

# Impact of Allergy History and Steroid Use on Immunotherapy Response in Patients with Metastatic Head and Neck Squamous Cell Carcinoma

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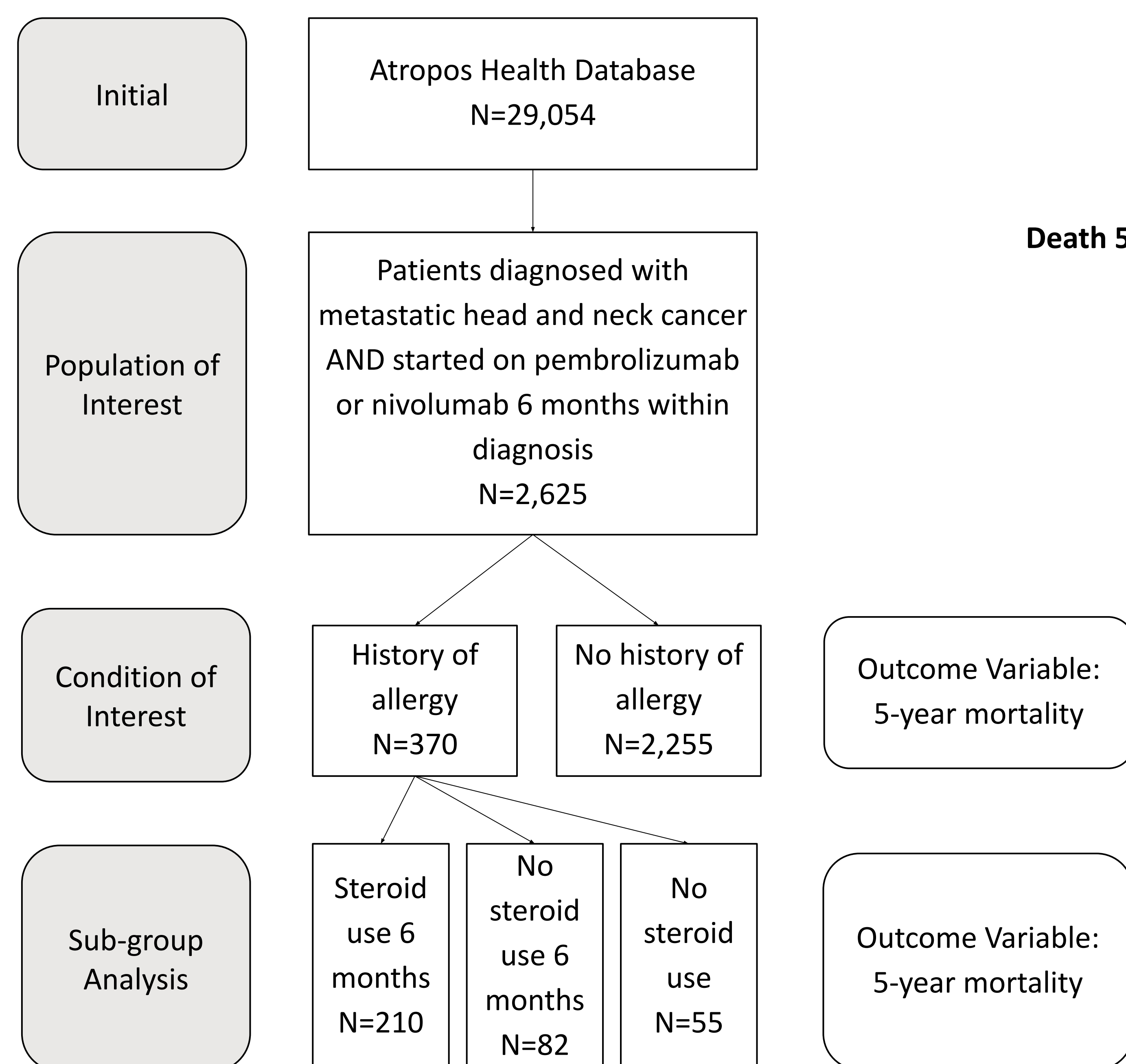
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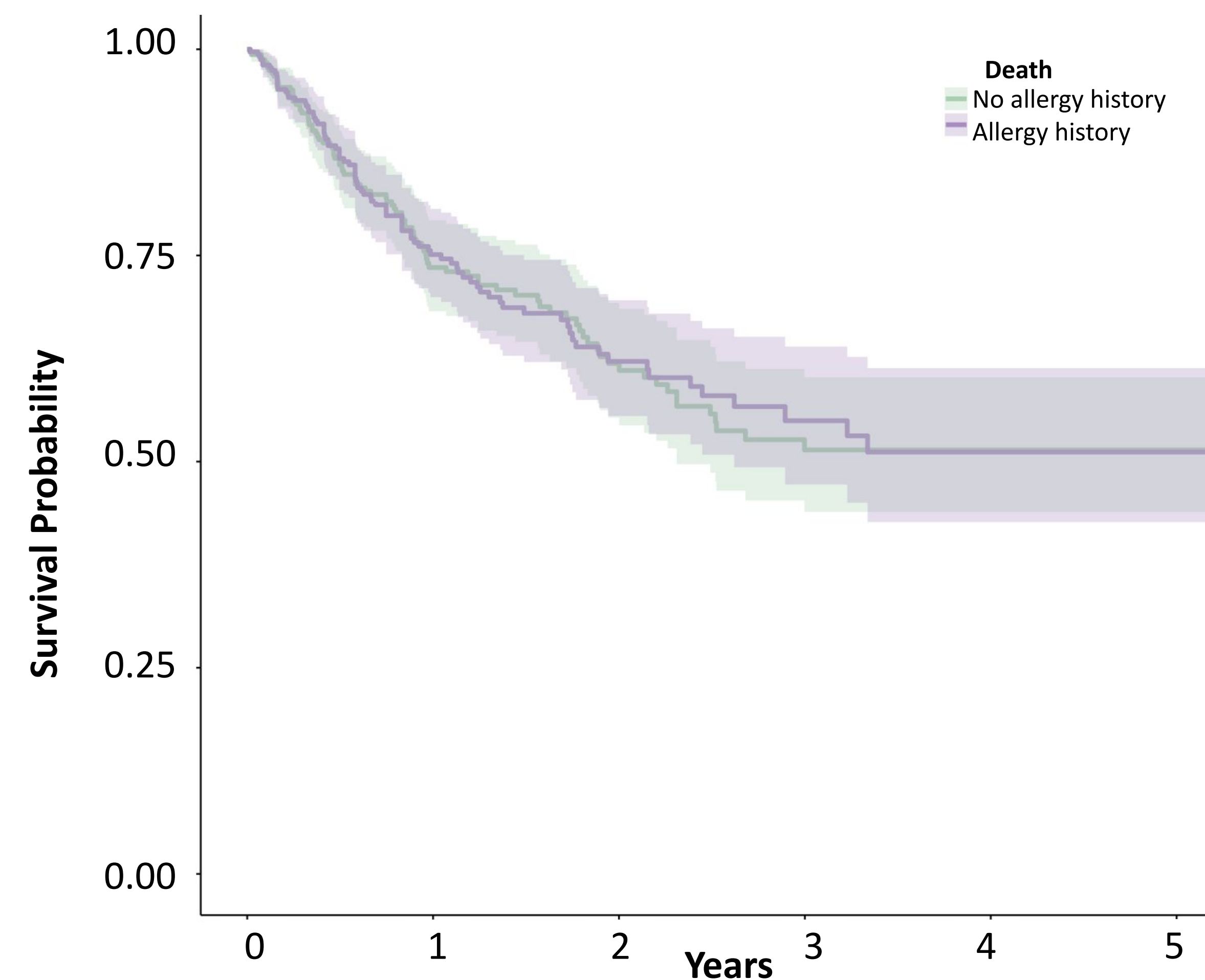
## Introduction

