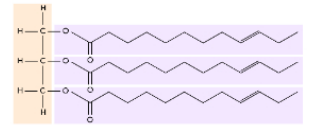# ☆ Triglyceride level (Richardson, 2020)

Tom Richardson, et al.
PLoS Medicine

`Blood` `Heart`

The 'tri' in triglycerides refers to the three fatty acid chains.

STUDY SUMMARY

Identification of 440 genetic variants associated with the _triglyceride_ level in the blood and analysis of its contribution to the risk of coronary heart disease.

YOUR RESULT

61st
PERCENTILE
Above average genetic predisposition to **higher triglyceride level**
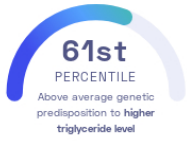
STUDY DESCRIPTION

Coronary heart disease (CHD) is a condition that develops when the heart's arteries cannot supply enough oxygen to the heart muscle. Coronary heart disease is the leading cause of death in the United States. It occurs when _plaque_ builds up in the heart's arteries and blocks the blood flow to the heart. Arterial _plaque_ consists of multiple substances that circulate in the blood. One of the substances that the study examined is _triglyceride_. To this end, this study analyzed genetic data of over 440,000 individuals of European descent to identify genomic regions associated with _triglyceride_ levels in the blood. The researchers identified 440 variants associated with _triglycerides_, 339 of which are newly discovered. Further work showed that high _triglyceride_ levels are associated with an increased risk of coronary heart disease. However, this association weakened slightly when the researchers considered all fats and proteins in the study. The results still suggest that _triglycerides_ play an important role in the development of heart disease.

DID YOU KNOW?

High triglyceride levels can increase your risk of conditions like heart attack and stroke. They have also been linked to diseases of the pancreas and liver. Doctors recommend getting more exercise, losing weight, and modifying your diet to lower triglyceride levels.

YOUR DETAILED RESULTS

To calculate your genetic predisposition to higher triglyceride level we summed up the effects of genetic variants that were linked to higher triglyceride level in the study that this report is based on. These variants can be found in the table below. The variants highlighted in green have **positive effect sizes** and increase your genetic predisposition to higher triglyceride level. The variants highlighted in blue have **negative effects sizes** and decrease your genetic predisposition to higher triglyceride level. Variants that are not highlighted are not found in your genome and do not affect your genetic predisposition to higher triglyceride level. By adding up the effect sizes of the highlighted variants **we calculated your polygenic score for higher triglyceride level to be 0.02**. To determine whether your score is high or low, we compared it to the scores of 5,000 other Nebula Genomics users. We found that your polygenic score for higher triglyceride level is in the **61st percentile**. This means that it is higher than the polygenic scores 61% of people. We consider this to be an **above average genetic predisposition to higher triglyceride level**. However, please note that genetic predispositions do not account for important non-genetic factors like lifestyle. Furthermore, the genetics of most traits has not been fully understood yet and many associations between traits and genetic variants remain unknown. For additional explanations, click on the column titles in the table below and visit our Nebula Library tutorial.

VARIANT ⓘ	YOUR GENOTYPE ⓘ	EFFECT SIZE ⓘ	VARIANT FREQUENCY ⓘ	SIGNIFICANCE ⓘ
rs61905078_A	A / A	-0.20 (↓)	93%	4.30×10^{-602}
rs4665972_T	T / C	0.10 (↑)	40%	1.00×10^{-526}
rs6999569_A	A / A	0.09 (↑)	53%	1.50×10^{-412}
rs480823_T	T / T	-0.16 (↓)	92%	3.10×10^{-381}
rs2240466_G	G / G	0.12 (↑)	88%	8.10×10^{-369}
rs343_C	C / C	0.14 (↑)	92%	4.40×10^{-334}
rs9436661_T	T / T	0.08 (↑)	65%	5.10×10^{-304}
rs483082_G	G / G	-0.09 (↓)	76%	1.10×10^{-292}
rs5112_C	C / C	-0.07 (↓)	47%	6.50×10^{-224}
rs116843064_G 🆕	G / G	0.23 (↑)	98%	3.10×10^{-216}
rs676210_G	G / G	0.07 (↑)	79%	5.50×10^{-197}
rs58542926_C	C / C	0.10 (↑)	93%	1.20×10^{-162}
rs72836561_C	C / C	-0.14 (↓)	97%	2.00×10^{-126}
rs11122450_T	G / G	0.05 (−)	39%	9.90×10^{-124}
rs174566_A	A / A	-0.05 (↓)	65%	2.10×10^{-120}
rs7000494_G	G / G	-0.14 (↓)	97%	4.10×10^{-120}
rs150423652_G	G / G	-0.29 (↓)	99%	1.50×10^{-119}
rs139974673_T 🆕	T / T	-0.14 (↓)	97%	2.20×10^{-115}
rs308_T	T / T	0.16 (↑)	98%	6.50×10^{-115}
rs6073958_T	T / T	-0.06 (↓)	80%	1.90×10^{-109}
rs998584_C	C / C	-0.04 (↓)	52%	4.90×10^{-89}
rs75609851_G	G / G	0.20 (↑)	99%	4.80×10^{-87}
rs1077835_A	A / G	-0.05 (↓)	78%	3.40×10^{-86}
rs2943645_C	T / T	-0.04 (−)	35%	1.10×10^{-83}
rs28383314_T 🆕	C / C	-0.04 (−)	38%	4.20×10^{-76}
rs13389219_C	C / C	0.04 (↑)	61%	7.70×10^{-76}
rs3936511_A	A / A	-0.05 (↓)	81%	6.00×10^{-74}
rs78484485_G	G / A	0.08 (↑)	95%	6.40×10^{-67}
rs3775228_C	C / C	-0.03 (↓)	60%	2.50×10^{-62}
rs4731701_C	C / C	0.03 (↑)	51%	3.30×10^{-61}
rs6882076_T	T / T	-0.03 (↓)	37%	1.90×10^{-57}
rs10822163_C	C / G	0.03 (↑)	53%	2.30×10^{-57}
rs78058190_G 🆕	G / G	-0.08 (↓)	95%	3.20×10^{-57}
rs2068888_G	G / A	0.03 (↑)	55%	4.10×10^{-57}
rs1495741_G	G / A	0.04 (↑)	22%	6.60×10^{-56}
rs12446515_C	C / T	0.03 (↑)	68%	3.80×10^{-55}
rs9378248_G	G / G	-0.03 (↓)	66%	2.50×10^{-54}
rs1532085_A	G / G	0.03 (−)	39%	3.20×10^{-51}

