

### Supplementary Material

**Table S1:** Statistical analysis of the clinical and analytical variables of the women of the control group without and with ultrasound (US).

Variable	Control without US (n= 15)	Control with US (n= 58)	p
Age (years)	54.5 (12.6)	51.4 (8.6)	0.266
Statins	3 (20.0 %)	5 (8.6 %)	0.348
Hypertension	2 (13.3 %)	2 (3.4 %)	0.185
Diabetes mellitus	0 (0.0 %)	3 (5.2 %)	> 0.999
Dyslipidemia	5 (33.3 %)	20 (34.5 %)	0.933
Body mass index (kg/m <sup>2</sup> )	23.5 (4.5)	26.4 (4.0)	<b>0.018</b>
Weight (kg)	61.0 (10.8)	68.8 (12.0)	<b>0.026</b>
GFR CKD-EPI (mL/min/1.73 m <sup>2</sup> )	89.5 (87 to 90)	90 (90 to 90)	0.099
Glucose (mmol/L)	5.0 (0.6)	5.3 (1.6)	0.586
T&G index	4.40 (4.24 to 4.54)	4.37 (4.25 to 4.56)	0.943
Insulin resistance	2 (14.3 %)	8 (13.8 %)	< 0.999
Total cholesterol (mmol/L)	4.7 (0.8)	5.4 (1.0)	0.077
HDL-C (mmol/L)	1.6 (0.7)	1.8 (0.5)	0.290
LDL-C (mmol/L)	2.8 (0.8)	3.1 (0.8)	0.194
Apolipoprotein A (g/L)	1.6 (1.4 to 1.7)	1.7 (1.5 to 1.9)	0.099
Apolipoprotein B (g/L)	0.9 (0.8 to 1.1)	1.1 (0.9 to 1.2)	0.183
Triglycerides (mmol/L)	0.9 (0.6 to 1.1)	0.8 (0.6 to 1.1)	0.989
Non-HDL-C (mmol/L)	3.2 (0.8)	3.5 (0.9)	0.213
Lipoprotein (a) (g/L)	0.5 (0.1 to 1.7)	0.2 (0.6 to 0.5)	0.099
Albumin/creatinine (g/mol)	0.6 (0.1 to 0.8)	0.0 (0.0 to 0.4)	<b>0.007</b>
APOE E2/E3-4	0 (0.0 %)	8 (14.0 %)	0.191
APOE E4/E2-3	4 (26.7 %)	9 (15.8 %)	0.450
ZPR1 (c.*724C>G)			
CC	9 (60.0 %)	41 (70.7 %)	
CG	6 (40.0 %)	17 (29.3 %)	0.427
APOA5 (c.56C>G)			
CC	12 (80.0 %)	54 (93.1 %)	
CG	3 (20.0 %)	4 (6.9 %)	0.124
GCKR (c.1337C>T)			
CC	3 (20.0 %)	17 (29.3 %)	
CT	9 (60.0 %)	28 (48.3 %)	0.694
TT	3 (20.0 %)	13 (22.4 %)	
Family history of premature CAD	0 (0.0 %)	6 (10.3 %)	0.335
Family history of non-premature CAD	3 (20.0 %)	10 (17.2 %)	0.723
Family history of premature stroke	0 (0.0 %)	5 (8.6 %)	0.576
Family history of non-premature stroke	5 (33.3 %)	11 (19.0 %)	0.295
Active smoking	5 (33.3 %)	13 (22.4 %)	0.502

