

Supplementary Table 1. Associations between APOA5 c.553G>T and Triglycerides.

	Unadjusted Model			Adjusted Model	
	n	OR (95% CI)	p-value	OD (95% CI)	p-value
Chinese Americans	300	4.45 (2.18-9.07)	<0.001	4.27 (1.91-9.56)	<0.001
Non-Chinese	240	2.75 (1.32-5.74)	0.007	2.28 (1.00-5.18)	0.050
American Asians					

CI, confidence interval; OR, odds ratio. Model adjusted for sex, age, diabetes, and BMI.

Supplementary Table 2. Characteristics of non-Chinese-American Asian groups.

Variable	High-TG (n = 139)	Low-Tg (n = 101)	p-value
Age (years)	47.5±1.5	43.0±1.9	0.064 <sup>a</sup>
Female (%)	43.5	69.3	<0.001 <sup>b</sup>
BMI (kg/m <sup>2</sup> )	26.1±0.4 (129)	23.5±0.4 (96)	<0.001 <sup>a</sup>
Total Cholesterol	286.3±9.5	234.3±6.5	<0.001 <sup>a</sup>
Triglycerides	524.9±63.5	95.8±2.6	*
VLDL-C	102.9±15.4 (83)	11.4±0.6 (67)	<0.001 <sup>a</sup>
VLDL-TG	416.4±61.1 (83)	46.4±2.8 (67)	<0.001 <sup>a</sup>
LDL-C	153.3±5.9 (119)	156.1±6.3 (100)	0.745 <sup>a</sup>
LDL-TG	56.6±3.9 (83)	31.0±1.4 (67)	<0.001 <sup>a</sup>
HDL-C	43.0±1.3 (129)	63.9±2.3 (100)	<0.001 <sup>a</sup>
MI, %	14.1 (135)	8.0 (100)	0.149 <sup>b</sup>
angina, %	17.2 (128)	10.5 (95)	0.161 <sup>b</sup>
family history CAD, %	40.7 (113)	44.9 (89)	0.546 <sup>b</sup>
Stroke, %	5.2 (134)	1.0 (100)	0.079 <sup>b</sup>
Diabetes, %	22.2 (135)	6.0 (100)	0.0006 <sup>b</sup>
Hypertension, %	51.9 (135)	23.0 (100)	<0.001 <sup>b</sup>
c.553T allele frequency (%)	13.7 (139)	5.4 (100)	<0.0001 <sup>b</sup>

BMI, body mass index; VLDL-C very-low-density lipoprotein cholesterol; VLDL-TG, very-low-density lipoprotein triglyceride; LDL-C, low-density lipoprotein cholesterol; LDL-TG, low-density lipoprotein triglyceride; HDL-C, high-density lipoprotein cholesterol. Values are ± SEM with the numbers of subjects in each instance in parenthesis. \* Use of these variables as a case selection criterion precludes reporting of a statistical significance. <sup>a</sup> p values calculated by unpaired Student's t test (TG values were log-transformed prior to testing); <sup>b</sup> by chi-square test.

Supplementary Table 3. Effect of second allele haplotype on levels of lipids and lipoproteins in c.553G>T heterozygotes.

	Haplotype 5 (n = 27)	Haplotypes 4,6 or 7 (n = 57)	p-value
Total Cholesterol	312 ± 31	267 ± 15	0.141
Triglycerides	832 ± 216	444 ± 70	0.018 <sup>a</sup>
VLDL-C	188 ± 46	86 ± 26	0.040
VLDL-TG	811 ± 268	332 ± 94	0.004 <sup>a</sup>
LDL-C	111 ± 8	138 ± 9	0.055
LDL-TG	68 ± 8	53 ± 6	0.138
HDL-C	39 ± 3	49 ± 3	0.019

All lipid values are mg/dl and are expressed as mean ± SEM. <sup>a</sup>Calculated from log-transformed data.

Supplementary Table 4. Multiple Regression Analysis of Odds of HTG

Predictor	Odds Ratio	Standard Error	95% CI	p-value
Genotype	3.10	0.865	1.797, 5.359	<0.0005
Sex	1.80	0.371	1.199, 2.695	0.005
BMI	1.11	0.030	1.055, 1.171	<0.0005
Diabetes	2.36	0.800	1.215, 4.588	0.011
Hypertension	2.01	0.478	1.260, 3.201	0.003
Age	1.00	0.006	0.993, 1.017	0.415

Predictors evaluated in the model for HTG included: APOA5 genotype (wild type genotype being the referent group), sex (female sex being the referent group), body mass index (change in odds per 1 m/kg<sup>2</sup> change in BMI), age (change in odds per year in age), diabetes status (non-diabetic being the referent group), and hypertension (normotensive being the referent group), and interaction terms for: genotype and sex, genotype and BMI, genotype and age, genotype and diabetes status, and genotype and hypertensive status. The model accounts for 13.78% of the variance in odds of HTG ( $p<0.0005$ )