Table S1: Sensitivity analysis for missing data bias

Study	Number		Number of patients with potentially missing data	Number of PSD observed	Additional PSD assuming 20% of patients with missing data had a PSD	Total estimated PSD at 20%	Calculated risk ratio and 95% CI at 20%	Additional PSD assuming 50% of patients with missing data had a PSD	Total estimated PSD at 50%	Calculated risk ratio and 95% CI at 50%
Rasmussen et al., 2003	SSRI	70	35	8	7	15	**0.783 (0.693-0.884)**	18	26	**0.820 (0.735-0.913)**
	Placebo	67	35	19	7	26		18	37	
Almeida et al., 2006	SSRI	48	NA	8	NA	NA		NA	NA	
	Placebo	51	NA	11	NA	NA		NA	NA	
Kim et al., 2017	SSRI	210	67	27	13	40		34	61	
	Placebo	195	73	25	15	40		37	62	
Dennis et al., 2018	SSRI	1564	140	210	28	238		70	280	
	Placebo	1563	140	269	28	297		70	339	
Hankey et al., 2020	SSRI	642	30	33	6	39		17	48	
	Placebo	638	17	46	3	49		23	55	
Lundström et al., 2020	SSRI	750	38	54	8	62		19	73	
	Placebo	750	29	81	6	87		15	96	

To test whether a difference in the incidence of PSD among patients with missing data could affect the calculated risk ratio of the meta-analysis, a post-hoc sensitivity analysis was conducted. If PSD were more common in patients with missing data, this could alter the calculated risk ratio towards no effect. The PSD rate was calculated with 20% and inflated to 50% to overestimate the potential additional PSD among participants with missing data. These additional PSD were added to the observed PSD in each group. Recalculation of risk-ratios remained statistically significant at both 20% (RR: 0.783, 95% CI 0.693 to 0.884) and 50% (RR: 0.783, 95% CI 0.693 to 0.884). Therefore, the missing data of the included studies did not significantly alter the findings of this meta-analysis on PSD prevention through SSRI treatment.

