

Real-World Evidence of Immune Checkpoint Inhibitor Treatment in Lung Cancer Patients from a Belgian Multicenter Study

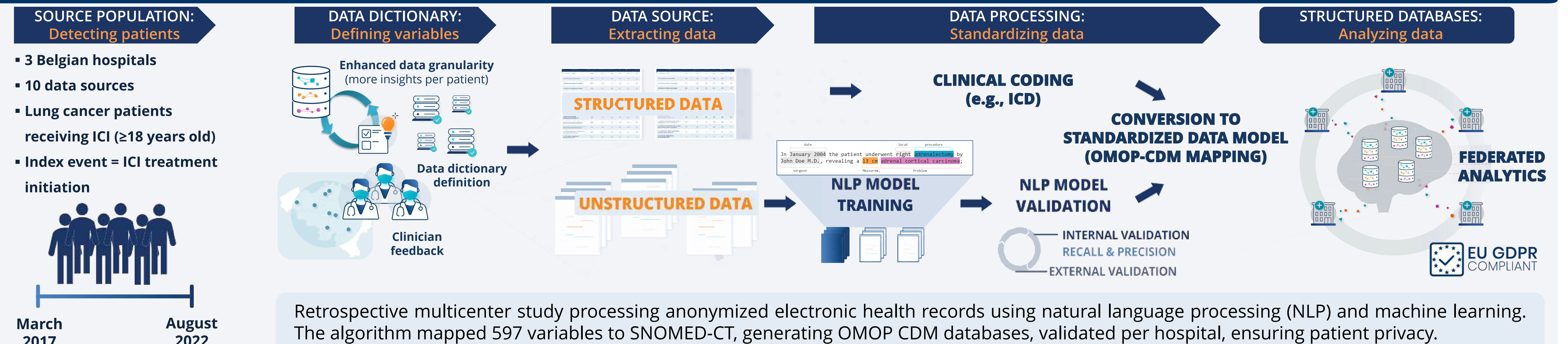
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BACKGROUND AND AIMS

- Immune checkpoint inhibitors (ICIs) have shown survival benefits in multiple clinical trials in patients with lung cancer. To gain further insights into real-world treatment patterns of lung cancer patients treated with ICIs, we performed a multicenter study.
- We present here the initial findings of the ICI-treated lung cancer patient cohort of 731 patients regarding demographic and clinical characteristics, ICI treatments, and overall survival (OS).

METHODS



RESULTS AND CONCLUSIONS

Figure 1. Patient demographics. The graphs below represent the age distribution, sex, and smoking status, of the lung cancer population.

