

Inflammatory-nutritional score helps predict survival in new multiple myeloma

January 20 2023, by Elana Gotkine



For patients with newly diagnosed multiple myeloma (NDMM), a



nomogram based on the inflammatory-nutritional score (INS) may help to predict survival, according to a study published online Jan. 5 in the *Journal of Inflammation Research*.

Limei Zhang, Ph.D., from the Sun Yat-sen University Cancer Center in Guangzhou, China, and colleagues conducted a retrospective analysis of baseline clinical and laboratory data for 442 patients with NDMM who were randomly divided into training and validation cohorts in a 8:2 ratio to assess the prognostic value of pretreatment inflammatory and nutritional parameters for predicting overall survival. The INS was constructed with six inflammatory/nutritional variables, including the nutritional risk index, body mass index, neutrophil-lymphocyte ratio, monocyte-lymphocyte ratio, platelet-lymphocyte ratio, and albuminalkaline phosphatase ratio. The INS was merged with performance status, lactate dehydrogenase, age, and C-reactive protein to generate a nomogram model for predictive optimization.

The researchers found that the model had good predictive performance, with a C-index of 0.708 and 0.749 in the training and validation cohorts, respectively. Excellent consistency between predicted and observed survival was demonstrated for both cohorts in calibration curves. The nomogram model exhibited better performance than other staging systems for multiple myeloma in the time-dependent receiver operating characteristic curve analysis.

"The nomogram based on the INS exhibited good predictive accuracy and discriminative ability, suggesting that it can aid in predicting individual survival probability in <u>patients</u> with NDMM," the authors write.

More information: Limei Zhang et al, Inflammatory and Nutritional Scoring System for Predicting Prognosis in Patients with Newly Diagnosed Multiple Myeloma, *Journal of Inflammation Research*



(2023). DOI: 10.2147/JIR.S390279

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Citation: Inflammatory-nutritional score helps predict survival in new multiple myeloma (2023, January 20) retrieved 9 April 2024 from https://medicalxpress.com/news/2023-01-inflammatory-nutritional-score-survival-multiple-myeloma.html

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