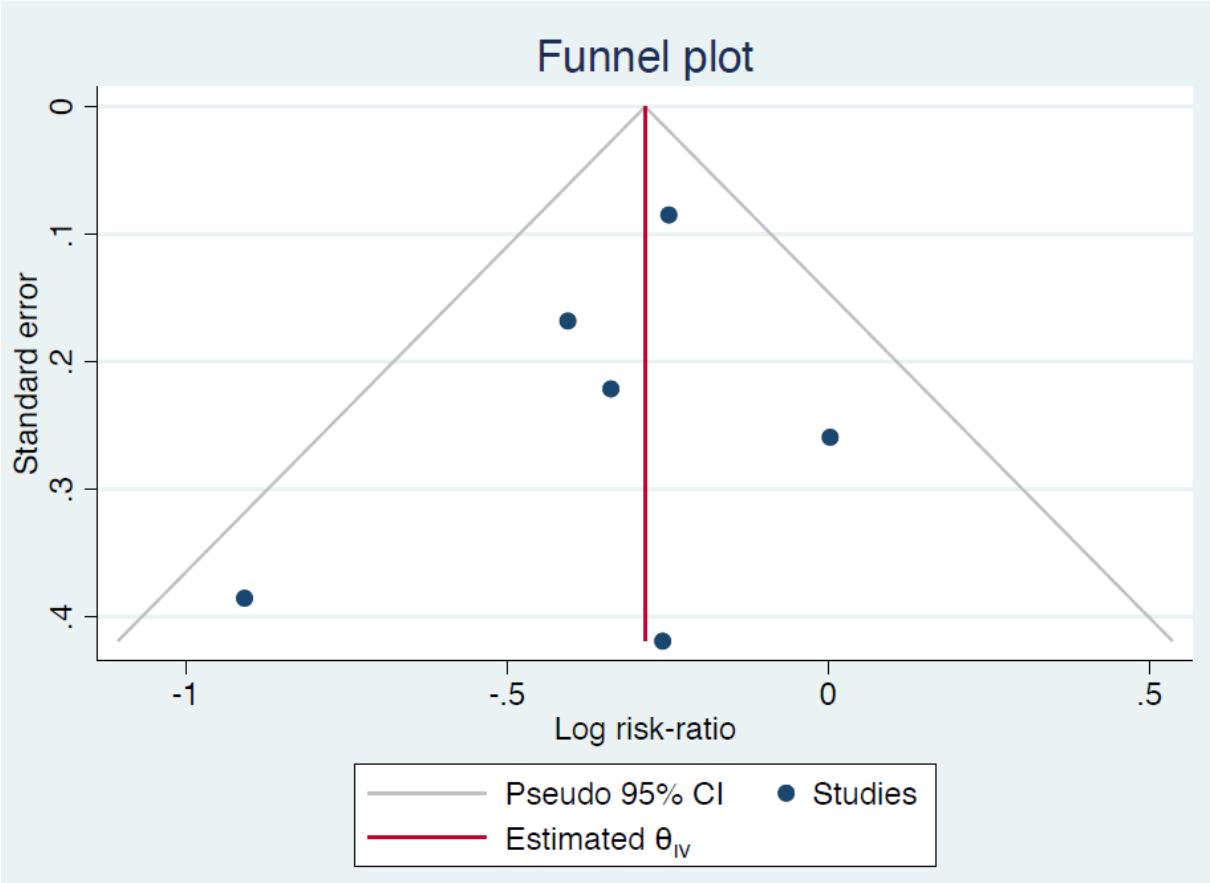


Figure S1: Funnel plot of the