

EP01.03: Sex-Based Inequities in Non-Small Cell Lung Cancer: Gaps and Opportunities Across the Care Pathway

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INTRODUCTION

Sex-related differences in lung cancer extend beyond incidence rates and encompass variations in smoking exposure, biological susceptibility to carcinogens, clinical presentation, access to diagnostic procedures, and treatment patterns.

The objective of this study was to evaluate sex-related disparities in non-small cell lung cancer (NSCLC) across the continuum of care.

METHODS

Design:

We conducted a retrospective cohort study including 1031 patients diagnosed with NSCLC between 2013 -2023 in two oncology centers. Smoking exposure (pack-years), body mass index (BMI), age and stage at diagnosis, diagnostic and treatment intervals, access to molecular testing and treatment, and overall survival were compared between women and men. Multivariable and interaction analyses were performed.

DISCUSSION AND CONCLUSION

Actionable Take Away Message

- Sex-related differences in NSCLC are heterogeneous: biological susceptibility drives earlier onset at lower smoking exposure, while prolonged diagnostic delays and under-representation in screening programs reflect addressable healthcare inequities.

Future Direction for Research

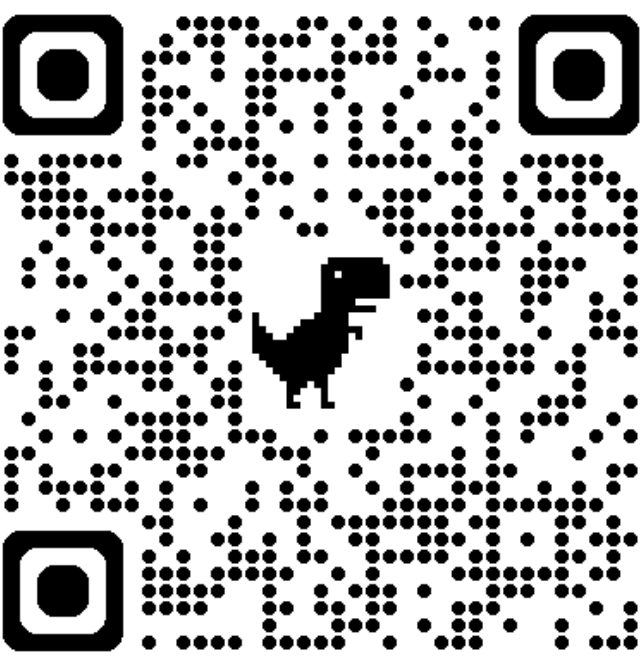
- Future research should map how regional healthcare infrastructure, resource limitations, and socioeconomic factors intersect with sex-based biological differences on a global scale.

REFERENCES & ACKNOWLEDGEMENTS

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Deepest gratitude to the 1,031 patients managed across the Tunisian oncology centers between 2013 and 2023, whose clinical journeys formed the foundation of this cohort study.

*All authors responsible for content disclose that AI was NOT used in the development of the material.

RESULTS

- Women experienced longer patient intervals (156 vs. 125 days; $p = 0.025$)
- Women experienced longer diagnostic intervals (42 vs. 31 days; $p = 0.02$)
- Women were younger at diagnosis (median 54 vs. 62 years; $p = 0.02$)
- 60% were stage IV at diagnosis
- Median overall survival was longer in women (20 vs. 14 months; log-rank $p < 0.01$)