Variable	Control without US (n= 15)	Control with US (n= 58)	p
Ex-smoker >6 months	0 (0.0 %)	12 (20.7 %)	0.061
Waist circumference (cm)	90.8 (13.4)	88.9 (13.2)	0.630
Dietary questionnaire (score)	10.7 (7 to 14)	11.7 (5 to 14)	0.086
Physical activity ( <i>puntos</i> )	1.8 (1.1)	1.7 (1.2)	0.862
Menopause	9 (60.0 %)	35 (60.3 %)	0.981
Menopause < 40 years	0 (0.0 %)	1 (1.7 %)	> 0.999
Menarche (years)	12.1 (1.8)	12.8 (1.7)	0.199
Pregnancies (number)	1 (0 to 3)	2 (1 to 3)	0.197
Miscarriages (number)	0 (0 to 1)	0 (0 to 1)	0.967
Contraception	1 (6.7 %)	2 (3.4 %)	0.504
Systolic blood pressure (mm Hg)	122.6 (17.9)	122.2 (15.9)	0.932
Diastolic blood pressure (mm Hg)	75.1 (11.6)	76.7 (9.0)	0.534
Heart rate (bpm)	69.6 (6.5)	69.1 (9.8)	0.853
Urea (mmol/L)	4.8 (1.1)	5.6 (1.4)	0.076
Creatinine (μmol/L)	62.8 (11.1)	63.1 (8.2)	0.893
Sodium (mmol/L)	142.4 (1.9)	141.2 (1.9)	<b>0.037</b>
Potassium (mmol/L)	4.3 (0.3)	4.4 (0.2)	0.493
Angiotensin-converting enzyme (ukat/L)	0.7 (0.3 to 1.4)	0.7 (0.1 to 1.5)	0.987
Lactate dehydrogenase (μkat/L)	2.8 (0.5)	2.7 (0.5)	0.411
Aspartate amino transferase (μkat/L)	0.3 (0.1)	0.3 (0.1)	0.684
Alanine amino transferase (μkat/L)	0.2 (0.1)	0.3 (0.1)	0.297
Albumin (g/L)	45.1 (3.0)	46.1 (2.5)	0.178
Bilirubin (μmol/L)	6.7 (2 to 12)	9.0 (4 to 27)	0.078
Gamma-glutamyltransferase (μkat/L)	0.3 (0.2 to 0.5)	0.3 (0.1 to 1.8)	0.838
Alkaline phosphatase (μkat/L)	1.2 (0.7 to 1.6)	1.1 (0.6 to 2.0)	0.306
Magnesium (mmol/L)	0.9 (0.1)	0.9 (0.1)	0.647
Urates (μmol/L)	263.9 (46.1)	246.1 (64.9)	0.337
Ferritin (μg/L)	82.4 (20.3 to 231.6)	102.9 (7.3 to 1151.1)	0.636
Transferrin (μmol/L)	31.1 (2.7)	33.9 (9.5)	0.271
Transferrin saturation index (%)	22.4 (11 to 36)	28.9 (5 to 85)	0.101
Haptoglobin (g/L)	1.2 (0.4)	1.2 (0.4)	0.748
Iron (μmol/L)	14.0 (4.5)	17.1 (6.9)	0.123
C-reactive protein (mg/L)	2.5 (0.3 to 18.1)	2.3 (0.3 to 43.6)	0.878
Rheumatoid factor (ku.i./L)	13.5 (10 to 59)	14.6 (10 to 248)	0.896
Protein/creatinine (g/mol)	9.2 (8.1 to 11.1)	8.6 (6.3 to 10.5)	0.269
Vitamin D (nmol/L)	77.6 (29.7 to 194.0)	67.3 (23.1 to 147.4)	0.253
Parathormone (pmol/L)	4.3 (2.9 to 6.9)	4.4 (3.1 to 5.7)	0.844

