

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Clinical characteristics of the study cohorts. Trauma time, time from trauma to blood sampling; SBP, systolic blood pressure; DBP, diastolic blood pressure; PT, prothrombin time; PT-INR, prothrombin time-international normalized ratio; APTT, activated partial thromboplastin time; TT, thrombin time; Fbg, fibrinogen; D-D, D-dimer; FDP, fibrinogen degradation products; WBC, white blood cell count; RBC, red blood cell count; HGB, hemoglobin concentration; PLT, platelet count; HCT, hematocrit percentage; NEUT%, neutrophill percentage; LYMPH%, lymphocyte percentage; MPV, mean platelet volume; PCT, platelet hematocrit; MCV, mean corpuscular volume; MCH, mean corpuscular hemoglobin; MCHC, mean corpuscular hemoglobin concentration; MONO%, monocyte percentage; EO%, eosinophill percentage; BASO%, basophill percentage; NEUT#, neutrophill count; LYMPH#, lymphocyte count; MONO#, monocyte count; EO#, eosinophill count; BASO#, basophill count; RDW-SD, red blood cell distribution width-SD; RDW-CV, red blood cell distribution width-CV; PDW, platelet distribution width; P-LCR, platelet large cell percentage.

File Name: Supplementary Data 2

Description: Raw intensity values of 326 annotated metabolites for 580 samples in discovery study cohort.

File Name: Supplementary Data 3

Description: The abundance of 326 annotated metabolites after imputation and normalization for 580 samples in discovery study cohort (log-transformed and scaled by median centered within a batch).

File Name: Supplementary Data 4

Description: Univariate and multivariate analyses identified 28 metabolites (bold) were significantly changed in pt-DVT patients. *P* values were calculated with two-tailed unpaired Student's T-test/Mann-Whitney U-test. The Benjamin-Hochberg false discovery rate (FDR) method was used to address multiple comparisons.

File Name: Supplementary Data 5

Description: The partial correlation coefficients among 28 metabolites within

DSPC network analysis. *P* values were calculated with two-tailed hypothesis test (Output from the MetaboAnalyst 5.0). The Benjamin-Hochberg false discovery rate (FDR) method was used to address multiple comparisons.

File Name: Supplementary Data 6

Description: Pathway analysis demonstrates metabolic dysregulation for pt-DVT. *P* values were calculated with two-tailed global test. The Benjamin-Hochberg false discovery rate (FDR) method was used to address multiple comparisons.

File Name: Supplementary Data 7

Description: Univariate analyses and logistic regression model identified 14 clinical parameters (bold) were significantly changed in pt-DVT patients. *P* values were calculated with two-tailed unpaired Student's T-test/Mann-Whitney U-test. The Benjamin-Hochberg false discovery rate (FDR) method was used to address multiple comparisons.

File Name: Supplementary Data 8

Description: The diagnostic assessment of D-dimer and clinical parameters in the PLT and RBC clusters.

File Name: Supplementary Data 9

Description: Associations between pt-DVT related metabolites and two clinical parameter clusters using linear regression model. *P* values were calculated with two-tailed hypothesis test (degrees of freedom, $df = 578$). The Benjamin-Hochberg false discovery rate (FDR) method was used to address multiple comparisons.

File Name: Supplementary Data 10

Description: Metabolic pathways associated with PLT cluster and RBC cluster that are dysregulated in pt-DVT patients. *P* values were calculated with two-tailed global test. The Benjamin-Hochberg false discovery rate (FDR) method was used to address multiple comparisons.

File Name: Supplementary Data 11

Description: Raw intensity values of 326 annotated metabolites for 100 samples in validation cohort.

File Name: Supplementary Data 12

Description: The abundance of 28 pt-DVT-related metabolites after imputation and normalization for 100 samples in validation cohort (log-transformed and scaled by median centered).

File Name: Supplementary Data 13

Description: Raw normalized intensity values of 524 annotated proteins for 183 samples.

File Name: Supplementary Data 14

Description: The abundance of 524 annotated proteins after imputation for 183 samples (log-transformed and scaled by median centered).

File Name: Supplementary Data 15

Description: Univariate analysis identified 214 proteins (bold) were significantly changed in pt-DVT patients. *P* values were calculated with two-tailed unpaired Student's T-test/Mann-Whitney U-test. The Benjamin-Hochberg false discovery rate (FDR) method was used to address multiple comparisons.

File Name: Supplementary Data 16

Description: The Connectivity Map (cMap) compounds with the pt-DVT-related proteins.

File Name: Supplementary Data 17

Description: Associations between pt-DVT related metabolites, clinical parameters and CRP using linear regression model. *P* values were calculated with two-tailed hypothesis test (degrees of freedom, *df* = 154). The Benjamin-Hochberg false discovery rate (FDR) method was used to address multiple comparisons.