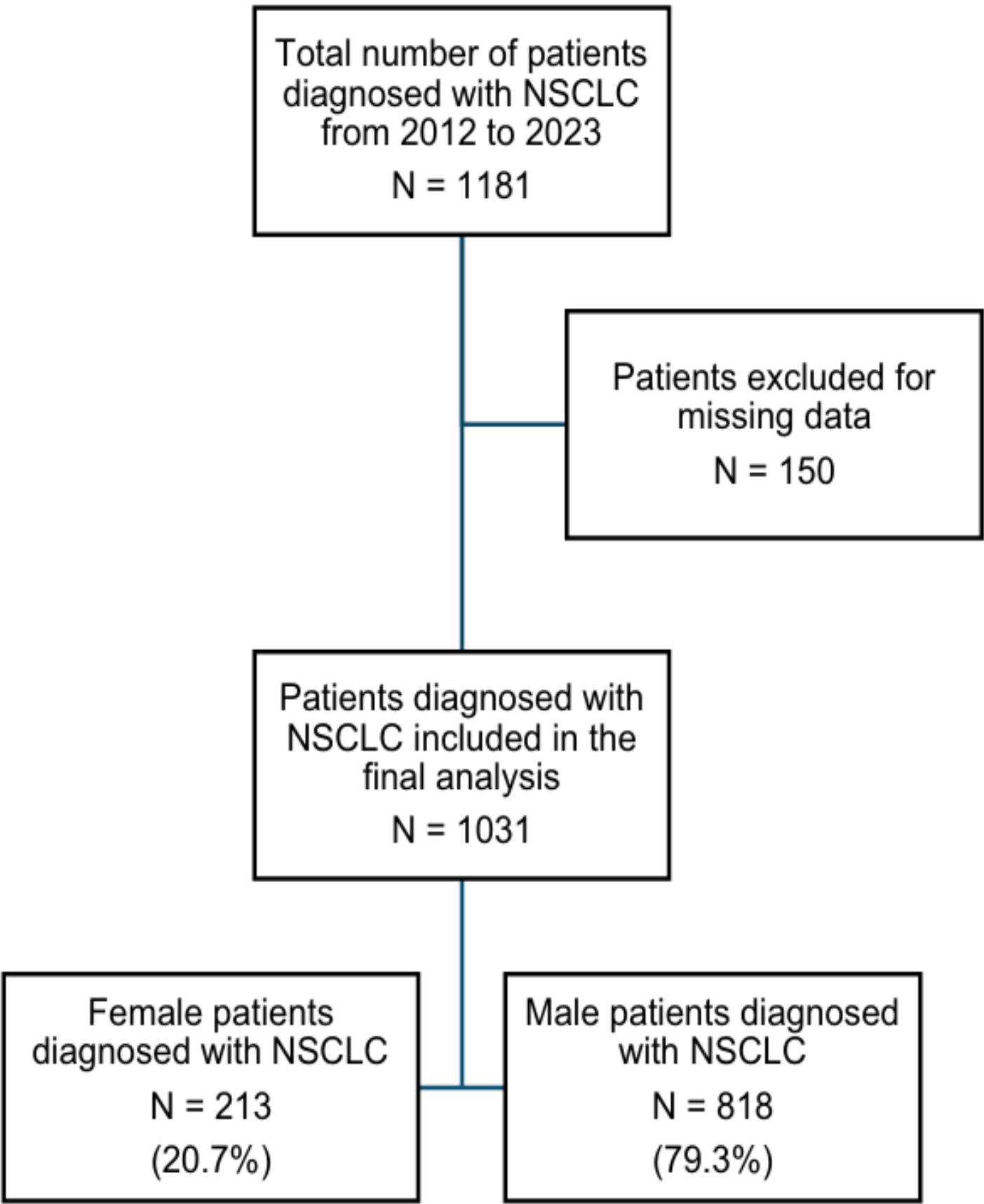
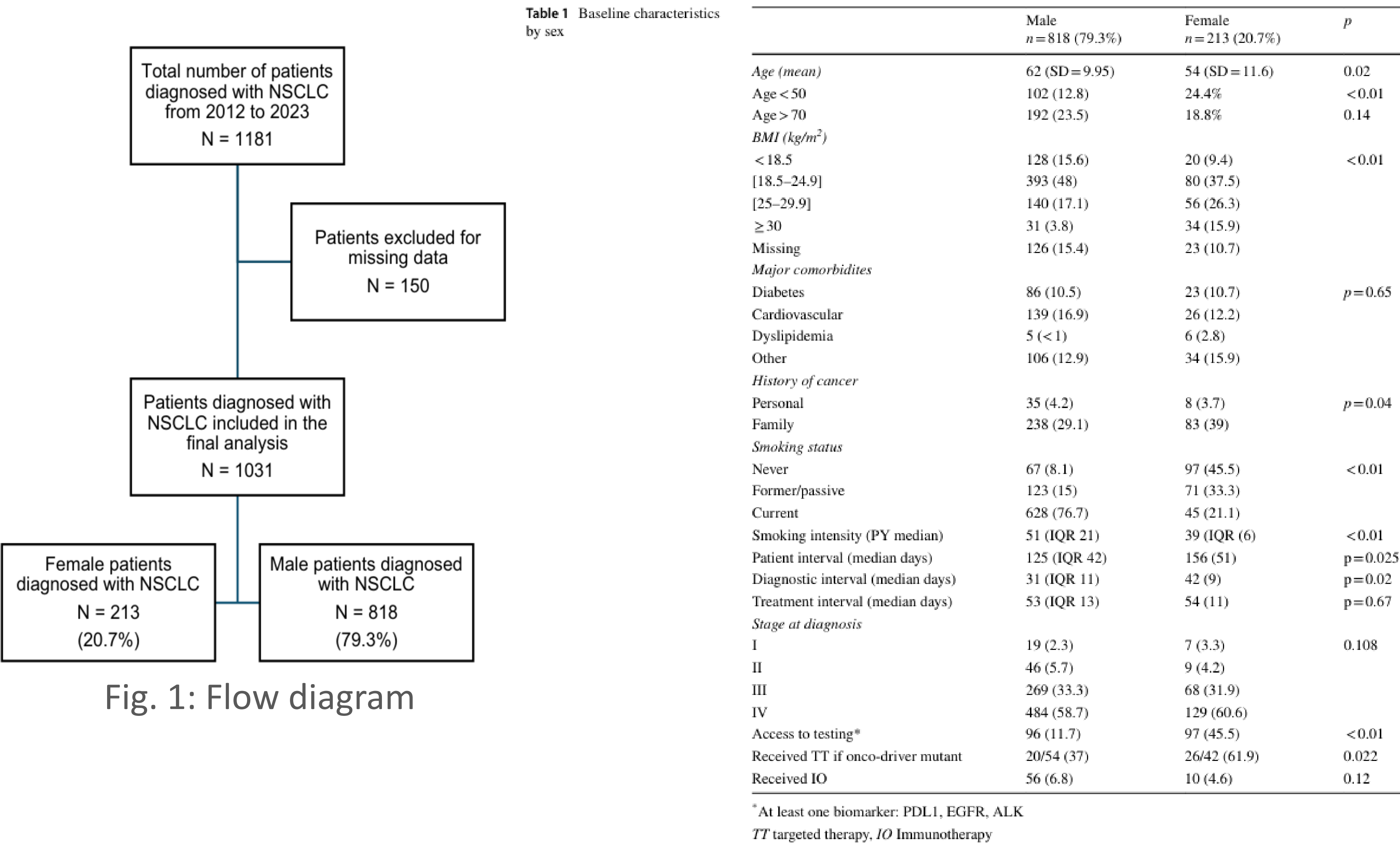