Variable	Control without US (n= 15)	Control with US (n= 58)	p
Thyrotropin ( <i>mu.int./L</i> )	1.5 (0.9 to 1.9)	2.0 (1.4 to 2.8)	0.085
Thyroxine ( <i>pmol/L</i> )	14.3 (13.7 to 16.1)	15.0 (13.9 to 16.8)	0.603
Glycosylated hemoglobin (%)	5.6 (0.3)	5.5 (0.9)	0.675
Homocysteine ( <i>μmol/L</i> )	10.2 (5.0 to 24.0)	9.2 (4.0 to 17.0)	0.347
Vitamin B12 ( <i>pmol/L</i> )	373 (306.0 to 444.5)	384.0 (286.7 to 455.0)	0.727
Folic acid ( <i>nmol/L</i> )	25.1 (13.4)	23.2 (8.3)	0.519
Immunoglobulin G ( <i>mg/L</i> )	10446.1 (1974.0)	11003.0 (3330.7)	0.553
Immunoglobulin A ( <i>mg/L</i> )	2277.0 (742.8)	1910.8 (1019.9)	0.214
Immunoglobulin M ( <i>mg/L</i> )	1164.0 (683.3)	1193.9 (517.8)	0.858
C3 complement ( <i>mg/L</i> )	968.7 (345.3)	1093.5 (222.7)	0.980
C4 complement ( <i>mg/L</i> )	223.1 (61.3)	236.6 (52.9)	0.408
Hemoglobin ( <i>g/L</i> )	132.2 (8.6)	135.1 (19.0)	0.586
Platelets ( <i>x10E9/L</i> )	259.6 (54.1)	259.3 (53.8)	0.985
Leukocytes ( <i>x10E9/L</i> )	6.4 (1.6)	6.0 (1.4)	0.453
Prothrombin time	0.9 (0.9 to 1.0)	0.9 (0.9 to 1.0)	0.834
Thromboplastin time	1.0636 (0.07762)	1.0133 (0.08249)	<b>0.043</b>
Fibrinogen ( <i>g/L</i> )	3.1 (2.7 to 3.7)	3.2 (2.9 to 3.8)	0.403
Pathological D-dimer	0 (0%)	1 (1.8%)	< 0.999

Data are expressed as n (%) for qualitative variables and analyzed by chi<sup>2</sup> test or Fisher test; mean (standard deviation) for normally distributed quantitative variables and analyzed by analysis of variance (ANOVA); median (interquartile range) for non-normally distributed variables, and analyzed by nonparametric tests (Mann–Whitney U). Data highlighted in bold indicate p < 0.05. US: Ultrasound; GFR CKD-EPI: Glomerular Filtration Rate Chronic Kidney Disease Epidemiology Collaboration; HDL-C: high-density lipoprotein cholesterol; LDL-C: low-density lipoprotein cholesterol; Non-HDL-C: non-HDL-cholesterol.

**Table S2:** Baseline characteristics of both the SLE and control group.

Variable	Control group (n= 73)	SLE group (n= 73)	p
Caucasian	71 (97.3 %)	70 (95.9 %)	> 0.999
Family history of premature CAD	6 (8.2 %)	3 (4.1 %)	
Family history of non-premature CAD	13 (17.8 %)	15 (20.5 %)	0.562
Family history of premature stroke	5 (6.8 %)	6 (8.2 %)	
Family history of non-premature stroke	16 (21.9 %)	10 (13.7 %)	0.426
Family history of thrombosis	3 (4.1 %)	1 (1.4 %)	0.620
Family history of cancer	39 (53.4 %)	38 (52.1 %)	0.868
Hyperuricemia	1 (1.4 %)	1 (1.4 %)	> 0.999
Menarche ( <i>years</i> )	12.6 (1.7)	12.8 (1.6)	0.443
Pregnancies ( <i>number</i> )	2 (0 to 3)	2 (1 to 3)	0.520
Miscarriages ( <i>number</i> )	0 (0 to 1)	0 (0 to 1)	0.787