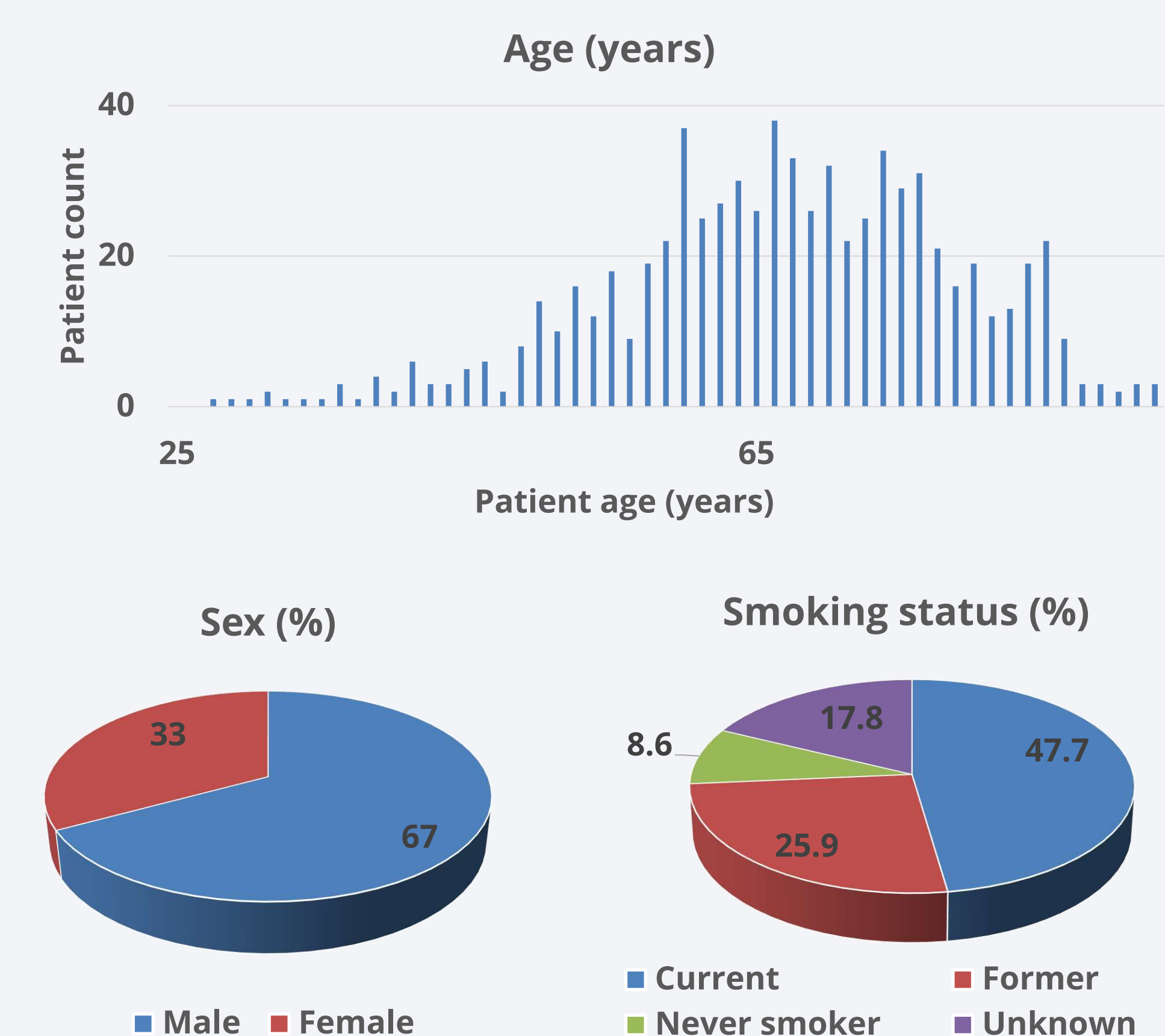


Figure 2. Clinical characteristics. Shown below are the percentages of lung cancer patients per ICI treatment, performance status, and metastatic status.