rs13108218_A	A / G	0.03 (↑)	39%	8.20×10^{-50}
rs2925979_T NEW	C / C	0.03 (–)	30%	1.40×10^{-49}
rs188247550_C NEW	C / C	0.13 (↑)	99%	1.70×10^{-48}
rs863750_C	C / T	-0.03 (↓)	40%	2.00×10^{-45}
rs540973884_T	G / G	0.03 (–)	40%	3.10×10^{-45}
rs72555385_A	A / A	-0.06 (↓)	95%	7.90×10^{-45}
rs4500049_A	T / T	0.03 (–)	47%	2.70×10^{-44}
rs56271783_G NEW	G / G	-0.07 (↓)	95%	7.90×10^{-44}
rs4722551_T	T / C	0.04 (↑)	84%	1.40×10^{-42}
rs6916318_A	A / A	-0.03 (↓)	47%	1.80×10^{-40}
rs7140110_T NEW	T / T	-0.03 (↓)	70%	5.70×10^{-38}
rs12928099_C	C / A	0.03 (↑)	70%	9.60×10^{-38}
rs114443260_C	C / C	-0.03 (↓)	73%	1.10×10^{-36}
rs186696265_C NEW	C / C	0.10 (↑)	99%	4.80×10^{-36}
rs2081687_T	T / C	0.03 (↑)	34%	5.80×10^{-36}
rs6982308_C	C / C	-0.02 (↓)	48%	1.20×10^{-35}
rs2980755_A NEW	G / G	0.02 (–)	54%	2.40×10^{-35}
rs684773_A	C / C	-0.03 (–)	23%	3.00×10^{-35}
rs4930724_T	T / T	0.03 (↑)	67%	3.70×10^{-35}
rs114165349_G	G / G	-0.08 (↓)	98%	4.00×10^{-35}
rs838133_A NEW	A / G	0.02 (↑)	45%	1.80×10^{-33}
rs4760254_G	G / C	0.03 (↑)	76%	2.90×10^{-33}
rs77009508_A	A / A	-0.04 (↓)	93%	4.40×10^{-32}
rs182636083_C	C / C	0.03 (↑)	48%	7.40×10^{-32}
rs6800707_C NEW	G / G	-0.03 (–)	19%	1.20×10^{-31}
rs326222_T	T / C	-0.03 (↓)	30%	1.70×10^{-31}
rs28364531_C NEW	C / C	-0.09 (↓)	98%	2.40×10^{-31}
rs11635675_T NEW	G / G	-0.02 (–)	66%	4.20×10^{-31}
rs1801689_A NEW	A / A	0.07 (↑)	97%	2.30×10^{-30}
rs76895963_T NEW	T / T	0.09 (↑)	98%	8.10×10^{-30}
rs41552812_C NEW	C / C	0.06 (↑)	93%	3.20×10^{-29}
rs192955957_C NEW	C / C	-0.05 (↓)	90%	5.40×10^{-28}
rs73243877_A NEW	A / A	-0.03 (↓)	83%	9.70×10^{-28}
rs3794695_C NEW	C / C	-0.03 (↓)	81%	1.10×10^{-27}
rs36104871_G NEW	G / G	0.06 (↑)	97%	2.20×10^{-27}
rs2267373_C	C / T	-0.02 (↓)	42%	1.90×10^{-26}
rs150564454_G	G / G	0.10 (↑)	99%	4.60×10^{-26}
rs11206374_G	G / G	-0.02 (↓)	78%	8.80×10^{-26}
rs1883711_G	G / G	-0.06 (↓)	97%	1.10×10^{-24}
rs58895965_C NEW	C / A	-0.03 (↓)	83%	2.20×10^{-24}
rs79153732_C	C / T	-0.08 (↓)	98%	4.00×10^{-24}
rs113344423_G	G / A	-0.04 (↓)	94%	1.60×10^{-23}
rs67981690_A NEW	A / A	-0.03 (↓)	87%	2.00×10^{-23}
rs2699805_G	G / G	0.02 (↑)	60%	2.40×10^{-23}
rs62117489_C NEW	C / C	0.04 (↑)	94%	5.50×10^{-23}
rs62271373_T NEW	T / T	-0.04 (↓)	94%	5.70×10^{-23}
rs3890483_G	G / G	-0.02 (↓)	56%	2.10×10^{-22}
rs7215055_A NEW	A / A	-0.04 (↓)	94%	1.50×10^{-21}
rs2523719_G	G / G	0.02 (↑)	83%	2.00×10^{-21}
rs11118310_A NEW	T / T	-0.02 (–)	41%	2.30×10^{-21}
rs13269725_A NEW	A / A	-0.03 (↓)	92%	4.00×10^{-21}
rs1030472_A NEW	A / A	-0.02 (↓)	79%	8.60×10^{-21}
rs12749691_A NEW	A / A	0.02 (↑)	70%	1.10×10^{-20}
rs1045241_C NEW	C / C	0.02 (↑)	73%	2.30×10^{-20}
rs6531216_G	A / A	-0.02 (–)	47%	2.40×10^{-20}
rs2917677_C NEW	C / C	0.02 (↑)	59%	2.60×10^{-20}
rs62084237_G NEW	G / G	-0.02 (↓)	82%	2.90×10^{-20}
rs1009360_T NEW	T / T	0.02 (↑)	58%	3.00×10^{-20}
rs6486122_C NEW	T / T	-0.02 (–)	31%	3.00×10^{-20}
rs10422861_C	T / T	0.02 (–)	33%	3.20×10^{-20}

