

Table S1. Comparison of blood lipid changes in two groups before and after treatment.

Characteristics	Atorvastatin group			Combined group			P_2
	0 Week	4 Week	P_1 value	0 Week	4 Week	P_1 value	
TG (mmol/L)	1.75 ± 0.59	1.71 ± 0.69	0.804	1.86 ± 0.87	1.74 ± 0.65	0.534	0.859
TC (mmol/L)	4.78 ± 1.26	4.24 ± 1.03	0.065	6.00 ± 2.34	3.63 ± 1.04	0.000	0.022
HDL-C (mmol/L)	1.21 ± 0.28	1.13 ± 0.27	0.249	1.24 ± 0.48	1.14 ± 0.21	0.284	0.869
LDL-C (mmol/L)	2.53 ± 0.77	2.14 ± 0.65	0.032	3.50 ± 1.19	1.59 ± 0.54	0.000	0.000
Lp-a (mg/L)	197.46 ± 41.98	239.48 ± 47.99	0.000	347.85 ± 63.07	212.41 ± 51.47	0.000	0.033

HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; Lp-a, lipoprotein-a; TC, total cholesterol; TG, triglycerides.

P_1 : significant difference between 0 Week and 4week in same groups.

P_2 : significant difference between the atorvastatin group and combined groups at 4 week.

Table S2. Alteration of blood lipid changes in two groups.

Characteristics	Atorvastatin group	Combined group	<i>P</i> value
ΔTG (mmol/L)	-0.04 ± 0.14	-0.13 ± 0.32	0.150
ΔTC (mmol/L)	-0.91 ± 0.56	-0.56 ± 1.98	0.340
ΔHDL-C (mmol/L)	-0.23 ± 0.43	-0.25 ± 0.34	0.837
ΔLDL-C (mmol/L)	-0.44 ± 0.69	-1.91 ± 1.38	0.000
ΔLp-a (mg/L)	79.38 ± 148.76	-120.07 ± 121.76	0.000

HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; Lp-a, lipoprotein-a; TC, total cholesterol; TG, triglycerides .

Table S3. Relative lipid class composition (%) in two groups before and after treatment.

Characteristics	Atorvastatin group			Combined group			<i>P</i> value
	0 W	4 W	Change (%)	0 W	4 W	Change (%)	
Cer d18:0	0.002	0.001	-52.15	0.002	0.002	7.01	<0.001
Gb3	0.013	0.007	-40.06	0.013	0.013	4.62	<0.001
CE	45.914	26.62	-42.02	45.887	46.743	1.86	<0.001
Glc/GalCer	0.134	0.081	-38.88	0.125	0.127	1.60	<0.001
FC	14.229	8.395	-41.04	15.114	14.684	-2.84	<0.001
SM	2.341	1.541	-34.17	2.406	2.616	8.72	<0.001
Cer d18:1	0.194	0.124	-35.98	0.196	0.1962	0.10	<0.001
LacCer	0.092	0.065	-28.59	0.101	0.096	-4.95	<0.001
PC O/PC P	1.243	0.719	-42.14	1.262	1.3734	8.83	<0.001
PC	14.305	11.29	-21.03	14.303	15.128	5.76	<0.001
PI	0.093	0.063	-31.29	0.104	0.126	21.15	<0.001
PE P/PE O	1.685	1.226	-27.22	1.674	1.604	-4.18	<0.001
LPC	0.304	0.252	-17.11	0.291	0.269	-7.56	0.004
TAG	35.911	26.20	-27.02	35.813	42.96	19.95	<0.001
DAG	0.414	0.434	4.83	0.425	0.453	6.59	0.763
PE	0.329	0.293	-10.73	0.338	0.316	-6.51	0.413
EICO	0.052	0.047	-9.04	0.005	0.005	0.667	0.007

CE, cholesteryl ester; Cer, ceramide; DAG, diacylglycerol; EICO, eicosanoids; FC, free cholesterol; Gb3, globotriasoylceramide; PC, phosphatidylethanolamines; PI, phosphatidylinositol; LPC, lysophosphatidylcholine; PE, phosphatidylethanolamines; SM, sphingomyelin; TAG, triacylglycerol.