Correction to: Shared genetic architecture between metabolic traits and Alzheimer's disease: a large-scale genome-wide cross-trait analysis

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Page 4: In the “Results-Genetic correlation between AD and metabolic traits” section, the sentence “We did not observe substantial genetic correlation between AD and obesity traits (BMI and WHR, both $R_g < 0.05$ and $P > 0.3$), T2D ($R_g = 0.106$, $P > 0.2$) and other lipid traits (LDL, TC and TG, $R_g = 0.104$, -0.076 , 0.022 , respectively, all $P > 0.17$) (Table 1)” should be “We did not observe substantial genetic correlation between AD and obesity traits (BMI and WHR, both $R_g < 0.05$ and $P > 0.3$), T2D ($R_g = 0.106$, $P > 0.2$) and other lipid traits (LDL, TC and TG, $R_g = -0.178$, -0.108 , -0.051 , respectively, all $P > 0.39$) (Table 1)”.

Page 4: In the “Results-Genetic correlation between AD and metabolic traits” section, the sentence “We also observed that HDL had a significant genetic correlation with AD ($R_g = -0.137$, $P = 0.0436$)” should be “We also observed

that HDL had a significant genetic correlation with AD ($R_g = 0.322$, $P = 0.017$)”.

Page 4: In the “Results-Analysis of partitioned genetic correlation by functional category section”, the sentence “In addition, the transcribed region was found to have the highest level of genetic correlation between AD and HDL ($R_g = -0.1471$)” should be “In addition, the transcribed region was found to have the highest level of genetic correlation between AD and HDL ($R_g = 0.261$)”.

Page 9: In the second paragraph of the Discussion section, the sentence “Our findings suggest that the phenotypic correlation between AD and metabolic traits was due to a common genetic predisposition base” should be “Our findings suggest that the phenotypic correlation between AD and metabolic traits was due to a common genetic predisposition base, however, may not be in the same direction”.

Page 9: In the second paragraph of the Discussion section “In the analysis of partitioned co-heritability by functional categories, we observed positive genetic correlation between AD and fasting glucose, FG-FINS meta-analysis” should be “In the analysis of partitioned co-heritability by functional categories, we observed positive genetic correlation between AD and fasting glucose, FG-FINS meta-analysis or HDL”.

Page 9: In the Discussion second paragraph, the sentence “and genetic correlation estimates were significant in transcribed, TFBS, super enhancer, H3K4me1, H3K27ac and DGF in AD–HDL trait pair (Fig. 1b)” should be “and genetic correlation estimates were significant in transcribed, TFBS, super enhancer, H3K4me3, H3K4me1, FetalDHS, DHS and DGF in AD–HDL trait pair (Fig. 1b)”.

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