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INTRODUCTION

BAP1 is frequently altered in malignant pleural mesothelioma. Its loss has been linked to an inflamed tumor microenvironment and may therefore have biomarker relevance during immune checkpoint inhibition.

Its prognostic significance during first-line immunotherapy remains uncertain.

OBJECTIVE

To evaluate overall survival according to BAP1 expression in a nationwide real-world cohort treated with ipilimumab plus nivolumab.

METHODS

DESIGN

Retrospective nationwide two-center cohort

POPULATION

Unresectable MPM; ≥1 dose of first-line ipilimumab + nivolumab, Jan 2021–Dec 2025; surgical cases excluded

BIOMARKER

BAP1 IHC on tissue microarrays: **loss vs retained**

DEMOGRAPHIC AND CLINICAL CHARACTERISTICS

Characteristic	Value, n (%)
Total cohort	41
Median age, years	70 (47–80)
Male	35 (85%)
Current/former smoker	23 (56%)
Asbestos exposure	23 (56%)
Epithelioid histology	26 (63%)
Sarcomatoid/biphasic histology	13 (32%)
Undetermined	2 (5%)
BAP1 loss among evaluable	19/29 (65%)

DISCUSSION AND CONCLUSION

KEY FINDING

BAP1 status was not associated with overall survival during first-line treatment with ipilimumab and nivolumab.

LIMITATION

The BAP1-evaluable subgroup was small (n = 29), producing wide confidence intervals.

CONCLUSION

These real-world findings require validation in larger prospective cohorts.

REFERENCES & ACKNOWLEDGEMENTS

KEY REFERENCES

- Xu D et al. JTO Clin Res Rep. 2024;5:100672.
- Ladanyi M et al. Genome Med. 2019;11:18.
- Baas P et al. Lancet. 2021;397:375–386.
- Peters S et al. Ann Oncol. 2022;33:488–499.

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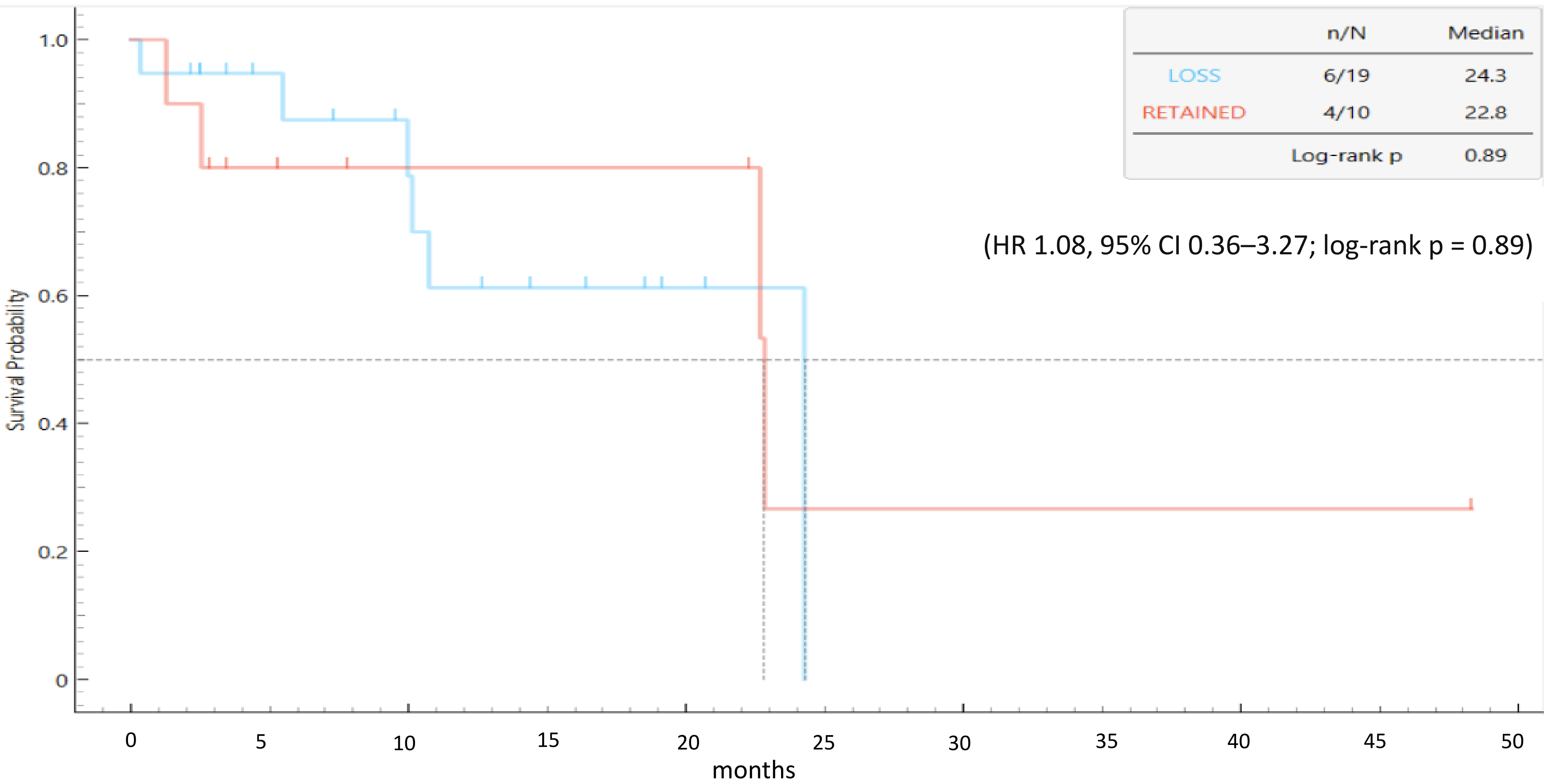
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AI USE DISCLOSURE

ChatGPT (OpenAI) was used to assist with poster layout, visual presentation, and language editing.

RESULTS

PRIMARY ENDPOINT: OVERALL SURVIVAL BY BAP1 STATUS



Outcome	BAP1 loss	BAP1 retained	Effect estimate
Patients, n	19	10	—
mFU, months	21.4	14.6	—
mOS, months (95% CI)	24.3 (12.6–NR)	22.8 (7.1–NR)	HR 1.08 (0.36–3.27); p=0.89

OVERALL COHORT AND TREATMENT

Measure	Result
mFU, months	24.6
mOS, months (95% CI)	17.0 (10.7–24.3)
mDOT, months (95% CI)	5.0 (4.2–10.4)
Ongoing 1L at cutoff	13/41 (31.7%)
Treatment cycles, median (IQR; range)	3 (2–5; 1–19)

SAFETY

Safety outcome	n (%)
≥1 immune-related AE	26 (63.5%)
Grade 3–4 immune-related AE	7 (17%)
Treatment-related death	1 (2.4%)
Cause of treatment-related death	Myocarditis

TAKE-HOME MESSAGE

BAP1 loss by IHC was common (65%), but survival was similar to retained expression during first-line dual immune checkpoint inhibition.