Variable	Control group (n= 73)	SLE group (n= 73)	p
Breastfeeding >2 months	31 (42.5 %)	28 (38.4 %)	0.613
Contraceptives	3 (4.1 %)	5 (6.8 %)	0.719
Ezetimibe	0 (0.0 %)	3 (4.1 %)	0.245
Systolic blood pressure (mm Hg)	122.3 (16.2)	124.1 (17.6)	0.514
Diastolic blood pressure (mm Hg)	76.5 (9.5)	78.0 (8.7)	0.323
Heart rate (lpm)	69.2 (9.2)	74.0 (11.3)	<b>0.006</b>
Sodium (mmol/L)	141 (140 to 143)	142 (140 to 143)	0.196
Potassium (mmol/L)	4.4 (0.2)	4.3 (0.4)	<b>0.033</b>
Chlorine (mmol/L)	102.5 (3.6)	102.2 (2.4)	0.693
Angiotensin-converting enzyme (ukat/L)	0.7 (0.5 to 0.8)	0.6 (0.4 to 0.9)	0.809
Creatine kinase (μkat/L)	1.3 (0.9 to 1.9)	1.3 (0.8 to 2.0)	0.441
Lactate dehydrogenase (μkat/L)	2.7 (2.4 to 3.1)	3.0 (2.6 to 3.5)	<b>0.001</b>
Aspartate amino transferase (μkat/L)	0.3 (0.3 to 0.4)	0.3 (0.3 to 0.4)	0.126
Alanine amino transferase (μkat/L)	0.3 (0.2 to 0.3)	0.3 (0.2 to 0.3)	0.681
Bilirubin (μmol/L)	8.0 (6.0 to 10.0)	6.0 (4.2 to 8.0)	<b>0.002</b>
Gamma-glutamyltransferase (μkat/L)	0.26 (0.18 to 0.38)	0.32 (0.21 to 0.48)	<b>0.028</b>
Alkaline phosphatase (μkat/L)	1.14 (0.9 to 1.3)	1.11 (0.9 to 1.3)	0.854
HDL-C/Total cholesterol	0.3 (0.1)	0.3 (0.1)	0.879
Magnesium (mmol/L)	0.9 (0.8 to 0.9)	0.8 (0.8 to 0.9)	<b>0.002</b>
Urates (μmol/L)	248 (221 to 291)	285.5 (225 to 321)	<b>0.016</b>
Urea (mmol/L)	5.4 (1.3)	6.2 (2.0)	<b>0.005</b>
Calcium (mmol/L)	2.4 (0.1)	2.4 (0.1)	0.376
Ferritin (μg/L)	59.0 (32.4 to 123.1)	48.1 (26.4 to 98.5)	0.207
Transferrin (μmol/L)	31.6 (29.6 to 34.5)	31.4 (29.0 to 35.5)	0.505
Transferrin saturation index (%)	25 (21 to 33)	22 (16 to 27)	<b>0.008</b>
Haptoglobin	1.2 (0.9 to 1.5)	1.4 (1.0 to 1.9)	<b>0.003</b>
Iron (μmol/L)	16 (13 to 20)	13 (10 to 17)	<b>0.003</b>
Pathological rheumatoid factor	8 (11.4 %)	12 (17.6 %)	0.300
Protein/creatinine (g/mol)	9.0 (6.8 to 10.6)	8.8 (0.3 to 18.8)	0.352
Thyrotropin (mu.int./L)	1.7 (1.3 to 2.6)	1.9 (1.4 to 3.1)	0.192
Thyroxine (pmol/L)	14.9 (13.9 to 16.5)	14.4 (12.4 to 16.5)	0.060
Immunoglobulin G (mg/L)	10391 (8940 to 12600)	12800 (10250 to 15075)	< 0.001
Immunoglobulin A (mg/L)	1781 (1350 to 2550)	2800 (1900 to 3587)	< 0.001
Immunoglobulin M (mg/L)	1020 (754 to 1480)	875 (527)	0.079
C3 complement (mg/L)	1069.3 (253.2)	1045.5 (230.4)	0.555
C4 complement (mg/L)	233.9 (54.4)	170.5 (83.2)	< 0.001

Variable	Control group (n= 73)	SLE group (n= 73)	p
Hemoglobin (g/L)	136 (130 to 143)	131 (124 to 139)	<b>0.006</b>
Platelets ( $\times 10^9/L$ )	259.4 (53.5)	237.1 (81.2)	0.053
Leukocytes ( $\times 10^9/L$ )	6.0 (5.3 to 6.9)	5.8 (4.6 to 7.1)	0.295
Prothrombin time	0.9 (0.9 to 1.0)	0.9 (0.9 to 1.0)	0.660
Thromboplastin time	1.0 (0.9 to 1.1)	1.0 (0.9 to 1.2)	0.263
Fibrinogen (g/L)	3.2 (2.9 to 3.8)	3.2 (2.7 to 3.7)	0.668
Pathological D-dimer	1 (1.4 %)	7 (10.3 %)	<b>0.033</b>
Minimum ABI	1.1 (1.0 to 1.2)	1.1 (1.0 to 1.1)	0.880
Maximum ABI	1.2 (1.1 to 1.2)	1.1 (1.1 to 1.2)	0.333

