Linear model: Independent $X_2$

A. Positive effect: OTUs in upper 10% in abundance

B. Mixed effect: OTUs in upper 10% in abundance

C. Positive effect: A random 10% of OTUs

D. Mixed effect: A random 10% of OTUs

E. Positive effect: OTUs in lower 10% of abundance

F. Mixed effect: OTUs in lower 10% of abundance

G. Positive effect: OTUs in the cluster

H. Mixed effect: OTUs in the cluster

Legend:
- $\beta$ is sampled from Unif(0,1) for positive effect and from Unif(-1,1) for mixed effect
- $\beta$ is sampled from Unif(0,2) for positive effect and from Unif(-2,2) for mixed effect
- $\beta$ is sampled from Unif(0,3) for positive effect and from Unif(-3,3) for mixed effect