Original Article

Prognostic Significance of CONUT Score in Elderly NSCLC

Purpose: This study evaluated the Controlling Nutritional Status (CONUT) score as a prognostic predictor in elderly non-small cell lung cancer (NSCLC) patients with surgical resection.

Methods: Overall, 114 patients over 80 years old undergoing curative resection for NSCLC were retrospectively analyzed. Receiver operating characteristic (ROC) analysis was conducted to evaluate the capacity of immune-inflammatory markers to predict overall survival (OS). Cox-proportional hazards regression analysis was implemented to investigate prognostic markers for OS.

Results: Based on ROC curves, the CONUT score was found to be the most valuable prognostic marker (area under the curve = 0.716). The high CONUT (≥2) group included 54 patients, and the low CONUT (0 or 1) group included 60 patients. The high CONUT group had poorer prognosis rates compared to the low CONUT group with regard to OS (5-year OS: 46.3% vs. 86.0%, p = 0.0006). In the multivariate data analysis, histology, lymphatic invasion, and CONUT score (hazard ratio: 4.23, p = 0.0003) were found to be exclusive and independent prognostic markers for OS.

Conclusion: Preoperatively, the CONUT score can be used as a novel prognostic marker in elderly NSCLC patients. CONUT evaluations can also be used to design nutritional interventions to improve patient outcomes.

Keywords:

Abbreviations and Acronyms

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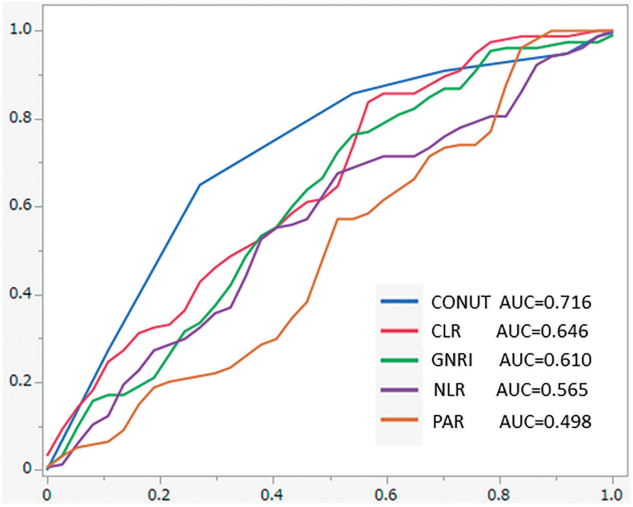

Fig. 1 [illegible]

ROC curves of inflammatory markers for OS prediction

[illegible] **Fig. 1** [illegible] **Table 4** [illegible]

Survival analysis based on CONUT score

[illegible] **Fig. 2** [illegible] **Fig. 3** [illegible]

Prognostic value of CONUT score and other clinicopathological variables

[illegible] **Table 5** [illegible] **Table 6** [illegible]

Discussion

[illegible]

Table 4 Comparison of the AUC between the CONUT score and other systemic inflammatory factors

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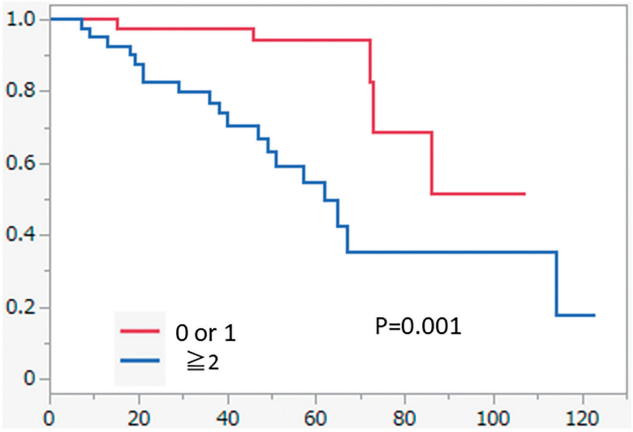

Fig. 3

Table 5 Univariate and multivariate Cox proportional hazards regression analyses for OS

		%		%

Conclusion

Declarations

Ethical approval

Consent for publication

Data availability

Author contributions

Funding

Conflicts of interest/Competing interests

References

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