Data are expressed as n (%) for qualitative variables and analyzed by  $\chi^2$  test or Fisher test; mean (standard deviation) for normally distributed quantitative variables and analyzed by analysis of variance (ANOVA); median (interquartile range) for non-normally distributed variables, and analyzed by nonparametric tests (Mann–Whitney U). Data highlighted in bold indicate  $p < 0.05$ . SLE: Systemic Lupus Erythematosus; CAD: coronary artery disease; HDL-C: high-density lipoprotein cholesterol; LDL-C: low-density lipoprotein cholesterol; Non-HDL-C: non-HDL-cholesterol; ABI: ankle brachial index.

**Table S3:** Statistical analysis of the genetic variants of the *ZPR1*, *APOA5* and *GCKR* genes with carotid plaque.

Gene	Non-carotid plaque subjects (n= 112)	Carotid plaque subjects (n= 19)	p
<i>ZPR1</i> (c.*724C>G) CC	77 (68.8 %)	15 (78.9 %)	NA
	CG	34 (30.4 %)	
	GG	1 (100 %)	
<i>APOA5</i> (c.56C>G) CC	97 (86.6 %)	17 (89.5 %)	NA
	CG	14 (12.5 %)	
	GG	1 (100 %)	
<i>GCKR</i> (c.1337C>T) CC	41 (36.6 %)	4 (21.1 %)	0.381
	CT	51 (45.5 %)	
	TT	20 (17.9 %)	

Data are expressed as n (%); NA: not statistically applicable.

**Table S4:** Multivariate analysis of the risk factors for carotid plaque, including insulin resistance, in both the SLE and control group.

Variable	OR (95 % CI)	p
SLE	1.677 (0.369 to 7.629)	0.503
GCKR (c.1337C>T) TT	Ref.	
CC	0.114 (0.016 to 0.831)	<b>0.032</b>
CT	0.731 (0.158 to 3.379)	0.688
Triglycerides (mmol/L)	12.864 (1.987 to 83.292)	<b>0.007</b>
Hypertension	3.244 (0.781 to 13.478)	0.105
Age	1.057 (0.987 to 1.132)	0.111
Insulin resistance	0.467 (0.061 to 3.597)	0.465
Nagelkerke R <sup>2</sup>	40.8 %	

SLE: systemic lupus erythematosus; OR: odds ratio; CI: confidence interval. Data highlighted in bold indicate  $p < 0.05$ .

**Table S5:** Multivariate analysis of the risk factors for carotid plaque, including insulin resistance but not triglycerides, in both the SLE and control group.

Variable	OR (95 % CI)	p
SLE	1.380 (0.320 to 5.942)	0.666
GCKR (c.1337C>T) TT	Ref.	
CC	0.190 (0.034 to 1.049)	<b>0.057</b>
CT	0.567 (0.135 to 2.386)	0.439
Hypertension	5.484 (1.408 to 21.360)	0.432
Age	1.025 (0.964 to 1.089)	0.432
Insulin resistance	4.853 (1.452 to 16.220)	<b>0.010</b>
Nagelkerke R <sup>2</sup>	30.8 %	

SLE: systemic lupus erythematosus; OR: odds ratio; CI: confidence interval. Data highlighted in bold indicate  $p < 0.05$ .

**Table S6:** Multivariate analysis of the risk factors for carotid plaque, including triglycerides and the glucose index, in both the SLE and control group.

Variable	OR (95 % CI)	p
SLE	1.693 (0.373 to 7.680)	0.495
GCKR (c.1337C>T) TT	Ref.	
CC	0.170 (0.029 to 0.985)	<b>0.048</b>
CT	0.578 (0.133 to 2.522)	0.466
Hypertension	4.334 (1.099 to 17.084)	<b>0.036</b>
Age	1.032 (0.969 to 1.099)	0.331
Triglycerides and glucose index	41.024 (3.892 to 432.438)	<b>0.002</b>
Nagelkerke R <sup>2</sup>	35.9 %	

SLE: systemic lupus erythematosus; OR: odds ratio; CI: confidence interval. Data highlighted in bold indicate  $p < 0.05$ .

