

Figure S1

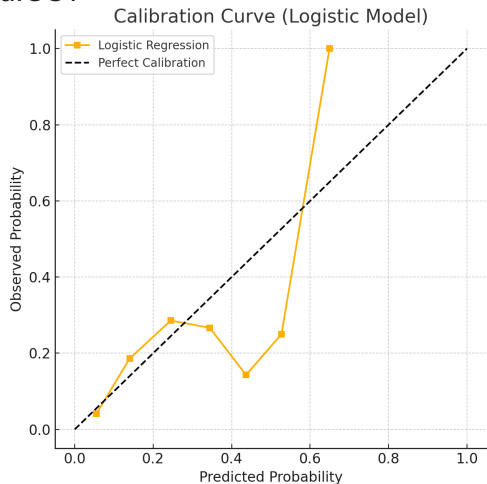


Figure S2

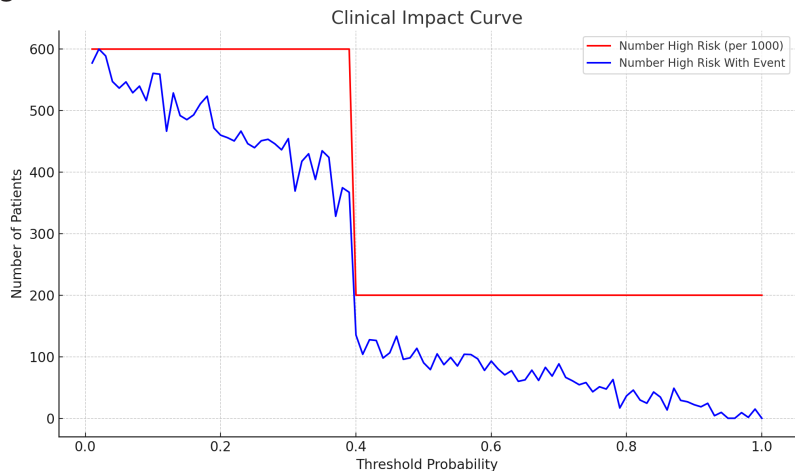


Figure S3

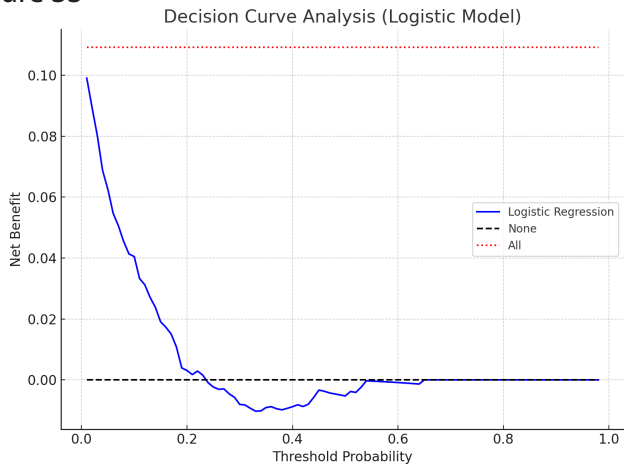


Figure S4

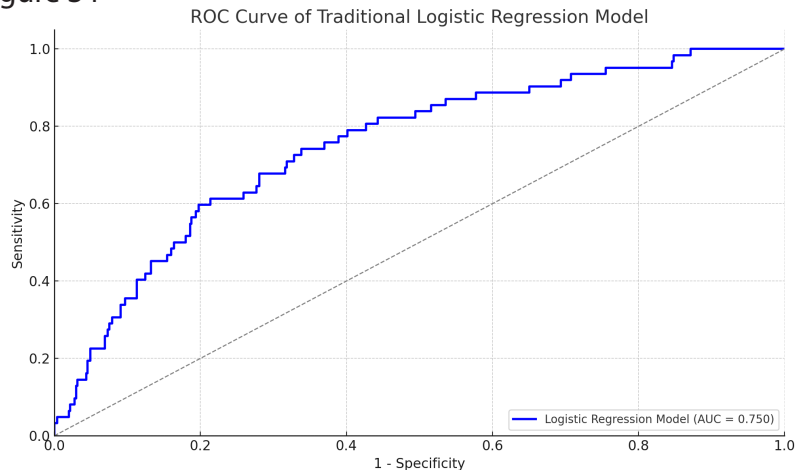


Figure S5

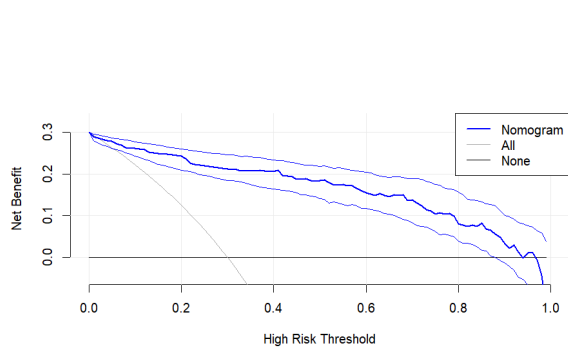
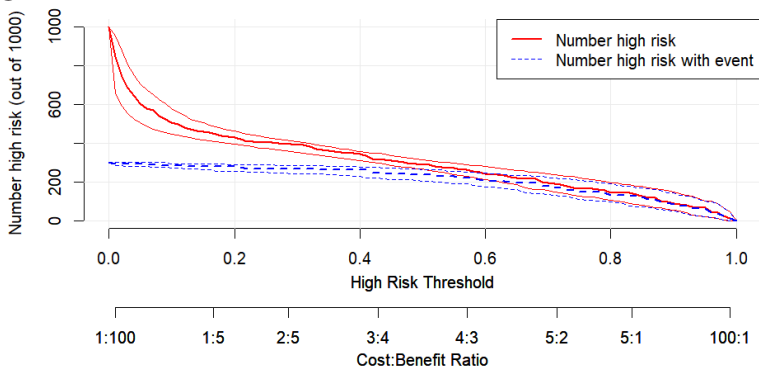


Figure S6



Supplementary Table 1

Variable	Coefficient
Age	0.011778731
Coronary heart disease	-0.006040097
Duration of dust exposure	0.098139034
Dyspnea	0.152077773
SpO ₂ (%)	-0.086191203
Serum kalium	0.030191756
Neutrophil	0.005764907
CRP	0.007901391
IL-6	0.006991769

Supplementary Table 2

Variable	Selection Frequency (out of 1000 resamples)
Age	917
Coronary heart disease	668
Duration of dust exposure	954
Dyspnea	978
SpO ₂ (%)	931
Serum kalium	812
Neutrophil	883
CRP	995
IL-6	992

Note:**Supplementary Figure S1**

Calibration curve of the logistic regression model for predicting survival in patients with pneumoconiosis. The curve shows good agreement between predicted and observed outcomes.

Supplementary Figure S2

Clinical impact curve of the prediction model showing the number of high-risk patients and true positive cases across different threshold probabilities.

Supplementary Figure S3

Decision curve analysis of the logistic regression model demonstrating the net clinical benefit across a range of threshold probabilities.

Supplementary Figure S4

ROC curve of the traditional logistic regression model for survival prediction in pneumoconiosis patients.

Supplementary Figure S5

Decision curve analysis of the nomogram model for survival prediction.

Supplementary Figure S6

Clinical impact curve of the nomogram model showing predicted high-risk populations and true events.

Supplementary Table 1

Features selected by LASSO regression and their corresponding coefficients.

Supplementary Table 2

Selection frequencies of LASSO-selected variables across 1000 bootstrap iterations.