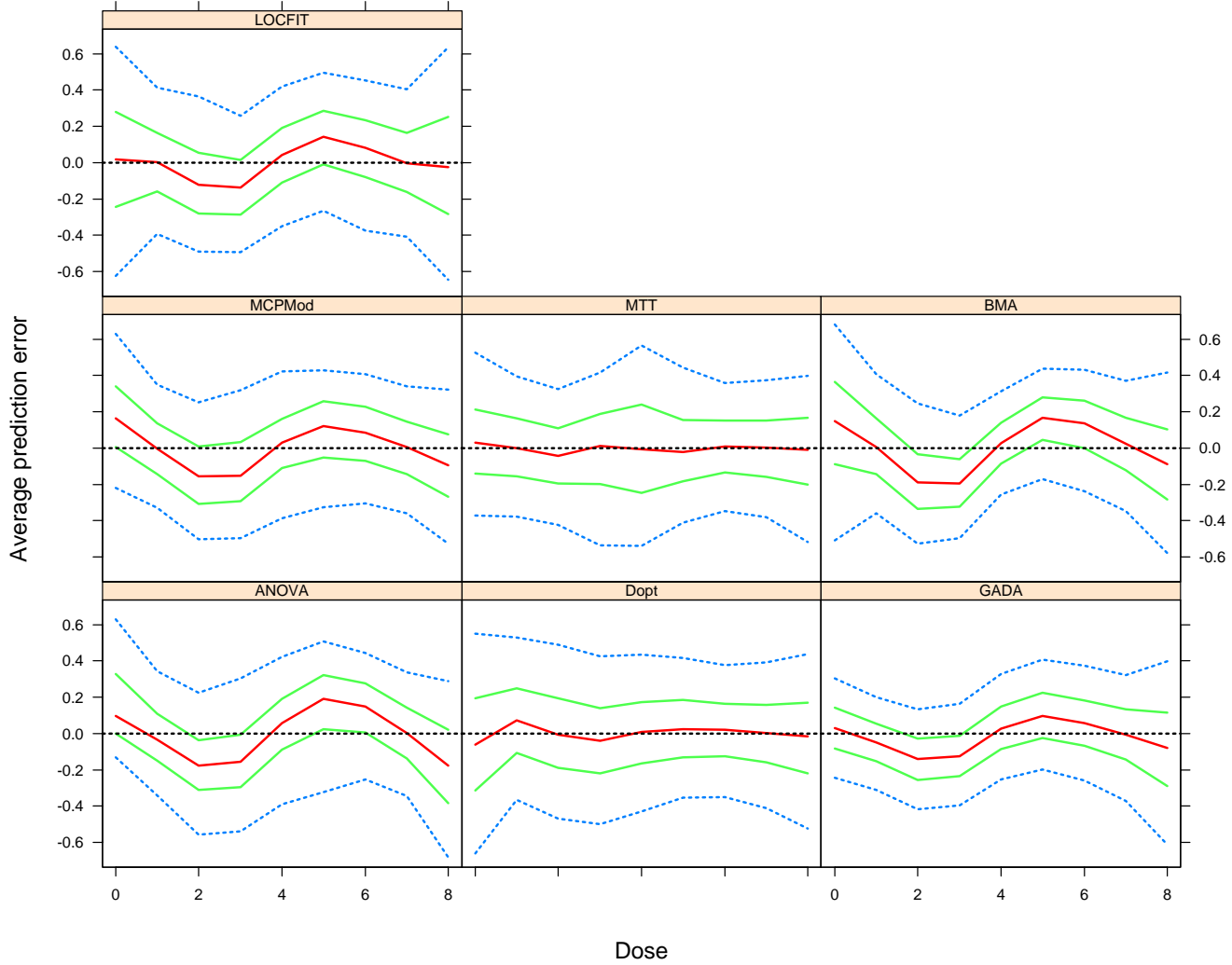
Sigmoid Emax, N = 150, 7 doses

5%, 95% 25%, 75% 50%



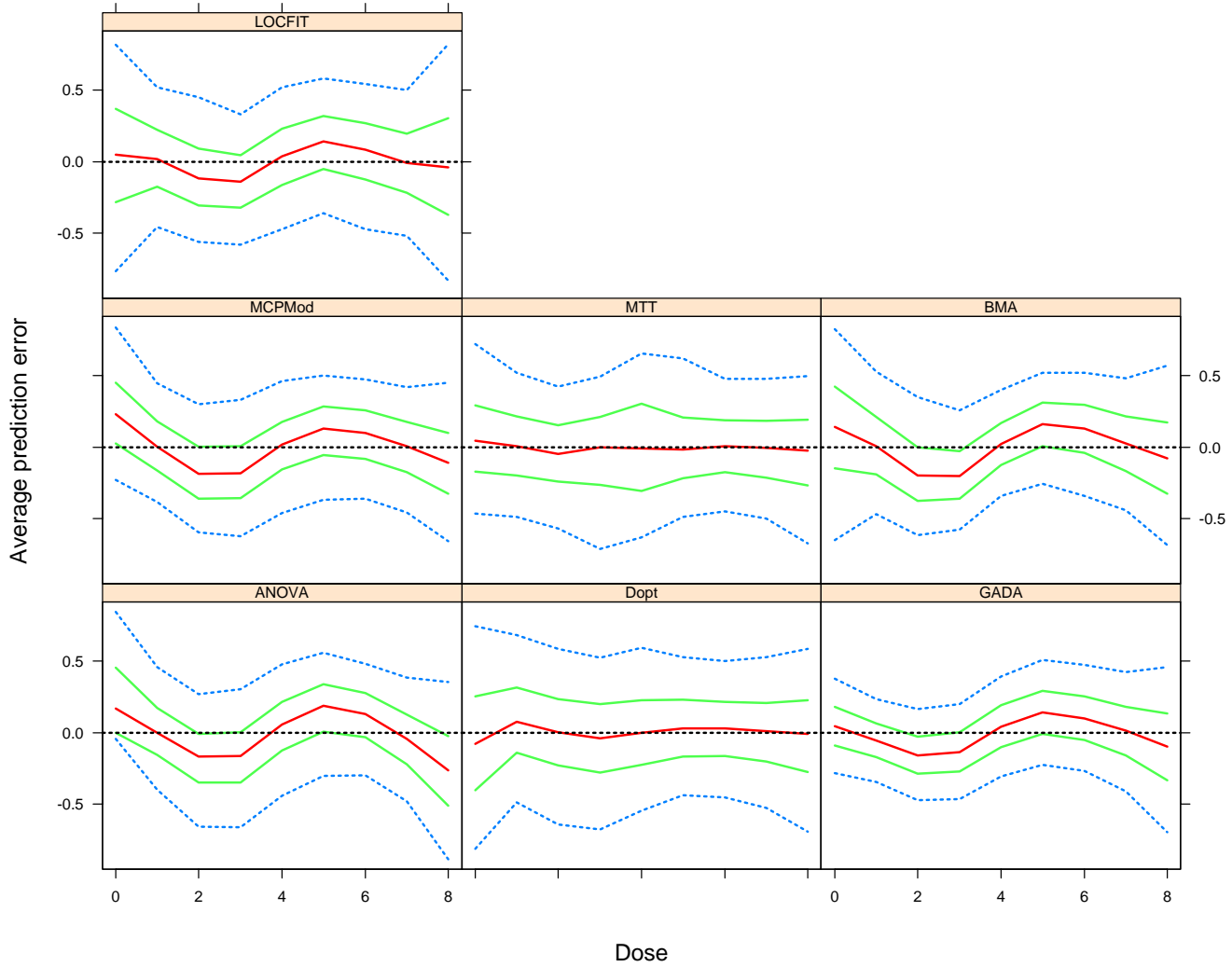
