



Figure S1. Model Overview

R2Y and Q2 are used to evaluate the interpretation and prediction ability of the PLS-DA model, respectively. The larger the cumulative value of R2Y and Q2, the more stable and reliable the model.

Table S2. Model parameter table

	R2X(cum)	R2Y(cum)	Q2(cum)
p1	0.316	0.462	0.433
p2	0.468	0.946	0.924
p3	0.511	0.982	0.95
p4	0.555	0.993	0.957

R2X (cum) and R2Y (cum) represent the cumulative interpretation rate; Q2 represents the prediction ability of the model. p1 and p2 represent the first and second principal components respectively.