## Supplementary material B



Figure 1: Main simulation scheme operational characteristics  $(Pr(\hat{\tau}) > 0)$ , mean bias of  $\tau$ , 95% coverage probability, empirical power and empirical type I error of  $\theta$ ) for a selected scenario of two to four studies. For abbreviations see Table 1 (Main manuscript).



Figure 2: Main simulation scheme operational characteristics  $(Pr(\hat{\tau}) > 0)$ , mean bias of  $\tau$ , 95% coverage probability, empirical power and empirical type I error of  $\theta$ ) for a selected scenario of two to four studies. For abbreviations see Table 1 (Main manuscript).



Figure 3: Main simulation scheme operational characteristics  $(Pr(\hat{\tau}) > 0)$ , mean bias of  $\tau$ , 95% coverage probability, empirical power and empirical type I error of  $\theta$ ) for a selected scenario of two to four studies. For abbreviations see Table 1 (Main manuscript).



Figure 4: Main simulation scheme operational characteristics  $(Pr(\hat{\tau}) > 0)$ , mean bias of  $\tau$ , 95% coverage probability, empirical power and empirical type I error of  $\theta$ ) for a selected scenario of two to four studies. For abbreviations see Table 1 (Main manuscript).



Figure 5: Conditional subset simulation scheme operational characteristics (Mean bias of  $\tau$ , mean bias, 95% coverage probability, empirical power and empirical type I error of  $\theta$ ) for four studies and  $\tau^2 = 0.5$ . For abbreviations see Table 1 (Main manuscript). First row *y*-axis - 100: 100,000, 50: 50,000, 10: 10,000 simulations



Figure 6: Conditional subset simulation scheme operational characteristics (Mean bias of  $\tau$ , mean bias, 95% coverage probability, empirical power and empirical type I error of  $\theta$ ) for four studies and  $\tau^2 = 2$ . For abbreviations see Table 1 (Main manuscript). First row y-axis - 100: 100,000, 50: 50,000, 10: 10,000 simulations



Figure 7: Main simulation scheme operational characteristics  $(Pr(\hat{\tau}) > 0)$ , mean bias of  $\tau$ , 95% coverage probability, empirical power and empirical type I error of  $\theta$ ) for a selected scenario of two to four studies with a constant continuity correction of 0.1. For abbreviations see Table 1 (Main manuscript).



Figure 8: Main simulation scheme operational characteristics  $(Pr(\hat{\tau}) > 0)$ , mean bias of  $\tau$ , 95% coverage probability, empirical power and empirical type I error of  $\theta$ ) for a selected scenario of two to four studies with a constant continuity correction of 0.1. For abbreviations see Table 1 (Main manuscript).



Figure 9: Conditional subset simulation scheme operational characteristics (Mean bias of  $\tau$ , mean bias, 95% coverage probability, empirical power and empirical type I error of  $\theta$ ) for four studies and  $\tau^2 = 2$  with a constant continuity correction of 0.1.. For abbreviations see Table 1 (Main manuscript). First row y-axis - 100: 100,000, 50: 50,000, 10: 10,000 simulations



Figure 10: Conditional subset simulation scheme operational characteristics (Mean bias of  $\tau$ , mean bias, 95% coverage probability, empirical power and empirical type I error of  $\theta$ ) for four studies and  $\tau^2 = 2$  with a constant continuity correction of 0.1.. For abbreviations see Table 1 (Main manuscript). First row y-axis - 100: 100,000, 50: 50,000, 10: 10,000 simulations