

## Author response to: Surgical treatment of anorectal melanoma: a systematic review and meta-analysis

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## Dear Editor

Our systematic review and meta-analysis of all retrospective and epidemiologic data available on survival outcomes of anorectal melanoma patients did not find a difference in survival for treatment with either local excision or extensive resection<sup>1</sup>. Due to the ongoing uncertainty about the best surgical approach, practiced treatment strategies will have differed in extensiveness in different hospitals and countries around the world. This study tried to identify a subgroup of anorectal melanoma patients that has had a survival benefit from this practice variation.

Naturally, as stated in the discussion, there are significant limitations due to the nature of a review including studies with retrospective designs and selection biases. However, due to the rarity of this specific cancer type (4.8 per 10 million per year), prospective randomized data will remain out of reach.

The inclusion of more detailed patient, tumour and workup characteristics (imaging data, tumour-size, -thickness, -depth of invasion, KIT and BRAF mutations, and PD-L1 expression, positive margins, local recurrences, completion radical resections) might give additional clues for a better patient-tailored approach. Unfortunately, these data are not (yet) available but will be studied by our group in the near future in more detailed patient cohorts.

Within these restrictions, we concluded in our article that we could not find a subset of patients that showed a better survival after a more invasive surgical approach. Considering the significant impact of an extensive resection on quality of life we stated that local excision merits consideration in these patients with such a short life expectancy. Of course, as discussed, the surgical option(s) will depend on individual patient characteristics,

technical feasibility and expected prognosis and will have to be weighted together with each individual patient.

Because of the absence of individual patient time-to-event data, we used Mantel-Haenszel method to compare the survival after both surgical strategies. This method calculates weighted average odds (or risk) ratios. The analysis of our data, containing 405 patients with stage specific survival data (of which 127 node positive patients), did not illustrate a survival difference between the two surgical approaches in both stage I and II (Fig. 4b).

We agree that considering omission of a regional lymph node resection might have impact on survival outcome, especially in clinically node-positive cases. However, it seems that aggressive tumour biology is the key survival determinant which can seldomly be turned around by invasive locoregional surgery. So even in clinically node positive anorectal melanoma patients a local excision with preservation of quality of life may be considered. Besides prevention of surgical morbidity, hopefully future anorectal melanoma treatment regimens will be upgraded with newer and more effective systemic modalities such as immunotherapy and targeted therapies in order to improve survival of patients with this aggressive melanoma variant.

Disclosure. The authors declare no conflict of interest.

## Reference

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