included studies

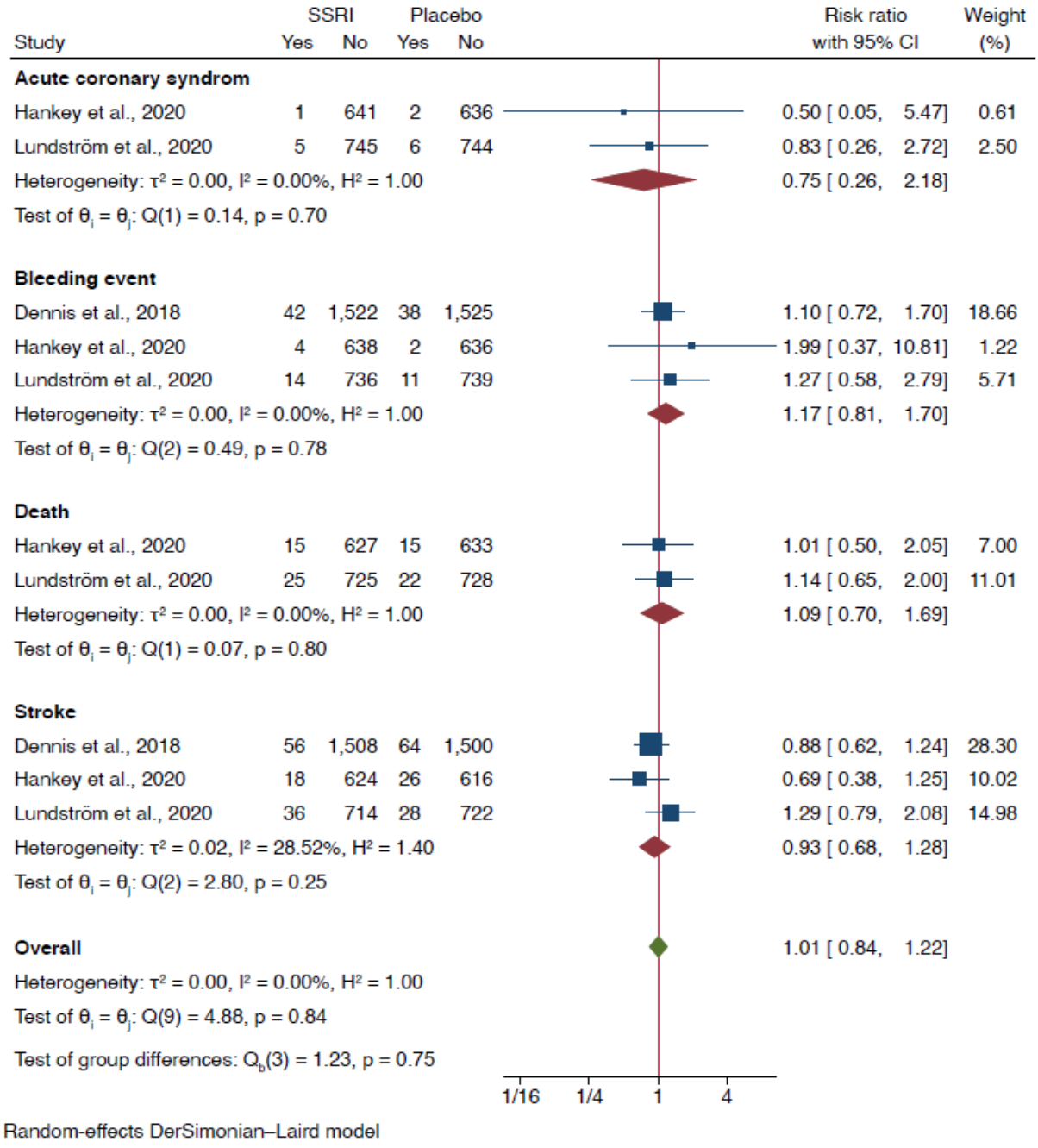
