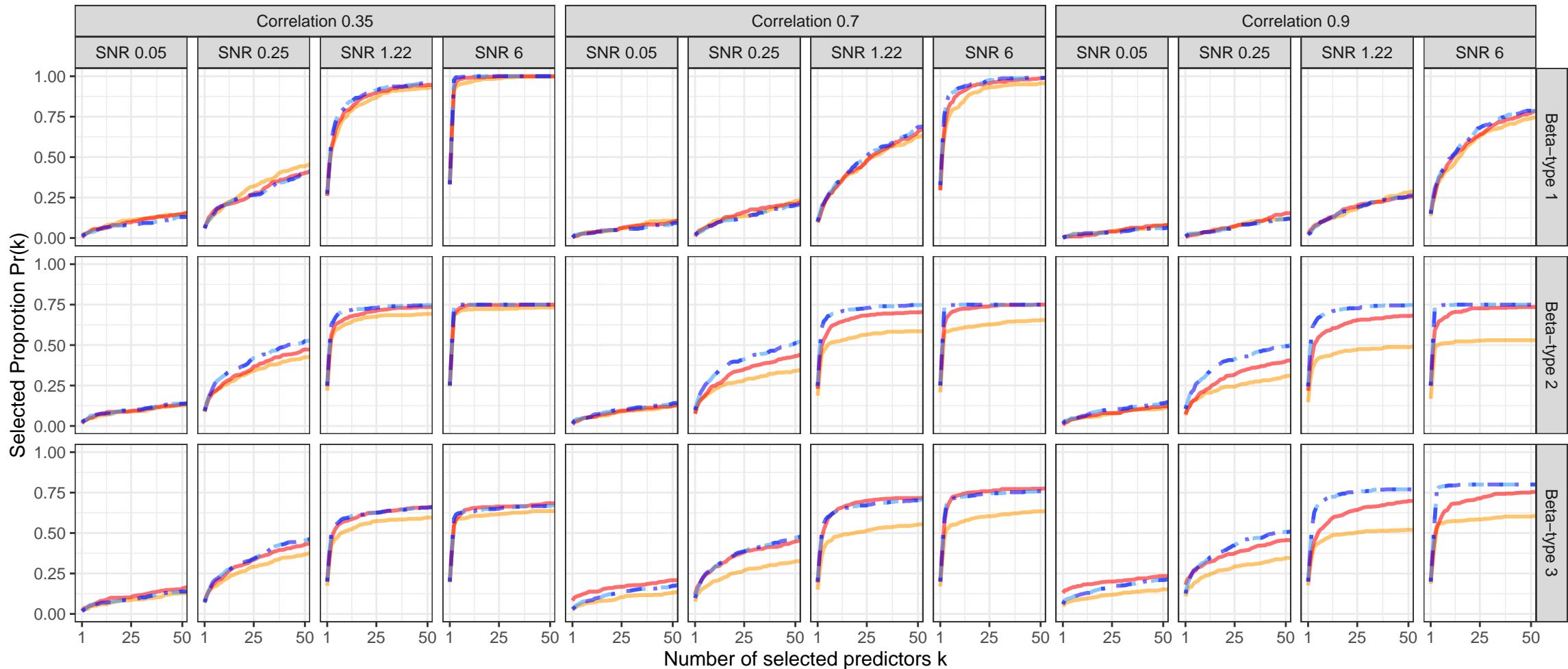n=100, p=1000