SUPPLEMENTAL DATA

Deep learning and inflammatory markers predict early response to immunotherapy in unresectable NSCLC: A multicenter study

Lei Yuan[1,2#], Qi Wang[1,2#], Fei Sun[3#], Hongcan Shi[1,2*]

[1]Department of Thoracic Surgery, Northern Jiangsu People's Hospital Affiliated to Yangzhou University, Yangzhou, China;

[2]Medical College, Yangzhou University, Yangzhou, China;

[3]Department of Thoracic Surgery, The Affiliated Taizhou People's Hospital of Nanjing Medical University, Taizhou, Jiangsu, China

[*]Correspondence to **Hongcan Shi**: shihongcan@yzu.edu.cn

[#]**Lei Yuan, Qi Wang** and **Fei Sun** contributed equally to this work.

DOI: https://doi.org/10.17305/bb.2025.12324

Full article is available at the following link:

https://www.bjbms.org/ojs/index.php/bjbms/article/view/12324/3927

Table S1. Analysis of clinical features

Feature_name	OR	OR lower 95%CI	OR upper 95%CI	*p*_value	OR	OR lower 95%CI	OR upper 95%CI
EGFR	0.560	0.505	0.621	<0.05	0.632	0.571	0.7
TNM	0.775	0.679	0.884	<0.05	0.873	0.784	0.971
modality	0.777	0.538	1.123	0.258			
ECOG	0.881	0.811	0.957	<0.05	0.967	0.906	1.033
NLR	0.921	0.891	0.951	<0.05	0.982	0.949	1.016
pathological_type	0.925	0.817	1.047	0.302			
treatment_lines	0.960	0.875	1.055	0.478			
smoking	0.969	0.853	1.100	0.677			
BMI	0.996	0.980	1.012	0.706			
type	0.996	0.959	1.034	0.847			
SIINI	0.998	0.997	0.998	<0.05	0.999	0.998	1.0
PLR	1.000	0.999	1.000	0.569			
ALI	1.000	1.000	1.000	0.542			
SII	1.000	1.000	1.000	0.275			
age	1.004	0.997	1.011	0.347			
PNI	1.007	0.996	1.018	0.272			
medication_regimen	1.027	0.916	1.151	0.704			
basic_disease	1.097	0.966	1.247	0.232			
PD_L1	1.104	1.018	1.197	<0.05	1.038	0.977	1.103
gender	1.298	1.096	1.536	<0.05	1.17	1.03	1.328

Table S2. Sensitivity analysis of clinical features.

