

P2.059: M1a with pleural or pericardial effusion has worse survival than those with pleural or contralateral lung metastases

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INTRODUCTION

- The subgroup prognostic analysis among M1a cases from the IASLC Staging Project was limited in sample size, treatment approaches and molecular characteristics.
- In this large multicenter cohort, we investigated whether non-small-cell lung cancer (NSCLC) patients with pleural or pericardial effusion have inferior survival compared with those presenting with pleural or pericardial nodules.

METHODS

Design:

- Patients with IVA NSCLC receiving first-line therapy were included from four medical centers between Jan 2021 and Dec 2023.
- Progression-free survival (PFS) and overall survival (OS) were analyzed using the Kaplan-Meier method and Cox regression models.

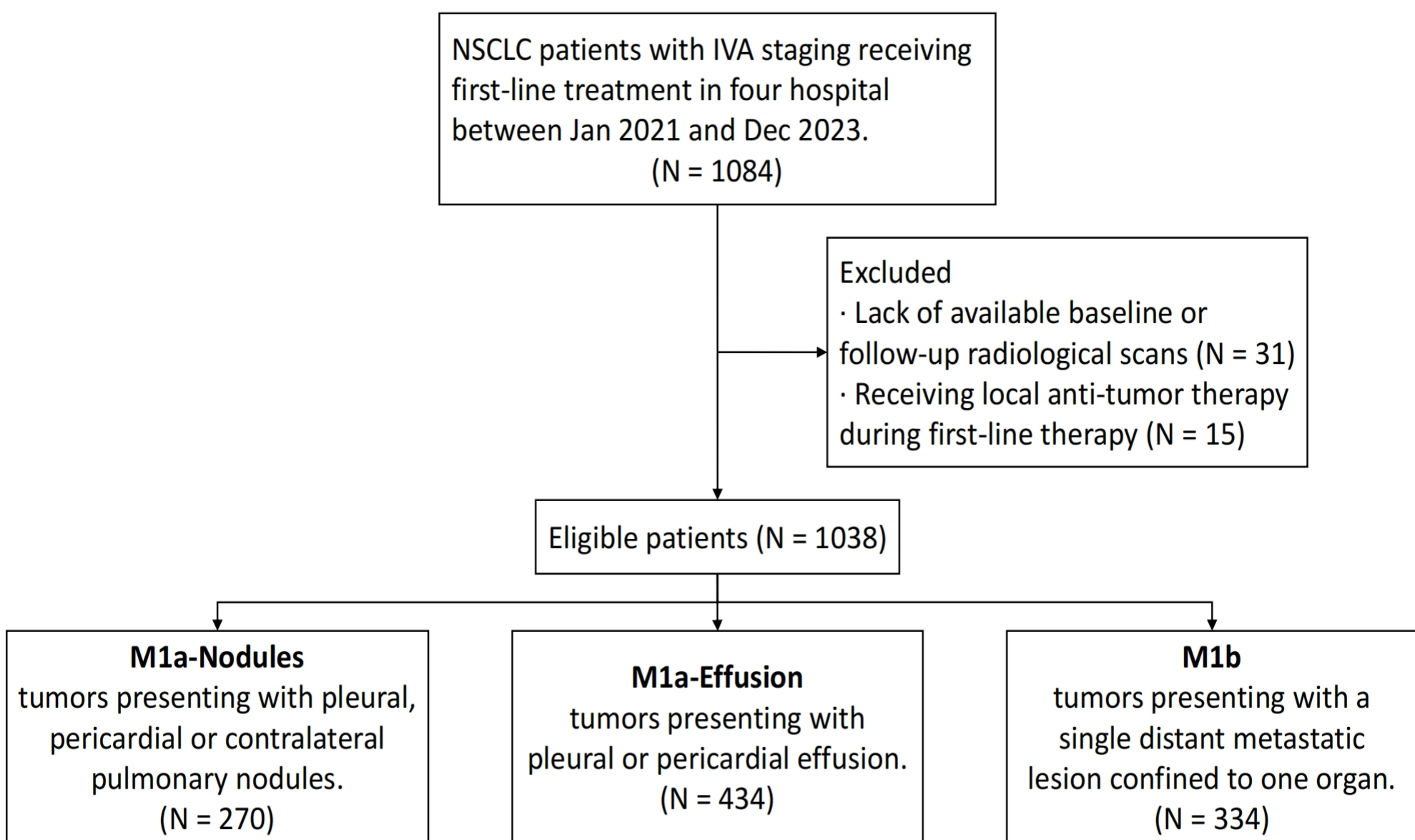


Figure 1. Flowchart of patient screening process.

DISCUSSION AND CONCLUSION

Conclusion

- M1a disease with pleural or pericardial effusion is associated with significantly worse survival than nodule-only M1a disease, whereas outcomes were comparable to those of M1b disease.

Discussion

- Pleural nodule metastases may serve as a precursor to malignant pleural effusion.
- External studies in another cohort with larger sample size is required to validate our conclusion. These findings may be taken into consideration for the next edition NSCLC staging guidelines.

