AB112. SOH21AS210. Predicting sentinel node positivity in patients with melanoma: which nomogram?

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Background: Clinicopathological parameters can be used to estimate probability of sentinel nodal metastases in patients with malignant melanoma. The aim of this study is to compare the predictive values of the Memorial Sloan-Kettering Cancer Centre (MSKCC) nomogram and the newly developed Melanoma Institute Australia (MIA) nomogram to predict sentinel lymph node (SLN) metastases in patients with primary cutaneous melanoma.

Methods: Patients with primary malignant melanoma who underwent regional nodal staging with SLN biopsy between June 2018 and November 2020 were included. Clinical and pathological parameters included in the MSKCC and MIA nomograms were retrieved from a prospectively maintained database. Estimated predictions from both nomograms were calculated for each individual patient and correlated with the final pathological results of the SLN biopsy.

Results: A total of 104 patients were included in the study. The median number of sentinel nodes retrieved was 1. Fourteen patients (13%) had a positive SLN biopsy of whom five proceeded to a completion lymphadenectomy. The MIA nomogram demonstrated a superior sensitivity (0.93) compared to the MSKCC nomogram (0.64). The negative predictive value was also greater utilising the MIA nomogram (97%) when compared to the MSKCC nomogram (93%). The average predicted probability of sentinel node metastases was higher when the MIA nomogram was used.

Conclusions: The MIA nomogram has a superior sensitivity and higher negative predictive value when compared to the MSKCC nomogram. This nomogram may serve as a useful adjunct in determining the need for SLN biopsy in an individual patient with a newly diagnosed melanoma.

Keywords: Biopsy; melanoma; negative predictive value; nomogram; sensitivity; sentinel node positivity

Footnote