Supplemental Figures

Supplemental Figure S1: Overview of research institutes participating in the ENIGMA-Major Depressive Disorder Working Group, displayed on a world map.

Supplemental Figure S2: Forest plot of meta-analytic effect size hippocampus with $p<0.05$: MDD patients versus controls

Supplemental Figure S3: Forest plot of meta-analytic effect size hippocampus with $p<0.05$: Recurrent MDD patients versus controls

Supplemental Figure S4: Forest plot of meta-analytic effect size hippocampus with $p<0.05$: Early age of onset (≤ 21) MDD patients versus controls

Supplemental Figure S5: Forest plot of meta-analytic effect size amygdala with $p<0.05$: Early age of onset (≤ 21) MDD patients versus controls
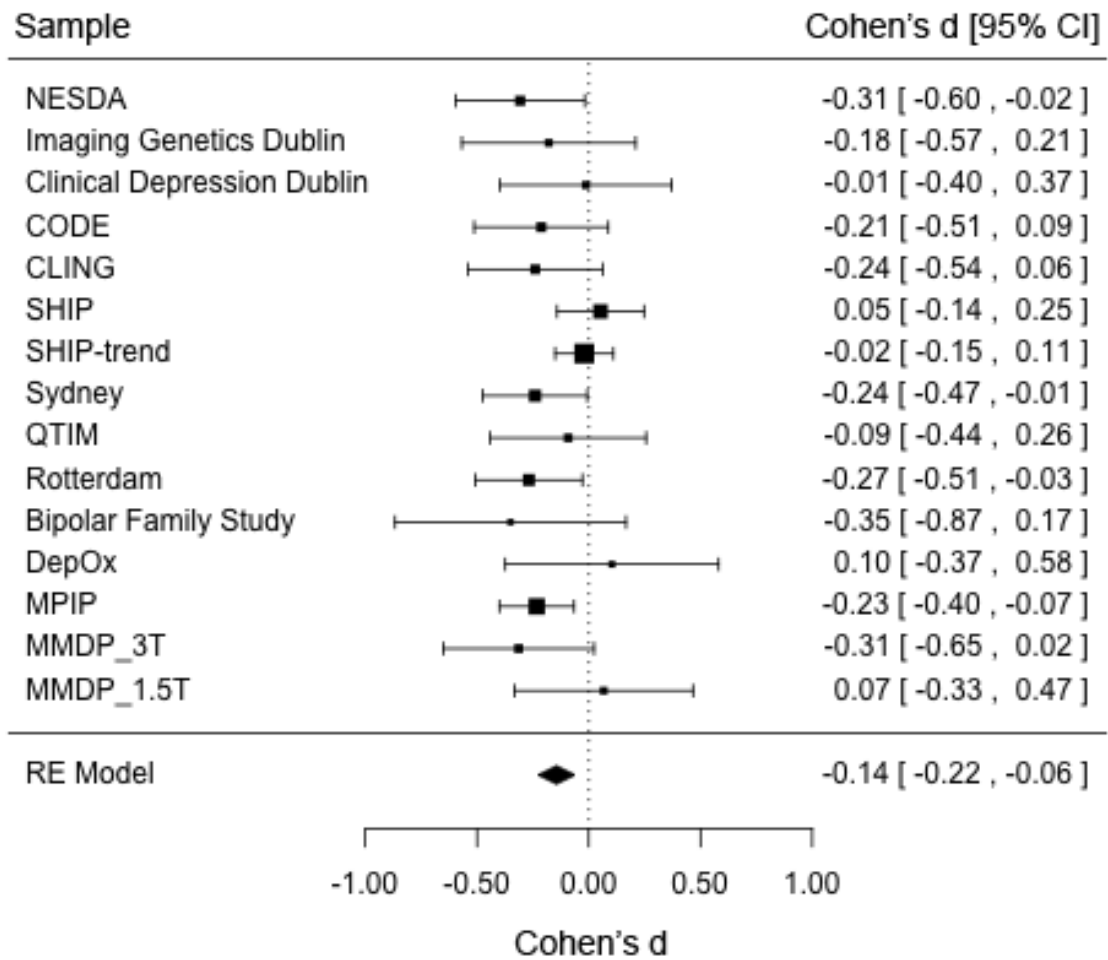
Supplemental Figure S6: Forest plot of meta-analytic effect size lateral ventricles with $p<0.05$: Early age of onset (≤ 21) MDD patients versus controls