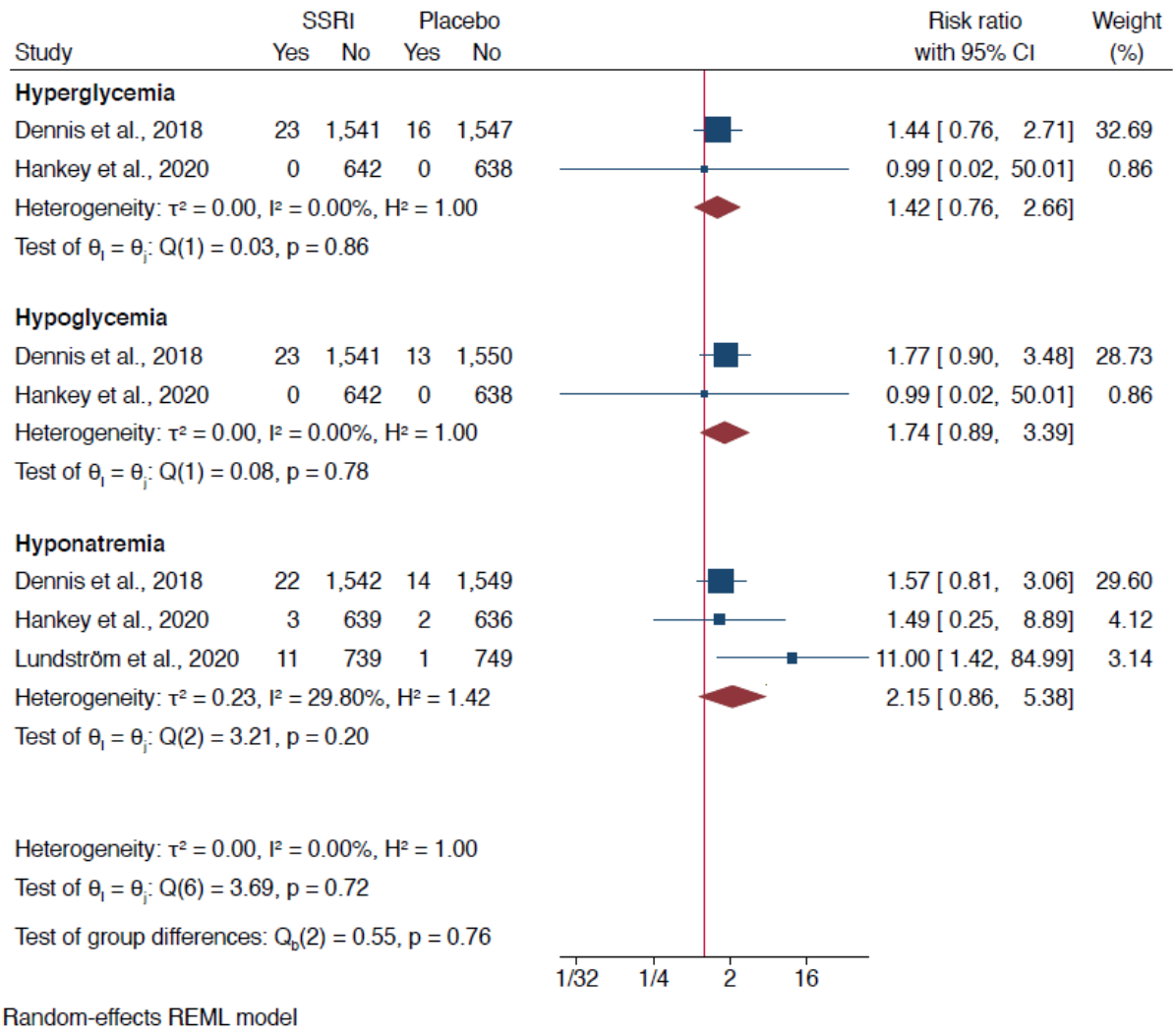
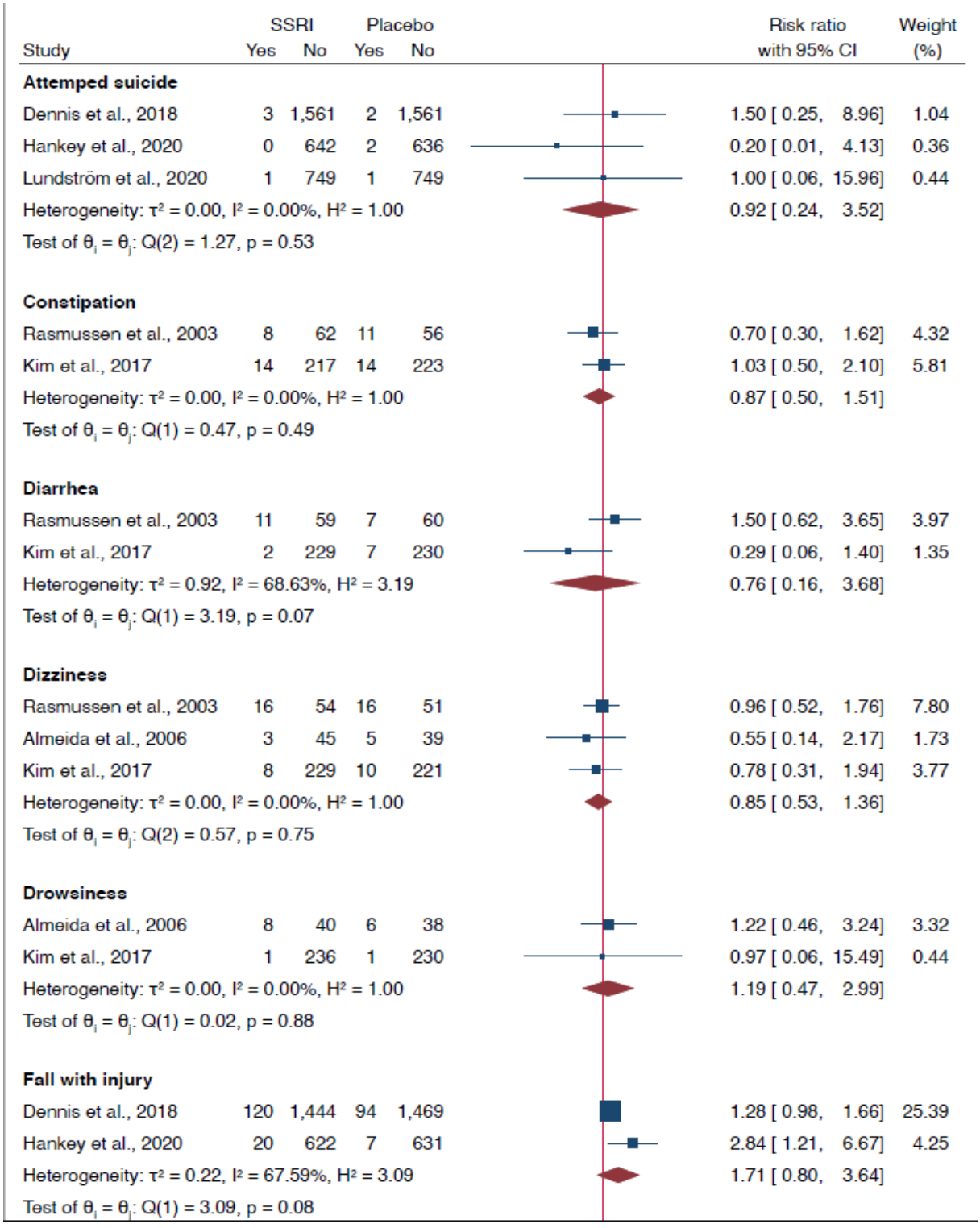


