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Original Article

Post-treatment Lung Tuberculosis Sequelae: an Inexpensive Clinical-Laboratory Nomogram to Predict Tissue Destruction

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Supplementary Files

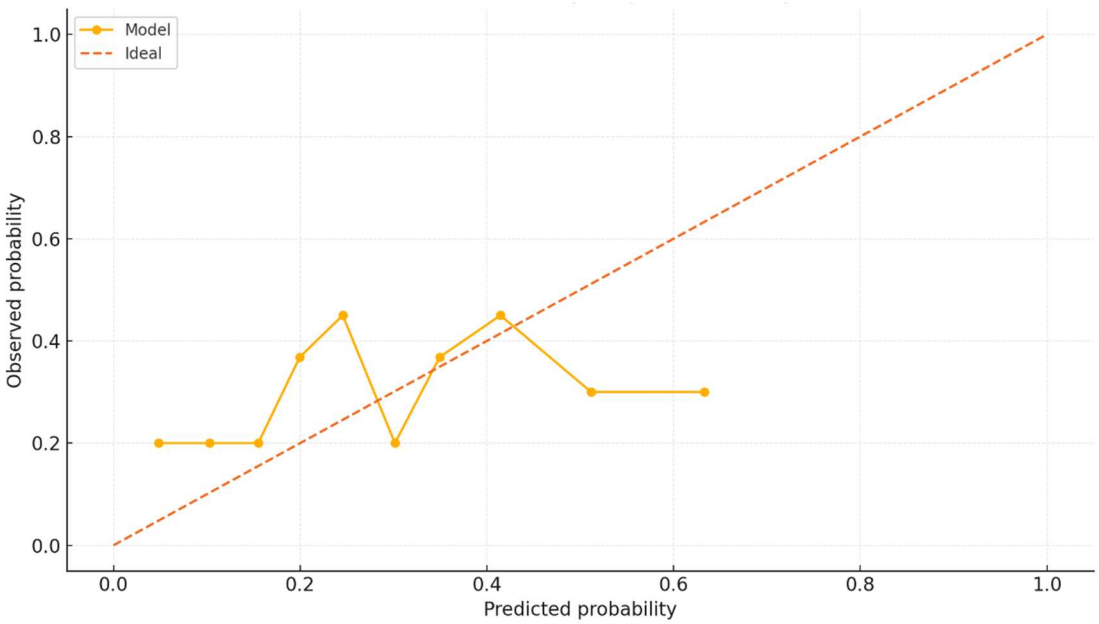
Supplementary Table S1. Variable-level missingness.

Variable (22 total)	Missing n (%)	Observed n (%)
Age	0 (0.0)	205 (100%)
Sex (M/F)	0 (0.0)	205 (100%)
Silicosis	0 (0.0)	205 (100%)
Drug-resistant TB	1 (0.5%)	204 (99.5%)
Symptom-to-treatment delay (days)	3 (1.5%)	202 (98.5%)
Lymphocyte count (×10⁹/L)	5 (2.4%)	200 (97.6%)
C-reactive protein (mg/L)	7 (3.4%)	198 (96.6%)
AST (U/L)	4 (2.0%)	201 (98.0%)
γ-GGT (U/L)	7 (3.4%)	198 (96.6%)
Albumin (g/L)	4 (2.0%)	201 (98.0%)
Atelectasis / cavity (CT)	2 (1.0%)	203 (99.0%)
Pleural effusion (CT)	2 (1.0%)	203 (99.0%)
The remaining 10 predictors all < 5 %	–	–

