

**Supplement Table 1.** The association of AEs and PK parameter

[illegible]

*ALT, alanine aminotransferase; ADR, Adverse Drug Reaction; AE, adverse event; CPK, creatine phosphokinase; ECG, Electrocardiograph;  $\gamma$ GTP,  $\gamma$ -glutamyltransferase; NA, not Applicable; NAG,  $\beta$ -N-acetyl-D-glucosaminidase; RBC, red blood cell; SAE, Serious adverse event; WBC, white blood cell.*

**Supplement Table 2.** Matrix effects of Topiroxostat and internal standard.

sample ID	LQC (2.0 ng/mL)			MQC (400 ng/mL)			HQC (800 ng/mL)		
	Topiroxostat accuracy (%)	Internal standard accuracy (%)	Normalization accuracy (%)	Topiroxostat accuracy (%)	Internal standard accuracy (%)	Normalization accuracy (%)	Topiroxostat accuracy (%)	Internal standard accuracy (%)	Normalization accuracy (%)
1	102.5	112.1	91.5	103.5	104.1	99.4	103.6	97.9	105.8
2	104.7	111.4	94	102.4	105.2	97.4	104.4	98.7	105.8
3	100.9	112.2	89.9	102.7	103.7	99	104.4	98.9	105.5
4	105.3	108.8	96.7	102.9	103.9	99	105.2	99.1	106.2
5	105.3	111.6	94.4	102.7	105.2	97.7	105.2	99.2	106
6	96.2	113.3	84.9	103	104	99.1	103.6	98.3	105.4
Mean			91.9			98.6			105.8
SD			4.2			0.8			0.3

Conc.: Concentration; SD: standard deviation; LQC: Low concentration quality control; MQC: Medium quality control; HQC: High concentration quality control.

**Supplement Table 3.** Hyperlipidemia matrix effect of Topiroxostat.

sample ID	LQC (2.0 ng/mL)		HQC (800 ng/mL)	
	Conc. (ng/mL)	Accuracy (%)	Conc. (ng/mL)	Accuracy (%)
1	1.94	96.9	802	100.3
2	1.93	96.3	807	100.9
3	1.97	98.6	802	100.3
4	1.99	99.7	813	101.7
5	1.88	94.1	814	101.7
6	1.93	96.6	802	100.3
Mean	1.94	97	807	100.9
SD	0.04		5.65	

Conc.: Concentration; SD: standard deviation; LQC: Low concentration quality control; HQC: High concentration quality control.

**Supplement Table 4.** Recovery of Topiroxostat and internal standard.

Sample ID	LQC (2.0 ng/mL) (%)	MQC (400 ng/mL) (%)	HQC (800 ng/mL) (%)	Internal Standard (%)
1	99.5	97.8	100	105.6
2	96.5	100	100	105
3	97.9	100.3	98.5	106
4	103.5	100.4	99.2	105.8
5	93.9	99.4	99.2	104.9
6	103.8	99.6	99.2	107.6
Mean	99.2	99.6	99.4	105.8
SD	3.9	1.0	0.6	1.0

SD: standard deviation; LQC: Low concentration quality control; MQC: Medium quality control; HQC: High concentration quality control.

Supplement Table 5    Long-term stability of Topiroxostat.

7 days				
sample ID	LQC (2.0 ng/mL)		HQC (800 ng/mL)	
	Conc. (ng/mL)	Accuracy (%)	Conc. (ng/mL)	Accuracy (%)
1	1.96	97.8	805	100.6
2	2.11	105.5	809	101.2
3	1.89	94.6	807	100.8
Mean	1.99	99.3	807	100.9
SD	0.1		2	
45 days				
sample ID	LQC (2.0 ng/mL)		HQC (800 ng/mL)	
	Conc. (ng/mL)	Accuracy (%)	Conc. (ng/mL)	Accuracy (%)
1	2.02	101	823	102.8
2	2.11	105.7	825	103.1
3	1.98	99.1	814	101.8
Mean	2.04	101.9	821	102.6
SD	0.1		5.9	
96 days				
sample ID	LQC (2.0 ng/mL)		HQC (800 ng/mL)	
	Conc. (ng/mL)	Accuracy (%)	Conc. (ng/mL)	Accuracy (%)
1	2.01	100.4	806	100.7
2	1.99	99.5	794	99.3
3	1.96	98.2	805	100.6
Mean	1.99	99.4	802	100.2
SD	0		6.7	

Conc.: Concentration; SD: standard deviation; LQC: Low concentration quality control; HQC: High concentration quality control.