Long-term outcomes of stage IIB-IV melanoma patients: Nationwide data from Norway

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Background

Population level data on the outcomes of melanoma patient survival by TNM stage are scarce. This study aimed to investigate the characteristics and outcomes of Norwegian cutaneous melanoma patients with stage IIB-IV. Patients included in the study should be fully resected and stages III and IV eligible for adjuvant therapy.

Methods

For this retrospective cohort study, all patients with cutaneous melanoma (ICD-10:C43), diagnosed between Jan-2008 to Dec-2018 with AJCC8 TNM stage IIB-IV (stage IV patients with no evidence of surgery were excluded) were identified in the population based Cancer Registry of Norway. The primary outcome of interest was overall survival (OS). The OS experience of the cohort was evaluated using Kaplan-Meier and Cox Proportional Hazards methods.

Results

A total of 4,339 patients were included; 57.9% male, 42.1% female, median age 72 (IQR 60-82). Stage IIB/C patients made up half of the cohort: IIB 35.7% and IIC 17.7%. Additional stages included IIIA 4.0%, IIIB 8.2%, IIIC 18.8%, IIID 2.7% and IV 13%. A male predominance was consistent across stages but average age distribution varied with IIC patients appearing older (IIB vs IIC: 71.9 vs 78.5) and IIIA younger (IIB vs IIIA: 71.9 vs 58.4) compared to IIB. OS varied by stage with 3-year OS in IIB 74.5%, IIC 48.7%, IIIA 91.5%, IIIB 76.7% IIIC 63.1% IIID 55.4% and IV 63.7%. There was an overall trend for higher OS in stage IIIA in comparison to IIB. This trend persisted in multivariable cox models (IIIA vs IIB, HR 0.63, 95% CI 0.41-0.97, p=0.037) adjusting for potential confounders including age, sex and anatomical site of disease. Trends in survival were explored further in analyses focusing on cancer-specific mortality. Risk of cancer specific mortality in IIC patients was elevated in comparison to IIB (HR 2.23, 95% CI 1.84-2.70, p=<0.001), however, there was no difference between IIIA and IIB (HR 0.90, 95% CI 0.55-1.48, p=0.682).

Conclusions

OS for stage II melanoma patients, and particularly IIC, is poor and in some cases worse than patients with more advanced stage melanoma. Our data highlight a high and unmet need amongst the stage II population for effective adjuvant treatment options.

Legal entity responsible for the study

The Authors.

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Disclosure

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