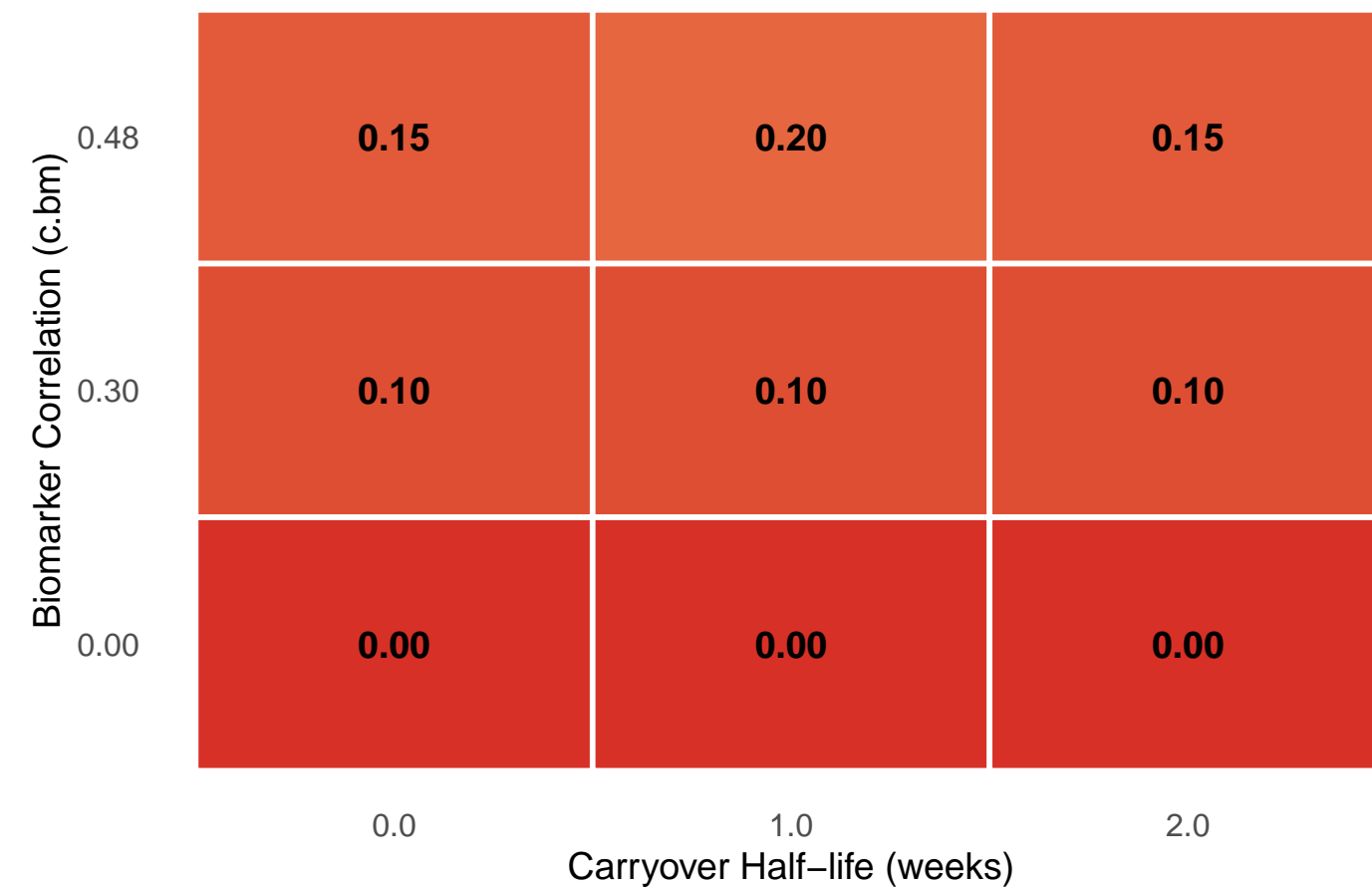


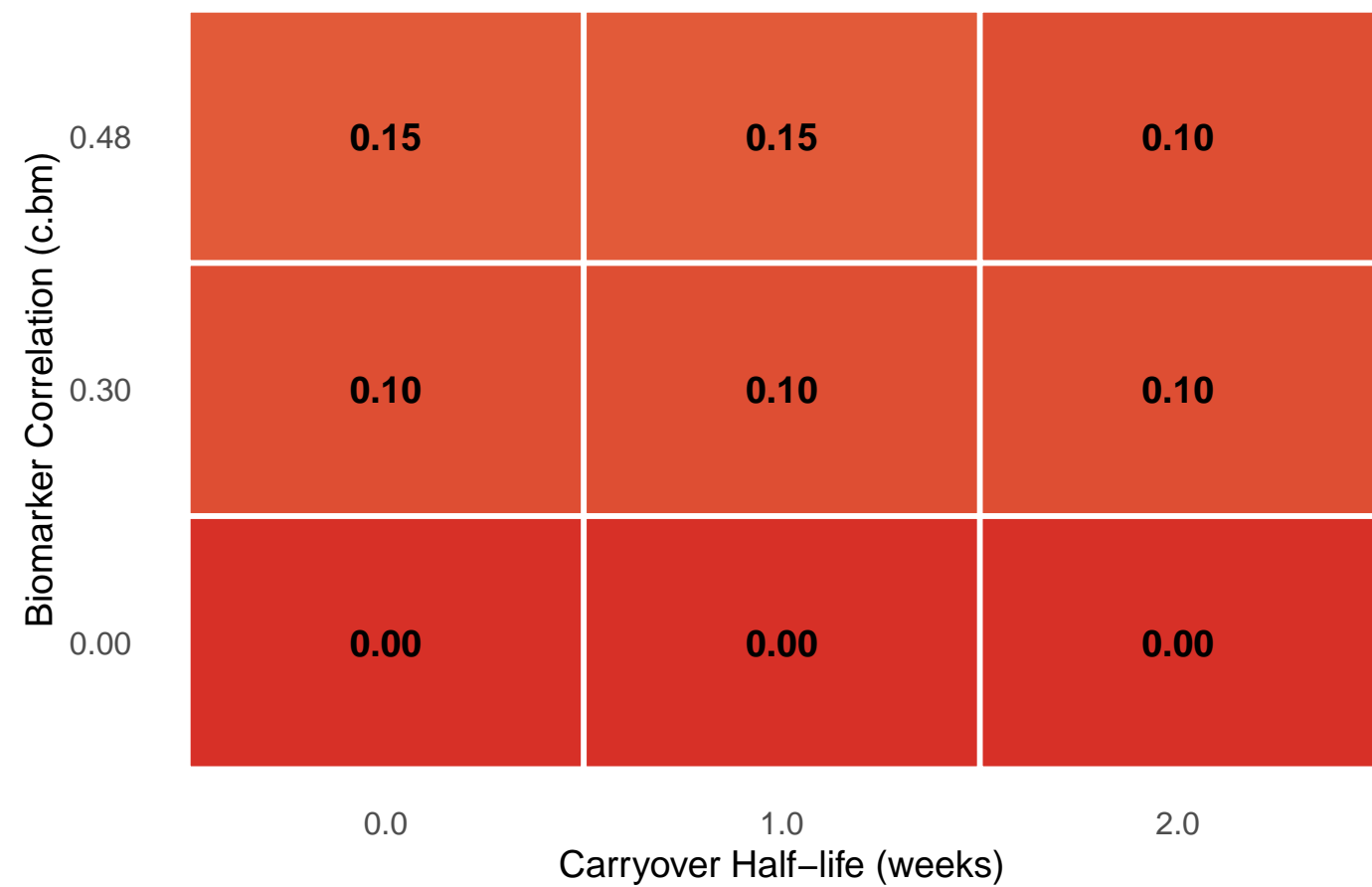
# Statistical Power Across All Parameter Combinations

Monte Carlo simulation (N=70 participants, 20 iterations per combination)

