Supplementary Materials

Plasma fatty acid metabolic profiling coupled with clinical research reveals the risk factors for atherosclerosis development in type 2 diabetes mellitus

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Supplemental Figures S1†-S4†.

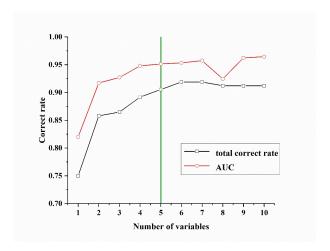


Figure S1†. The total correct rates and AUC values of the PLS-DA models for the 74 T2DM patients before and after treatment established by different numbers of variables. The first one was the variable with the highest β value, the second combination was the first one plus the second one, then, the first three, and so on. The total correct rates were obtained from the 10-fold cross validation. Also considering the AUC values, the first five variables were selected.

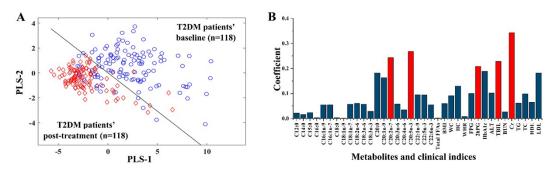


Figure S2†. 2D-project plots of metabolites and clinical indices by PLS-DA for the 118 T2DM patients before and after treatment (A) and absolute value of coefficients β of each variable for the discrimination (B). Each projection point in Fig S2† (A) indicated either a baseline (blue) or a post-treatment (red) sample. The AUC value was 96.65%. The total correct rate and correct rates for the T2DM patients before and after two years treatment were 93.22%, 90.68% and 95.76%, respectively. Cr, TBIL, 2hPG, C20:2n-7 and C20:5n-3 were screened out as key indexes.

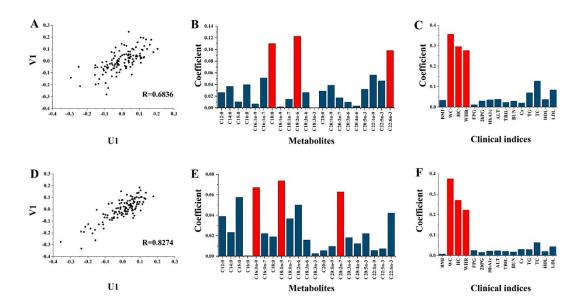


Figure S3†:The first pair of typical variables of metabolite (U1) and clinical indice (V1) before and after 2 years of treatment in T2DM patients and the coefficient' absolute values of the first pair of canonical variables in the clinical indices and fatty acids of 118 T2DM patients. Fig. S3†(A) and (D) show the first pair of typical variables of metabolite (U1) and clinical indice (V1) before and after 2 years of treatment in 118 T2DM patients. Fig. S3†(B), (C), (E), and (F) show the coefficient' absolute values of the first pair of canonical variables in the fatty acids and the clinical indices of 118 T2DM patients before and after 2 years of treatment, respectively.

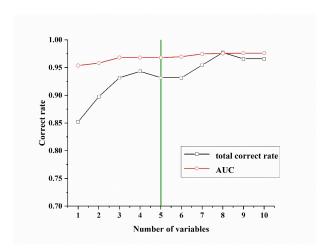


Figure S4 \dagger . The total correct rates and the AUC values of the PLS-DA models for the 44 T2DM-AS patients before and after treatment established by different numbers of variables. The first one was the variable with the highest β value or AUC value, the second combination was the first one plus the second one, then, the first three, and so on. The total correct rates were obtained from the 10-fold cross validation. Also considering the AUC values, the first five variables were selected.