rs150555490_C	C / C	0.04 (↑)	94%	1.50×10^{-19}
rs71603401_A	A / A	-0.03 (↓)	86%	1.70×10^{-19}
rs11781692_C	C / C	-0.07 (↓)	99%	2.40×10^{-19}
rs9817452_G	G / G	0.02 (↑)	61%	2.70×10^{-19}
rs580063_T	T / T	0.02 (↑)	79%	2.90×10^{-19}
rs1799831_C	C / C	-0.02 (↓)	84%	3.40×10^{-19}
rs10750766_C	C / C	-0.02 (↓)	29%	3.90×10^{-19}
rs72801474_G	G / G	0.03 (↑)	91%	4.50×10^{-19}
rs696825_C	C / C	0.02 (↑)	75%	5.70×10^{-19}
rs79192570_G	G / G	0.03 (↑)	86%	1.00×10^{-18}
rs1800978_C	C / C	0.03 (↑)	88%	1.10×10^{-18}
rs185139895_G	G / G	-0.04 (↓)	96%	1.30×10^{-18}
rs9274390_C	C / C	0.03 (↑)	86%	1.40×10^{-18}
rs10775406_A	A / G	-0.02 (↓)	24%	1.60×10^{-18}
rs4969179_T	T / G	0.02 (↑)	40%	2.70×10^{-18}
rs4976033_A	A / G	-0.02 (↓)	60%	2.90×10^{-18}
rs12185242_A	A / A	-0.02 (↓)	55%	4.00×10^{-18}
rs41273040_G	G / G	-0.06 (↓)	98%	4.00×10^{-18}
rs3103310_A	A / A	-0.02 (↓)	76%	6.20×10^{-18}
rs6458869_C	A / A	0.02 (−)	36%	7.10×10^{-18}
rs7134376_C	C / C	0.02 (↑)	57%	1.20×10^{-17}
rs61830291_A	A / C	-0.03 (↓)	90%	1.30×10^{-17}
rs7735249_C	C / C	-0.03 (↓)	89%	2.00×10^{-17}
rs535241194_A	A / G	-0.02 (↓)	79%	2.90×10^{-17}
rs78376313_T	T / T	-0.05 (↓)	97%	4.50×10^{-17}
rs12610709_G	G / A	-0.02 (↓)	83%	5.00×10^{-17}
rs79287178_G	G / G	-0.05 (↓)	97%	7.00×10^{-17}
rs2519093_C	T / T	0.02 (−)	82%	1.30×10^{-16}
rs2487294_G	G / T	-0.02 (↓)	28%	1.50×10^{-16}
rs2773469_A	A / G	0.02 (↑)	27%	1.60×10^{-16}
rs140107293_A	A / A	0.02 (↑)	85%	2.70×10^{-16}
rs142385484_C	C / T	0.02 (↑)	86%	3.20×10^{-16}
rs8126001_C	C / C	0.02 (↑)	51%	3.50×10^{-16}
rs13101719_T	A / A	-0.02 (−)	58%	4.10×10^{-16}
rs7138037_G	G / C	-0.02 (↓)	77%	4.90×10^{-16}
rs563296_G	G / A	-0.02 (↓)	44%	5.60×10^{-16}
rs9375694_G	G / A	-0.02 (↓)	30%	7.40×10^{-16}
rs10176110_T	T / C	-0.02 (↓)	87%	8.40×10^{-16}
rs11231161_A	A / A	-0.02 (↓)	63%	9.20×10^{-16}
rs2850245_G	G / T	0.02 (↑)	37%	9.20×10^{-16}
rs116878033_C	C / C	-0.04 (↓)	96%	1.10×10^{-15}
rs729761_T	T / G	-0.02 (↓)	29%	1.10×10^{-15}
rs10243434_T	T / T	0.02 (↑)	41%	1.40×10^{-15}
rs55966194_C	C / G	0.02 (↑)	72%	1.50×10^{-15}
rs1064939_A	A / A	0.05 (↑)	98%	1.60×10^{-15}
rs1938566_C	T / T	0.02 (−)	17%	1.60×10^{-15}
rs5402_T	T / T	-0.02 (↓)	88%	1.60×10^{-15}
rs591939_A	A / A	-0.02 (↓)	75%	3.70×10^{-15}
rs7239575_T	T / C	0.02 (↑)	51%	4.30×10^{-15}
rs10797119_T	T / C	-0.02 (↓)	46%	5.40×10^{-15}
rs2035816_A	A / A	0.03 (↑)	92%	5.60×10^{-15}
rs13107325_C	C / C	-0.03 (↓)	93%	5.70×10^{-15}
rs7274718_G	G / A	-0.02 (↓)	40%	6.20×10^{-15}
rs3131337_G	G / C	0.02 (↑)	87%	1.20×10^{-14}
rs72904737_G	G / A	0.03 (↑)	91%	1.20×10^{-14}
rs9561643_A	A / C	-0.02 (↓)	69%	1.50×10^{-14}
rs10242866_C	T / T	-0.02 (−)	60%	1.80×10^{-14}
rs2278426_C	C / C	0.04 (↑)	96%	2.00×10^{-14}
rs2277083_A	G / G	0.02 (−)	44%	2.10×10^{-14}