Sigmoid Emax, N = 250, 9 doses

5%, 95% 25%, 75% 50%



Sigmoid Emax, N = 150, 9 doses

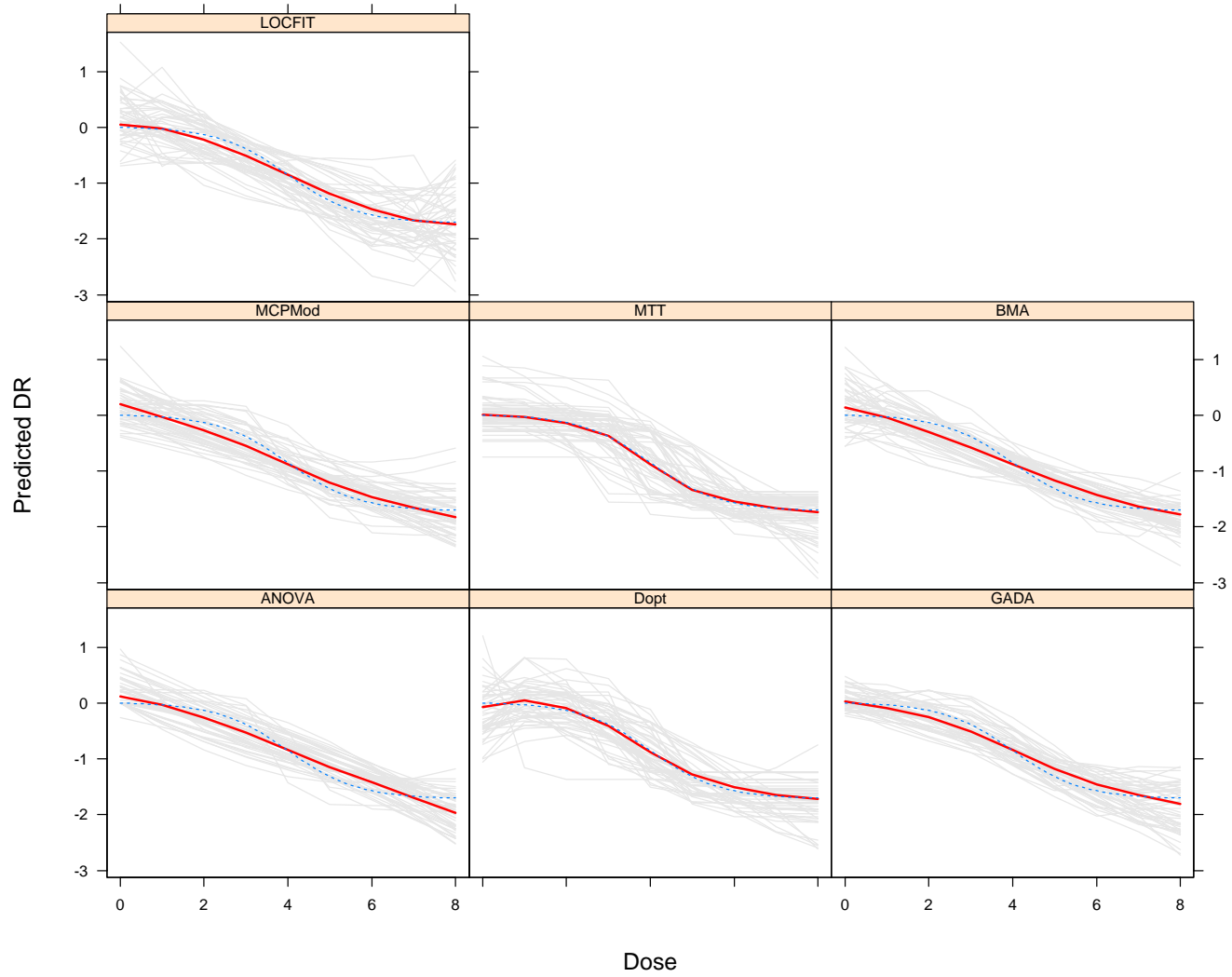
