Supporting Information to:

Characterization of Pharmacokinetic Profiles and Metabolic Pathways of 20(S)-Ginsenoside Rh1 in vivo and in vitro

Li Lai, Haiping Hao, Yitong Liu, Chaonan Zheng, Qiong Wang, Guangji Wang, Xijin Chen

Affiliation
Key Lab of Drug Metabolism and Pharmacokinetics, China Pharmaceutical University, Nanjing, P. R. China

Correspondence
Prof. Dr. Guangji Wang
Key Lab of Drug Metabolism and Pharmacokinetics
China Pharmaceutical University
Nanjing 210009
People’s Republic of China
Tel.: +86/25/8327 1128
Fax: +86/25/8530 6750
guangjiwang@hotmail.com

Dr. Haiping Hao
Key Lab of Drug Metabolism and Pharmacokinetics
China Pharmaceutical University
Nanjing 210009
People’s Republic of China
Tel.: +86/25/8539 1089
Fax: +86/25/8530 6750
hhp_770505@yahoo.com.cn
Fig. 1S (a)

Fig. 1S (b)

Fig. 1S (c)
Fig. 1S (g)

Total ion chromatograms of: (a) blank bile sample; (b) bile sample; (c) blank urine sample; (d) urine sample after i.g. administration. Extracted chromatograms of: (e) liver tissue; (f) intestinal tract after i.g. administration with Rh1 at m/z 637.4, Ppt at m/z 475.3, M1 and M2 at m/z 653.4. Total ion chromatograms of: (g) blank artificial gastric juice; (h) sample incubated in the artificial gastric juice for 0.5 h.
Fig. 2S Lineweaver-Burk plot on the elimination of Rh1 in rat liver microsomes

Table 1S Summary of retention times, molecular ions, MS-MS product ions and molecular formula for metabolites identification.

<table>
<thead>
<tr>
<th>Metabolites</th>
<th>$t_R$(min)</th>
<th>$[M-H]^-$</th>
<th>MS-MS fragment ions</th>
<th>molecular formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rh1</td>
<td>12.5</td>
<td>637.426</td>
<td>475.3735, 391.2813</td>
<td>C$<em>{36}$H$</em>{62}$O$_9$</td>
</tr>
<tr>
<td>M1</td>
<td>7.8</td>
<td>653.4227</td>
<td>491.3719, 391.2812</td>
<td>C$<em>{36}$H$</em>{62}$O$_{10}$</td>
</tr>
<tr>
<td>M2</td>
<td>8.5</td>
<td>653.4226</td>
<td>-</td>
<td>C$<em>{36}$H$</em>{62}$O$_{10}$</td>
</tr>
<tr>
<td>M3</td>
<td>7.2</td>
<td>655.4321</td>
<td>493.3874</td>
<td>C$<em>{36}$H$</em>{64}$O$_{10}$</td>
</tr>
<tr>
<td>Ppt</td>
<td>19.5</td>
<td>475.3753</td>
<td>391.2835</td>
<td>C$<em>{30}$H$</em>{52}$O$_4$</td>
</tr>
</tbody>
</table>

- not detected.