SNP	Alleles	Effect	Frequency	P-value
rs2071887_T	T / A	-0.02 (↓)	66%	2.40×10^{-14}
rs11228377_T NEW	T / C	0.02 (↑)	41%	2.50×10^{-14}
rs12880341_T NEW	T / C	-0.02 (↓)	84%	2.90×10^{-14}
rs3820897_T NEW	C / C	-0.02 (–)	18%	3.80×10^{-14}
rs138751626_A NEW	A / A	-0.03 (↓)	92%	3.90×10^{-14}
rs8025505_C NEW	C / C	-0.02 (↓)	74%	4.00×10^{-14}
rs17326656_G NEW	T / T	-0.02 (–)	76%	4.10×10^{-14}
rs28577186_G NEW	A / A	0.02 (–)	34%	4.10×10^{-14}
rs3822072_G NEW	G / A	-0.02 (↓)	55%	4.60×10^{-14}
rs73221948_G NEW	G / G	-0.02 (↓)	71%	6.30×10^{-14}
rs213494_C NEW	C / T	-0.02 (↓)	35%	7.60×10^{-14}
rs62459095_C NEW	C / C	0.03 (↑)	94%	7.70×10^{-14}
rs6968865_A NEW	A / T	-0.02 (↓)	37%	8.30×10^{-14}
rs4239538_G NEW	A / A	0.02 (–)	69%	8.40×10^{-14}
rs4776793_C NEW	C / C	-0.02 (↓)	65%	8.40×10^{-14}
rs7749305_T NEW	T / T	0.02 (↑)	88%	8.90×10^{-14}
rs2652806_C NEW	T / T	0.02 (–)	33%	9.60×10^{-14}
rs11078597_T NEW	T / T	-0.02 (↓)	81%	1.00×10^{-13}
rs61729990_C	C / C	0.06 (↑)	98%	1.10×10^{-13}
rs12415159_A NEW	A / G	-0.02 (↓)	85%	1.30×10^{-13}
rs3814883_C NEW	C / C	-0.01 (↓)	52%	1.40×10^{-13}
rs4134963_C NEW	C / T	0.02 (↑)	81%	1.50×10^{-13}
rs41785_C	C / A	0.01 (↑)	58%	1.80×10^{-13}
rs60610697_T NEW	T / G	-0.02 (↓)	78%	2.10×10^{-13}
rs140874911_C NEW	C / C	-0.03 (↓)	93%	2.40×10^{-13}
rs114052230_C NEW	C / C	0.02 (↑)	83%	3.50×10^{-13}
rs3731696_A NEW	A / A	-0.02 (↓)	88%	6.40×10^{-13}
rs2288004_G	C / C	0.01 (–)	62%	7.40×10^{-13}
rs61885960_T NEW	T / T	0.03 (↑)	95%	8.00×10^{-13}
rs1316753_G NEW	G / G	0.01 (↑)	61%	8.30×10^{-13}
rs11030107_A NEW	A / G	-0.02 (↓)	74%	8.60×10^{-13}
rs58324296_A NEW	A / A	0.01 (↑)	65%	8.70×10^{-13}
rs1365297_A NEW	A / A	0.02 (↑)	82%	9.20×10^{-13}
rs12600110_T NEW	T / T	0.01 (↑)	62%	9.30×10^{-13}
rs4675812_G NEW	G / A	0.01 (↑)	41%	9.80×10^{-13}
rs490972_G NEW	G / G	-0.01 (↓)	53%	1.10×10^{-12}
rs37538_G NEW	C / C	0.01 (–)	40%	1.40×10^{-12}
rs79634051_G NEW	G / G	0.04 (↑)	97%	1.40×10^{-12}
rs58953077_C	T / T	-0.01 (–)	60%	1.50×10^{-12}
rs7260465_C NEW	C / T	0.02 (↑)	74%	1.90×10^{-12}
rs12440800_A NEW	A / T	-0.02 (↓)	74%	2.00×10^{-12}
rs2812208_G NEW	G / C	0.05 (↑)	98%	2.40×10^{-12}
rs149778057_A NEW	A / A	0.02 (↑)	67%	2.50×10^{-12}
rs1861435_T NEW	A / A	0.01 (–)	58%	2.50×10^{-12}
rs72644085_T	T / T	0.02 (↑)	85%	2.50×10^{-12}
rs7018436_T	T / C	-0.02 (↓)	69%	2.70×10^{-12}
rs921971_T NEW	T / C	-0.02 (↓)	73%	2.80×10^{-12}
rs1567353_C NEW	G / G	-0.02 (–)	69%	3.40×10^{-12}
rs6792725_A NEW	A / G	0.02 (↑)	31%	3.50×10^{-12}
rs35104374_T NEW	C / C	0.02 (–)	27%	3.70×10^{-12}
rs7704653_A NEW	G / G	-0.02 (–)	28%	4.00×10^{-12}
rs4761234_T NEW	T / C	0.01 (↑)	52%	4.10×10^{-12}
rs12138136_T NEW	T / T	0.02 (↑)	91%	4.60×10^{-12}
rs7439032_T NEW	C / C	0.02 (–)	20%	5.20×10^{-12}
rs10797996_C NEW	C / T	0.01 (↑)	43%	5.30×10^{-12}
rs4450871_A NEW	A / G	0.01 (↑)	56%	5.80×10^{-12}
rs55767272_A NEW	A / A	0.03 (↑)	93%	6.00×10^{-12}
rs78025076_C NEW	C / C	-0.05 (↓)	98%	6.30×10^{-12}
rs935168_G	G / A	-0.01 (↓)	35%	8.10×10^{-12}

