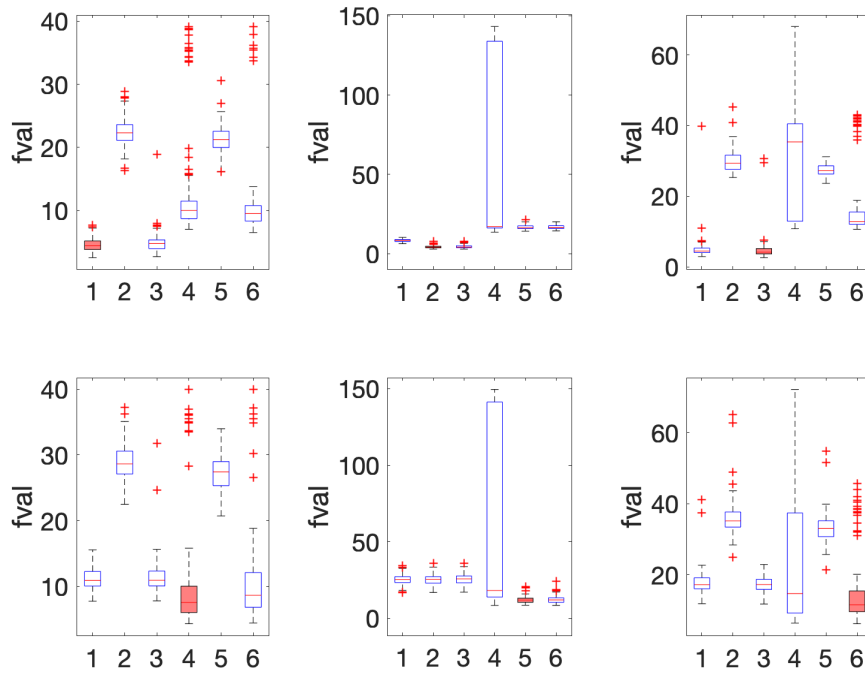
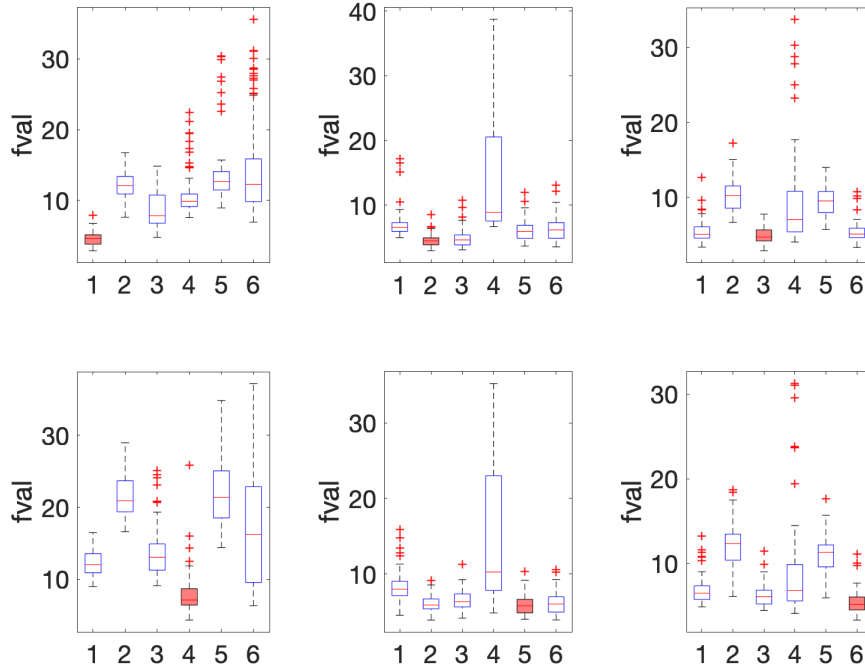


## S4 Fig: Identification of the right effect with a continuous covariate

**A**



**B**



Results from minimization process. Number 1-3 refers to effects group, linear, group and linear in the variable  $\alpha_{pop}$  and 4-6 in the variable  $\mu_{pop}$ . Red boxplots correspond to the real model used to generate the data with the model. A) Normal distribution for the covariate, B) Lognormal distribution.