5%, 95% 25%, 75% 50%



Sample of Predicted DR Profiles

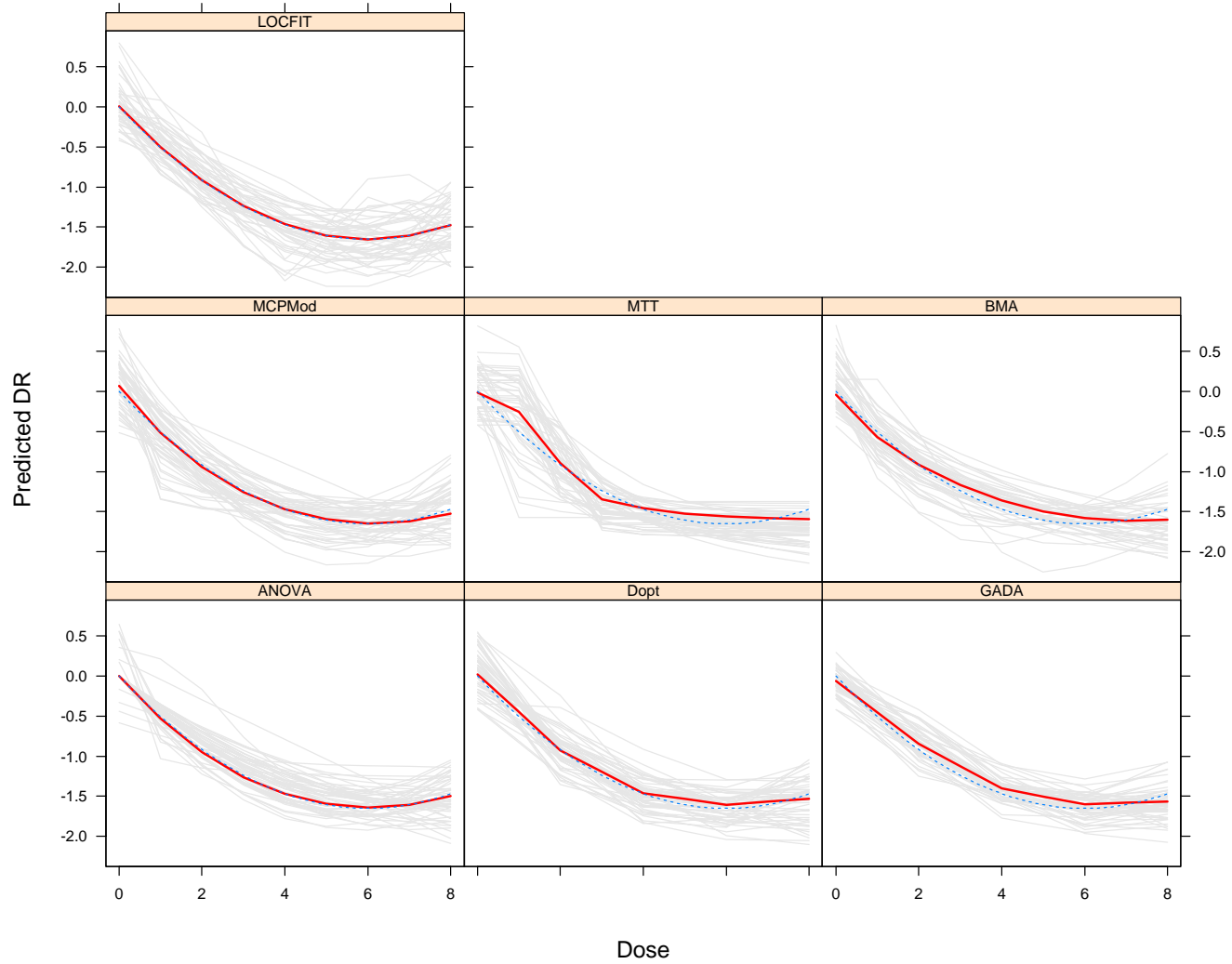
Logistic, N = 150, 9 doses