SNP	Genotype	Effect	Frequency	p-value
rs2237029_G	G / A	0.01 (↑)	40%	8.50×10^{-12}
rs75679663_C	C / C	0.07 (↑)	99%	8.70×10^{-12}
rs867939_G	G / A	0.01 (↑)	42%	8.70×10^{-12}
rs2860183_T	T / C	0.01 (↑)	38%	9.20×10^{-12}
rs34580448_T	T / T	0.03 (↑)	96%	1.10×10^{-11}
rs595767_A	G / G	-0.01 (–)	48%	1.10×10^{-11}
rs80276949_G	G / G	-0.05 (↓)	98%	1.20×10^{-11}
rs581080_G	G / C	-0.02 (↓)	18%	1.30×10^{-11}
rs9480889_C	C / G	-0.02 (↓)	22%	1.30×10^{-11}
rs11100083_T	T / C	0.02 (↑)	77%	1.40×10^{-11}
rs41292412_C	C / C	-0.06 (↓)	99%	1.40×10^{-11}
rs77244849_T	T / T	0.01 (↑)	68%	1.40×10^{-11}
rs9970140_A	A / A	0.03 (↑)	92%	1.40×10^{-11}
rs6690181_T	C / C	0.01 (–)	62%	1.50×10^{-11}
rs9832727_C	C / G	0.01 (↑)	66%	1.70×10^{-11}
rs9610329_C	C / C	-0.01 (↓)	57%	1.80×10^{-11}
rs954244_C	C / G	-0.02 (↓)	75%	1.90×10^{-11}
rs12472667_C	C / C	-0.01 (↓)	63%	2.20×10^{-11}
rs3829126_G	G / G	-0.02 (↓)	91%	2.20×10^{-11}
rs6093446_G	G / A	-0.01 (↓)	71%	2.20×10^{-11}
rs1171617_G	T / T	-0.02 (–)	23%	2.40×10^{-11}
rs35859536_C	C / C	0.01 (↑)	69%	2.60×10^{-11}
rs6424109_C	A / A	-0.02 (–)	13%	3.10×10^{-11}
rs11078696_G	G / G	0.02 (↑)	20%	3.30×10^{-11}
rs75225803_C	C / C	0.02 (↑)	91%	3.50×10^{-11}
rs112424890_C	C / T	-0.02 (↓)	82%	3.70×10^{-11}
rs140288_G	G / A	0.01 (↑)	43%	3.70×10^{-11}
rs11240358_G	G / A	-0.01 (↓)	61%	4.00×10^{-11}
rs10152471_G	G / G	0.01 (↑)	61%	4.90×10^{-11}
rs1351394_T	T / T	-0.01 (↓)	49%	5.00×10^{-11}
rs62118471_T	T / T	-0.04 (↓)	97%	5.00×10^{-11}
rs296360_T	T / T	0.02 (↑)	83%	5.40×10^{-11}
rs4709746_C	C / C	0.02 (↑)	87%	6.10×10^{-11}
rs6068280_A	A / G	-0.01 (↓)	33%	6.20×10^{-11}
rs79311290_A	A / A	-0.02 (↓)	89%	7.00×10^{-11}
rs113439801_C	C / C	0.02 (↑)	83%	7.20×10^{-11}
rs77631110_A	A / A	-0.05 (↓)	98%	7.30×10^{-11}
rs9943778_A	A / A	0.02 (↑)	76%	7.90×10^{-11}
rs151235402_C	C / C	-0.05 (↓)	98%	8.80×10^{-11}
rs35763453_T	T / T	-0.03 (↓)	94%	9.10×10^{-11}
rs6517522_T	T / T	0.01 (↑)	50%	9.80×10^{-11}
rs13066793_A	A / A	0.02 (↑)	91%	1.00×10^{-10}
rs36043408_G	G / A	0.01 (↑)	50%	1.00×10^{-10}
rs11722924_G	G / C	-0.01 (↓)	46%	1.10×10^{-10}
rs75398587_C	C / C	0.03 (↑)	93%	1.10×10^{-10}
rs147011441_G	G / G	-0.04 (↓)	98%	1.20×10^{-10}
rs2131919_A	A / A	-0.02 (↓)	84%	1.30×10^{-10}
rs1126673_C	C / C	-0.01 (↓)	30%	1.40×10^{-10}
rs12926107_A	A / G	-0.01 (↓)	55%	1.40×10^{-10}
rs2382825_C	C / C	0.01 (↑)	38%	1.60×10^{-10}
rs62565259_C	C / C	0.02 (↑)	83%	1.60×10^{-10}
rs9890200_A	C / C	0.01 (–)	63%	1.60×10^{-10}
rs12591786_C	C / C	0.02 (↑)	84%	1.70×10^{-10}
rs35764600_G	G / C	-0.01 (↓)	60%	1.70×10^{-10}
rs8066985_A	A / G	0.01 (↑)	48%	1.70×10^{-10}
rs58839393_A	A / T	-0.02 (↓)	84%	1.80×10^{-10}
rs6708784_A	A / G	0.01 (↑)	51%	1.90×10^{-10}
rs10842703_A	A / A	-0.01 (↓)	76%	2.00×10^{-10}
rs200841050_C	T / T	0.01 (–)	33%	2.00×10^{-10}

