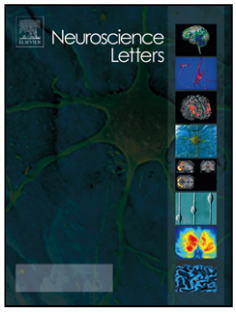

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Association analysis of SNP rs11868035 in *SREBF1* with sporadic Parkinson's disease, sporadic amyotrophic lateral sclerosis and multiple system atrophy in a Chinese population

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Highlights

- We assessed the association between rs11868035 in *SREBF1* and sporadic Parkinson's disease, sporadic amyotrophic lateral sclerosis and multiple system atrophy in a Chinese population
- A total of 3,115 subjects, which included 1,150 PD, 833 ALS, and 318 MSA patients, and 814 controls, were recruited in the study.
- The minor allele "G" of SNP rs11868035 in the *SREBF1* gene decreased the risk for ALS in early-onset ALS and ALS in women.
- This was the first independent study to explore the associations of rs11868035 with ALS and MSA in a large Chinese population.

Abstract

Background: The etiology of neurodegenerative disease remains unclear. Recently, SNP rs11868035, located in an intron of the sterol regulatory element binding factor (*SREBF1*) gene, was found to be associated with Parkinson's disease (PD) in a large European population in a genome-wide association study. To examine the possible genetic association of rs11868035 with sporadic PD, sporadic amyotrophic lateral sclerosis (ALS) and multiple system atrophy (MSA) in a Chinese population, we conducted this large case-control study.