Telmisartan and rosuvastatin synergistically ameliorating dementia and cognitive impairment in older hypertensive patients with apolipoprotein E genotype

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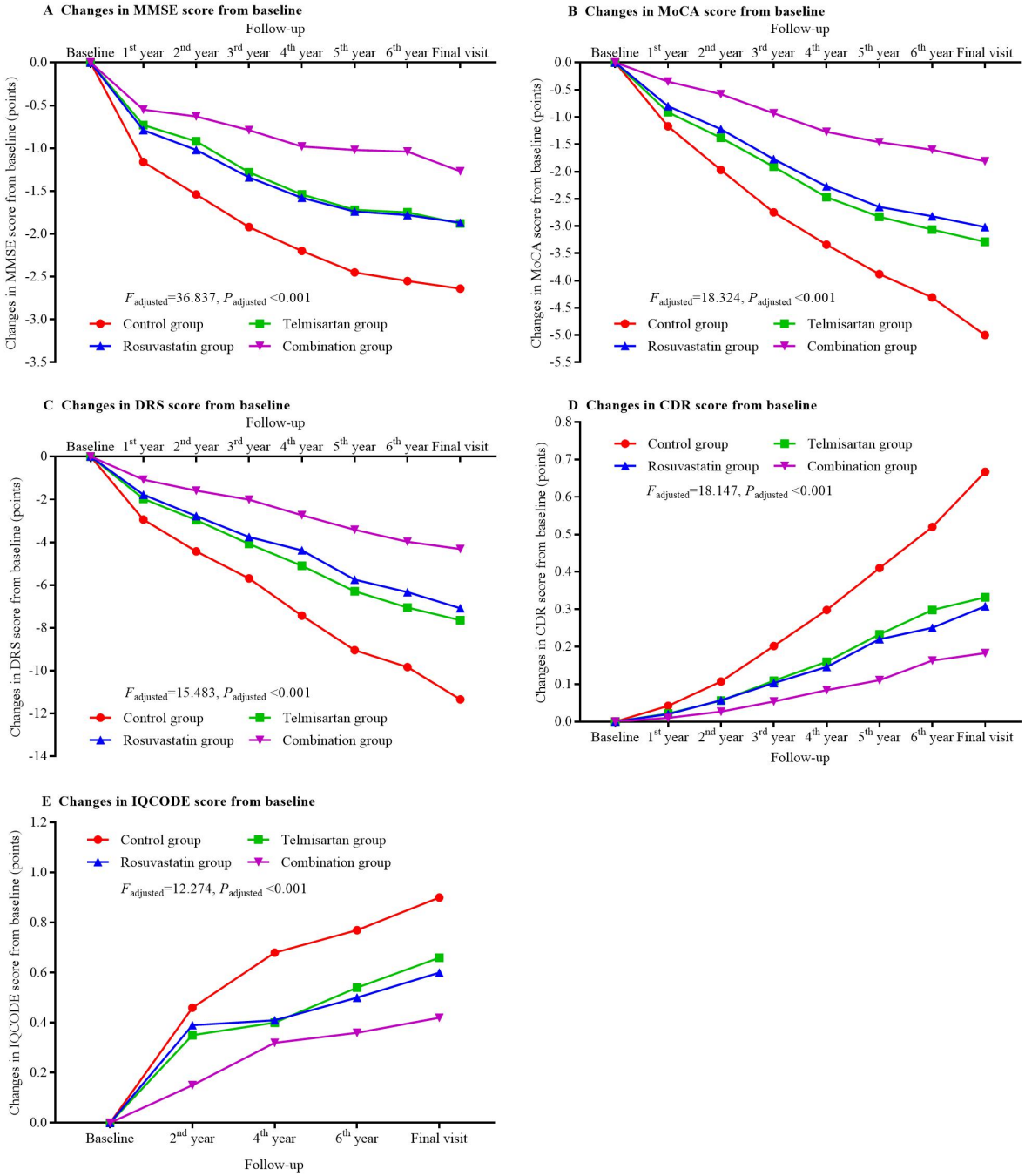
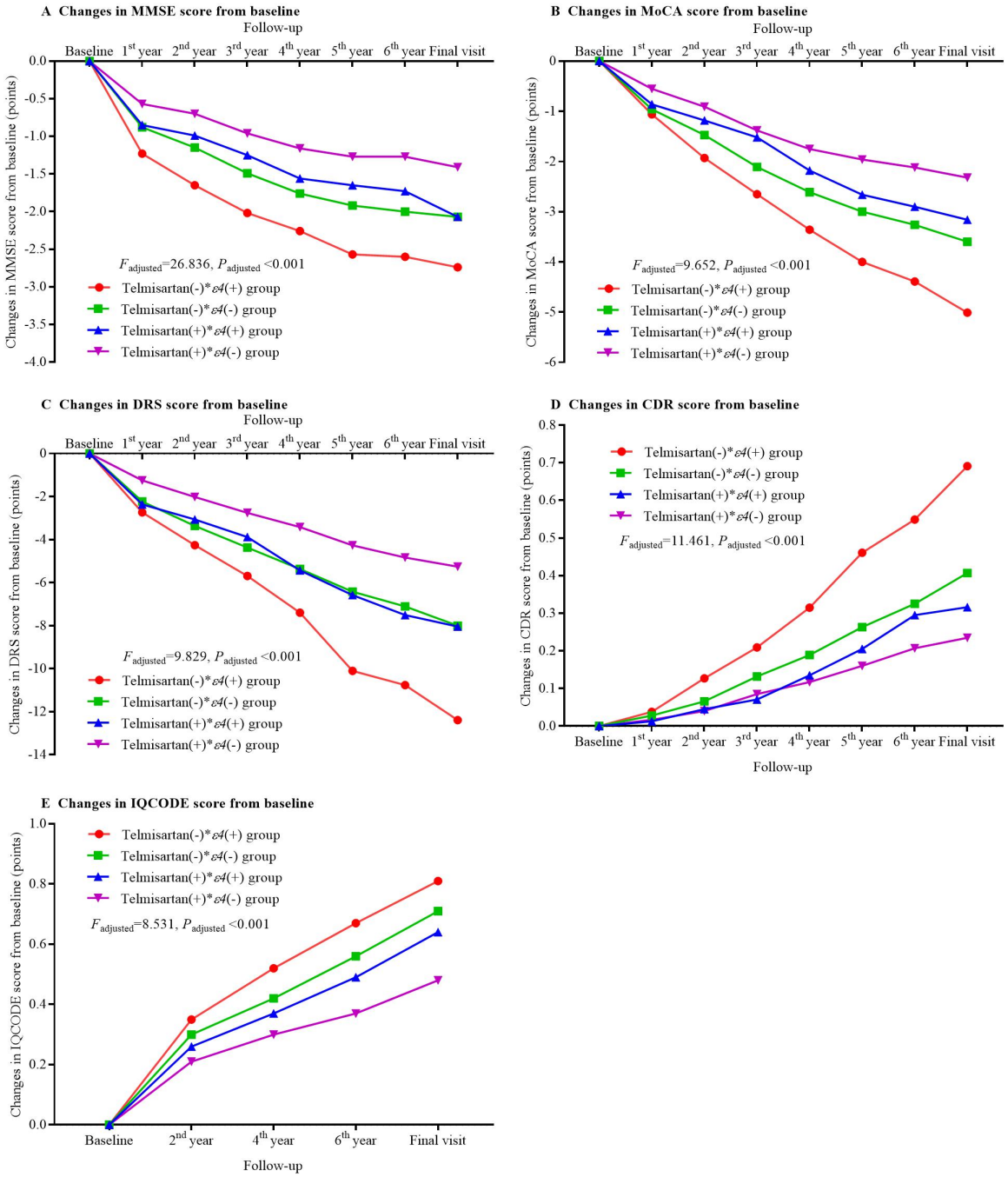
Supplementary Table 1 The risks of the incidence of dementia

