Objective: The aim of this study was to determine whether the brain-derived neurotrophic factor (BDNF) 196 G/A or catechol-O-methyltransferase (COMT) Val158Met polymorphisms is associated with susceptibility to ADHD.

Method: We conducted a meta-analysis of the associations between the BDNF 196 G/A and COMT Val158Met polymorphisms and ADHD.

Results: Sixteen studies consisting of 3,594 patients with ADHD and 4,040 controls were included in this meta-analysis. Our results showed no association between ADHD and the BDNF 196 A allele in all participants (odds ratio [OR] = 0.958, 95% confidence interval [CI] = [0.800, 1.146], p = .638), European or Asian population. Meta-analysis indicated no association between ADHD and the COMT G allele in all study participants (OR = 1.078, 95% CI = [0.962, 1.207], p = .196), European or Asian population.

Conclusion: This meta-analysis showed a lack of association between the BDNF 196 G/A and COMT Val158Met polymorphisms and ADHD.