

Table 1: Summary statistics for bivariate random effects method recalculations versus results of published traditional univariate random effects pooling estimates

	Avg. Published Univariate	Avg. Calculated Bivariate	Avg. Δ (Calc. – Pub.)	p-value
Sensitivity				
Lower C.I. limit	78.4 (74.9, 81.8)	71.8 (68.1, 75.5)	-6.5 (-7.8, -5.3)	<0.001
Summary estimate	83.3 (80.2, 86.4)	81.9 (79.2, 84.7)	-1.4 (-2.2, -0.5)	<0.001
Upper C.I. limit	87.5 (84.7, 90.4)	88.7 (86.7, 90.7)	1.1 (-0.2, 2.5)	0.78
C.I. Range	9.2 (8.5, 9.8)	16.9 (15.1, 18.6)	7.7 (5.8, 9.6)	<0.001
Specificity				
Lower C.I. limit	82.4 (79.3, 85.5)	73.5 (69.1, 77.8)	-8.9 (-11.3, -6.5)	<0.001
Summary estimate	87.0 (84.3, 89.7)	84.5 (81.9, 87.2)	-2.5 (-3.4, -1.6)	<0.001
Upper C.I. limit	90.3 (88.0, 92.6)	91.3 (89.6, 93.0)	1.0 (-0.2, 2.1)	0.98
C.I. Range	8.0 (7.2, 8.8)	18.0 (15.3, 20.7)	9.9 (7.0, 12.7)	<0.001

Re-analyses were performed for 33 reviews, together performing 51 meta-analyses.

*p values were determined by logit transforming the univariate and bivariate values for each study. Differences between these logit transformed values for each study were compared to zero using a One-Tailed T-Test. Studies reporting values of 100% had a -0.5% continuity correction applied.