

INTRODUCTION

Immunotherapy has transformed outcomes in advanced non-small cell lung cancer (NSCLC), with proven survival benefits in over 60% of eligible patients globally.

Access in sub-Saharan Africa, however, remains severely constrained by diagnostic, infrastructural, and financial barriers.

We conducted a real-world analysis of primary lung cancer (PLC) patients in Nigeria to quantify immunotherapy utilization and factors associated with access.

METHODS

We conducted a retrospective cohort review of patients with histology-confirmed lung cancer managed at the Medserve-LUTH Cancer Centre, Lagos, Nigeria, between May 2019 and May 2025.

Demographic, clinical, histopathologic, immunohistochemistry (IHC), and treatment data were extracted from institutional records. Patients who received immunotherapy (n=209) were compared with those who did not (n=8).

DISCUSSION AND CONCLUSION

In this high-volume Nigerian lung cancer cohort, immunotherapy utilization was extremely low and concentrated in a small subset of younger patients who underwent more extensive diagnostic work-up, particularly IHC, and received systemic chemotherapy.

These findings indicate that diagnostic readiness and treatment affordability, rather than disease biology, are key gatekeepers of immunotherapy access in this setting.

Expanding pathology and biomarker capacity, embedding systematic pathways for treatment eligibility assessment, and implementing financial protection mechanisms will be essential to enable equitable integration of immuno-oncology into lung cancer care in sub-Saharan Africa.

REFERENCES & ACKNOWLEDGEMENTS

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Artificial Intelligence (AI) Use Disclaimer

AI was not used in the development of this abstract

RESULTS

Median age at diagnosis was 59 years (range 27–83). 51.6% were male (112/217).

NSCLC accounted for 77.9% (169/217), and 77.9% presented with stage IV disease. Chemotherapy was administered to 58.5% of patients (127/217).

Immunohistochemistry was performed in 24% (52/217). Only 8 patients (3.7%) received at least one line of immunotherapy.

Compared with non-immunotherapy recipients (n=209); immunotherapy recipients were younger (median 51.5 vs 59 years), and more frequently male (62.5% vs 51.2%).

Immunohistochemistry was substantially more common among immunotherapy recipients (62.5% vs 22.5%), and all had also received cytotoxic chemotherapy, predominantly platinum-based doublets.