Supplemental Figure S7: Scatterplots of the percentage of patients taking antipsychotic medication versus the effect size for the caudate at each site
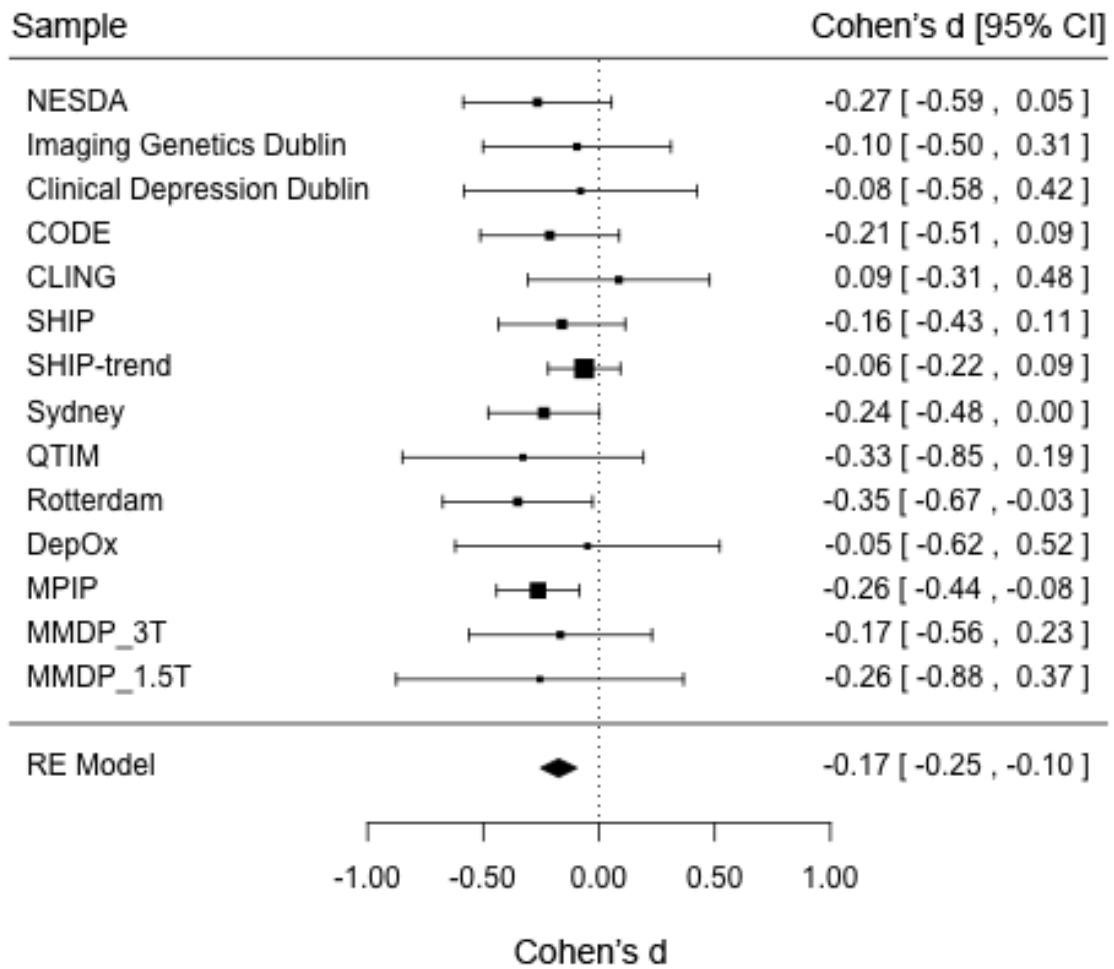
Supplemental Figure S1: Overview of research institutes participating in the ENIGMA-Major Depressive Disorder Working Group, displayed on a world map.