rs9812100_G 🆕	G / A	0.01 (↑)	52%	2.30×10^{-10}
rs10899490_C 🆕	C / C	0.02 (↑)	84%	2.40×10^{-10}
rs6798755_C 🆕	C / C	0.03 (↑)	93%	2.40×10^{-10}
rs573377651_A 🆕	A / A	-0.02 (↓)	92%	2.50×10^{-10}
rs6465120_A 🆕	A / G	0.01 (↑)	51%	2.60×10^{-10}
rs1292065_C 🆕	C / G	0.01 (↑)	29%	3.00×10^{-10}
rs149142833_C 🆕	C / C	-0.02 (↓)	84%	3.20×10^{-10}
rs55737395_G 🆕	G / A	0.01 (↑)	66%	3.30×10^{-10}
rs11187027_G	G / G	-0.02 (↓)	79%	3.40×10^{-10}
rs11903847_T 🆕	T / C	0.01 (↑)	34%	3.40×10^{-10}
rs77756595_A 🆕	A / A	0.03 (↑)	96%	3.40×10^{-10}
rs146706984_G 🆕	G / G	-0.02 (↓)	92%	3.50×10^{-10}
rs61993685_T 🆕	T / T	0.02 (↑)	92%	3.60×10^{-10}
rs57074291_C	C / C	0.01 (↑)	74%	4.30×10^{-10}
rs62397245_C 🆕	C / G	-0.01 (↓)	78%	4.50×10^{-10}
rs7191623_G 🆕	G / A	0.02 (↑)	79%	4.60×10^{-10}
rs34245505_C 🆕	C / C	-0.02 (↓)	80%	4.70×10^{-10}
rs383091_T	T / C	-0.01 (↓)	37%	5.40×10^{-10}
rs9600143_A 🆕	A / T	0.01 (↑)	46%	5.80×10^{-10}
rs193735_G 🆕	G / G	-0.03 (↓)	96%	7.10×10^{-10}
rs806973_A 🆕	A / A	0.01 (↑)	61%	7.10×10^{-10}
rs10792091_T 🆕	T / T	-0.02 (↓)	86%	7.70×10^{-10}
rs71473777_A 🆕	A / A	-0.02 (↓)	88%	8.20×10^{-10}
rs852388_G 🆕	G / C	-0.02 (↓)	79%	8.70×10^{-10}
rs8102873_C 🆕	C / T	-0.01 (↓)	42%	8.80×10^{-10}
rs79983121_C 🆕	C / C	-0.02 (↓)	80%	9.00×10^{-10}
rs9376511_A 🆕	A / A	0.02 (↑)	80%	9.10×10^{-10}
rs9788220_T 🆕	C / C	-0.02 (–)	19%	9.80×10^{-10}
rs111914893_C 🆕	C / C	-0.03 (↓)	95%	1.10×10^{-9}
rs12530679_A 🆕	A / A	0.01 (↑)	52%	1.10×10^{-9}
rs245051_A 🆕	A / A	0.01 (↑)	59%	1.10×10^{-9}
rs62427982_C 🆕	C / C	0.01 (↑)	68%	1.10×10^{-9}
rs7631606_T 🆕	T / G	0.01 (↑)	73%	1.10×10^{-9}
rs4802113_T 🆕	C / C	0.01 (–)	54%	1.20×10^{-9}
rs4909945_T 🆕	T / C	-0.01 (↓)	31%	1.20×10^{-9}
rs6506033_C 🆕	C / C	0.02 (↑)	93%	1.20×10^{-9}
rs1149470_T 🆕	A / A	0.01 (–)	24%	1.30×10^{-9}
rs112403212_C	C / C	-0.02 (↓)	86%	1.40×10^{-9}
rs12422600_G 🆕	A / A	0.01 (–)	63%	1.50×10^{-9}
rs12454712_T 🆕	C / C	0.01 (–)	62%	1.50×10^{-9}
rs13101828_A 🆕	G / G	0.01 (–)	55%	1.50×10^{-9}
rs704_G 🆕	A / A	0.01 (–)	52%	1.50×10^{-9}
rs139386986_C 🆕	C / C	0.02 (↑)	91%	1.60×10^{-9}
rs79357714_A	A / A	0.03 (↑)	95%	1.60×10^{-9}
rs1347188_A 🆕	A / A	-0.01 (↓)	75%	1.70×10^{-9}
rs138191773_G 🆕	G / G	0.05 (↑)	98%	1.70×10^{-9}
rs3826043_C 🆕	C / T	0.01 (↑)	57%	1.70×10^{-9}
rs78588343_G 🆕	G / G	0.02 (↑)	82%	1.70×10^{-9}
rs933574_A 🆕	A / C	-0.01 (↓)	52%	1.70×10^{-9}
rs12504746_C 🆕	C / C	0.02 (↑)	81%	2.00×10^{-9}
rs1561928_A 🆕	G / G	-0.02 (–)	12%	2.00×10^{-9}
rs2517887_G 🆕	G / C	-0.01 (↓)	79%	2.10×10^{-9}
rs4662414_A 🆕	A / A	0.01 (↑)	55%	2.10×10^{-9}
rs56902258_T 🆕	T / T	0.02 (↑)	80%	2.10×10^{-9}
rs6700266_G 🆕	G / A	0.01 (↑)	66%	2.10×10^{-9}
rs11664106_A 🆕	A / A	0.01 (↑)	63%	2.20×10^{-9}
rs2455821_C 🆕	C / A	-0.01 (↓)	73%	2.20×10^{-9}
rs3808477_C 🆕	C / C	0.01 (↑)	72%	2.20×10^{-9}
rs9944241_T 🆕	C / C	0.01 (–)	52%	2.20×10^{-9}