**Table S7:** Multivariate analysis of the risk factors for carotid plaque, including glucose, in both the SLE and control group.

Variable	OR (95 % CI)	p
SLE	1.637 (0.354 to 7.575)	0.528
GCKR (c.1337C>T) TT	Ref.	
CC	0.112 (0.016 to 0.811)	<b>0.030</b>
CT	0.651 (0.143 to 2.971)	0.579
Triglycerides (mmol/L)	7.195 (2.159 to 23.981)	<b>0.001</b>
Glucose (mmol/L)	1.044 (0.745 to 1.465)	0.801
Hypertension	3.655 (0.882 to 15.149)	0.074
Age	1.049 (0.981 to 1.122)	0.163
Nagelkerke R <sup>2</sup>	40.3 %	

SLE: systemic lupus erythematosus; OR: odds ratio; CI: confidence interval. Data highlighted in bold indicate  $p < 0.05$ .

**Table S8:** Multivariate analysis of the risk factors for carotid plaque, including severity by the SLICC/SDI index, in both the SLE and control group.

Variable	OR (95 % CI)	p
SLICC/SDI= 0	1.564 (0.318 to 7.685)	0.582
SLICC/SDI≥ 1	1.633 (0.272 to 9.803)	0.592
GCKR (c.1337C>T) TT	Ref.	
CC	0.110 (0.015 to 0.821)	<b>0.031</b>
CT	0.665 (0.147 to 3.008)	0.597
Triglycerides (mmol/L)	7.556 (2.399 to 23.794)	<b>0.001</b>
Hypertension	3.555 (0.853 to 14.822)	0.082
Age	1.051 (0.983 to 1.123)	0.146
Nagelkerke R <sup>2</sup>	40.3 %	

SLE: systemic lupus erythematosus; OR: odds ratio; CI: confidence interval. SLICC/SDI: Systemic Lupus International Collaborating Clinics/ACR Damage Index. Data highlighted in bold indicate  $p < 0.05$ .

**Table S9:** Multivariate analysis of the risk factors for carotid plaque, including the cumulative dose of corticosteroids, in both the SLE and control group.

Variable	OR (95 % CI)	p
ADC from 0 to 17 g	2.442 (0.488 to 12.205)	0.277
ADC > 17 g	0.852 (0.139 to 5.234)	0.862
GCKR (c.1337C>T) TT	Ref.	
CC	0.101 (0.013 to 0.754)	<b>0.025</b>
CT	0.584 (0.122 to 2.79)	0.500
Triglycerides (mmol/L)	9.553 (2.836 to 32.178)	< 0.001
Hypertension	4.306 (0.990 to 18.726)	0.052
Age	1.051 (0.982 to 1.125)	0.153
Nagelkerke R <sup>2</sup>	42.2 %	

OR: odds ratio; CI: confidence interval. ADC: cumulative dose of corticosteroids. Data highlighted in bold indicate  $p < 0.05$ .

**Table S10:** Multivariate analysis of the risk factors for carotid plaque, including homocysteine, in both the SLE and control group.

Variable	OR (95 % CI)	p
SLE	1.332 (0.268 to 6.607)	0.726
GCKR (c.1337C>T) TT	Ref.	
CC	0.101 (0.014 to 0.748)	<b>0.025</b>
CT	0.570 (0.124 to 2.616)	0.470
Triglycerides (mmol/L)	7.164 (2.239 to 22.926)	<b>0.001</b>
Hypertension	3.428 (0.809 to 14.520)	0.094
Age	1.034 (0.965 to 1.109)	0.342
Homocysteine	1.026 (0.889 to 1.183)	0.726
Nagelkerke R <sup>2</sup>	38.9 %	

SLE: systemic lupus erythematosus; OR: odds ratio; CI: confidence interval. Data highlighted in bold indicate  $p < 0.05$ .