	HR	95 % CI	*P* value
Grouped by telmisartan and rosuvastatin			
Combination group	Ref.		
Rosuvastatin group	1.904	1.137 to 3.188	0.014
Telmisartan group	2.064	1.241 to 3.433	0.005
Control group	3.835	2.835 to 6.137	<0.001
Grouped by telmisartan and APOE genotype			
Telmisartan(+)*ε4(-) group	Ref.		
Telmisartan(+)*ε4(+) group	1.339	0.785 to 2.286	0.284
Telmisartan(-)*ε4(-) group	1.838	1.273 to 2.654	0.001
Telmisartan(-)*ε4(+) group	2.617	1.691 to 4.050	<0.001
Grouped by rosuvastatin and APOE genotype			
Rosuvastatin(+)*ε4(-) group	Ref.		
Rosuvastatin(+)*ε4(+)group	1.276	0.737 to 2.208	0.384
Rosuvastatin(-)*ε4(-) group	1.948	1.345 to 2.822	<0.001
Rosuvastatin(-)*ε4(+) group	2.895	1.869 to 4.486	<0.001
Grouped by telmisartan, rosuvastatin, and APOE genotype			
Combination*ε4(-) group	Ref.		
Combination*ε4(+) group	1.461	0.601 to 3.552	0.403
Rosuvastatin*ε4(-) group	2.035	1.101 to 3.762	0.023
Rosuvastatin*ε4(+) group	2.319	1.076 to 4.999	0.032
Telmisartan*ε4(-) group	2.151	1.173 to 3.948	0.013
Telmisartan*ε4(+) group	2.706	1.279 to 5.721	0.009
Control*ε4(-) group	3.682	2.087 to 6.498	<0.001
Control*ε4(+) group	5.967	3.182 to 11.190	<0.001