Mean Hippocampus

Sample		Cohen's d [95% CI]
NESDA		-0.31 [-0.60 , -0.02]
Imaging Genetics Dublin		-0.18 [-0.57 , 0.21]
Clinical Depression Dublin		-0.01 [-0.40 , 0.37]
CODE		-0.21 [-0.51 , 0.09]
CLING		-0.24 [-0.54 , 0.06]
SHIP		0.05 [-0.14 , 0.25]
SHIP-trend		-0.02 [-0.15 , 0.11]
Sydney		-0.24 [-0.47 , -0.01]
QTIM		-0.09 [-0.44 , 0.26]
Rotterdam		-0.27 [-0.51 , -0.03]
Bipolar Family Study		-0.35 [-0.87 , 0.17]
DepOx		0.10 [-0.37 , 0.58]
MPIP		-0.23 [-0.40 , -0.07]
MMDP_3T		-0.31 [-0.65 , 0.02]
MMDP_1.5T		0.07 [-0.33 , 0.47]
RE Model		-0.14 [-0.22 , -0.06]

-1.00   -0.50   0.00   0.50   1.00

Cohen's d

Supplemental Figure S2: Forest plot of meta-analytic effect size hippocampus with *p*<0.05: MDD patients versus controls

Mean Hippocampus

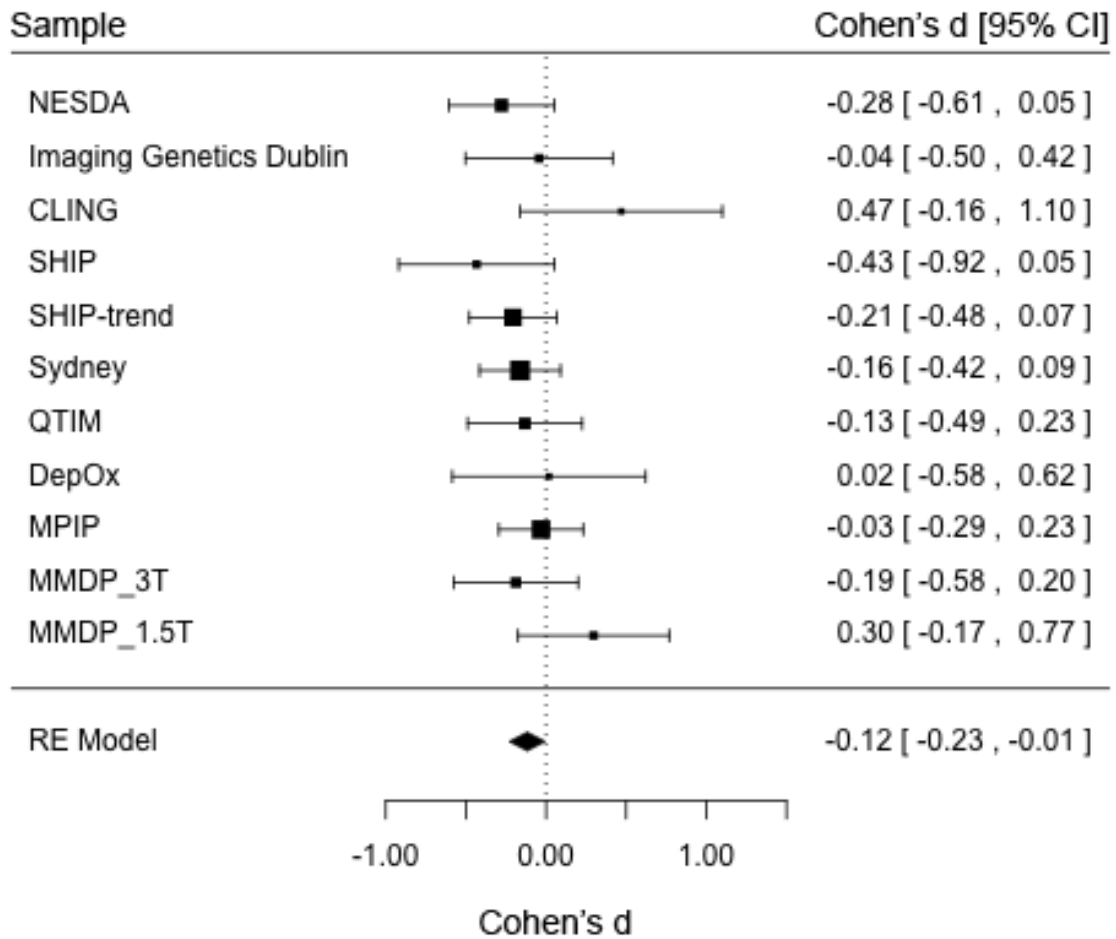| Sample		Cohen's d [95% CI]
NESDA		-0.27 [-0.59 , 0.05]
Imaging Genetics Dublin		-0.10 [-0.50 , 0.31]
Clinical Depression Dublin		-0.08 [-0.58 , 0.42]
CODE		-0.21 [-0.51 , 0.09]
CLING		0.09 [-0.31 , 0.48]
SHIP		-0.16 [-0.43 , 0.11]
SHIP-trend		-0.06 [-0.22 , 0.09]
Sydney		-0.24 [-0.48 , 0.00]
QTIM		-0.33 [-0.85 , 0.19]
Rotterdam		-0.35 [-0.67 , -0.03]
DepOx		-0.05 [-0.62 , 0.52]
MPIP		-0.26 [-0.44 , -0.08]
MMDP_3T		-0.17 [-0.56 , 0.23]
MMDP_1.5T		-0.26 [-0.88 , 0.37]
RE Model		-0.17 [-0.25 , -0.10]

