

Table S1 The serum lipid using the untargeted lipidomics workflow based on ultra-high performance liquid chromatography-mass spectrometry and multivariate analysis

No.	Rt(min)	Ion form	m/z	Proposed compound	Formula	Trend in model
1	8.42	M-H	766.54	PC(20:4(5Z,8Z,11Z,14Z)/15:0)	C43H78NO8P	↑
2	7.27	M+H	808.58	PC(18:3(6Z,9Z,12Z)/20:2(11Z,14Z))	C46H82NO8P	↑
3	2.59	M+H	806.56	PC(18:2(9Z,12Z)/20:4(8Z,11Z,14Z,17Z))	C46H80NO8P	↑
8	5.37	M-H	767.49	PG(18:2(9Z,12Z)/18:3(6Z,9Z,12Z))	C42H73O10P	↓
4	2.05	M+H	819.51	PG(18:3(6Z,9Z,12Z)/22:5(4Z,7Z,10Z,13Z,16Z))	C46H75O10P	↑
5	7.38	M+H	726.51	PE(20:4(8Z,11Z,14Z,17Z)/15:0)	C40H72NO8P	↓
6	7.29	M+H	772.58	PE(14:1(9Z)/24:1(15Z))	C43H82NO8P	↑
7	1.62	M+H	784.51	PS(16:1(9Z)/20:3(8Z,11Z,14Z))	C42H74NO10P	↓
9	3.89	M-H	564.53	Cer(d18:0/18:1(9Z))	C36H71NO3	↓
10	5.10	M-H	566.55	Cer(d18:0/18:0)	C36H73NO3	↓
11	2.78	M-H	785.65	SM(d18:1/22:0)	C45H91N2O6P	↓

Table S2 The metabolic pathway analysis results of lipid profile alterations in sepsis-induced liver injury.

Name	Total	Expected	Hits	Raw p	FDR	Impact
Glycerophospholipid metabolism	30	0.064194	2	0.0013111	0.1062	0.23056
Linoleic acid metabolism	5	0.010699	1	0.010668	0.43207	0
alpha-Linolenic acid metabolism	9	0.019258	1	0.019148	0.51701	0
Glycosylphosphatidylinositol(GPI)-anchor biosynthesis	14	0.029957	1	0.02968	0.60102	0.0439
Sphingolipid metabolism	21	0.044936	1	0.044297	0.71762	0
Arachidonic acid metabolism	36	0.077033	1	0.075124	1	0

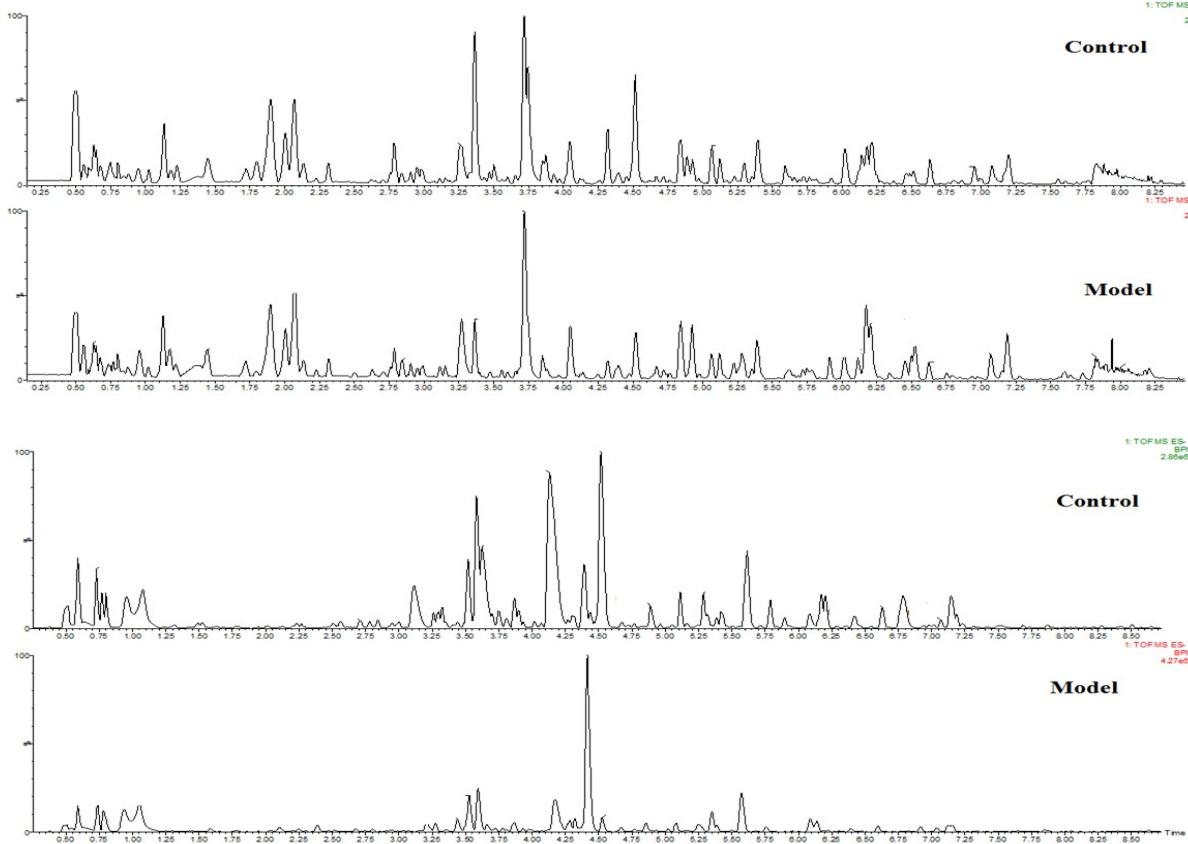


Figure S1. The total ion chromatograms of the control group and the model group in positive and negative ion mode