Figure S2: Forest plot of important safety outcomes



FigureS3: Forest plot of adverse events associated with blood level changes


Study
SSRI Yes No
Placebo Yes No
Risk ratio with 95% CI
Weight (%)
Attemped suicide
Dennis et al., 2018 3 1,561 2 1,561 1.50 [0.25, 8.96] 1.04
Hankey et al., 2020 0 642 2 636 0.20 [0.01, 4.13] 0.36
Lundström et al., 2020 1 749 1 749 1.00 [0.06, 15.96] 0.44
Heterogeneity: τ² = 0.00, I² = 0.00%, H² = 1.00 0.92 [0.24, 3.52]
Test of θi = θj: Q(2) = 1.27, p = 0.53
Constipation
Rasmussen et al., 2003 8 62 11 56 0.70 [0.30, 1.62] 4.32
Kim et al., 2017 14 217 14 223 1.03 [0.50, 2.10] 5.81
Heterogeneity: τ² = 0.00, I² = 0.00%, H² = 1.00 0.87 [0.50, 1.51]
Test of θi = θj: Q(1) = 0.47, p = 0.49
Diarrhea
Rasmussen et al., 2003 11 59 7 60 1.50 [0.62, 3.65] 3.97
Kim et al., 2017 2 229 7 230 0.29 [0.06, 1.40] 1.35
Heterogeneity: τ² = 0.92, I² = 68.63%, H² = 3.19 0.76 [0.16, 3.68]
Test of θi = θj: Q(1) = 3.19, p = 0.07
Dizziness
Rasmussen et al., 2003 16 54 16 51 0.96 [0.52, 1.76] 7.80
Almeida et al., 2006 3 45 5 39 0.55 [0.14, 2.17] 1.73
Kim et al., 2017 8 229 10 221 0.78 [0.31, 1.94] 3.77
Heterogeneity: τ² = 0.00, I² = 0.00%, H² = 1.00 0.85 [0.53, 1.36]
Test of θi = θj: Q(2) = 0.57, p = 0.75
Drowsiness
Almeida et al., 2006 8 40 6 38 1.22 [0.46, 3.24] 3.32
Kim et al., 2017 1 236 1 230 0.97 [0.06, 15.49] 0.44
Heterogeneity: τ² = 0.00, I² = 0.00%, H² = 1.00 1.19 [0.47, 2.99]
Test of θi = θj: Q(1) = 0.02, p = 0.88
Fall with injury
Dennis et al., 2018 120 1,444 94 1,469 1.28 [0.98, 1.66] 25.39
Hankey et al., 2020 20 622 7 631 2.84 [1.21, 6.67] 4.25
Heterogeneity: τ² = 0.22, I² = 67.59%, H² = 3.09 1.71 [0.80, 3.64]
Test of θi = θj: Q(1) = 3.09, p = 0.08