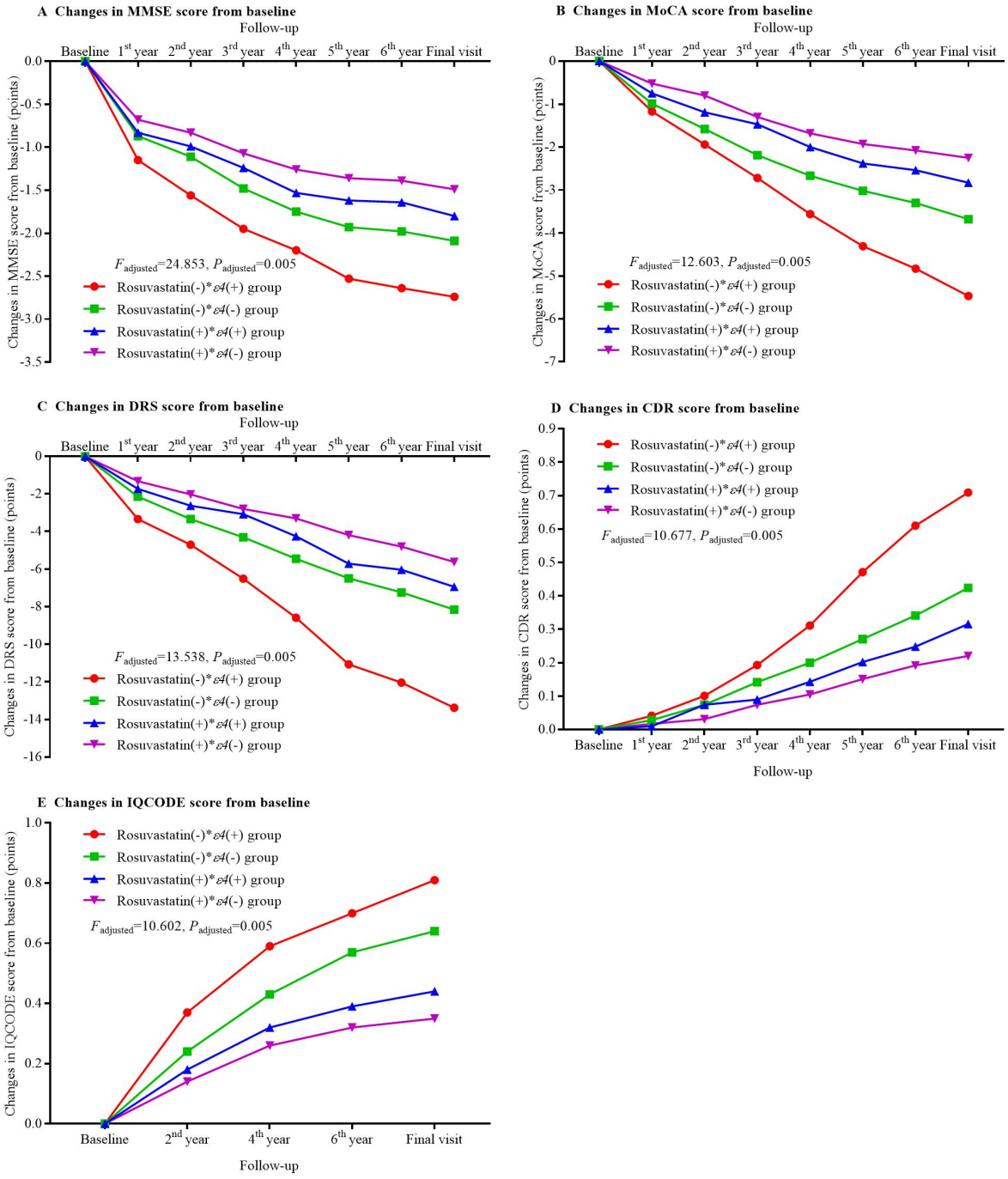
Supplementary Figure legends:



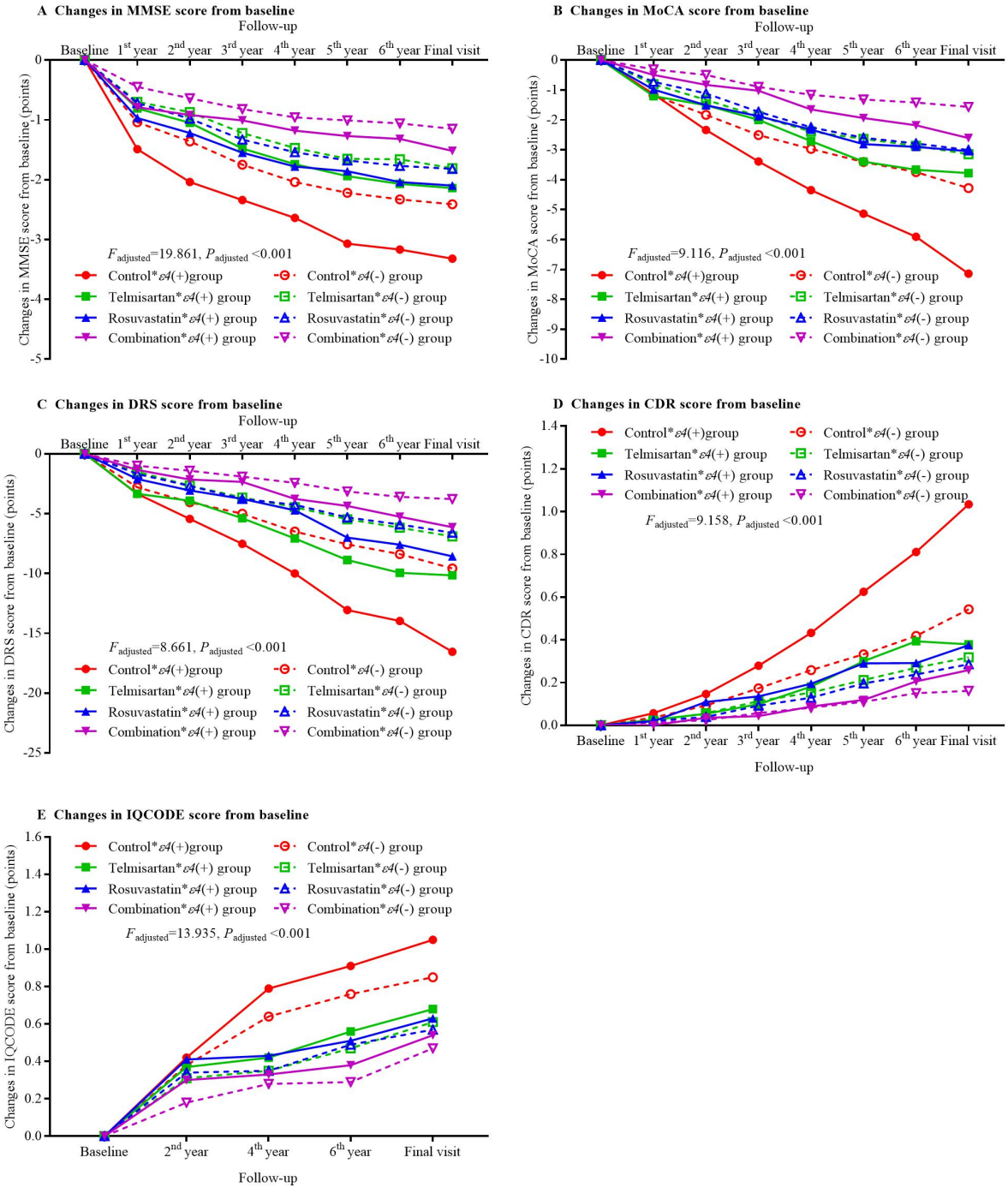
Supplementary Fig. 1 Changes in global cognitive function and IQCODE from baseline at every follow-up visit in the patients grouped by telmisartan and rosuvastatin administration. A is the changes in MMSE; B is the changes in MoCA; C is the changes in DRS; D is the changes in CDR; E is the changes in IQCODE. MMSE indicates Mini-Mental Scale Estimation; MoCA, Montreal Cognitive Assessment; DRS, Mattis Dementia Rating Scale; CDR, Clinical Dementia Rating; IQCODE, Informant Questionnaire on Cognitive Decline in the Elderly.



