

Supporting Information

Region	$\hat{\pi}_0$	95% CI	n_0	n	$\hat{\pi}_I$	95% CI	n_I	n_C
AI	0.45	(0.19,0.74)	4	9	0.86	(0.54,1.00)	5	0
Hp.A	0.62	(0.29,0.90)	4	6	0.75	(0.29,0.99)	2	0
PI	0.40	(0.14,0.70)	3	8	0.71	(0.36,0.96)	4	1
T	0.67	(0.28,0.95)	3	4	0.67	(0.16,0.99)	1	0
S1	0.71	(0.36,0.96)	4	5	0.67	(0.16,0.99)	1	0
S2	0.71	(0.36,0.96)	4	5	0.67	(0.16,0.99)	1	0
Pfc	0.38	(0.15,0.65)	4	11	0.67	(0.35,0.91)	5	2
Acc	0.42	(0.17,0.69)	4	10	0.62	(0.29,0.90)	4	2
Pcc	0.33	(0.05,0.72)	1	4	0.6	(0.19,0.93)	2	1
Th	0.45	(0.19,0.74)	4	9	0.57	(0.22,0.88)	3	2
Pag	0.33	(0.01,0.84)	0	1	0.33	(0.01,0.84)	0	1

Table S1 - Estimates of the probability of NS (π_0) and the probability of IBS>Control(π_I): Includes corresponding 95% credible intervals, for binomial models with uniform priors (upper and lower bounds). Abbreviations: n – Number of studies reporting; CI – credible interval; Acc – Anterior Cingulate Cortex, PFC – Prefrontal Cortex; AI/PI – Anterior/Posterior Insula; Hp/Am – Hippocampus/Amygdala (reported together); S1/S2– Somatosensory Area I & II; Pcc – Posterior Cingulate Cortex; T – Temporal Lobule; PAG – Periaqueductal grey matter.

n	K							
	0	1	2	3	4	5	6	7
4	0.15714	0.52190	0.31666	0.00430				
5	0.07732	0.35461	0.47214	0.09593				
6	0.03790	0.21882	0.44508	0.27864	0.01956			
7	0.01885	0.12666	0.34371	0.39195	0.11644	0.00239		
8	0.00943	0.07357	0.23511	0.38813	0.25815	0.03545	0.00016	
9	0.00463	0.03956	0.15481	0.31996	0.34393	0.12859	0.00852	
10	0.00226	0.02202	0.09813	0.24048	0.34179	0.24021	0.05346	0.00165

Table S2 - Probability of border sum totals: Probability that the minimum border sum U for $n=4, 5, \dots, 10$ is equal to $k=0, 1, \dots, 7$; Under the null hypothesis P_0 . Based on 100,000 simulated matrices N_0 , each based on a different randomly chosen P_0 .