— Sample — Median - - - True



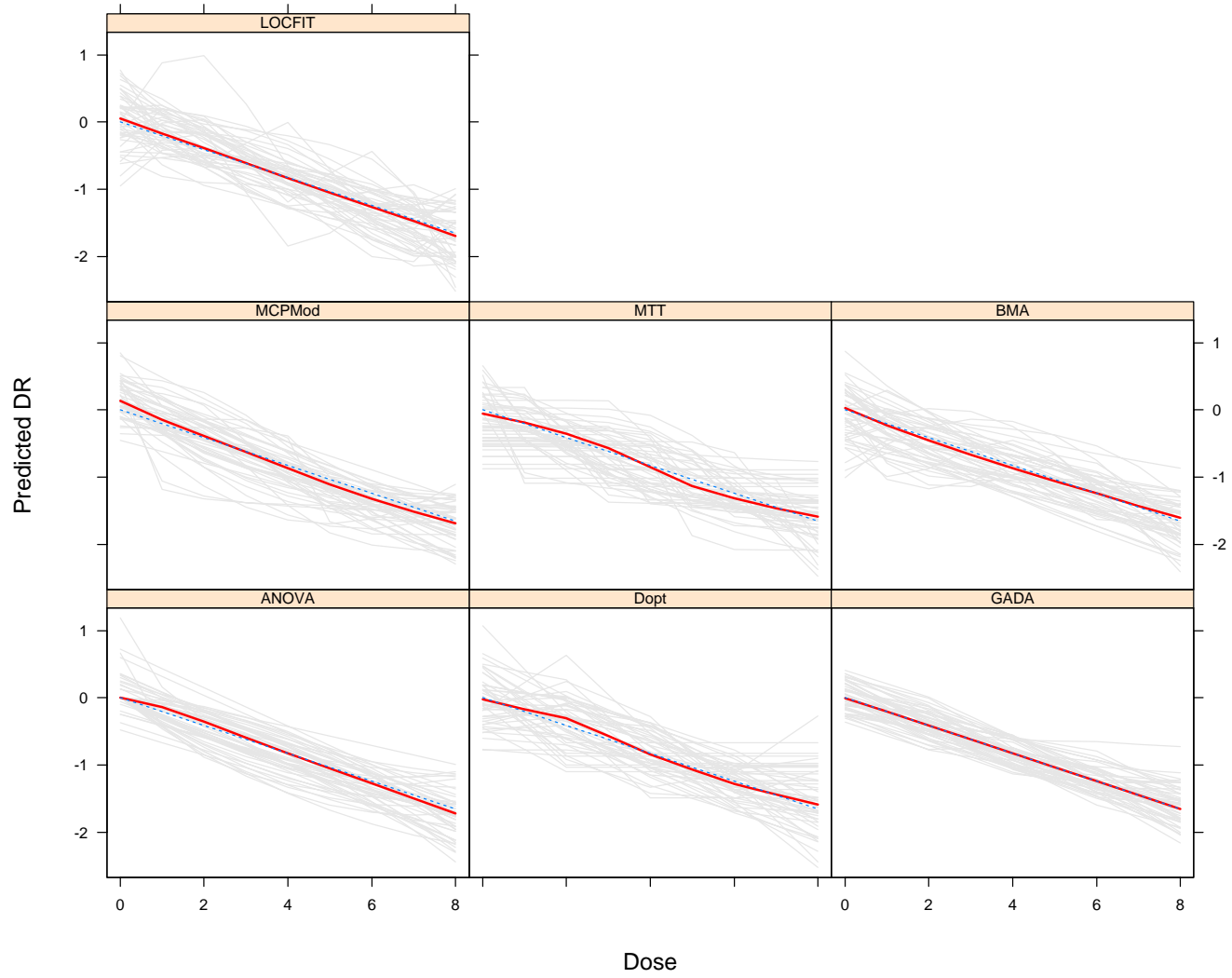
Umbrella, N = 250, 5 doses

— Sample — Median - - - True



Linear, N = 150, 5 doses

— Sample — Median - - - True



E_{max}, N = 250, 7 doses

— Sample — Median - - - True