rs73025562_G	G / G	-0.01 (↓)	75%	2.30×10^{-9}
rs11746801_G	A / A	0.01 (−)	36%	2.50×10^{-9}
rs144984216_C NEW	C / C	0.04 (↑)	98%	2.50×10^{-9}
rs2240533_T NEW	T / C	0.01 (↑)	69%	2.70×10^{-9}
rs775633_T NEW	A / A	0.01 (−)	35%	2.80×10^{-9}
rs72691637_G NEW	G / G	0.02 (↑)	81%	2.90×10^{-9}
rs1835346_A	A / A	0.04 (↑)	98%	3.10×10^{-9}
rs200293726_A NEW	A / A	-0.01 (↓)	69%	3.10×10^{-9}
rs139453187_T	T / T	-0.02 (↓)	93%	3.30×10^{-9}
rs36061954_C NEW	C / T	-0.01 (↓)	60%	3.70×10^{-9}
rs3784310_T NEW	T / T	0.01 (↑)	72%	4.30×10^{-9}
rs1340819_A NEW	A / A	0.01 (↑)	65%	4.40×10^{-9}
rs4714001_G NEW	G / A	-0.01 (↓)	36%	4.40×10^{-9}
rs4128205_A	A / C	-0.01 (↓)	49%	5.00×10^{-9}
rs9496567_G NEW	G / G	0.01 (↑)	76%	5.30×10^{-9}
rs7244_G NEW	G / A	-0.02 (↓)	83%	5.60×10^{-9}
rs4382584_G NEW	G / G	-0.01 (↓)	73%	5.70×10^{-9}
rs7424120_C NEW	C / T	0.01 (↑)	40%	5.70×10^{-9}
rs10811662_G NEW	G / G	0.02 (↑)	83%	5.90×10^{-9}
rs7400002_A NEW	A / A	-0.01 (↓)	77%	6.10×10^{-9}
rs9831084_T NEW	C / C	0.01 (−)	54%	6.10×10^{-9}
rs7855395_A NEW	A / G	0.01 (↑)	43%	6.50×10^{-9}
rs10962680_C NEW	T / T	0.01 (−)	26%	6.70×10^{-9}
rs7596814_G NEW	G / T	0.01 (↑)	71%	7.30×10^{-9}
rs9584870_T NEW	T / T	0.01 (↑)	63%	7.80×10^{-9}
rs74897213_G NEW	G / G	-0.03 (↓)	95%	8.40×10^{-9}
rs10180284_C NEW	C / T	0.01 (↑)	52%	8.70×10^{-9}
rs7714361_A NEW	A / A	-0.01 (↓)	77%	8.80×10^{-9}
rs2499797_G NEW	G / A	0.02 (↑)	16%	9.40×10^{-9}
rs325485_A NEW	G / G	0.01 (−)	40%	9.40×10^{-9}
rs55837381_G	A / A	0.01 (−)	75%	9.70×10^{-9}
rs113266765_C NEW	C / C	0.03 (↑)	97%	1.00×10^{-8}
rs1133400_A NEW	A / A	-0.01 (↓)	78%	1.00×10^{-8}
rs1281978_C NEW	T / T	0.01 (−)	47%	1.00×10^{-8}
rs1728407_A NEW	A / G	-0.01 (↓)	55%	1.00×10^{-8}
rs320369_A NEW	A / G	0.01 (↑)	32%	1.10×10^{-8}
rs4564007_T NEW	C / C	0.01 (−)	32%	1.10×10^{-8}
rs12669911_A NEW	C / C	0.01 (−)	39%	1.20×10^{-8}
rs2342371_G NEW	A / A	0.01 (−)	27%	1.20×10^{-8}
rs4559942_G NEW	A / A	-0.01 (−)	23%	1.20×10^{-8}
rs75268115_A NEW	A / A	0.02 (↑)	92%	1.20×10^{-8}
rs2194411_G NEW	G / A	0.02 (↑)	87%	1.30×10^{-8}
rs55646464_G NEW	T / T	-0.01 (−)	70%	1.30×10^{-8}
rs71538127_C NEW	C / G	-0.02 (↓)	88%	1.30×10^{-8}
rs77824033_T NEW	T / T	0.03 (↑)	96%	1.30×10^{-8}
rs78297458_T NEW	T / T	0.04 (↑)	98%	1.30×10^{-8}
rs117291242_C NEW	C / C	-0.03 (↓)	96%	1.40×10^{-8}
rs80078546_C NEW	C / C	0.02 (↑)	95%	1.40×10^{-8}
rs10172544_C NEW	C / C	0.01 (↑)	59%	1.50×10^{-8}
rs76172517_T NEW	T / T	0.02 (↑)	89%	1.50×10^{-8}
rs7681288_G NEW	G / A	-0.01 (↓)	34%	1.60×10^{-8}
rs880315_T NEW	T / T	0.01 (↑)	66%	1.60×10^{-8}
rs498475_G NEW	G / A	0.01 (↑)	37%	1.70×10^{-8}
rs499293_G NEW	G / G	0.01 (↑)	34%	1.70×10^{-8}
rs10863828_T NEW	T / T	0.01 (↑)	76%	1.80×10^{-8}
rs184694823_A NEW	A / A	-0.02 (↓)	92%	1.80×10^{-8}
rs2017500_G NEW	G / A	-0.01 (↓)	49%	1.80×10^{-8}
rs2705616_C	C / G	-0.01 (↓)	47%	1.80×10^{-8}
rs3758413_T NEW	C / C	-0.01 (−)	58%	1.80×10^{-8}

