IS AJCC STAGE IIA MELANOMA A HOMOGENEOUS DISEASE? A 23-YEAR SINGLE-CENTER EXPERIENCE

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Keywords: *Melanoma Stage Iia, Prognosis.*

Introduction. Stage IIA cutaneous melanoma is generally considered an intermediate-risk disease with favorable long-term outcomes. However, patients within this stage represent a clinically heterogeneous population, and their risk of recurrence and melanoma-related death may vary considerably. The aim of this study was to investigate long-term outcomes and identify prognostic factors in patients with AJCC stage IIA melanoma, with particular attention to differences between T2b and T3a tumors.

Materials and Methods. We performed a retrospective analysis of 201 consecutive patients diagnosed with AJCC stage IIA cutaneous melanoma between 2001 and 2024 at a tertiary referral center. Clinicopathological variables included demographic characteristics, Breslow thickness, histological subtype, mitotic activity, Clark level, lymphovascular invasion, regression, and tumor-infiltrating lymphocytes (TILs). Disease-free survival (DFS), melanoma-specific survival (MSS), and overall survival (OS) were estimated using Kaplan–Meier analysis and evaluated through Cox proportional hazards models.

Results. The study population comprised 99 patients with T2b melanoma and 102 with T3a melanoma. After a median follow-up of 144 months, 55 patients developed disease recurrence. Recurrence occurred significantly more frequently among patients with T3a melanoma than among those with T2b disease (35.3% vs 19.2%; p=0.016). Patients with T3a melanoma also experienced significantly poorer long-term outcomes, with a 5-year DFS of 67.5% compared with 87.5% in T2b melanoma and a 5-year OS of 74.5% versus 84.6%, respectively. A similar, although not statistically significant, trend was observed for melanoma-specific survival. During follow-up, 84 deaths were recorded, including 40 attributable to melanoma. Multivariable analysis identified Breslow thickness as an independent predictor of recurrence, whereas brisk TILs were independently associated with improved disease-free survival.

Conclusions. Although classified within the same AJCC stage, T2b and T3a melanomas exhibit substantially different clinical outcomes. These findings suggest that stage IIA melanoma encompasses biologically distinct risk groups and highlight the potential contribution of clinicopathological and immune-related factors to a more refined prognostic stratification. Further studies are warranted to refine surveillance strategies and identify patients who may benefit from more personalized follow-up approaches.

References

1. Gershenwald JE, Scolyer RA, Hess KR, et al. Melanoma staging: Evidence-based changes in the American Joint Committee on Cancer eighth edition cancer staging manual. CA Cancer J Clin. 2017;67(6):472-492. doi:10.3322/caac.21409;
2. Maher NG, Vergara IA, Long GV, Scolyer RA. Prognostic and predictive biomarkers in melanoma. Pathology. 2024;56(2):259-273. doi:10.1016/j.pathol.2023.11.004;
3. Homsi J, Kashani-Sabet M, Messina JL, Daud A. Cutaneous melanoma: prognostic factors. Cancer Control. 2005;12(4):223-229. doi:10.1177/107327480501200403