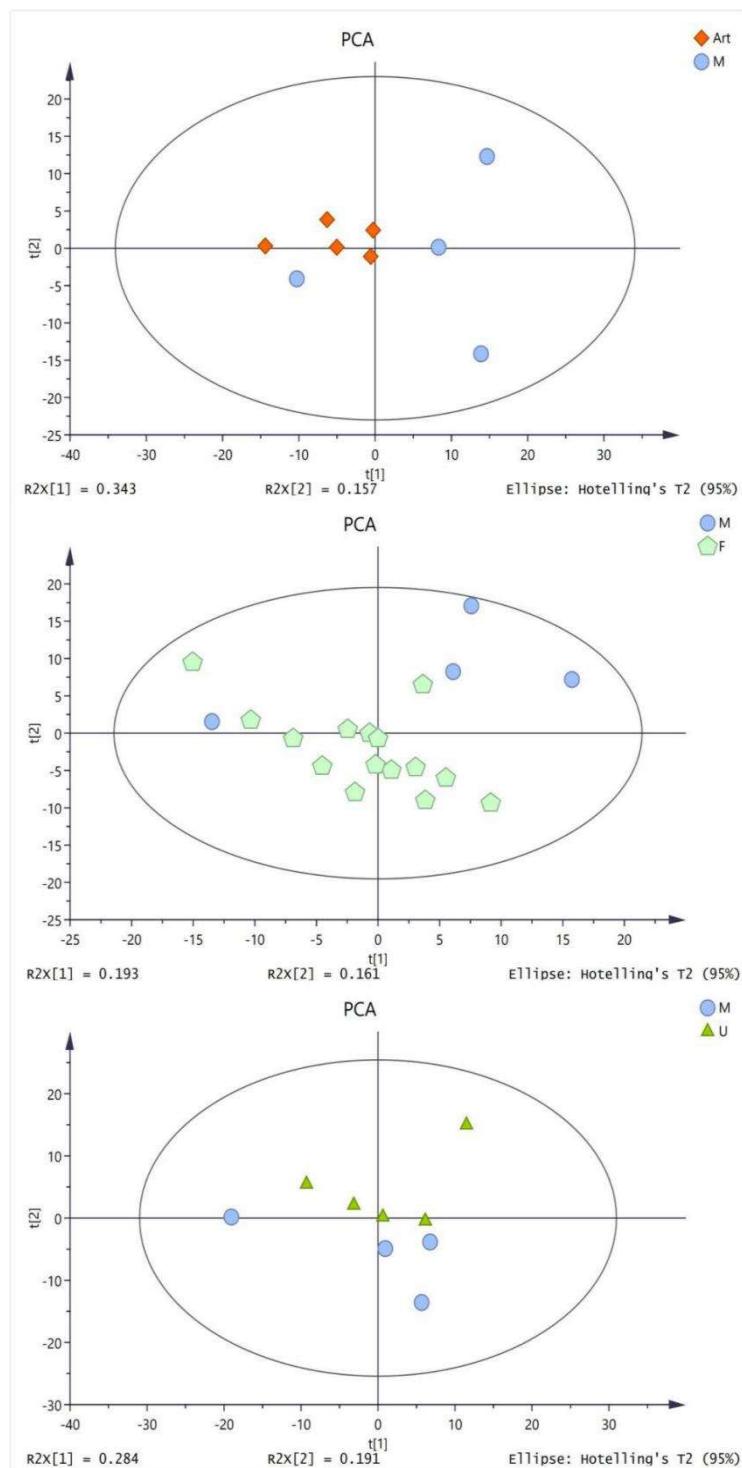


## *Supporting Information*

Table S1. The modeling parameters of all groups.

| No. | Model             | Type    | A       | N     | R2X(cum) | R2Y(cum) | Q2(cum) | R2    | Q2           |
|-----|-------------------|---------|---------|-------|----------|----------|---------|-------|--------------|
| 1   | ART-M             | PCA-X   | 2       | 9     | 0.5      |          | 0.064   |       |              |
| 2   | ART-M             | PLS-DA  | 3       | 9     | 0.531    | 1        | 0.904   |       |              |
| 3   | ART-M             | OPLS-DA | 1+4+0   | 9     | 0.724    | 1        | 0.788   | 1     | 0.614        |
| 4   | M-U               | PCA-X   | 2       | 9     | 0.475    |          | -0.0512 |       |              |
| 5   | M-U               | PLS-DA  | 2       | 9     | 0.308    | 0.992    | 0.239   |       |              |
| 6   | M-U               | OPLS-DA | 1+4+0   | 9     | 0.709    | 1        | 0.49    | 1     | 0.786        |
| 7   | M-combin<br>ation |         | PCA-X   | 3     | 19       | 0.442    |         | 0.11  |              |
| 8   | M-combin<br>ation |         | PLS-DA  | 2     | 19       | 0.19     | 0.979   | 0.364 |              |
| 9   | M-combin<br>ation |         | OPLS-DA | 1+1+0 | 19       | 0.19     | 0.979   | 0.465 | 0.932 -0.158 |





**Figure.** Unsupervised principal component analysis (PCA) score plots based on the gas chromatography time-of-flight mass spectrometry (GC/TOFMS) data for the model(M) groups vs. artesunate(ART) group (20 mg/kg); ursolic acid(U) group (20 mg/kg) and combination(F) group (artesunate 20 mg/kg + ursolic acid 20 mg/kg).