



Supplementary Fig. 1. Linkage disequilibrium diagram for the investigated samples. Supplementary Fig. 1 shows Linkage disequilibrium results from Haploview analysis for the investigated samples. EU, European samples; MDD, major depressive disorder; BPD, bipolar disorder; Ctrl, control.

Supplementary Table 1. Samples descriptive data

Variables	Samples		
	EU (n = 246)	Korean MDD (n = 242)	Korean BPD (n = 132)
Sex (male/female/missing)	96/150/0	92/150/0	87/45/0
Suicide history (yes/no/missing)	85/155/6	54/187/1	22/89/21
Previous depressive events (yes/no/missing)	222/0/24	-	-
Family history (yes/no/missing)	-	47/194/1	42/37/49
Treatment remission (yes/no/missing)	-	62/180/0	-
Treatment response (yes/no/missing)	-	91/151/0	-
Treatment resistance (yes/no/missing)	-	68/173/1	-
Age	47.42 ± 13.36	43.57 ± 14.81	36.36 ± 11.60
Age at onset	-	39.75 ± 13.76	26.58 ± 10.20
Mean Hamilton depression scale score at baseline	13.38 ± 8.21	22.75 ± 7.30	7.70 ± 4.03
Mean Hamilton depression scale score improvement	-	13.64 ± 6.61	-
Mean Hamilton depression scale score at discharge	-	38.74 ± 24.98	-
Body mass index at baseline	25.05 ± 10.87	-	29.83 ± 15.69

Values are presented as number only or mean ± standard deviation. In Supplementary Table 1 in reported the descriptive data of the samples under investigation. Other than the samples described, in this work a sample of 366 Healthy subjects of Korean ancestry was also included. EU, European samples; MDD, major depressive disorder; BPD, bipolar disorder.

Supplementary Table 2. Hardy–Weinberg Equilibrium test results on the investigated samples

Samples	SNP	Position	ObsHET	PredHET	HWpval	%Geno	MAF	Alleles
EU	rs10110456	142609472	0.378	0.465	0.0274	63.9	0.369	G:A
	rs11167152	142609716	0.254	0.446	4.12E-04*	70.9	0.335	C:G
	rs7465272	142610477	0.448	0.441	0.938	98.8	0.328	T:A
	rs10097505	142612823	0.362	0.482	3.00E-04*	91.8	0.404	G:A
Korean MDD	rs10110456	142609472	0.488	0.499	0.7922	100	0.479	G:A
	rs11167152	142609716	0.017	0.016	1	99.6	0.008	C:G
	rs7465272	142610477	0.36	0.383	0.4068	100	0.258	T:A
	rs10097505	142612823	0.423	0.378	0.0919	99.6	0.253	G:A
Korean BPD	rs10110456	142609472	0.47	0.499	0.5864	100	0.477	G:A
	rs11167152	142609716	0	0	1	100	0	C:C
	rs7465272	142610477	0.417	0.437	0.706	100	0.322	T:A
	rs10097505	142612823	0.386	0.379	1	100	0.254	G:A
Korean Ctrl	rs10110456	142609472	0.483	0.5	0.6095	99.7	0.485	A:G
	rs11167152	142609716	0.012	0.012	1	100	0.006	C:G
	rs7465272	142610477	0.408	0.404	0.9894	100	0.281	T:A
	rs10097505	142612823	0.403	0.402	1	99.7	0.278	G:A

In Supplementary Table 2 are reported the results of Hardy–Weinberg Equilibrium test for the investigated samples.

ObsHET, observed heterozygosity; PredHET, predicted heterozygosity; HWpval, p value for Hardy–Weinberg Equilibrium test; MAF, minor allele frequency; EU, European samples; MDD, major depressive disorder; BPD, bipolar disorder; Ctrl, controls.

* $p < 0.001$.