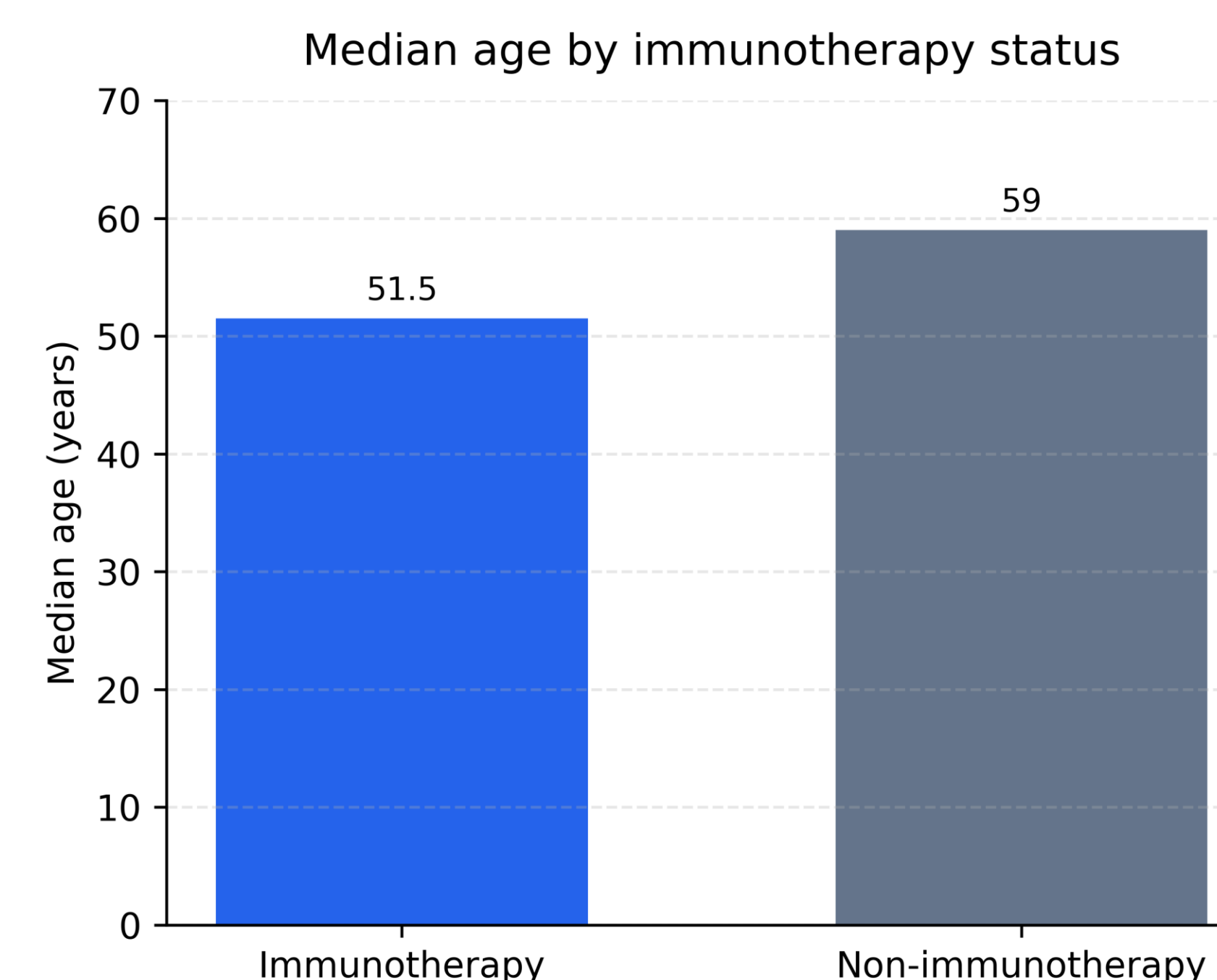


Figure 1: Mean age

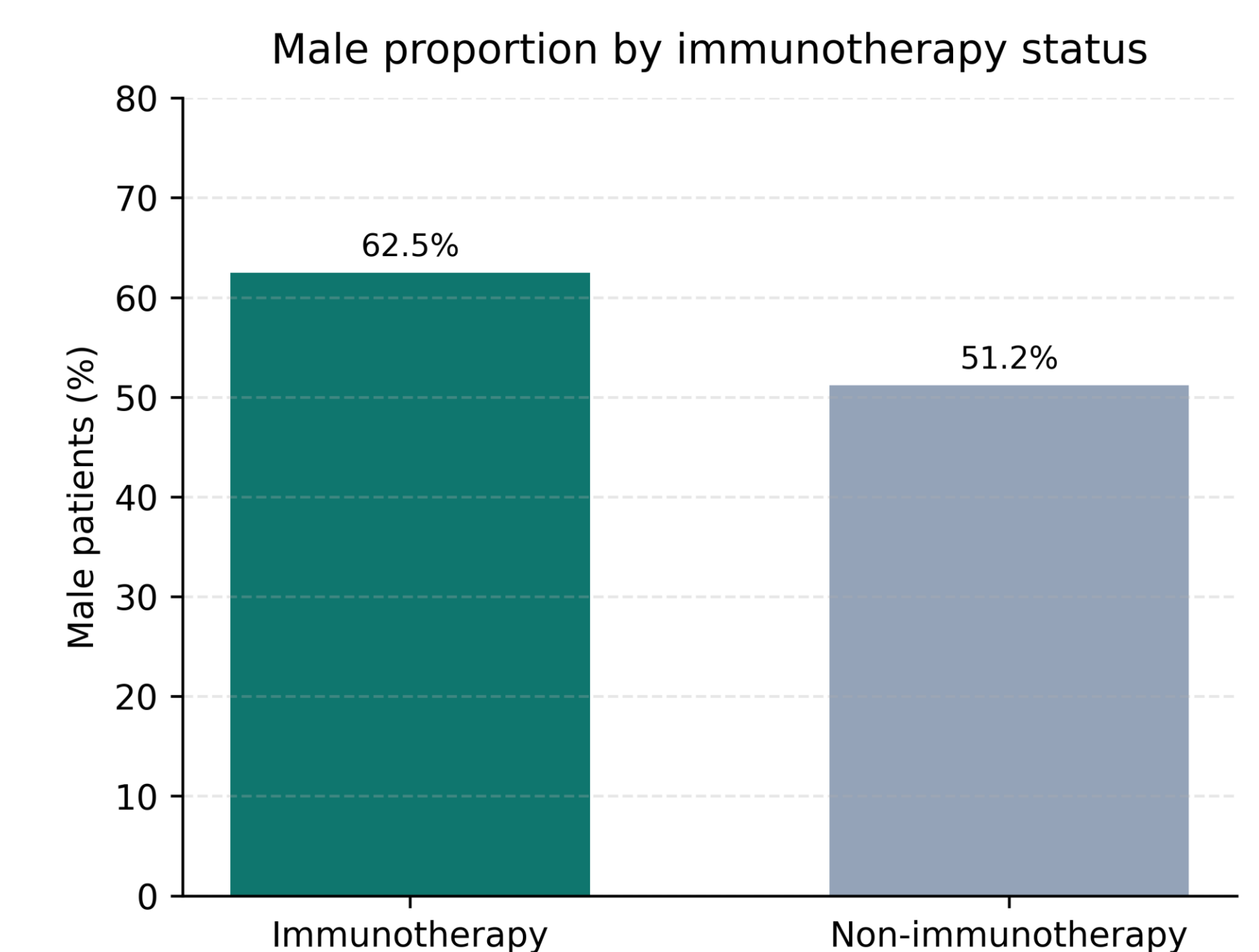