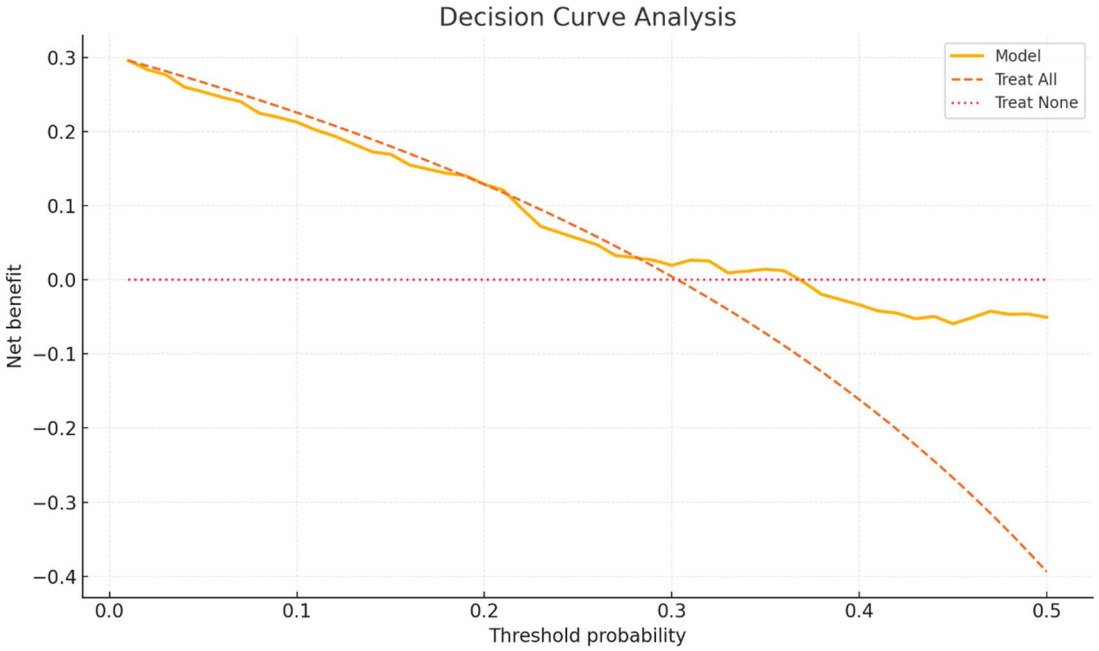
Supplementary Table S2. Complete-case versus multiply-imputed estimates for the final nine-predictor model.

Predictor	**Complete-case OR (95% CI)**	**MI-pooled OR (95% CI)**	**|Δβ| %***
Symptom-to-treatment delay (per 5 days)	1.08 (1.04 – 1.14)	1.07 (1.03 – 1.13)	3.0
Lymphocyte count (per 0.5 × 10⁹/L)	0.32 (0.11 – 0.79)	0.34 (0.13 – 0.83)	5.9
C-reactive protein (per 10 mg/L)	1.03 (1.01 – 1.05)	1.03 (1.01 – 1.04)	2.8
Aspartate aminotransferase (per 5 U/L)	1.05 (1.01 – 1.10)	1.04 (1.00 – 1.09)	3.5
γ-Glutamyl-transferase (per 5 U/L)	1.02 (1.00 – 1.04)	1.02 (1.00 – 1.04)	0.0
Albumin (per 1 g/L)	0.85 (0.75 – 0.95)	0.86 (0.77 – 0.97)	2.5
Silicosis (yes vs no)	16.8 (2.39 – 166.1)	15.9 (2.30 – 155.0)	5.4
Drug-resistant TB (yes vs no)	6.68 (1.75 – 30.3)	6.45 (1.70 – 29.1)	2.3
Atelectasis / cavity (yes vs no)	3.45 (0.75 – 18.0)	3.40 (0.72 – 17.6)	1.5

* |Δβ| % = absolute percentage change in the log-odds coefficient between complete-case and multiply-imputed analyses; values < 6 % indicate negligible imputation impact.



Supplementary Figure S1. Model calibration and clinical utility. Observed versus predicted risk of post-treatment lung destruction is shown for ten equal frequency bins of predicted probability. Dots represent mean observed event rates within each bin; the solid line connects these values, and the dashed 45° line depicts perfect calibration. The closeness of the plotted line to the reference indicates good agreement between the predicted and observed risk.



Supplementary Figure S2. Decision-curve analysis (DCA). Net benefit is plotted versus the threshold probability—the risk at which a clinician would escalate follow-up. The nomogram (solid line) exceeds "treat-all" (long-dashed) and "treat-none" (dotted) across 10–40%. Interpreting thresholds: $p_t = 0.10, 0.20, 0.30, 0.40$ imply a willingness to accept ≈ approximately 9, 4, 2.3, and 1.5 unnecessary escalations, respectively, for each correctly escalated patient.