**Table S11:** Multivariate analysis of the risk factors for carotid plaque, including the dietary questionnaire, in both the SLE and control group.

Variable	OR (95 % CI)	p
SLE	1.608 (0.346 to 7.464)	0.544
GCKR (c.1337C>T) TT	Ref.	
CC	0.113 (0.015 to 0.827)	<b>0.032</b>
CT	0.677 (0.143 to 3.210)	0.624
Triglycerides (mmol/L)	7.560 (2.397 to 23.844)	<b>0.001</b>
Hypertension	3.563 (0.867 to 14.635)	0.078
Age	1.050 (0.982 to 1.122)	0.156
Dietary questionnaire (score)	1.013 (0.750 to 1.367)	0.935
Nagelkerke R <sup>2</sup>	39.9 %	

SLE: systemic lupus erythematosus; OR: odds ratio; CI: confidence interval. Data highlighted in bold indicate  $p < 0.05$ .

**Table S12:** Statistical analysis of the allelic variants of the GCKR gene and lipid profile adjusted for lipid-lowering drugs.

Variable	Allelic variant GCKR (c.1337C>T) gene	Non LLT (n= 105)	LLT (n= 41)	<i>p</i> LLT	<i>p</i> GCKR gene	<i>p</i> interaction (LLT and GCKR gene)
TC (mmol/L)	CC	5.2 (0.8)	5.1 (0.9)	0.056	0.267	0.293
	CT	5.2 (0.9)	4.5 (0.7)			
	TT	5.2 (1.3)	4.9 (0.5)			
TG (mmol/L)	CC	1.0 (0.5)	1.6 (0.9)	< 0.001	0.028	0.354
	CT	0.9 (0.4)	1.2 (0.4)			
	TT	0.9 (0.5)	1.2 (0.4)			
HDL-C (mmol/L)	CC	1.6 (0.6)	1.6 (0.4)	0.216	0.393	0.415
	CT	1.8 (0.4)	1.8 (0.4)			
	TT	1.7 (0.5)	1.6 (0.3)			
LDL-C (mmol/L)	CC	3.1 (0.7)	2.7 (0.8)	0.004	0.87	0.182
	CT	2.9 (0.6)	2.2 (0.5)			
	TT	2.9 (0.7)	2.7 (0.3)			
Non-HDL-C (mmol/L)	CC	3.5 (0.8)	3.5 (1.0)	0.208	0.109	0.145
	CT	3.4 (0.8)	2.8 (0.6)			
	TT	3.3 (0.9)	3.3 (0.8)			
Apo B (g/L)	CC	1.0 (0.2)	1.0 (0.3)	0.260	0.099	0.178
	CT	0.9 (0.2)	0.9 (0.1)			
	TT	1.0 (0.3)	0.9 (0.2)			

Data are expressed as mean (standard deviation) and analyzed by analysis of covariance (ANCOVA) and adjusted for lipid-lowering drugs. Data highlighted in bold indicate *p* < 0.05. LLT: Lipid-lowering treatment; TC: total cholesterol; TG: triglycerides; HDL-C: high-density lipoprotein cholesterol; LDL-C: low-density lipoprotein cholesterol; Non-HDL-C: non-HDL-cholesterol; Apo B: apolipoprotein B.

**Table S13:** Statistical analysis of the allelic variants of the *GCKR* gene and carotid plaque adjusted for lipid-lowering drugs.

Variable	Allelic variant <i>GCKR</i> (c.1337C>T) gene	Non LLT (n= 105)	LLT (n= 41)	<i>p</i> LLT	<i>p</i> <i>GCKR</i> gene	<i>p</i> interaction (LLT and <i>GCKR</i> gene)
Carotid plaque (present)	CC	0 (0 %)	4 (28.6 %)	<b>0.044</b>	0.868	0.754
	CT	5 (10.9 %)	5 (33.3 %)			
	TT	1 (6.3 %)	4 (44.4 %)			

Data are expressed as n (%) and analyzed by multivariate logistic regression. Data highlighted in bold indicate  $p < 0.05$ . LLT: Lipid-lowering treatment.