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Blood 142 (2023) 6259–6260

The 65th ASH Annual Meeting Abstracts

ONLINE PUBLICATION ONLY

627.AGGRESSIVE LYMPHOMAS: CLINICAL AND EPIDEMIOLOGICAL

A Novel Nomogram Predicting Rituximab-Associated Interstitial Pneumonia in Patients with Diffuse Large B-Cell Lymphoma: A Retrospective Analysis of Single-Center

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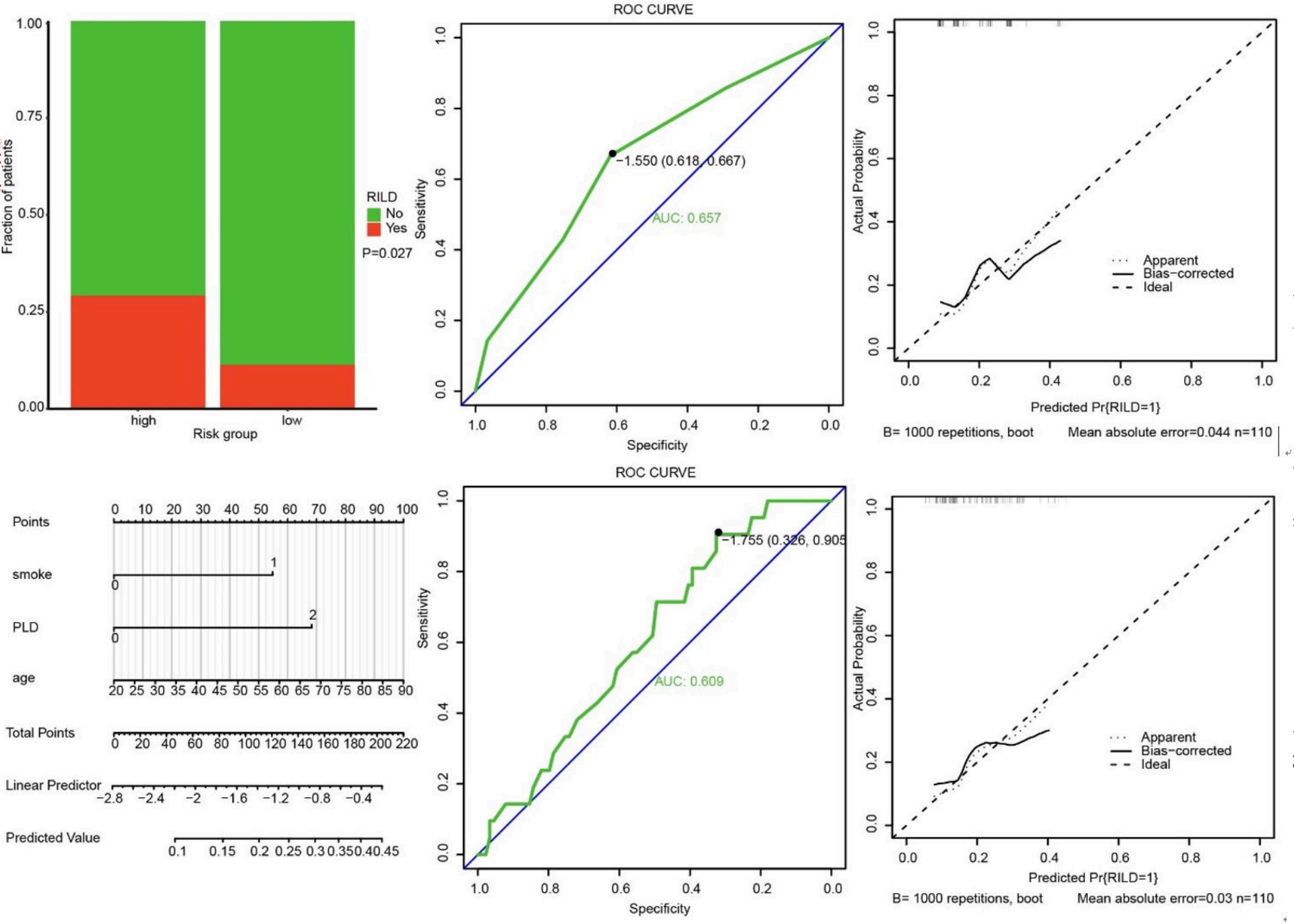
Background: The incidence rate of rituximab-induced interstitial lung disease (RILD) was reported to be 3.7%-16.7%. The onset of RILD was insidious, and the clinical symptoms were atypical. The course of the RILD progressed rapidly without timely treatment. However, there were no models reported to predict the risk of RILD. Herein, we investigated the incidence of RILD in consecutive patients with diffuse large B-cell lymphoma (DLBCL) and its correlation with clinicopathological features, and a novel nomogram was constructed to successfully predict the risk of RILD.
Methods: The clinicopathological data of 110 consecutive patients with DLBCL who were treated in the Department of Hematology of Beijing Tongren Hospital from January 2020 to December 2022 were retrospectively collected, and all patients received first-line treatment regimens containing rituximab. The occurrence of interstitial pneumonia was assessed by chest CT or interim PET-CT. Efficacy was assessed according to Lugano criteria, and chi-square test was used to assess the difference in RILD in different characteristic groups.
Results: The complete remission rate of 110 patients with DLBCL after treatment was 84.2%. Twenty-one patients (19.1%) developed RILD during treatment, and the median time of occurrence was the 4th cycle(range: 2~8). The median duration of treatment for RILD was 10 days (range: 5~60). Except for 5 patients with no obvious symptoms, all 16 patients received glucocorticoid-containing regimens, and all patients improved after treatment. The incidence of RILD was significantly higher in patients who received liposomal doxorubicin-containing regimens than those treated with adriamycin regimens (29.7% versus 13.7%, P=0.043). Smoking (P=0.298) and advanced age (P=0.156) were associated with a high incidence of RILD. Then we developed a RILD risk prediction model according to the risk factors, and the patients were divided into high-risk and low-risk groups, and the incidence of RILD was significantly different between the two groups (P=0.027). Finally, a novel nomogram related to the occurrence of RILD in DLBCL patients was developed to scientifically and accurately predict the incidence of RILD.
Conclusion: Patients with DLBCL should be alert to the occurrence of RILD after chemotherapy with rituximab-containing regimen, especially in smoking and elderly patients, and the prevention and monitoring of RILD should be strengthened after the application of liposomal doxorubicin.

Disclosures No relevant conflicts of interest to declare.

https://doi.org/10.1182/blood-2023-180826



The occurrence of RILD in different groups and the ROC curve and calibration curve (upper figures)

Nomogram plot, the ROC curve and calibration curve of the incidence of RILD patients with DLBCL after the first-line treatment (lower figures)

Figure 1