Patients Study	with schizophrenia Total Mean SI	Healthy controls Total Mean SD	Standardised Mean Difference	SMD 95%-	Weight Weight Cl (fixed) (random)	
metabolite = Glu da Silva Alves et al. 2011 (45) Goldstein et al. 2015 (41) Hugdahl et al. 2015 (40) Smesny et al. 2015 (49) Chen et al. 2017 (39) Maddock et al. 2018 (47) Iwata et al. 2019 (38) Kaminski et al. 2019 (25) Wang et al. 2019 (46) Fixed effect model Random effects model Heterogeneity: $I^2 = 68\%$, $\tau^2 = 0.1$	11 6.39 1.3200 42 1.17 0.0766 18 5.60 3.0000 31 11.61 1.0800 24 1.64 2.1514 17 0.90 0.0700 64 14.02 1.5500 55 7.92 1.0900 72 6.41 0.7500 334	15 1.12 0.0500 26 7.63 2.9025 31 10.49 1.6840 4 24 1.28 1.8677 25 0.90 0.0800 26 13.94 1.3200 35 8.22 0.9000		-0.04 [-0.76; 0.6 - 0.68 [0.07; 1.2 -0.69 [-1.31; -0.0 - 0.79 [0.28; 1.3 0.18 [-0.39; 0.7 0.00 [-0.62; 0.6 0.05 [-0.40; 0.5 -0.29 [-0.72; 0.1 -0.38 [-0.69; -0.0 -0.04 [-0.21; 0.1 0.02 [-0.28; 0.3	8] 5.8% 7.1% 7] 5.5% 6.9% 1] 7.8% 8.2% 5] 6.5% 7.5% 2] 5.5% 7.0% 1] 10.1% 9.0% 3] 11.5% 9.4% 6] 20.7% 10.9% 2] 77.4%	
metabolite = Glx Goto et al. 2012 (48) Kegeles et al. 2012 (74) Jessen et al. 2013 (43) Coughlin et al. 2015 (42) Fixed effect model Random effects model Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, p Fixed effect model Random effects model Heterogeneity: $I^2 = 58\%$, $\tau^2 = 0.1$ Residual heterogeneity: $I^2 = 60\%$	429 009, <i>p</i> < 0.01	22 0.00 0.0005 20 2.06 0.3300	-1 -0.5 0 0.5 1	0.35 [-0.31; 1.0] -0.27 [-0.82; 0.2] 0.16 [-0.46; 0.7] 0.12 [-0.51; 0.7] 0.05 [-0.25; 0.3] 0.05 [-0.25; 0.3] -0.02 [-0.16; 0.1] 0.03 [-0.20; 0.2]	7] 7.0% 7.8% 8] 5.4% 6.9% 5] 5.3% 6.8% 6] 22.6% 6] 28.1% 2] 100.0%	