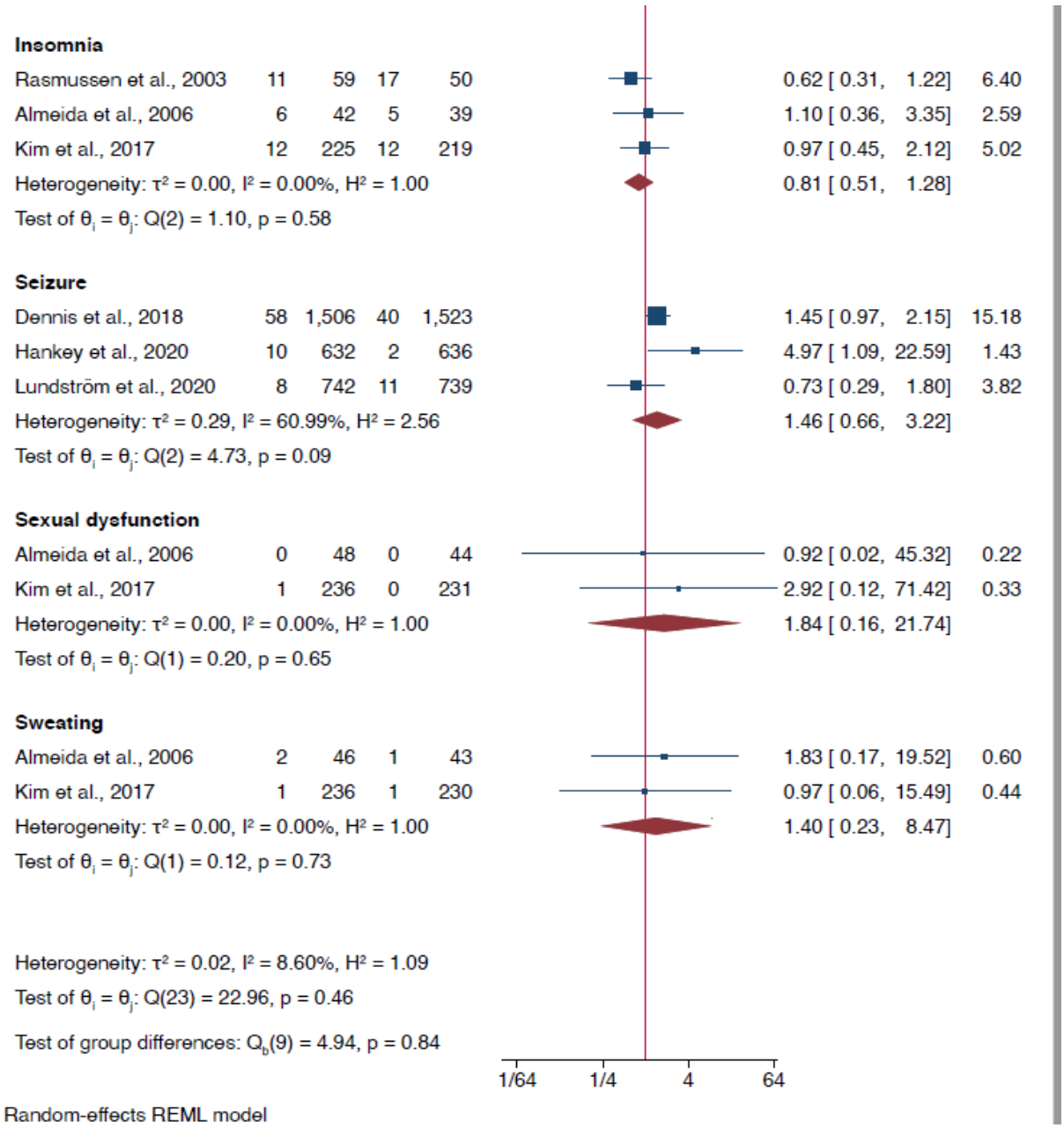


FIGURE S4: Forest plot of other adverse events

Study	Randomization process	Deviations from intended intervention	Missing outcome data	Measurement of the outcome	Selection of the reported result	Overall bias
Rasmussen et al., 2003	Unclear	Unclear	High	Low	Low	Some concerns
Almeida et al., 2006	Low	Low	Unclear	Low	Low	Some concerns
Kim et al., 2017	Low	Low	Some concerns	Low	Low	Some concerns
Dennis et al., 2018	Low	Low	Some concerns	Low	Low	Some concerns
Hankey et al., 2020	Low	Low	Some concerns	Low	Low	Some concerns
Lundström et al., 2020	Low	Low	Some concerns	Low	Low	Some concerns

FIGURE S5: Risk of bias assessment