Supplementary Materials

Prognostic factors and a Cox proportional hazards model for survival in primary liver cancer

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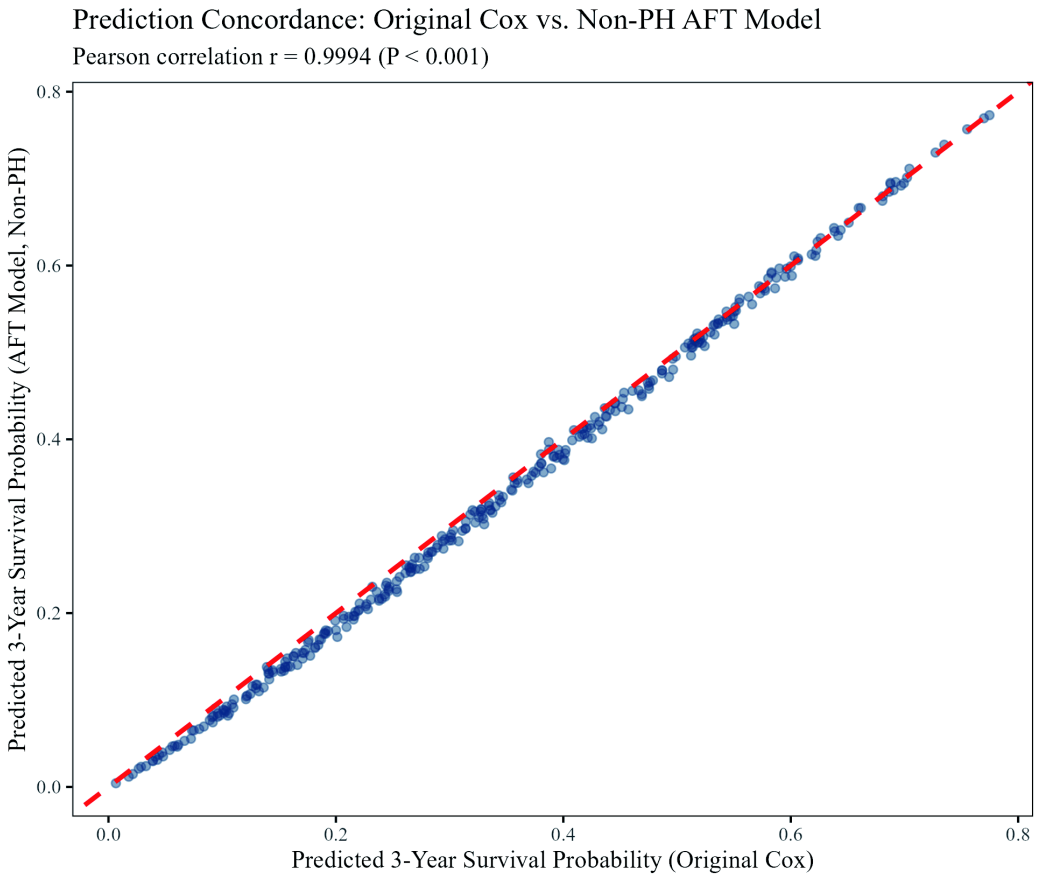
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Supplementary Table 1. Quantitative assessment of absolute prediction and calibration errors across different time horizons

Time Point	Mean Absolute Error (MAE/ICI)	Median Absolute Error (E_{50})	90th Percentile Error (E_{90})
1-Year (12 units)	0.2485	0.2648	0.3061
3-Year (36 units)	0.0167	0.0112	0.0422
5-Year (60 units)	0.1174	0.1358	0.1593

Note: Errors were quantified through 500 bootstrap resamplings. MAE / ICI: Mean Absolute Error / Integrated Calibration Index, representing the average absolute difference between predicted probabilities and bootstrap-corrected observed survival probabilities; E_{50}: Median absolute error; E_{90}: The 90th percentile of absolute errors. Time units reflect the follow-up scale of the study cohort.



Supplementary Figure 1. Concordance of predicted 3-year overall survival probabilities between the primary Cox model and the non-proportional Weibull Accelerated Failure Time (AFT) model. Scatter plot illustrating the correlation of individual predicted 3-year overall survival probabilities derived from the primary multivariable Cox proportional hazards model (x-axis) and the parametric Weibull Accelerated Failure Time (AFT) model (y-axis) in the validation cohort. The parametric AFT framework relaxes the proportional hazards (PH) assumption. The red dashed line represents the line of identity (y = x). The two models showed high consistency in risk estimation (Pearson's correlation coefficient r = 0.9994, $P < 0.001$), suggesting that the presence of non-proportional hazards had limited influence on individual risk stratification.