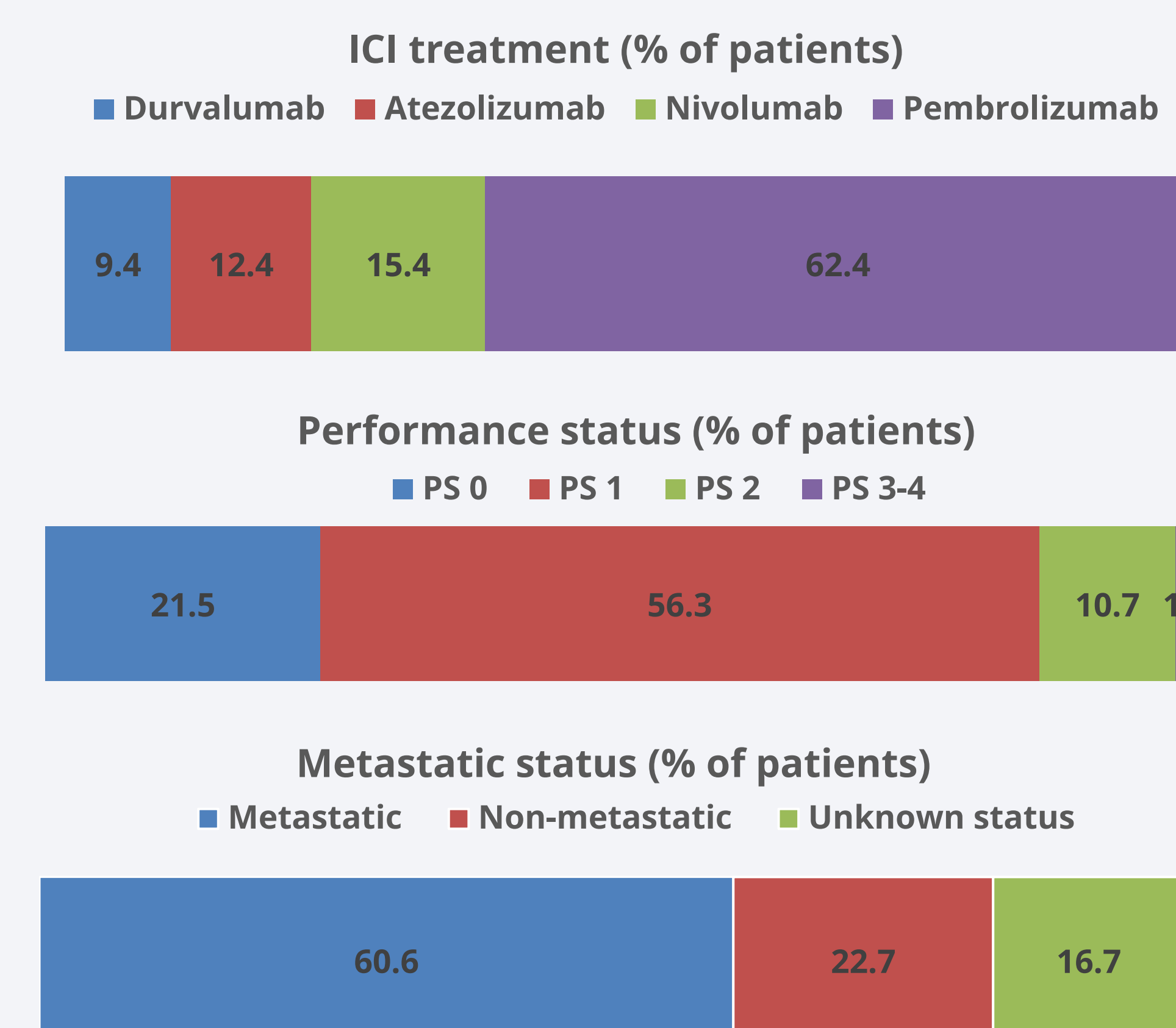


Figure 4. Overall survival. Kaplan-Meier curves for OS according to (A) ICI mechanism of action, (B) Metastatic status, (C) Performance status, or (D) Smoking status.

