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## Supplementary Materials

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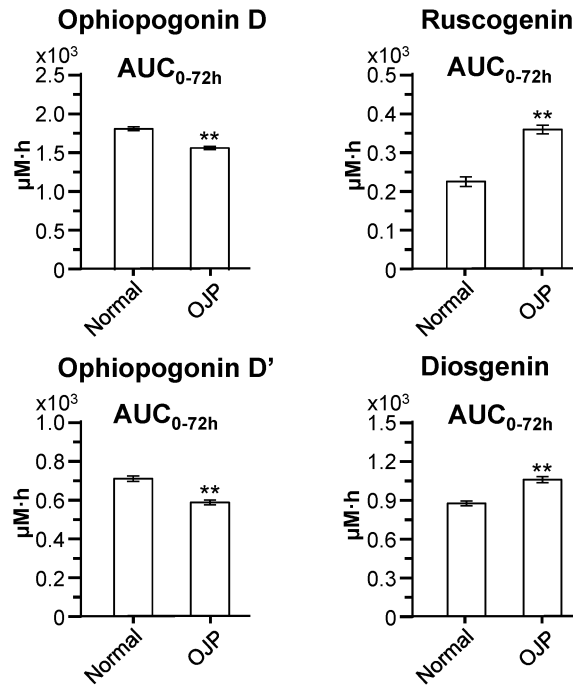
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**Figure S1.** *Ophiopogon* polysaccharide promotes the metabolism of ophiopogonin D and ophiopogonin D', and the production of ruscogenin and diosgenin. The  $AUC_{0-72h}$  of ophiopogonin D, ruscogenin, ophiopogonin D' and diosgenin in different groups. Normal: ophiopogonin group; OJP: *Ophiopogon* polysaccharide (OJP) + ophiopogonin group. The area under the concentration–time curve ( $AUC_{0-72h}$ ) were analyzed by Graphpad Prism software (v7.0). Data are represented as mean  $\pm$  SD ( $n = 5$ ). Significance difference was assessed by one-way ANOVA: \* $P < 0.05$  and \*\* $P < 0.01$  vs normal group.



9

10

**Table S1.** Concentrations of ophiopogonin D, ophiopogonin D' and their metabolites (i.e. ruscogenin and Diosgenin ) in ten time points of normal group and OJP group.

Analyte	Group	Concentrations of ophiopogonins ( $\mu\text{M}$ ): mean $\pm$ SD ( $n = 5$ ) <sup>c</sup>									
		0 h	6 h	12 h	18 h	24 h	30 h	36 h	48 h	60 h	72 h
Ophiopogonin D	OJP <sup>a</sup>	30.53 $\pm$ 0.54	30.08 $\pm$ 0.84	29.04 $\pm$ 0.65	27.36 $\pm$ 1.14	23.31 $\pm$ 0.79	22.72 $\pm$ 1.10	21.72 $\pm$ 0.88	20.01 $\pm$ 1.31	17.49 $\pm$ 1.19	10.86 $\pm$ 1.17
	Normal <sup>b</sup>	30.61 $\pm$ 0.65	30.07 $\pm$ 1.08	29.67 $\pm$ 0.89	28.09 $\pm$ 1.33	27.43 $\pm$ 1.35	25.78 $\pm$ 1.03	25.13 $\pm$ 1.38	24.19 $\pm$ 1.56	23.36 $\pm$ 1.58	18.36 $\pm$ 1.36
Ruscogenin	OJP	ND <sup>d</sup>	ND	ND	0.60 $\pm$ 0.03	2.00 $\pm$ 0.20	4.12 $\pm$ 0.50	4.93 $\pm$ 0.46	6.87 $\pm$ 0.52	8.94 $\pm$ 0.90	14.53 $\pm$ 0.92
	Normal	ND	ND	ND	ND	0.90 $\pm$ 0.09	2.25 $\pm$ 0.34	3.53 $\pm$ 0.54	4.81 $\pm$ 0.83	5.62 $\pm$ 0.77	8.48 $\pm$ 1.15
Ophiopogonin D'	OJP	30.01 $\pm$ 0.77	26.95 $\pm$ 1.54	20.24 $\pm$ 1.34	17.45 $\pm$ 1.69	11.97 $\pm$ 1.19	1.63 $\pm$ 0.17	0.84 $\pm$ 0.01	0.80 $\pm$ 0.08	0.72 $\pm$ 0.06	0.63 $\pm$ 0.02
	Normal	29.53 $\pm$ 0.95	27.48 $\pm$ 1.37	25.93 $\pm$ 1.54	24.01 $\pm$ 1.90	17.39 $\pm$ 1.59	2.30 $\pm$ 0.26	1.55 $\pm$ 0.27	1.02 $\pm$ 0.07	0.85 $\pm$ 0.10	0.78 $\pm$ 0.04
Diosgenin	OJP	ND	ND	0.41 $\pm$ 0.03	1.51 $\pm$ 0.15	9.91 $\pm$ 0.86	18.42 $\pm$ 1.02	20.28 $\pm$ 1.18	21.51 $\pm$ 1.11	22.76 $\pm$ 1.68	28.72 $\pm$ 2.10
	Normal	ND	ND	ND	0.17 $\pm$ 0.04	8.45 $\pm$ 0.11	16.51 $\pm$ 0.67	17.60 $\pm$ 0.93	18.64 $\pm$ 1.25	18.90 $\pm$ 1.05	20.76 $\pm$ 1.63

11

<sup>a</sup> OJP: *Ophiopogon* polysaccharide (OJP) + ophiopogonin group; <sup>b</sup> Normal: ophiopogonin group; <sup>c</sup> Data are represented as mean  $\pm$  SD ( $n = 5$ ); <sup>d</sup> ND: not detected.