

Supplementary Table 1 MS/MS parameters in selected reaction monitoring.

| No | Compound | Q1 (<i>m/z</i>) | Q3 (<i>m/z</i>) | DP (V) | EP (V) | CE (V) | CXP (V) |
|----|----------------------|----------------------|----------------------|-----------|-----------|-----------|------------|
| 1 | SNAG- Δ^5 -CA | 672.3 | 97.0 | -70 | -8 | -70 | -14 |
| 2 | SNAG- Δ^5 -CG | 364.2 | 97.0 | -30 | -10 | -42 | -14 |
| 3 | SNAG- Δ^5 -CT | 389.2 | 97.0 | -100 | -14 | -42 | -14 |
| 4 | S7B- Δ^5 -CA | 469.2 | 97.0 | -320 | -12 | -80 | -14 |
| 5 | S7O- Δ^5 -CA | 467.1 | 97.0 | -240 | -12 | -60 | -14 |
| 6 | IS | 455.3 | 97.0 | -80 | -12 | -75 | -10 |

CE, Collision energy; CXP, Collision cell exit potential; DP, Declustering potential; EP, Entrance potential; SNAG- Δ^5 -CA, 3 β -Sulfoxy-7 β -N-acetylglucosaminyl-5-cholenoic acid; SNAG- Δ^5 -CG, Glycine-amidated 3 β -sulfoxy-7 β -N-acetylglucosaminyl-5-cholenoic acid; SNAG- Δ^5 -CT, Taurine-amidated 3 β -sulfoxy-7 β -N-acetylglucosaminyl-5-cholenoic acid; S7B- Δ^5 -CA, IS, internal standard, 3 β -Sulfoxy-7 β -hydroxy-23-*nor*-5-cholenoic acid; 3 β -Sulfoxy-7 β -hydroxy-5-cholenoic acid; S7O- Δ^5 -CA, 3 β -Sulfoxy-7-oxo-5-cholenoic acid; IS, internal standard.