REFERENCES & ACKNOWLEDGEMENTS

References

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Acknowledgments

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RESULTS

Basine characteristics

- In total, 1038 patients with IVA NSCLC were evaluated. 524 patients (50.4%) were female and 301 (29.0%) were current or former smokers, with a median age 64 years (range, 19 - 92).
- Patients were classified into three groups, including tumors presenting with: 1) pleural, pericardial, or contralateral pulmonary nodules without effusions ("M1a-Nodules", N=270), 2) pleural or pericardial effusion ("M1a-Effusion", N=434), 3) single metastatic lesion in one organ ("M1b", N=334).

Survival outcoms

- Kaplan-Meier survival analyses showed that inferior PFS and OS was observed in patients with M1a-Effusion compared with those with M1a-Nodules ($P < 0.001$ and $P < 0.001$, respectively), while sharing a similar prognosis with patients with M1b disease (PFS, $P = 0.658$; OS, $P = 0.703$).
- Multivariable analyses identified M1a-Effusion as an independent adverse prognostic factor for PFS (HR 1.67, $P < 0.001$) and OS (HR 1.65, $P = 0.007$).
- Among patients receiving first-line epidermal growth factor receptor-tyrosine kinase inhibitors (EGFR-TKIs), M1a-Effusion was associated with significantly worse PFS and OS versus M1a-Nodules ($P < 0.001$ and $P = 0.001$, respectively), and demonstrated prognostic outcomes comparable to those of M1b patients ($P = 0.644$ and $P = 0.643$, respectively).

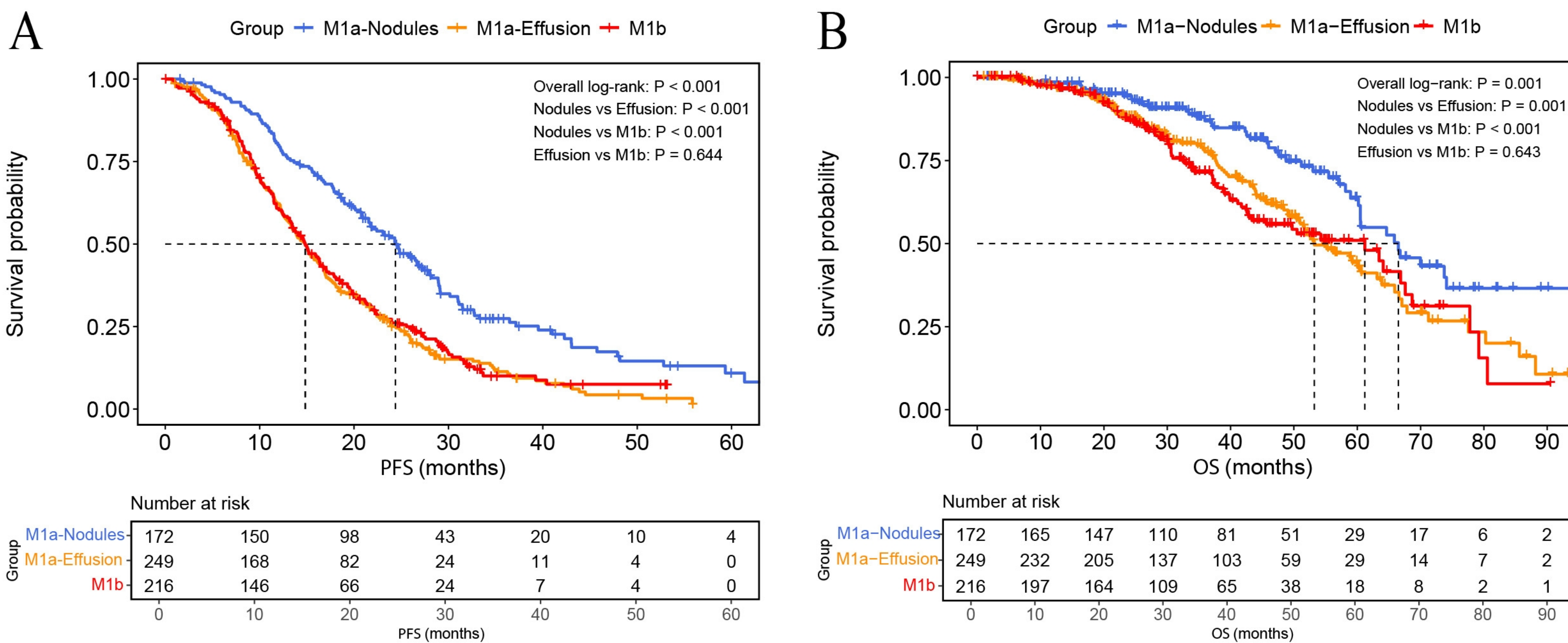


Figure 2. Kaplan-Meier analysis of PFS (A) and OS (B) by M staging descriptors.