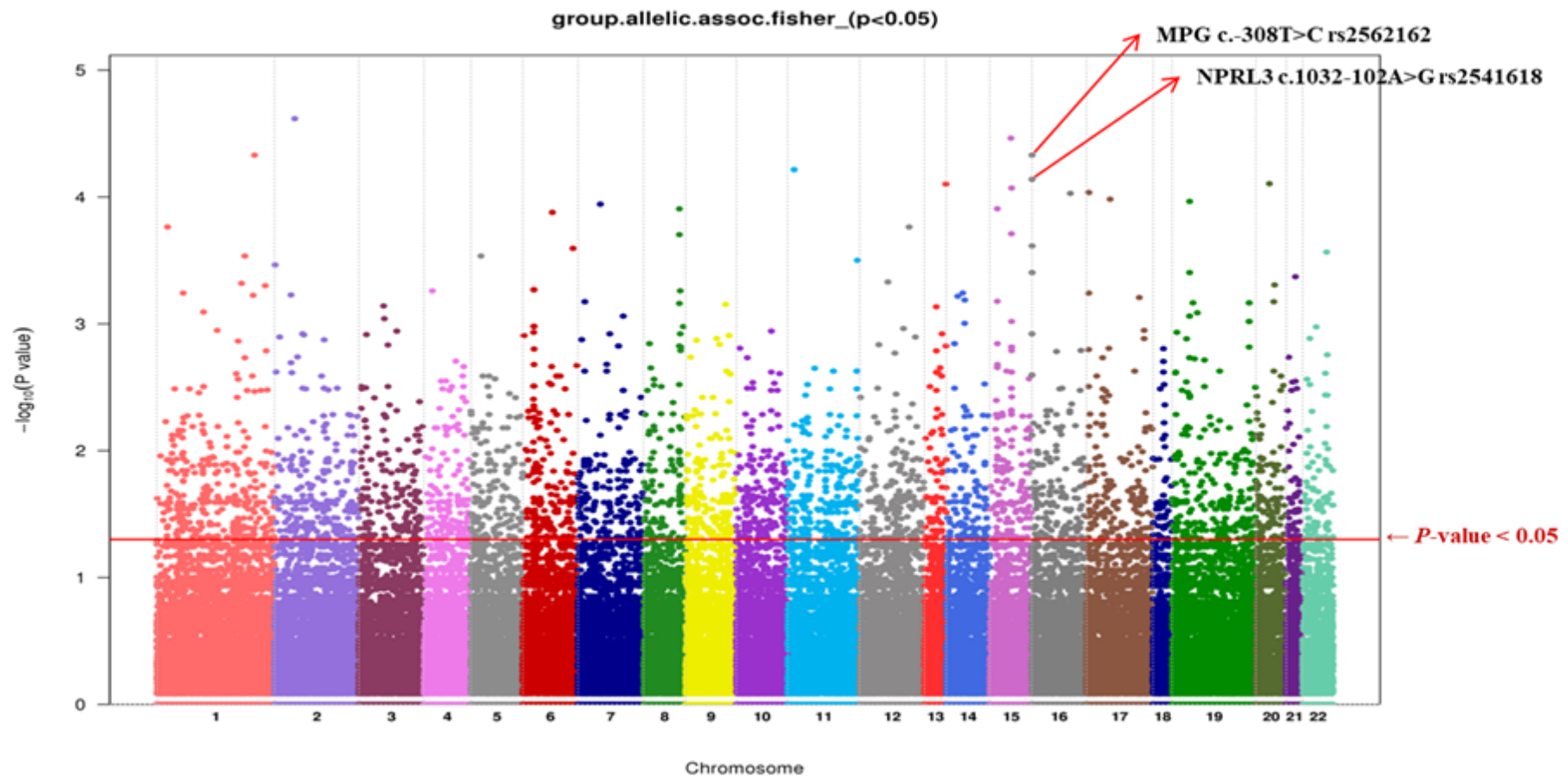
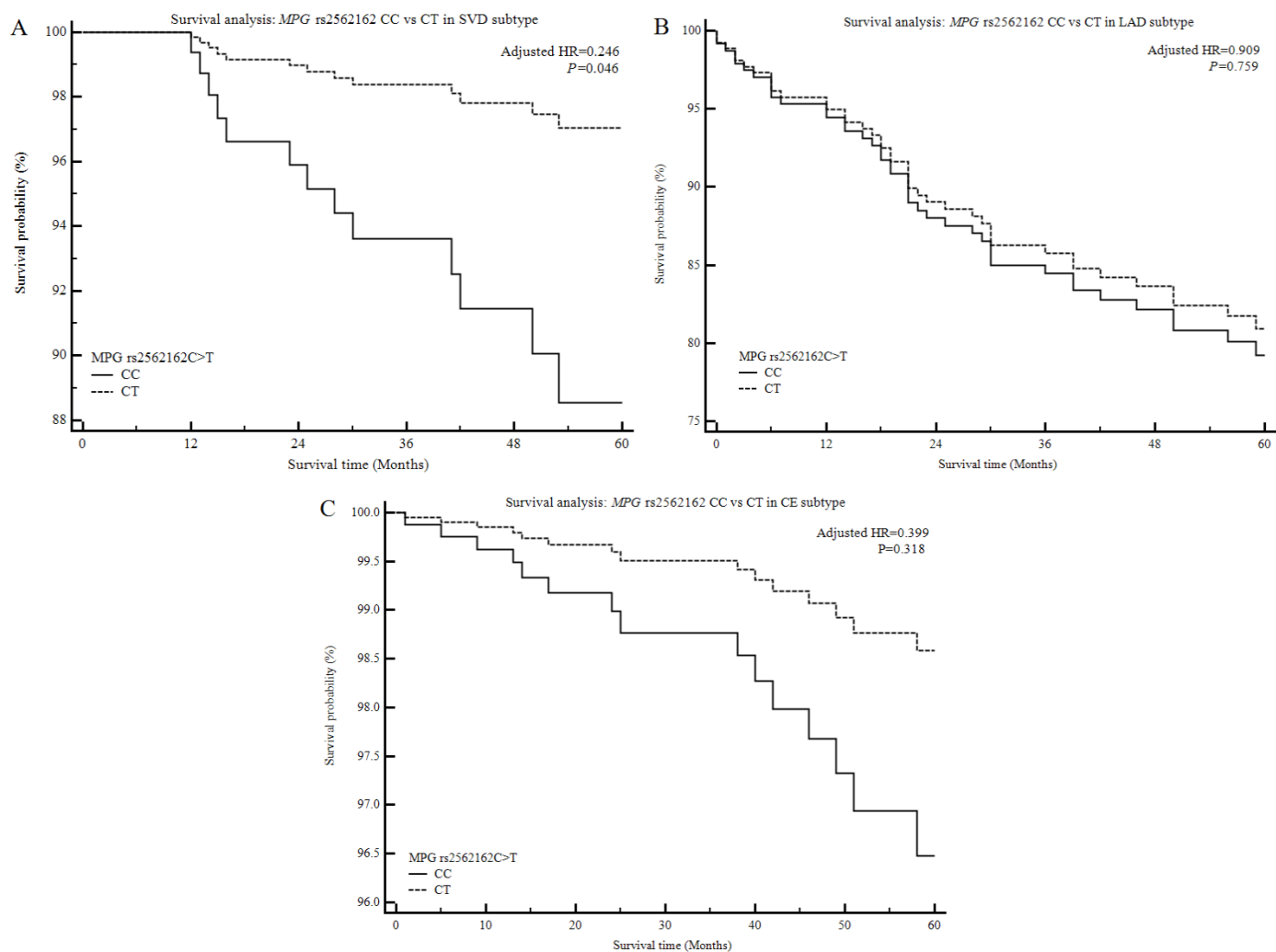


**Figure S1.** Information of *MPG* and *NPRL3* gene polymorphisms position number in chromosome 16. The whole 3'UTR length of *MPG* and *NPRL3* gene is 927bp. Part of *MPG* 3'UTR (74bp) share with *NPRL3* 3'UTR (904bp) and the sharing 3'UTR length is 51bp.



**Figure S2. Information of *MPG* and *NPRL3* gene polymorphism in Manhattan plot of WES analysis.** The significant SNPs were filtered by the significant criteria satisfying  $P < 0.05$  for Fisher's exact test, and *MPG* and *NPRL3* gene polymorphisms were selected by Fisher's exact test ( $P = \text{upper } 0.2\%$ ).



**Figure S3.** Survival plot of a Cox proportional hazards model with *MPG* rs2562162C>T in ischemic stroke. Survival probability of ischemic stroke patients grouped by (A) small vessel disease (SVD), (B) large artery disease (LAD), and (C) cardioembolism (CE) subtype based on *MPG* rs2562162CC vs. *MPG* rs2562162CT genotypes. Note to Figure S2: HR, hazard ratio