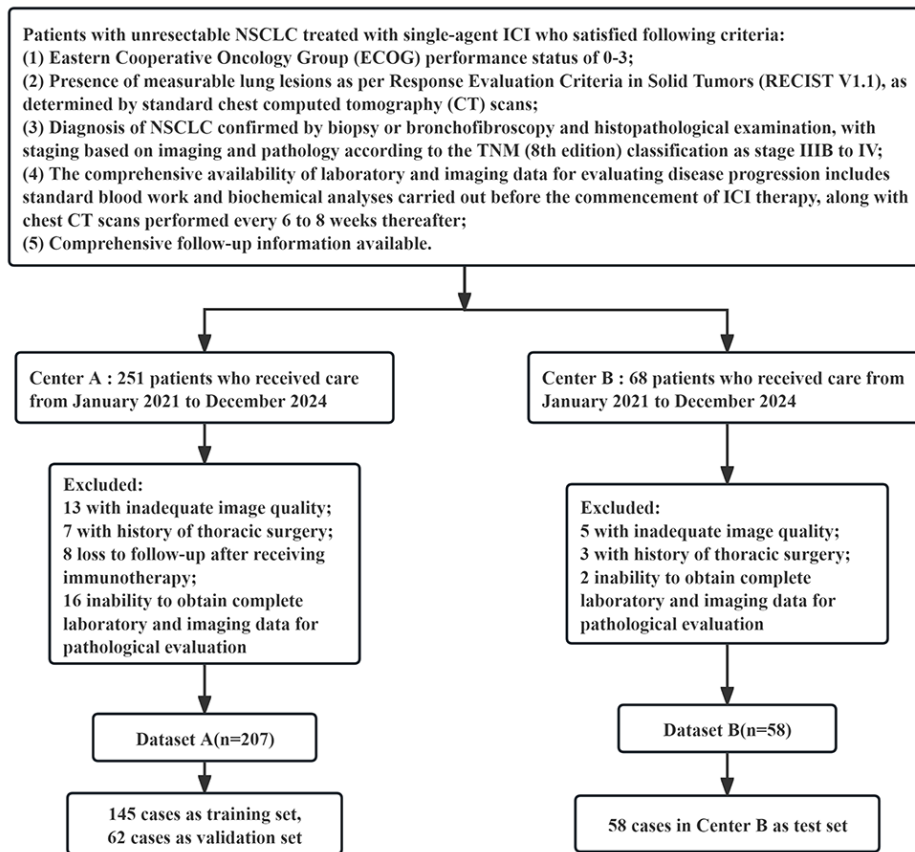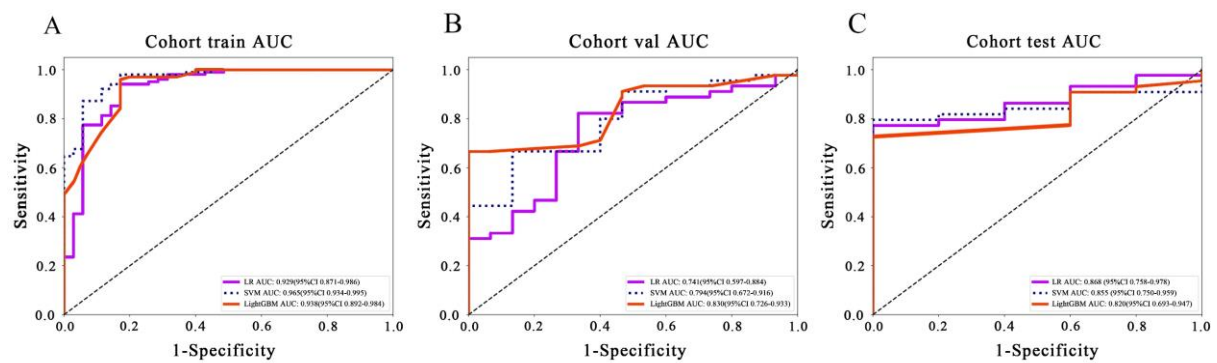|	Feature	AUC	Sensitivity	Specificity
1	gender	0.707	0.842	0.571
2	EGFR	0.791	0.868	0.714
3	pathological.type	0.633	0.553	0.714
4	TNM	0.6	0.342	0.857
5	SIINI	0.842	0.684	0.857

