

**Table S2.** Chemical and spectroscopic characteristics of phenolic compounds revealed by HPLC-DAD-ESI-Q-TOF analysis.

| Assignment              | Molecular formula                               | Retention time<br>(min) | UV wave lenght<br>(nm) | [M-H]      |          | Score | Difference<br>(ppm) |
|-------------------------|---|-------------------------|------------------------|------------|----------|-------|---------------------|
|                         |   |                         |                        | Calculated | Expected |       |                     |
| Di-galloyl-glucoside    | C <sub>20</sub> H <sub>20</sub> O <sub>14</sub> | 2.69                    | 275                    | 483.078    | 483.078  | 99.66 | -0.66               |
| Punicalin <i>a</i>      | C <sub>34</sub> H <sub>22</sub> O <sub>22</sub> | 2.81                    | 256;374                | 781.053    | 781.054  | 99.88 | 0.61                |
| Punicalin <i>b</i>      | C <sub>34</sub> H <sub>22</sub> O <sub>23</sub> | 2.90                    | 256;374                | 781.053    | 781.053  | 99.09 | 0.30                |
| <i>α</i> -Punicalagin   | C <sub>48</sub> H <sub>28</sub> O <sub>30</sub> | 3.46                    | 260;378                | 1083.059   | 1083.056 | 91.44 | -1.38               |
| <i>β</i> -Punicalagin   | C <sub>48</sub> H <sub>28</sub> O <sub>31</sub> | 3.97                    | 260;378                | 1083.059   | 1083.059 | 98.09 | -0.56               |
| Valoneic acid dilactone | C <sub>21</sub> H <sub>10</sub> O <sub>13</sub> | 11.47                   | 269;370                | 469.005    | 469.005  | 99.42 | -0.49               |
| Ellagic acid glucoside  | C <sub>20</sub> H <sub>16</sub> O <sub>13</sub> | 11.64                   | 256;365                | 463.052    | 463.052  | 99.59 | -0.38               |
| Ellagic acid            | C <sub>14</sub> H <sub>6</sub> O <sub>8</sub>   | 15.26                   | 254;369                | 300.999    | 300.999  | 99.36 | 0.69                |