

Table S1. The selected time-to-death variables and the penalized elastic net coefficients in adult male diabetic hemodialysis patients ($\alpha_{\text{optimal}}=0.6^*$ and $\lambda_{\text{optimal}}=0.0448^*$).

Factors	Coefficient [†]
Vascular access type	0.52096
Dialysis duration per session (h)	0.49019
Hemoglobin (g/dL)	-0.19175
BMI (Kg/m ²)	-0.16474
UF (mL)	-0.09550
Potassium (mEq/L)	0.09046
Pre-dialysis weight (Kg)	-0.02506
Phosphate (mg/dL)	0.02162
SBP (mmHg)	-0.00972
HDL-C (mg/dL)	-0.00962
Dry weight (Kg)	-0.00152
DBP (mmHg)	-0.00043
LDL (mg/dL)	0.00035
ALKPH (IU/L)	-0.00002

ALKPH, Alkaline phosphatase; BMI, Body mass index; DBP, Diastolic blood pressure; HDL-C, High-density lipoprotein cholesterol; LDL, Low-density lipoprotein; MSE, Mean-squared error; SBP, Systolic blood pressure; UF, Ultrafiltration volume.

Note: α_{optimal} and λ_{optimal} are selected based on the 5-fold cross-validation for which MSE is minimum.

[†]The estimated coefficients using elastic net penalized analysis sorted by magnitude from highest to lowest.

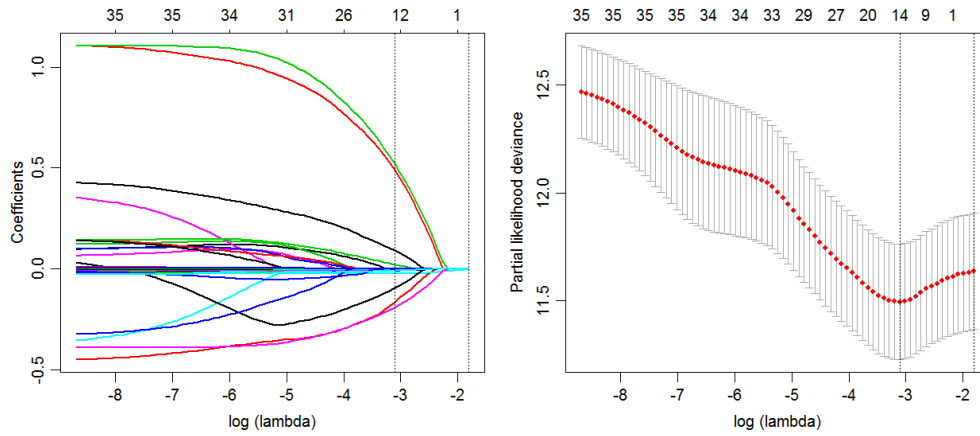


Figure S1. Left: The elastic net penalized coefficients on the male diabetic hemodialysis (MDHD) dataset are shown as a function of $\log(\lambda)$. **Right:** Partial likelihood deviance of the five-fold cross-validation including lower and upper standard deviations (SDs) as a function of $\log(\lambda)$ for the MDHD dataset. The dotted vertical lines demonstrate the λ values with a minimum deviance ($\log \lambda = -3.1064$) and the largest λ value within one SD of the minimum deviance ($\log \lambda = -1.8039$).

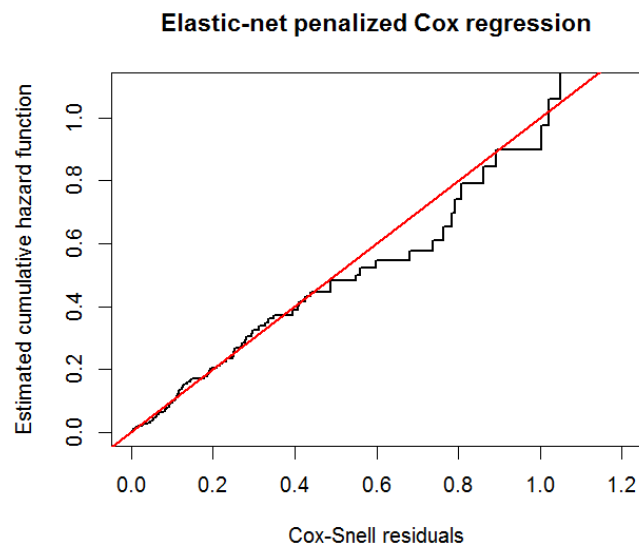


Figure S2. The graphical assessment of the fit of the elastic net penalized Cox-adjusted regression model using the Cox-Snell residual plot.