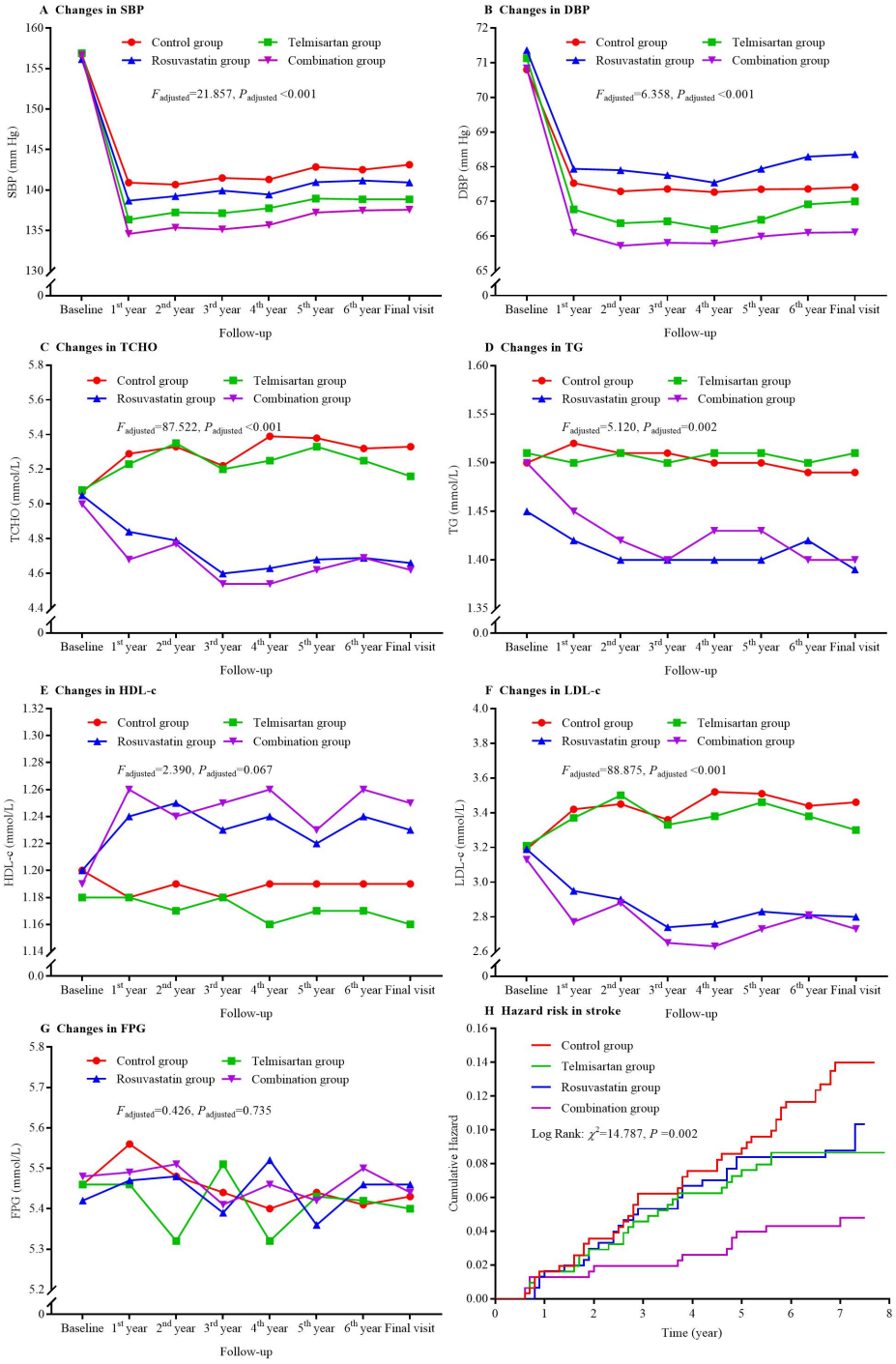
Supplementary Fig. 2 Changes in global cognitive function and IQCODE from baseline at every follow-up visit in the patients grouped by telmisartan administration and *APOE* genotype. A is the changes in MMSE; B is the changes in MoCA; C is the changes in DRS; D is the changes in CDR; E is the changes in IQCODE. MMSE indicates Mini-Mental Scale Estimation; MoCA, Montreal Cognitive Assessment; DRS, Mattis Dementia Rating Scale; CDR, Clinical Dementia Rating; IQCODE, Informant Questionnaire on Cognitive Decline in the Elderly.