Figure 2: Gender proportion

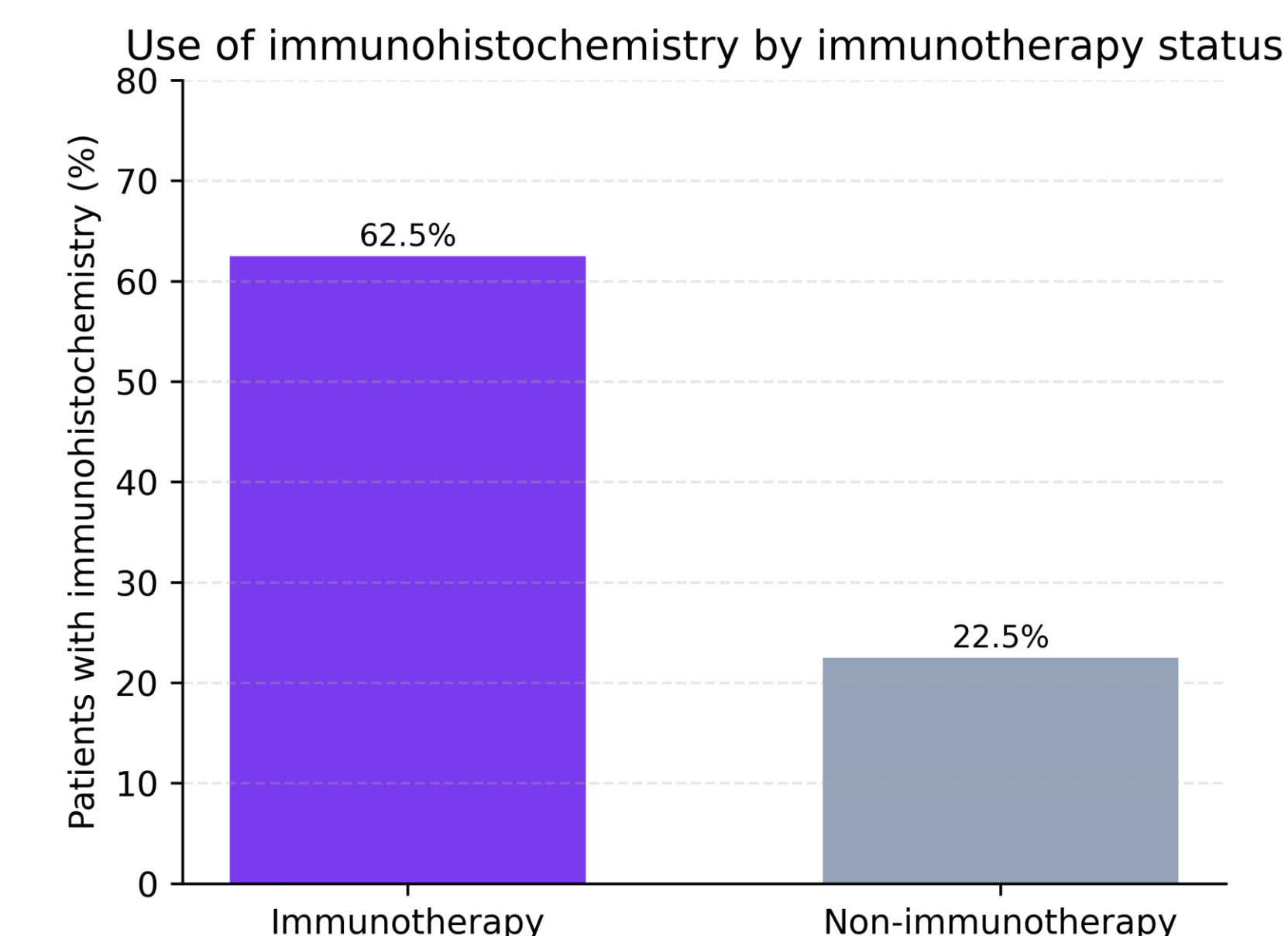


Figure 3: Immunohistochemistry