Fig. 1: Flow diagram

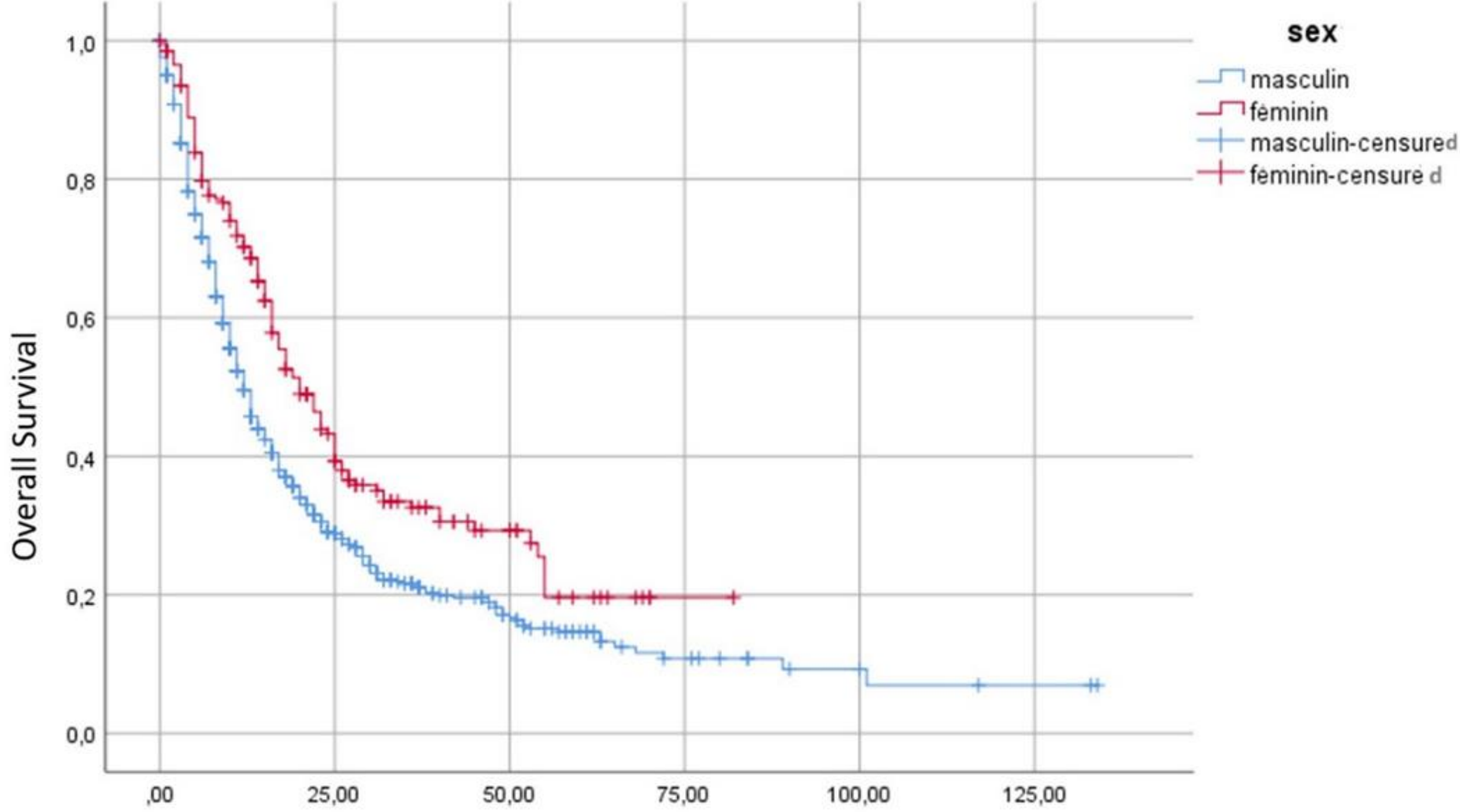


Fig. 2: Kaplan-Meier overall survival by sex