SNP	Genotype	Effect	Frequency	P-value
rs7136223_A	A / A	0.01 (↑)	72%	1.80×10^{-8}
rs28624578_T	T / C	-0.01 (↓)	83%	1.90×10^{-8}
rs394872_C	C / T	-0.01 (↓)	46%	1.90×10^{-8}
rs7199293_G	G / A	-0.01 (↓)	47%	2.00×10^{-8}
rs878409_G	A / A	0.01 (−)	46%	2.10×10^{-8}
rs112162280_C	C / C	0.01 (↑)	71%	2.20×10^{-8}
rs2187114_G	G / G	0.02 (↑)	90%	2.20×10^{-8}
rs7077812_T	T / T	-0.01 (↓)	81%	2.20×10^{-8}
rs293561_T	T / G	-0.01 (↓)	64%	2.30×10^{-8}
rs34893217_G	G / T	0.02 (↑)	89%	2.30×10^{-8}
rs76957426_C	C / T	-0.01 (↓)	70%	2.30×10^{-8}
rs11657201_A	A / G	-0.01 (↓)	76%	2.40×10^{-8}
rs1556124_G	A / A	-0.01 (−)	23%	2.40×10^{-8}
rs4947121_T	C / C	-0.01 (−)	23%	2.40×10^{-8}
rs11980456_G	G / G	-0.01 (↓)	71%	2.60×10^{-8}
rs2420477_T	T / C	0.01 (↑)	47%	2.60×10^{-8}
rs1152847_G	G / G	0.01 (↑)	65%	2.70×10^{-8}
rs4858894_C	G / G	-0.01 (−)	38%	2.70×10^{-8}
rs9553567_T	C / C	-0.02 (−)	16%	2.80×10^{-8}
rs2416759_G	G / A	-0.01 (↓)	30%	2.90×10^{-8}
rs62473520_T	T / C	0.02 (↑)	92%	2.90×10^{-8}
rs6572807_A	A / A	-0.01 (↓)	73%	2.90×10^{-8}
rs134551_C	C / T	0.01 (↑)	66%	3.00×10^{-8}
rs3017106_C	C / T	-0.01 (↓)	31%	3.00×10^{-8}
rs144738419_A	A / A	0.05 (↑)	99%	3.10×10^{-8}
rs6000553_A	G / G	-0.01 (−)	47%	3.10×10^{-8}
rs6722159_T	A / A	0.01 (−)	51%	3.10×10^{-8}
rs61780049_A	A / G	-0.02 (↓)	85%	3.20×10^{-8}
rs6913325_G	T / T	0.01 (−)	55%	3.20×10^{-8}
rs2131311_A	G / G	0.01 (−)	29%	3.30×10^{-8}
rs2774430_A	G / G	-0.01 (−)	44%	3.50×10^{-8}
rs7186635_A	A / A	-0.01 (↓)	68%	3.50×10^{-8}
rs6924805_G	G / T	0.01 (↑)	41%	3.70×10^{-8}
rs2070341_C	C / C	-0.01 (↓)	40%	3.80×10^{-8}
rs61975915_C	C / T	0.01 (↑)	70%	3.80×10^{-8}
rs72917533_T	T / T	0.01 (↑)	81%	3.80×10^{-8}
rs62064941_A	A / A	0.03 (↑)	96%	4.20×10^{-8}
rs62130120_G	A / A	0.01 (−)	54%	4.20×10^{-8}
rs7826246_A	A / G	-0.02 (↓)	90%	4.20×10^{-8}
rs143076454_G	G / G	-0.04 (↓)	98%	4.30×10^{-8}
rs2110690_A	A / A	-0.01 (↓)	49%	4.30×10^{-8}
rs4002684_A	A / A	0.01 (↑)	60%	4.30×10^{-8}
rs2054067_A	A / A	0.01 (↑)	63%	4.50×10^{-8}
rs973709_G	G / A	0.01 (↑)	44%	4.50×10^{-8}
rs56321085_G	G / A	-0.02 (↓)	92%	4.80×10^{-8}
rs6805924_G	T / T	-0.01 (−)	57%	4.80×10^{-8}
rs7694869_A	G / G	0.01 (−)	38%	4.90×10^{-8}