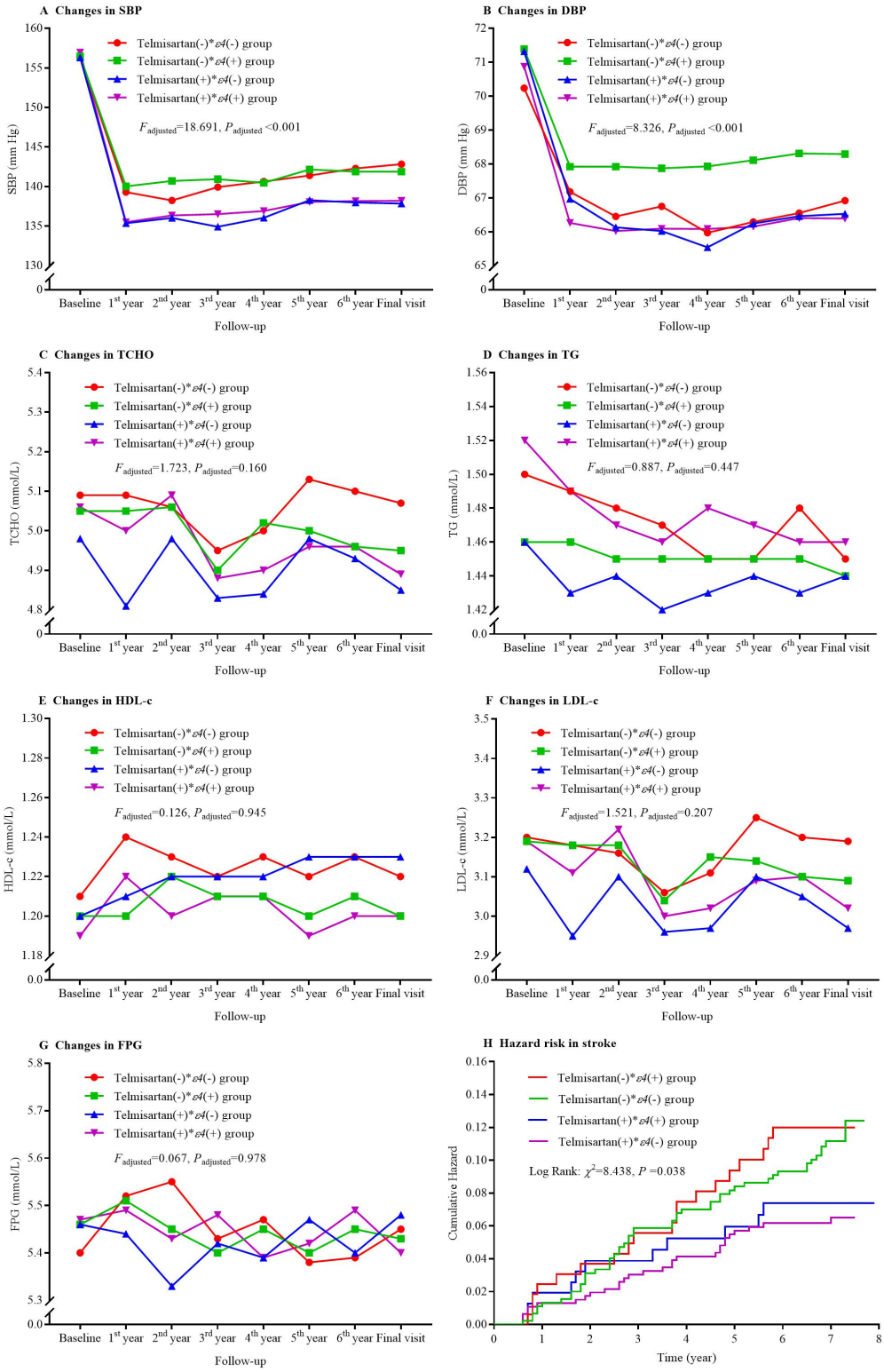
Supplementary Fig. 3 Changes in global cognitive function and IQCODE from baseline at every follow-up visit in the patients grouped by rosuvastatin administration and *APOE* genotype. A is the changes in MMSE; B is the changes in MoCA; C is the changes in DRS; D is the changes in CDR; E is the changes in IQCODE. MMSE indicates Mini-Mental Scale Estimation; MoCA, Montreal Cognitive Assessment; DRS, Mattis Dementia Rating Scale; CDR, Clinical Dementia Rating; IQCODE, Informant Questionnaire on Cognitive Decline in the Elderly.



Supplementary Fig. 4 Changes in global cognitive function and IQCODE from baseline at every follow-up visit in the patients grouped by telmisartan, rosuvastatin, and *APOE* genotype. A is the changes in MMSE; B is the changes in MoCA; C is the changes in DRS; D is the changes in CDR; E is the changes in IQCODE. MMSE indicates Mini-Mental Scale Estimation; MoCA, Montreal Cognitive Assessment; DRS, Mattis Dementia Rating Scale; CDR, Clinical Dementia Rating; IQCODE, Informant Questionnaire on Cognitive Decline in the Elderly.