Cohen's d: -1.00   -0.50   0.00   0.50   1.00

Supplemental Figure S3: Forest plot of meta-analytic effect size hippocampus with *p*<0.05: Recurrent MDD patients versus controls
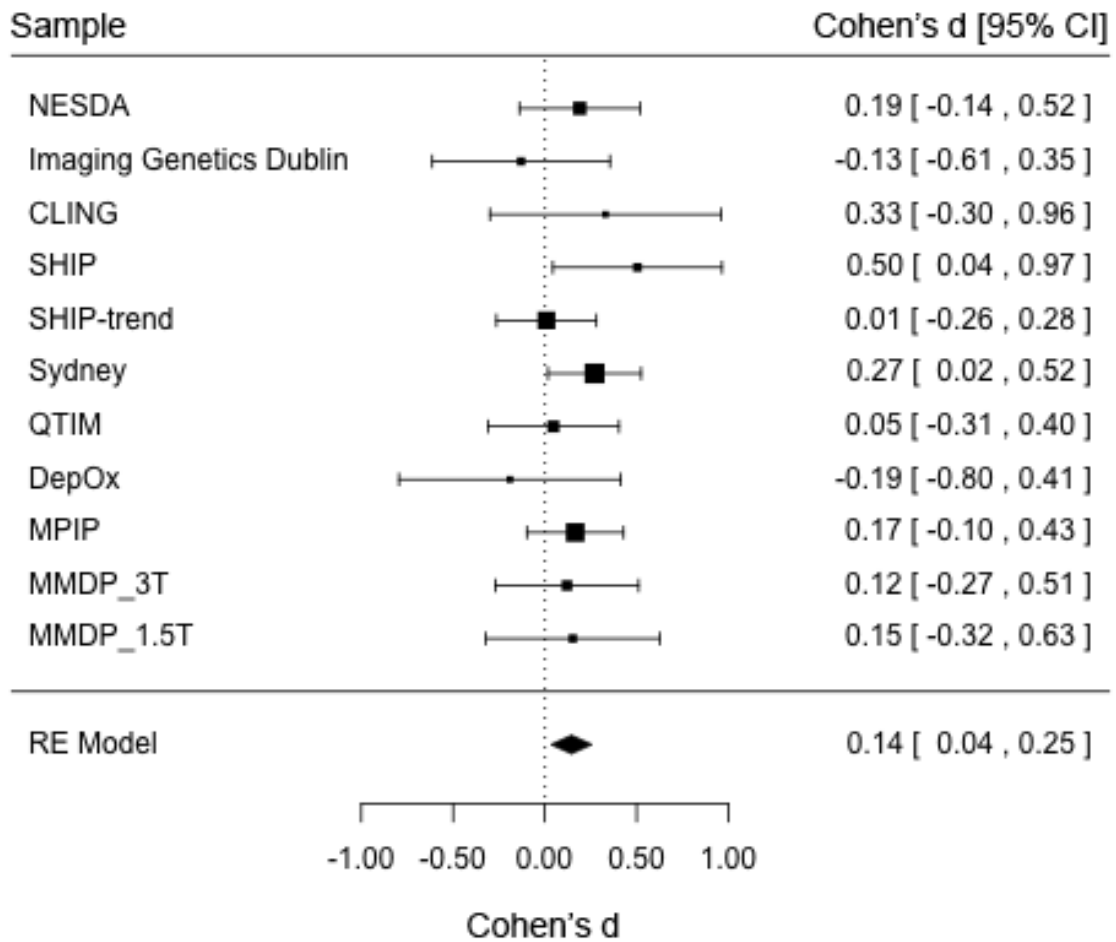
Mean Hippocampus

