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## Background

A survival disadvantage in male cutaneous melanoma patients (pts) has been long recognized through the stages. Specifically, we evaluated the role of sex as an independent prognostic factor among pts with stage II melanoma.

## Methods

We retrospectively collected clinical, pathological and molecular data of stage II cutaneous melanoma pts referring to our Institution between January 2018 and December 2021. Univariate Cox regression models were used for statistical analysis.

## Results

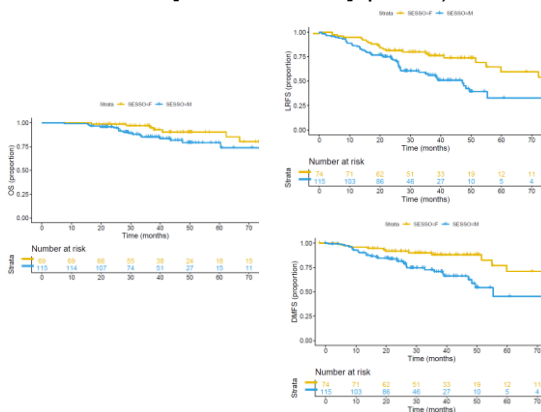
Overall, with a median follow-up of 38 months, 191 patients with stage II melanoma undergoing surgery without systemic adjuvant treatment were analyzed: 43 (22.5%) had stage IIA, 88 (46.1%) stage IIB, and 60 (31.4%) stage IIC disease. Median age was 66 years. 116 (61%) patients were males.

BRAF status was available for 140 (73.3%) pts: 51 (36 %) were V600-mutant and 89 (64%) wild type. No differences in overall (OS), local relapse-free (LRFS) and distant metastasis-free survival (DMFS) was observed in terms of BRAF status (HR<sub>OS</sub> 0.99, p 0.9; HR<sub>LRFS</sub> 0.82, p 0.4; HR<sub>DMFS</sub> 0.82, p 0.5).

A significant disadvantage for males was observed in risk of local (mLRFS<sub>male</sub> 47.17 vs mLRFS<sub>female</sub> 79.57 mo, HR 1.94 [CI 95% 1.22 – 3.09], p 0.005) and distant-relapse (mDMFS<sub>male</sub> 55.36 vs mDMFS<sub>female</sub> 152.69 mo, HR 2.69 [CI 95% 1.38 – 5.25], p 0.004).

A statistically significant trend for worse OS was observed among male pts (mOS<sub>male</sub> 122.27 vs mOS<sub>female</sub> 180.33 mo, HR 2.13 [CI 0.93 – 4.89], p 0.07).

Patients Characteristics	n (%)
<b>Age</b>	
<65	89 (46.6%)
>=65	102 (53.4%)
<b>Median (range), years</b>	66 (15 - 88)
<b>Sex</b>	
Male	116 (61%)
Female	75 (39%)
<b>Stage</b>	
II A	43 (22.5%)
II B	88 (46.1%)
II C	60 (31.4%)
<b>BRAF status</b>	
Wild type	89 (64%)
V600-mutant	51 (34%)



## Conclusions

Our study confirms a disadvantage for cutaneous melanoma male pts in survival outcomes, except for OS, for which a longer follow-up is required. Sex, combined with other recognized prognostic factors in stage II melanoma, could potentially become a mean in selecting patients for adjuvant treatments in the near future.