Supplementary table 1. Summarization of the mentioned genetic variations in this study.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Gene | Protein | Hapotype in this study | Nucleotide Change | rs Number | Amino Acid Change | Function |
| *SLCO1B1* | OATP1B1  Transporter | NA | *c.521T>C* | rs4149056 | p.Val174Ala | Reduce uptake/transport activity and increase drug concentrations which metabolized by OATP1B1[1] |
| NA | *c.388A>G* | rs2306283 | p.Asn130Asp | Increased drug hepatic uptake to reduce plasma concentration[2] |
| NA | *c.463C>A* | rs11045819 | p.Pro155Thr | Might reduce uptake/transport activity[3] |
| ApoE | Apolipoprotein E | \*1 | c.rs7412: 526C>T  c.rs429358:388T>C | rs7412-T, rs429358-C | p.rs7412:Arg176Cys;  p.rs429358:Cys130Arg | The rare missing allele |
| \*2 | c.rs7412: 526C>T  c.rs429358:388C>T | rs7412-T, rs429358-T | p.rs7412:Arg176Cys;  p.rs429358: Arg130Cys | Reduce the apoprotein binds to cell surface receptors.[4] |
| \*3 | c.rs7412: 526T>C  c.rs429358:388C>T | rs7412-C, rs429358-T | p.rs7412: Cys176Arg;  p.rs429358: Arg130Cys | Neutral |
| \*4 | c.rs7412: 526T>C  c.rs429358:388T>C | rs7412-C, rs429358-C | p.rs7412: Cys176Arg;  p.rs429358:Cys130Arg | ApoE4 cannot form apoE-A-Ⅱ complex to increase cholesterol and low-density lipoprotein-cholesterol concentrations. [5] |
| *CYP2C9* | CYP2C9  Enzyme | \*1 | Wild type | NA | NA | Normal function |
| \*2 | c.430C>T | rs1799853 | p.Arg144Cys | CYP2C9 Enzyme inactive[6] |
| \*3 | c.1075A>C | rs1057910 | p.Ile359Leu | CYP2C9 Enzyme inactive[7] |

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