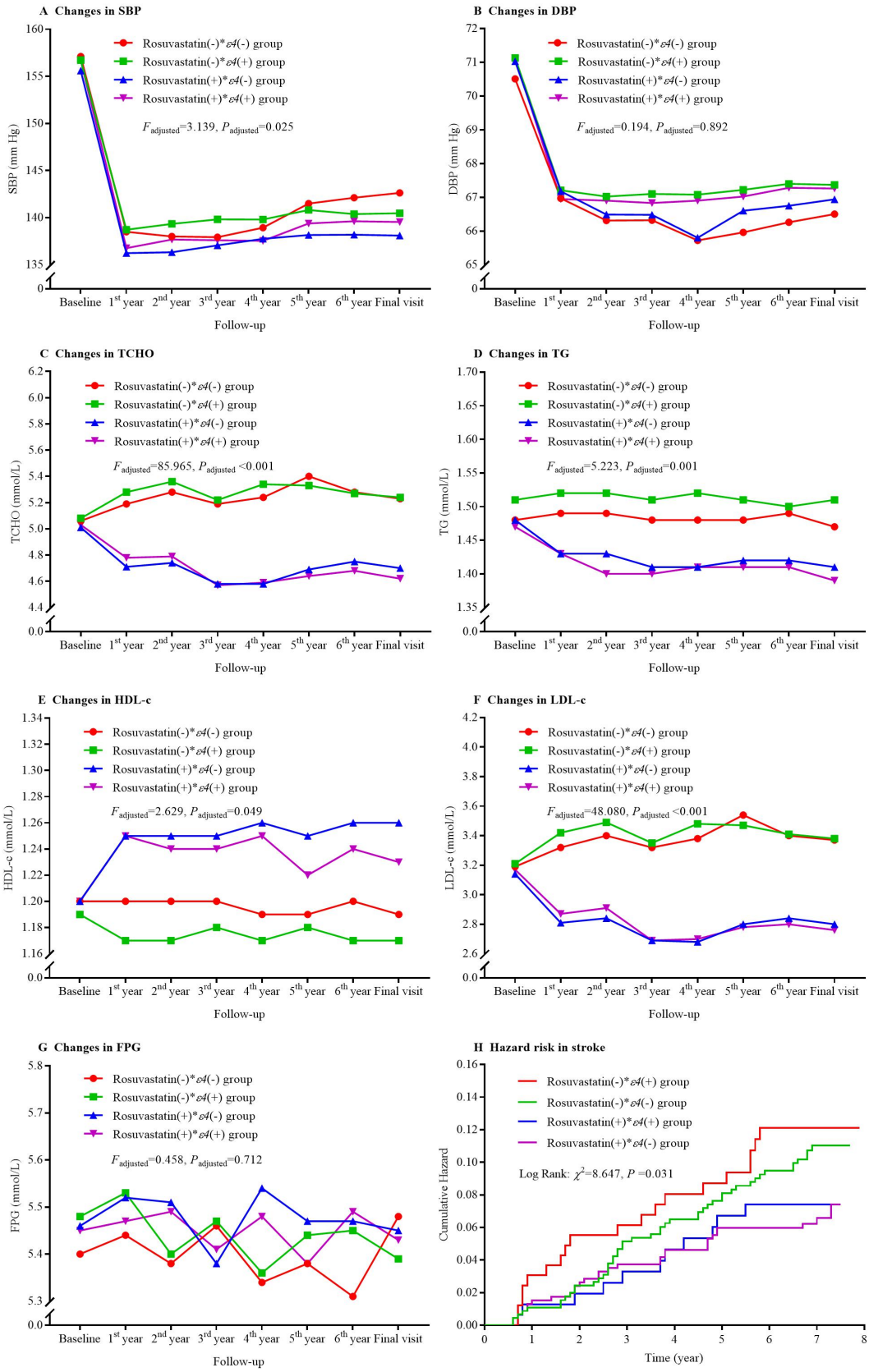


Supplementary Fig. 5 Trajectory of blood pressure, lipids, and fasting plasma glucose and cumulative hazards of stroke incidence during the follow-up period in the patients grouped by telmisartan and rosuvastatin administration. A is the trajectory of SBP; B is the trajectory of DBP; C is the trajectory of TCHO; D is the trajectory of TG; E is the trajectory of HDL-c; F is the trajectory of LDL-c; G is the trajectory of FPG; H is the cumulative hazard of stroke incidence. SBP indicates systolic blood pressure; DBP, diastolic blood pressure; TCHO, total cholesterol; TG, triglycerides; HDL-c, high-density lipoprotein cholesterol; LDL-c, low-density lipoprotein cholesterol; FPG, fasting plasma glucose.