Sample	Cohen's d [95% CI]
NESDA	-0.43 [-0.76 , -0.10]
Imaging Genetics Dublin	-0.26 [-0.73 , 0.21]
CLING	-0.44 [-1.07 , 0.19]
SHIP	-0.17 [-0.65 , 0.30]
SHIP-trend	-0.24 [-0.51 , 0.04]
Sydney	-0.14 [-0.39 , 0.11]
QTIM	-0.10 [-0.46 , 0.27]
DepOx	0.58 [-0.05 , 1.21]
MPIP	-0.38 [-0.64 , -0.11]
MMDP_3T	-0.19 [-0.57 , 0.20]
MMDP_1.5T	0.18 [-0.29 , 0.65]
RE Model	-0.20 [-0.31 , -0.10]

Cohen's d

Supplemental Figure S4: Forest plot of meta-analytic effect size hippocampus with
p<0.05: Early age of onset ($\leq$ 21) MDD patients versus controls

Mean Amygdala

| Sample		Cohen's d [95% CI]
NESDA		-0.28 [-0.61 , 0.05]
Imaging Genetics Dublin		-0.04 [-0.50 , 0.42]
CLING		0.47 [-0.16 , 1.10]
SHIP		-0.43 [-0.92 , 0.05]
SHIP-trend		-0.21 [-0.48 , 0.07]
Sydney		-0.16 [-0.42 , 0.09]
QTIM		-0.13 [-0.49 , 0.23]
DepOx		0.02 [-0.58 , 0.62]
MPIP		-0.03 [-0.29 , 0.23]
MMDP_3T		-0.19 [-0.58 , 0.20]
MMDP_1.5T		0.30 [-0.17 , 0.77]
RE Model		-0.12 [-0.23 , -0.01]

Cohen's d axis: -1.00   0.00   1.00

Supplemental Figure S5: Forest plot of meta-analytic effect size amygdala with p<0.05: Early age of onset (≤ 21) MDD patients versus controls

Mean Lateral Ventricle

Sample		Cohen's d [95% CI]
NESDA		0.19 [-0.14 , 0.52]
Imaging Genetics Dublin		-0.13 [-0.61 , 0.35]
CLING		0.33 [-0.30 , 0.96]
SHIP		0.50 [0.04 , 0.97]
SHIP-trend		0.01 [-0.26 , 0.28]
Sydney		0.27 [0.02 , 0.52]
QTIM		0.05 [-0.31 , 0.40]
DepOx		-0.19 [-0.80 , 0.41]
MPIP		0.17 [-0.10 , 0.43]
MMDP_3T		0.12 [-0.27 , 0.51]
MMDP_1.5T		0.15 [-0.32 , 0.63]
RE Model		0.14 [0.04 , 0.25]