Figure S1. Research flow chart

Figure S2. Illustration of the ROC curves for clinical model on different datasets: (A) training set; (B) validation set; (C) test set.
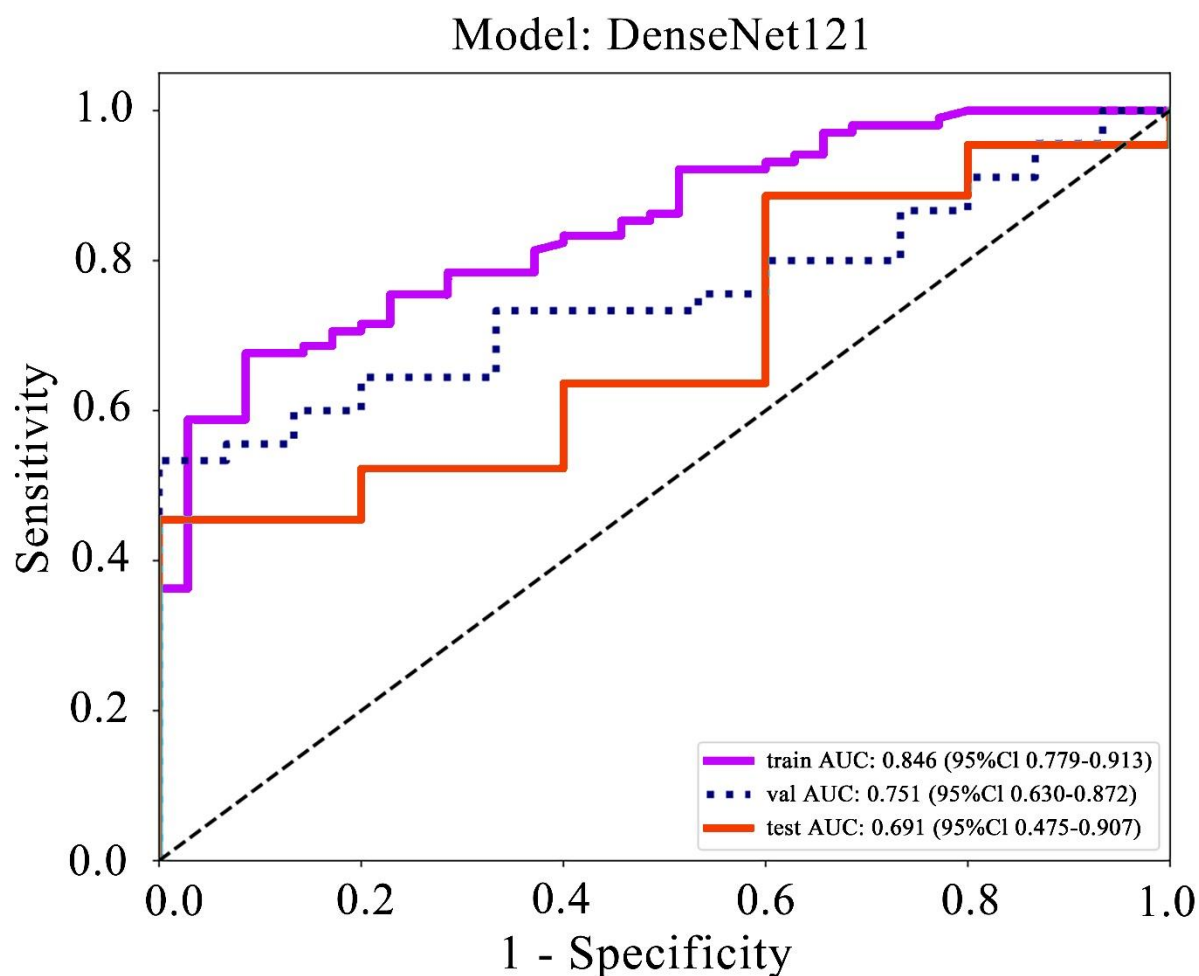
Figure S3. Illustration of the ROC curves for Deep Learning Signature on different datasets: (A) training set; (B) validation set; (C) test set.
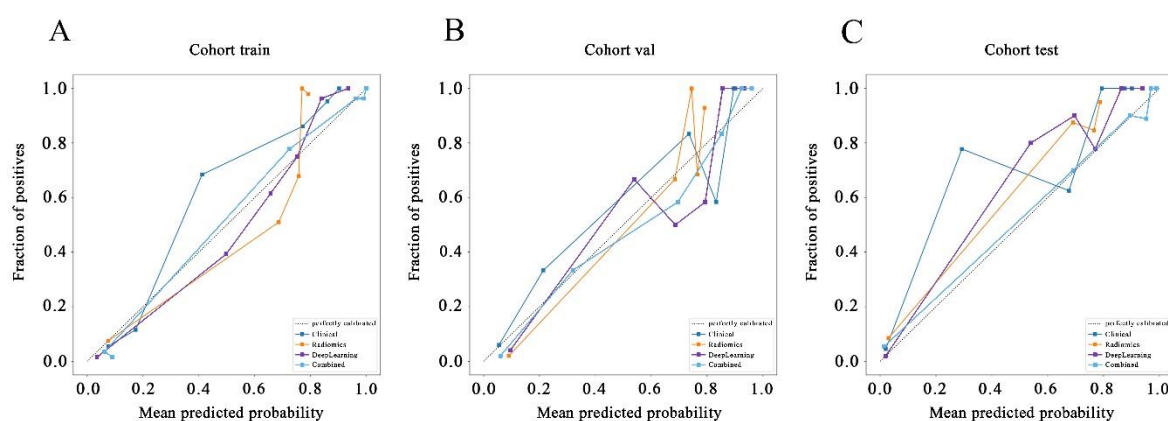

Figure S4. Calibration Curve on different datasets: (A) training set; (B) validation set; (C) test set.