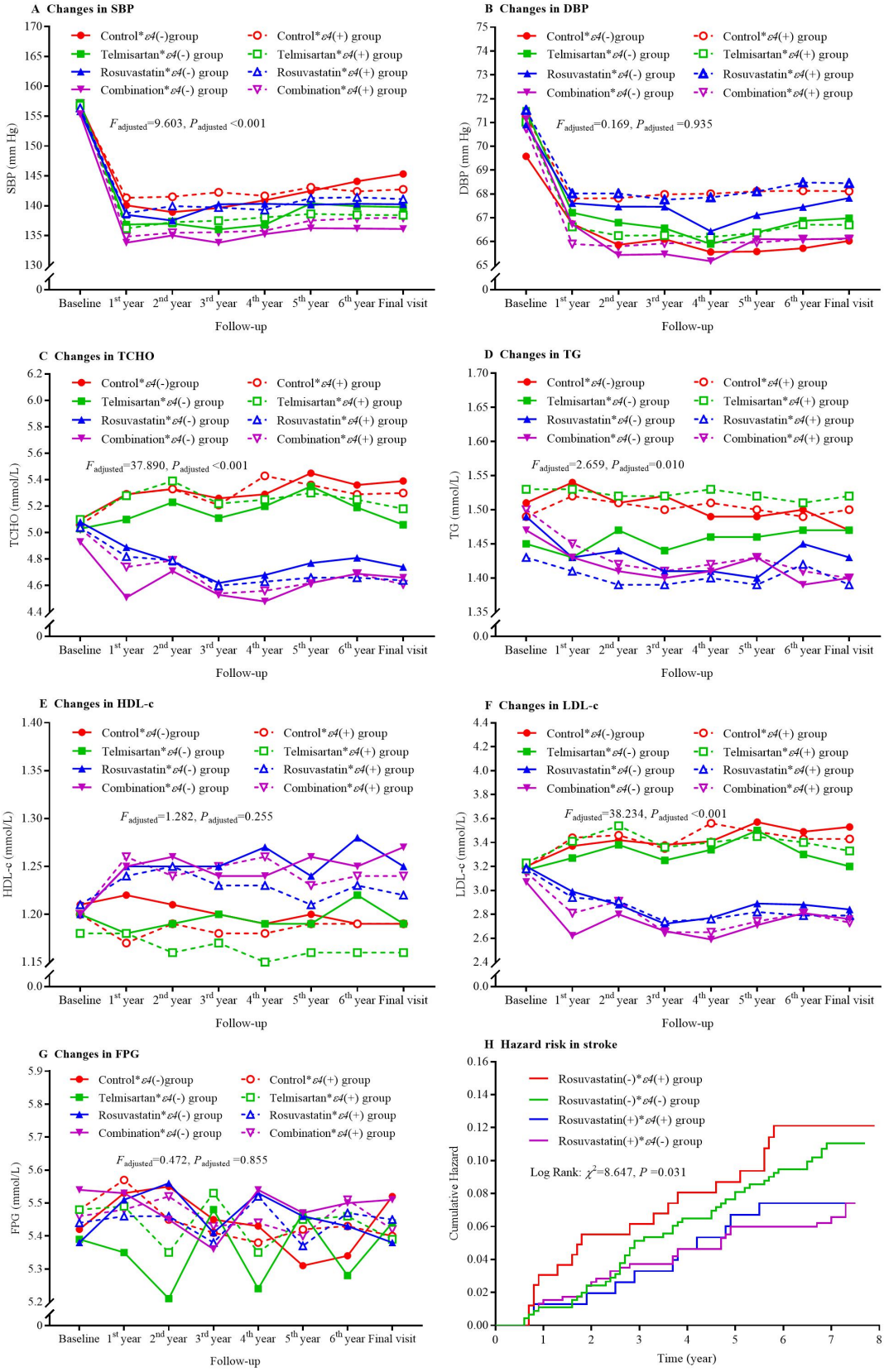
Supplementary Fig. 6 Trajectory of blood pressure, lipids, and fasting plasma glucose and cumulative hazards of stroke incidence during the follow-up period in the patients grouped by telmisartan administration and *APOE* genotype.A is is the trajectory of SBP; B is the trajectory of DBP; C is the trajectory of TCHO; D is the trajectory of TG; E is the trajectory of HDL-c; F is the trajectory of LDL-c; G is the trajectory of FPG; H is the

cumulative hazard of stroke incidence. SBP indicates systolic blood pressure; DBP, diastolic blood pressure; TCHO, total cholesterol; TG, triglycerides; HDL-c, high-density lipoprotein cholesterol; LDL-c, low-density lipoprotein cholesterol; FPG, fasting plasma glucose.



Supplementary Fig. 7 Trajectory of blood pressure, lipids, and fasting plasma glucose and cumulative hazards of stroke incidence during the follow-up period in the patients

grouped by rosuvastatin administration and *APOE* genotype. A is is the trajectory of SBP; B is the trajectory of DBP; C is the trajectory of TCHO; D is the trajectory of TG; E is the trajectory of HDL-c; F is the trajectory of LDL-c; G is the trajectory of FPG; H is the cumulative hazard of stroke incidence. SBP indicates systolic blood pressure; DBP, diastolic blood pressure; TCHO, total cholesterol; TG, triglycerides; HDL-c, high-density lipoprotein cholesterol; LDL-c, low-density lipoprotein cholesterol; FPG, fasting plasma glucose.



Supplementary Fig. 8 Trajectory of blood pressure, lipids, and fasting plasma glucose and cumulative hazards of stroke incidence during the follow-up period in the patients

grouped by telmisartan, rosuvastatin, and *APOE* genotype. A is is the trajectory of SBP; B is the trajectory of DBP; C is the trajectory of TCHO; D is the trajectory of TG; E is the trajectory of HDL-c; F is the trajectory of LDL-c; G is the trajectory of FPG; H is the cumulative hazard of stroke incidence. SBP indicates systolic blood pressure; DBP, diastolic blood pressure; TCHO, total cholesterol; TG, triglycerides; HDL-c, high-density lipoprotein cholesterol; LDL-c, low-density lipoprotein cholesterol; FPG, fasting plasma glucose.