

Figure S1 Sensitivity analysis for PFS prediction. (A,C,E) ROC curves were constructed to assess the predictive value of NLR (A), dNLR (C) and ANC (E) for PFS. The area under the curve was 0.570 for NLR, 0.552 for dNLR and 0.591 for ANC. (B,D,F) PFS among NSCLC patients in the first line was evaluated based on optimal values of NLR (B), dNLR (D) and ANC (F) in the overall population. In (B), patients were stratified according to baseline NLR, with the red line indicating $\text{NLR} \geq 5$ and the green line indicating $\text{NLR} < 5$. In (D), patients were stratified based on baseline dNLR, with the red line indicating $\text{dNLR} \geq 1.786$ and the green line indicating $\text{dNLR} < 1.786$. In (E), patients were stratified based on baseline ANC, with the red line indicating $\text{ANC} \geq 11.06$ and the green line indicating $\text{ANC} < 11.06$. Each circle represents a censored patient. For the median values, the first and second values correspond to the values for patients defined by an inflammatory marker either below or above the established threshold, respectively. ANC, absolute neutrophil count; dNLR, derived neutrophils-to-lymphocyte ratio; ICI, immune checkpoint inhibitor; NLR, neutrophils-to-lymphocyte ratio; NSCLC, non-small cell lung cancer; PFS, progression-free survival; ROC, receiver operating characteristic.

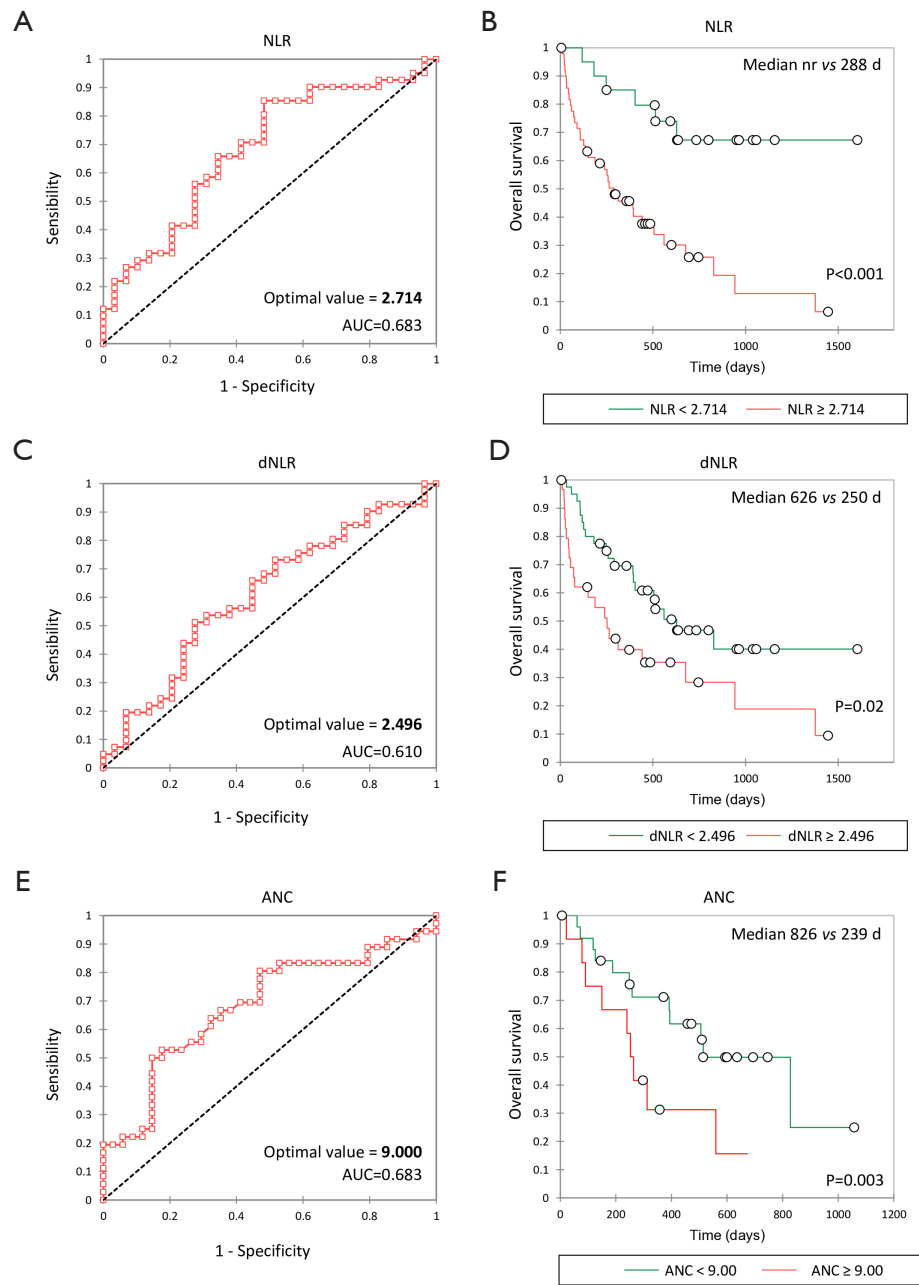


Figure S2 Sensitivity analysis for OS prediction. (A,C,E) ROC curves were generated to evaluate the prognostic performance of NLR (A), dNLR (C) and ANC (E) for OS. The area under the curve was 0.683 for NLR, 0.610 for dNLR and 0.683 for ANC. (B,D,F) OS outcomes for NSCLC patients in the first line were examined based on optimal values of NLR (B), dNLR (D) and ANC (F) in the overall population. In (B), patients were categorized according to baseline NLR, with the red line representing $\text{NLR} \geq 2.714$ and the green line indicating $\text{NLR} < 2.714$. In (D), patients were stratified based on baseline dNLR, with the red line representing $\text{dNLR} \geq 2.496$ and the green line indicating $\text{dNLR} < 2.496$. In (E), patients were stratified based on baseline ANC, with the red line indicating $\text{ANC} \geq 9.00$ and the green line indicating $\text{ANC} < 9.00$. Each circle represents a censored patient. For the median values, the first and second values correspond to the values for patients defined by an inflammatory marker either below or above the established threshold, respectively. 'nr' stands for 'not reached'. ANC, absolute neutrophil count; dNLR, derived neutrophils-to-lymphocyte ratio; ICI, immune checkpoint inhibitor; NLR, neutrophils-to-lymphocyte ratio; NSCLC, non-small cell lung cancer; OS, overall survival; ROC, receiver operating characteristic.