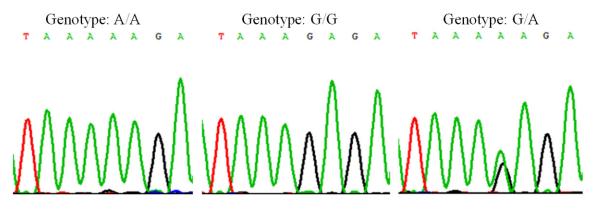
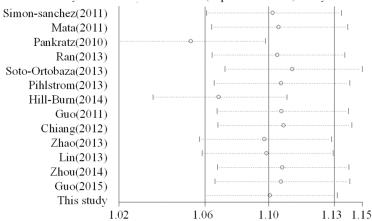


Supplemental Data 1. The procedures of study selection for meta-analysis.



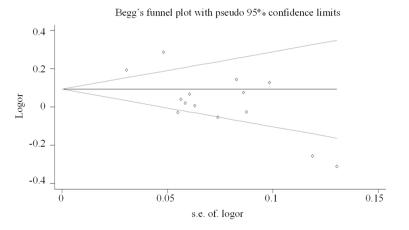
Supplemental Data 2. The genotypic analysis of rs3129882 at HLA-DRA in Chinese population. The direct DNA sequencing analysis showed that rs3129882 at HLA-DRA is heterozygous in PD and healthy control. The rs3129882 genotypes contains A/A, G/G and G/A.

HLA-DRA in Chinese Parkinson's disease patients



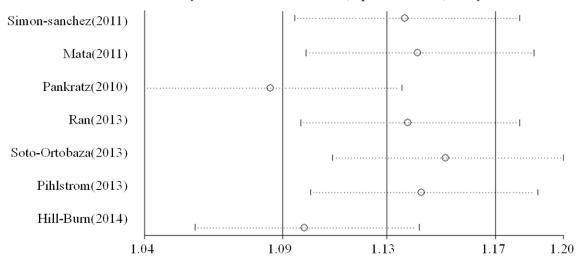
Meta-analysis fixed-effects estimates (exponential form) Study ommited

Supplemental Data 3. Sensitivity analysis of the association between rs3129882 and PD in Chinese and Caucasians populations. The omitted studies were listed in the vertical axis and their OR values were shown in horizontal axis. Each plot was draw according to the pooled OR without the omitted studies. The 95% confidence interval was represented by the two ends of every broken line.



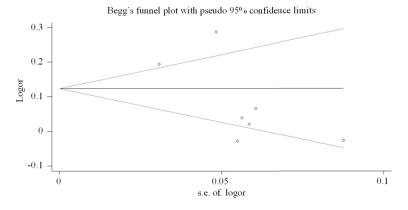
Supplemental Data 4. Begger's funnel plots of the association between rs3129882 and PD in Chinese and Caucasians populations. Each plot was draw according to the OR and s.e. of. logor values of the represented study. The OR means the odds of having the rs3129882 allele G for individuals with PD in relation to the odds for individuals without PD. The represented studies were listed in **Table 3** and the meta-result was in **Figure 1**. S.e. of. logor, natural logarithm of OR; Horizontal line stand for the magnitude of effect.

HLA-DRA in Chinese Parkinson's disease patients



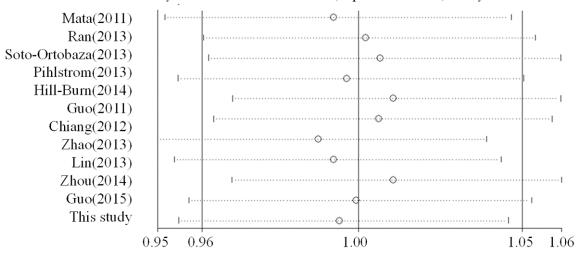
Meta-analysis fixed-effects estimates (exponential form) Study ommited

Supplemental Data 5. Sensitivity analysis of the sub-meta-analysis in Caucasians population. The omitted studies were listed in the vertical axis and their OR values were shown in horizontal axis. Each plot was draw according to the pooled OR without the omitted studies. The 95% confidence interval was represented by the two ends of every broken line.



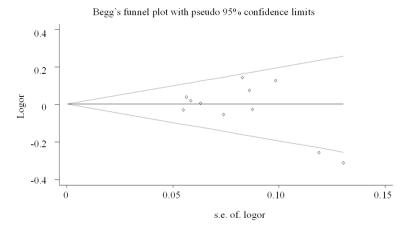
Supplemental Data 6. Begger's funnel plots of sub-meta-analysis in Caucasians population. Each plot was draw according to the OR and s.e. of. logor values and represented one study. The OR means the odds of having the rs3129882 allele G for individuals with PD in relation to the odds for individuals without PD. The represented studies were listed in **Table 3** and the meta-result was in **Figure 1**. S.e. of. logor, natural logarithm of OR; Horizontal line stand for the magnitude of effect.

HLA-DRA in Chinese Parkinson's disease patients



Meta-analysis fixed-effects estimates (exponential form) Study ommited

Supplemental Data 7. Sensitivity analysis of sub-meta-analysis in non-GWAS studies. The omitted studies were listed in the vertical axis and their OR values were shown in horizontal axis. Each plot was draw according to the pooled OR without the omitted studies. The 95% confidence interval was represented by the two ends of every broken line.



Supplemental Data 8. Begger's funnel plots of sub-meta-analysis in non-GWAS studies. Each plot was draw according to the OR and s.e. of. logor values and represented one study. The OR means the odds of having the rs3129882 allele G for individuals with PD in relation to the odds for individuals without PD. The represented studies were listed in **Table 3** and the meta-result was in **Figure 2**. S.e. of. logor, natural logarithm of OR; Horizontal line stand for the magnitude of effect.