Cohen's d

-1.00 -0.50 0.00 0.50 1.00

Supplemental Figure S6: Forest plot of meta-analytic effect size lateral ventricles with *p*<0.05: Early age of onset (≤ 21) MDD patients versus controls
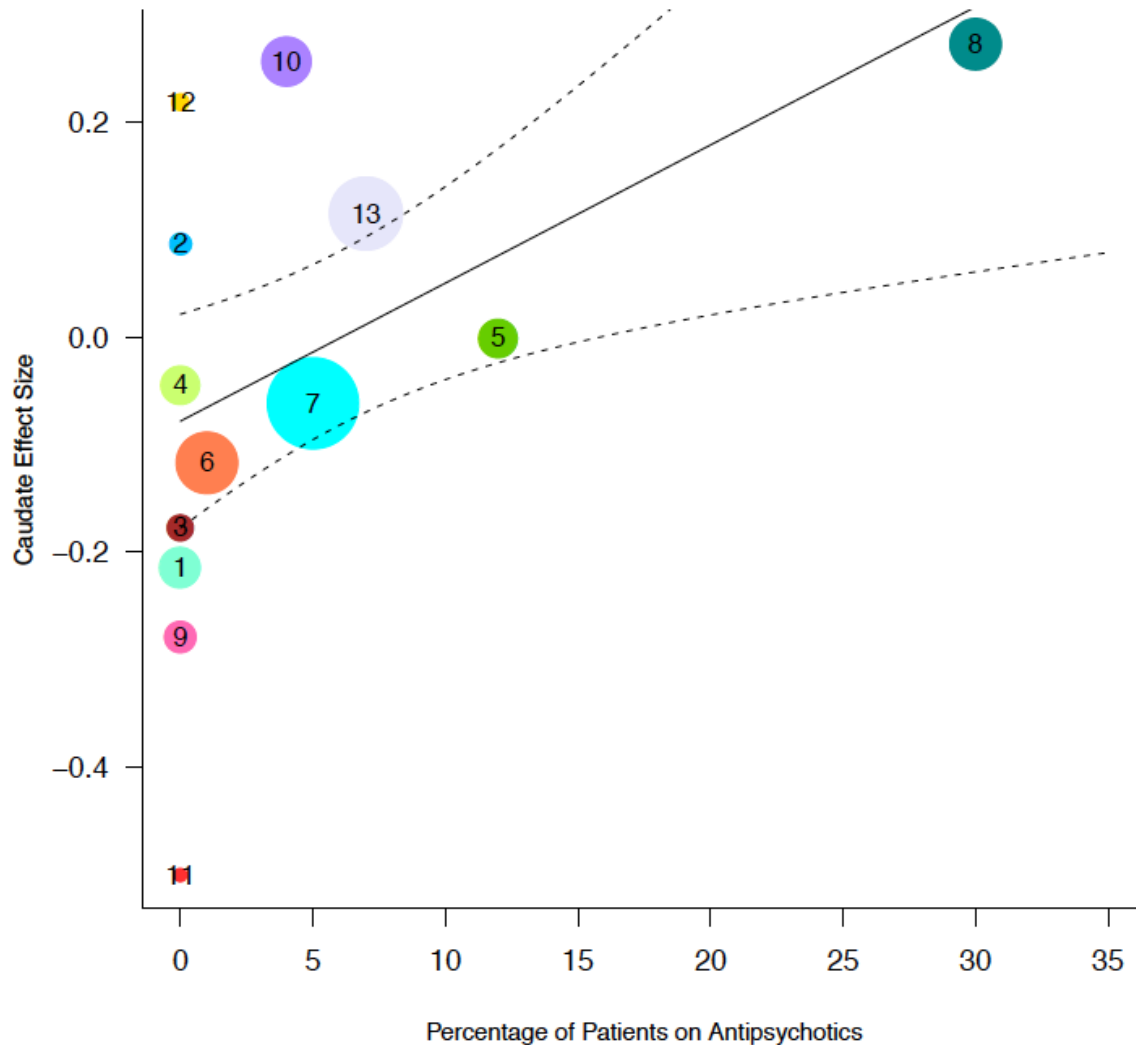
Figure S7. Scatterplots of the percentage of patients taking antipsychotic medication versus the effect size for the caudate at each site. Points are numbered according to the order of study sites listed in Table 1 (note: MMDP 3T and MMDP 1.5T studies were excluded from this analysis due to missing data on antipsychotic use). The size of each point corresponds to the inverse of the standard error for the effect size at each site (i.e., sites with larger samples have bigger points). The solid black line represents the effect of the percentage of patients taking antipsychotics on the effect size (the result of the moderator analysis) weighted by the inverse of the standard error in each sample. A positive association of the percentage of patients using antipsychotics on the caudate effect size was observed using a Bonferroni significance threshold for comparisons of 9 brain regions ($P^* = 0.05/9 \sim 5.6 \times 10^{-3}$), i.e. caudate volume of MDD patients more strongly increased relative to controls as the percentage of patients taking antipsychotic medication increased.