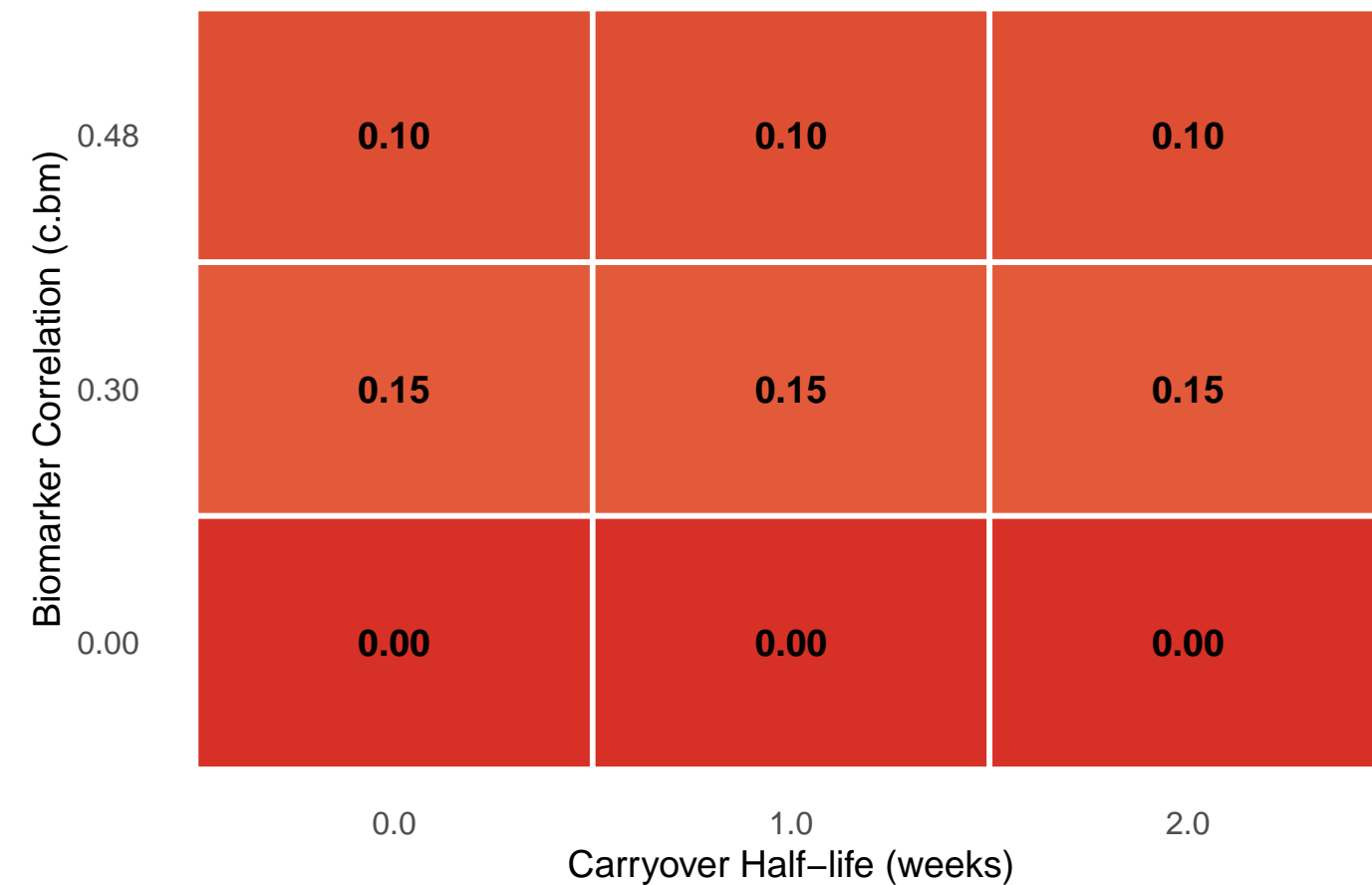
Hybrid Design  
WITHOUT Carryover Model



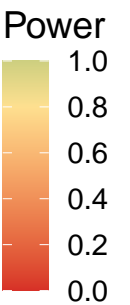
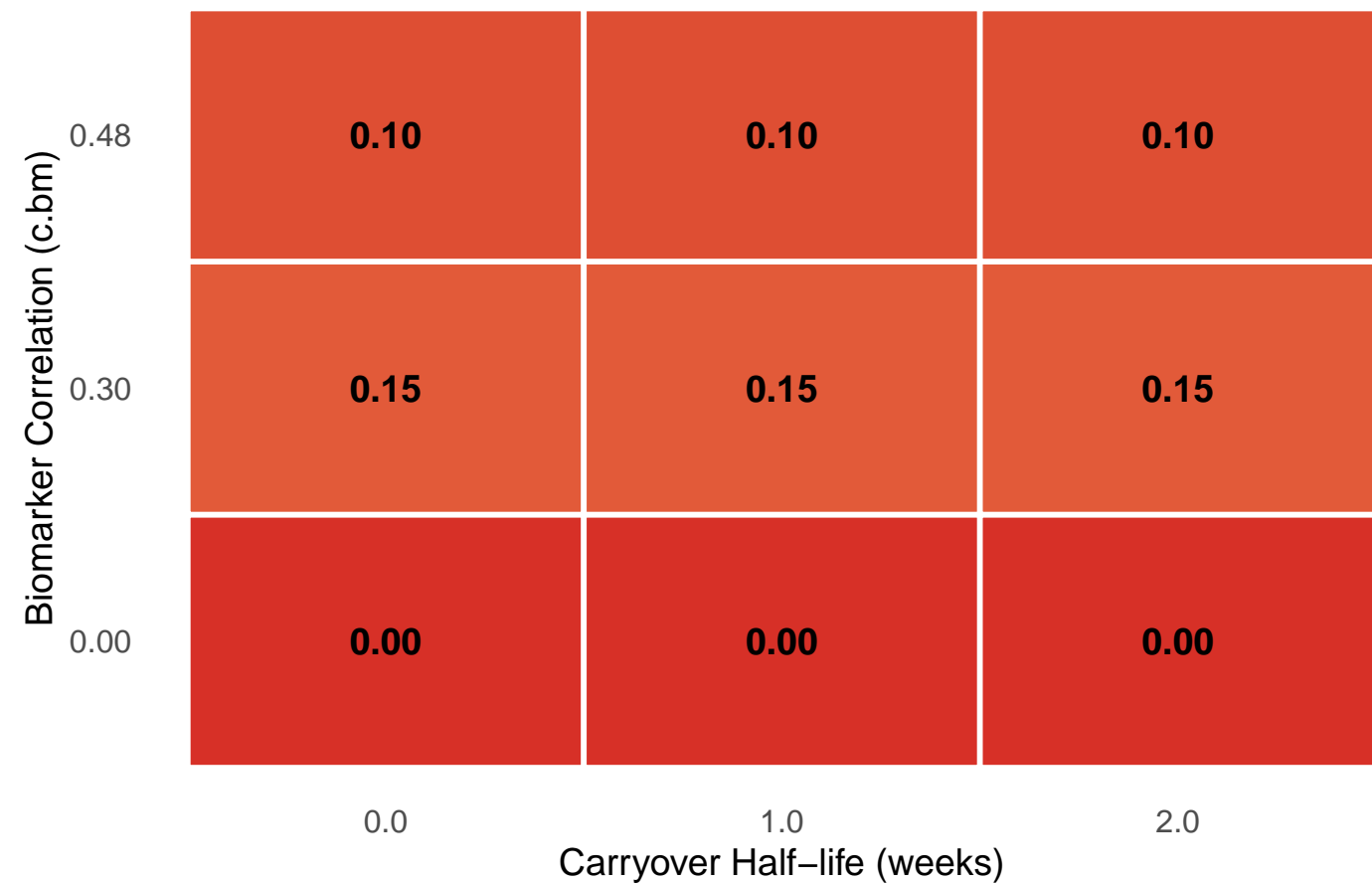
Hybrid Design  
WITH Carryover Model



Crossover Design  
WITHOUT Carryover Model



Crossover Design  
WITH Carryover Model



Each heatmap shows power to detect biomarkerxreatment interaction  
Biomarker correlation levels: 0 (no interaction), 0.3 (moderate), 0.48 (strong)  
Fixed parameters: autocorr = 0.6 (reduced from Hendrickson 0.8), treatment effect = 5.0