- HNSCC is the 6th most common cancer worldwide, prognosis is poor, paving the way for several novel treatments, including immune checkpoint inhibitors (ICI).<sup>1, 2</sup>
- In different cancers, steroid use near ICI treatment is associated with worse survival outcomes. Outcomes are associated with steroid dosage and timing.<sup>3, 4</sup>
- Mouse model of HNSCC demonstrated that steroid treatment reduced efficacy of anti PD-1 treatment.<sup>5</sup>
- Studies on clinical data and patient cohorts remains limited in HNSCC specifically.
- Does the use of steroids affect immunotherapy response in patients with recurrent/metastatic head and neck squamous cell carcinoma who have a history of allergy?

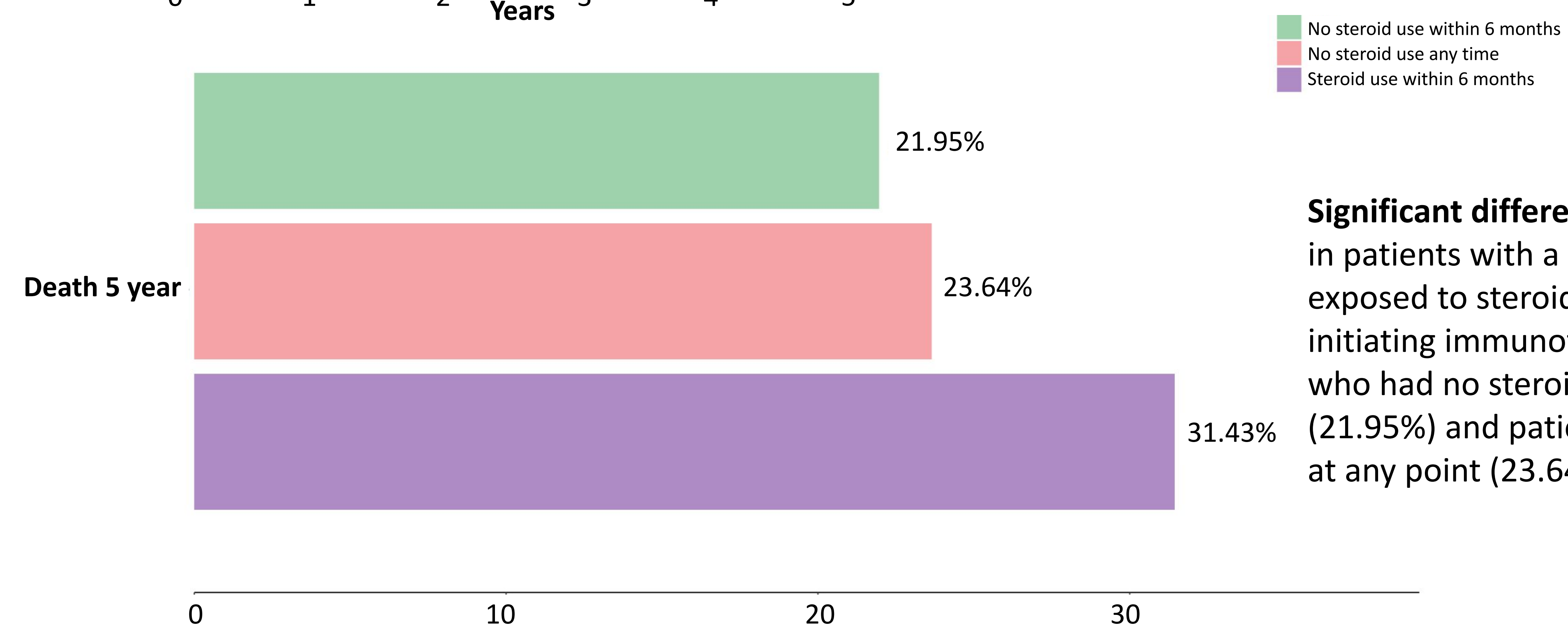
## Methods & Data



## Results



**No significant difference** in 5-year mortality rates between patients with metastatic HNSCC who were started on either pembrolizumab or nivolumab within 6 months who have a history of allergy and who do not have a history of allergy



**Significant difference** in 5-year mortality rates in patients with a history of allergy who were exposed to steroids within 6 months of initiating immunotherapy (31.43%) vs. patients who had no steroid use within 6 months (21.95%) and patients who had no steroid use at any point (23.64%)

## Conclusion

- Steroid exposure prior to initiation of immunotherapy does not appear to significantly influence survival outcomes, as no difference was observed between patients with and without a history of allergy.
- Steroid exposure after initiation of immunotherapy may negatively impact survival outcomes, particularly within the first 6 months of treatment, suggesting a critical window of vulnerability.

## References

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