Additional material

Comparative pharmacokinetics of oxyresveratrol alone and in combination with piperine as a bioenhancer in rats

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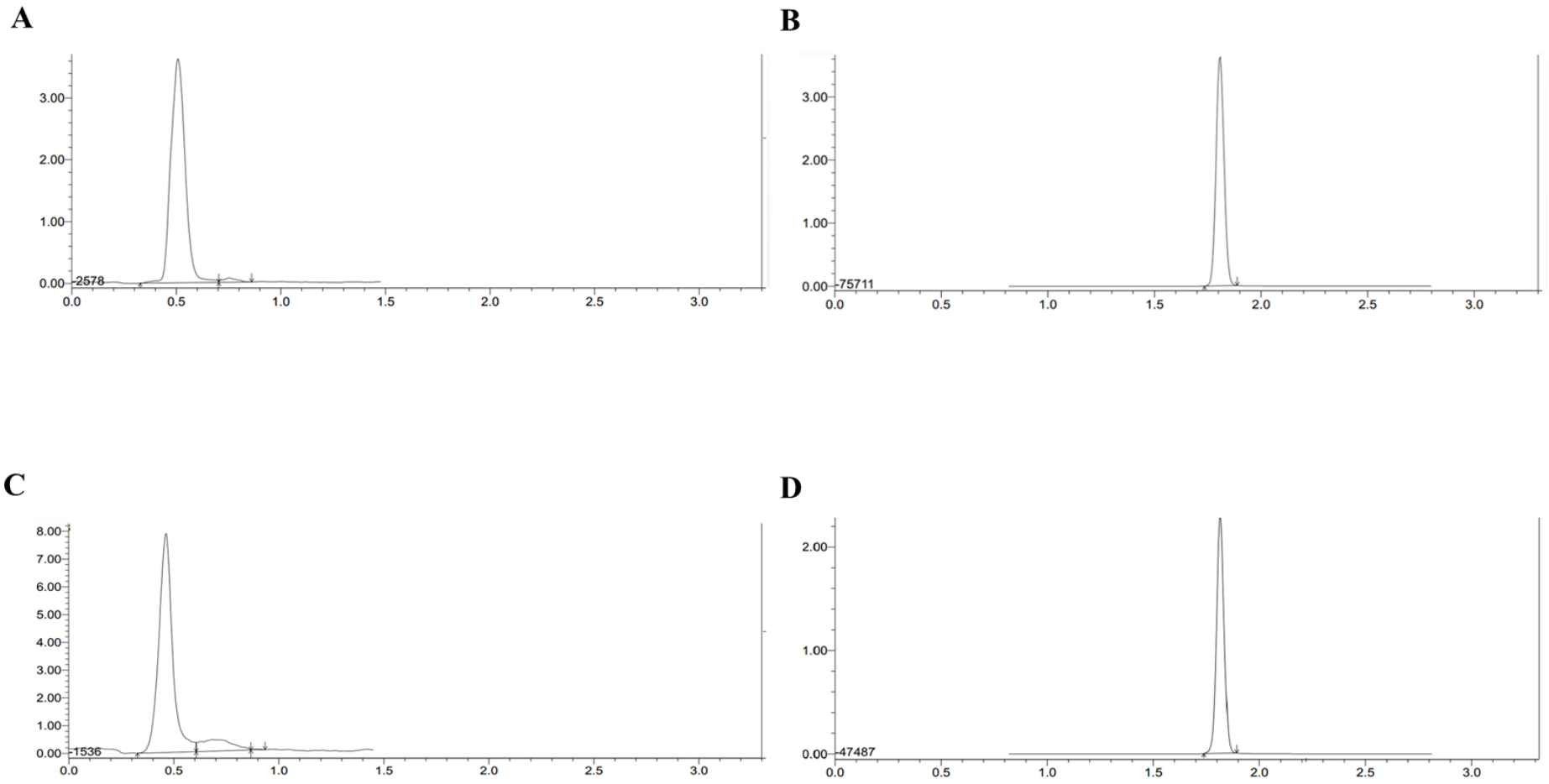

Figure 1S LC–MS/MS chromatograms. Blank plasma spiked with 250 ng/mL oxyresveratrol (A); Blank plasma spiked with 25 ng/mL piperine (B); Plasma sample collected from rat at 1 h after intravenous administration of oxyresveratrol 10 mg/kg (C); Plasma sample collected from rat at 1 h after intravenous administration of piperine 1 mg/kg (D).

Table 1S The precision and accuracy for oxyresveratrol determined by LC–MS/MS.

QC concentration (ng/mL)	Precision (%CV)		Accuracy (%RE)	
	Within–batch	Between–batch	Within–batch	Between–batch
10	7.12	9.75	–5.30	–6.94
100	2.25	3.11	–3.71	–4.63
400	1.09	2.03	–14.34	–13.39

CV, coefficient of variation; RE, relative error.

Table 2S The recovery of oxyresveratrol after extraction from rat plasma.

Concentration of OXY (ng/mL)		Mean	SD	%CV	Absolute Recovery
LQC 10 ng/mL	Un–extract	9.59	1.64	17.11	104.57
	Extract	10.02	1.15	11.49	
MQC 100 ng/mL	Un–extract	108.14	2.88	2.66	88.74
	Extract	95.96	1.60	1.67	
HQC 400 ng/mL	Un–extract	393.02	11.53	2.93	90.43
	Extract	355.42	7.60	2.14	

LQC, low concentration quality control; MQC, medium concentration quality control; HQC high concentration quality control; CV, coefficient of variation

Table 3S The stability of oxyresveratrol at different storage conditions

Conditions	QC concentration (ng/mL)	Measured Value (ng/mL)	SD	%CV	%RE	%Recovery
Room temperature (12 h)	10	6.35	0.26	4.11	36.51	63.49
	100	73.50	1.70	2.31	26.50	73.50
	400	272.61	6.39	2.34	31.85	68.15
Autosampler	10	8.77	1.09	12.44	12.31	87.69
	100	92.60	1.86	2.01	7.40	92.60
	400	345.41	5.06	1.46	13.65	86.35
Three Freez–thaw cycles	10	5.87	0.69	11.79	41.26	58.75
	100	72.84	3.62	4.98	27.16	72.84
	400	281.73	10.00	3.55	29.57	70.43
Storage at –20°C (30 d)	10	7.24	0.85	11.77	27.60	72.41
	100	85.78	3.94	4.59	14.22	85.78
	400	324.47	17.08	5.26	18.88	81.12

QC, Quality control; CV, coefficient of variation; RE, relative error.