simulated null datasets: false postive rate with different levels of replication 0.50 Beta-Binom 0.50 Beta-Binom p = 0.1p = 0.4Binom Binom 0.45 0.45 0.40 0.40 0.35 -0.350.30 0.30 0.250.25 0.20 0.20 0.15 0.15 -0.10 0.10 0.05 positive rate 0.00 0.00 1 8 9 10 1 12 13 14 15 16 11 18 19 10 12 13 14 15 8 9 10 1 12 13 18 10 10 10 10 10 10 10 10 10 10 10 10 0.50 0.50 Beta-Binom p = unif(0,0.8)Beta-Binom 8.0 = 0false 0.45 Binom Binom 0.450.40-0.40 0.350.350.30 0.30 0.250.25 0.20 0.20 0.15 0.15-0.10 0.10-0.05 0.05 +0.00 0.00 8 9 10 1 12 13 18 16 10 10 10 10 10 10 10 10 10 10 9 10 1 12 13 18 10 10 10 10 10 10 10 10 10 10 10 10

level of replication (Nr)