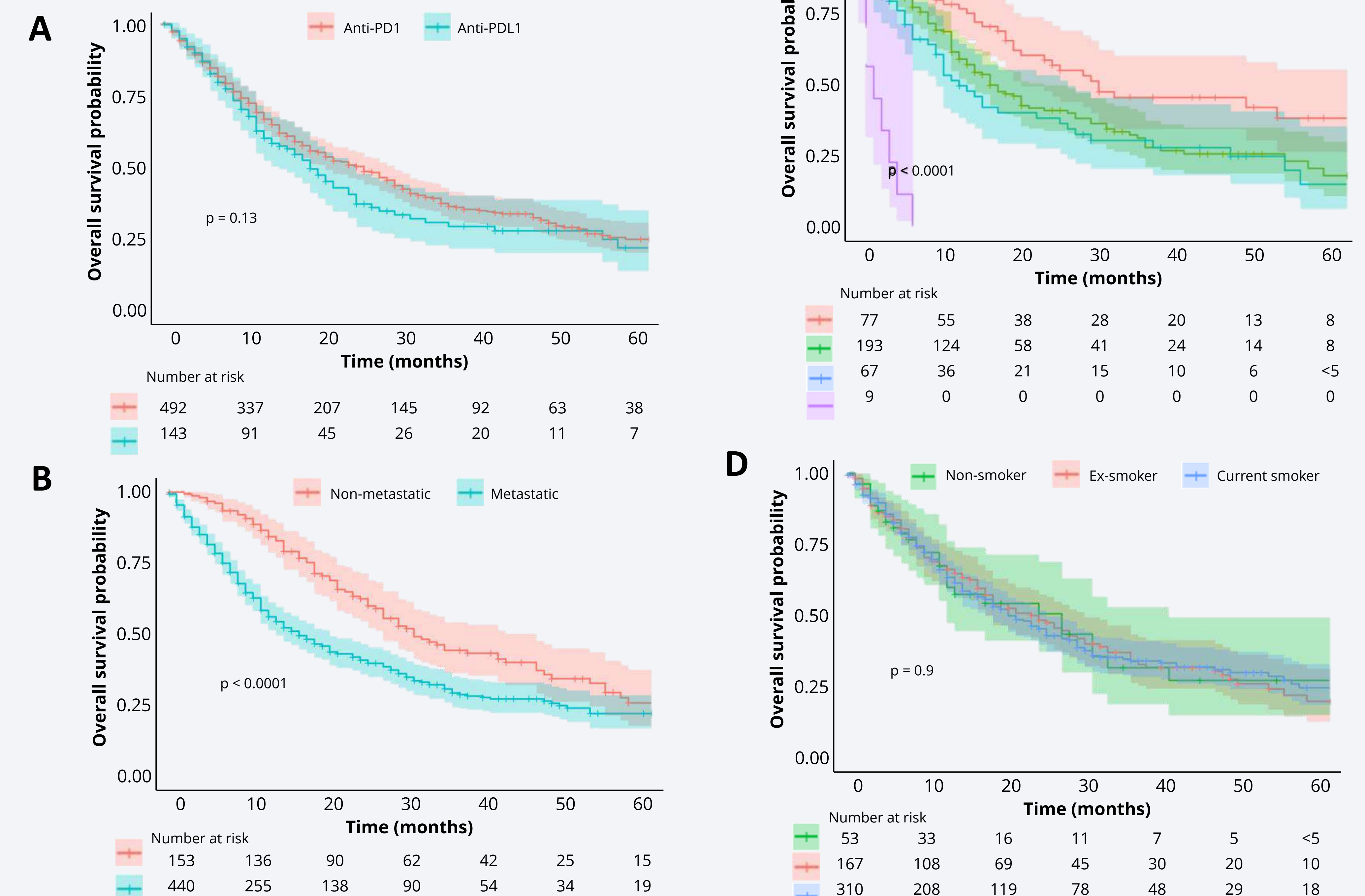
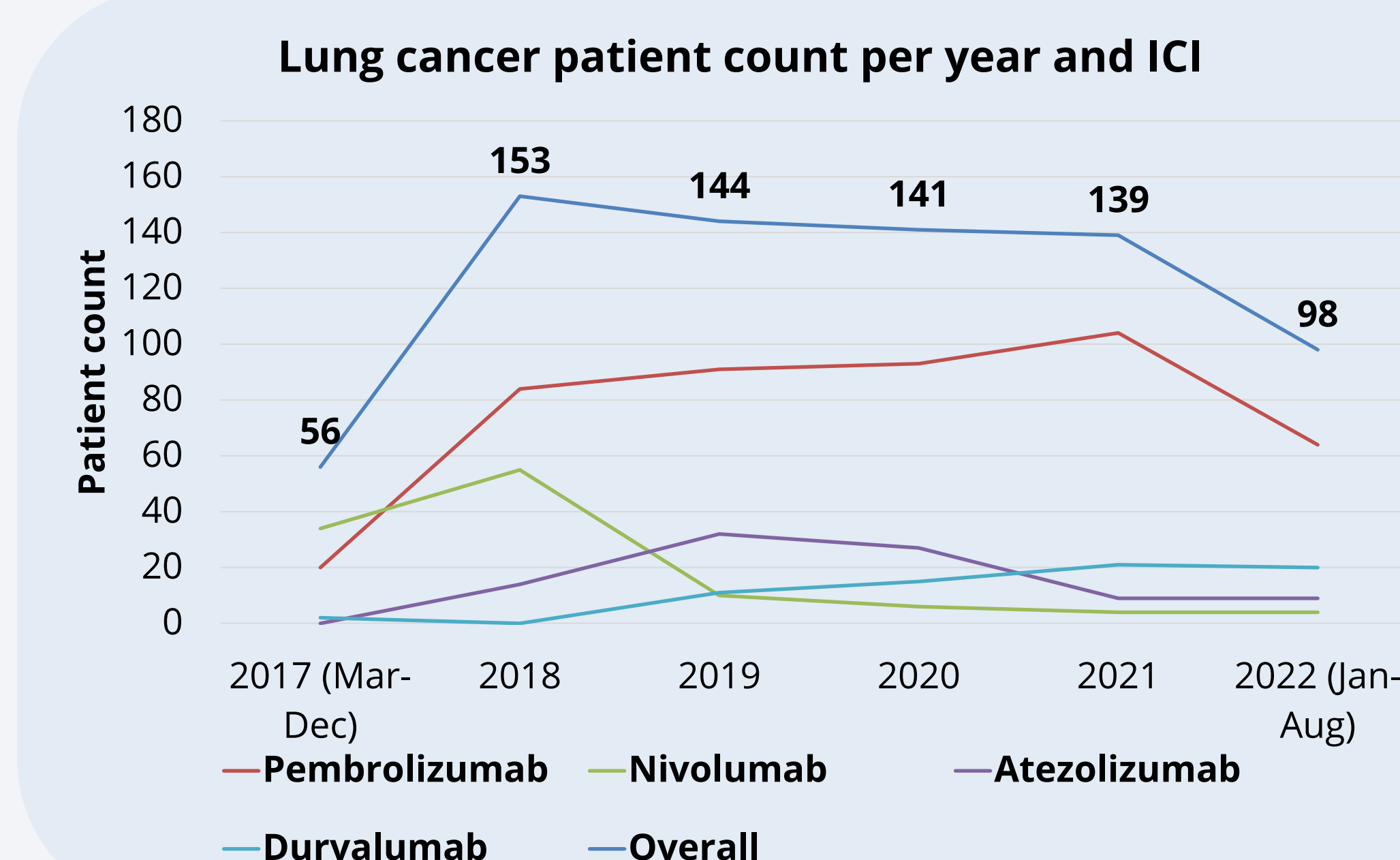


Figure 3. Lung cancer patient count per year and ICI. Line graph depicting the lung cancer patient count per year and per ICI regarding date of ICI treatment initiation, i.e., the index date for patient inclusion in the study. Colored lines show the overall population (including total patient number per year) and subgroups based on different ICI treatments reimbursed in Belgium, representing all indications together (monotherapy, combination therapy, all treatment lines and settings). The corresponding months of 2017 and 2022 are shown, as data was not collected for the full year.



CONCLUSIONS: These preliminary results demonstrate the feasibility of autonomously extracting and locally validating federated hospital databases—a crucial tool for accessing real-world data on patients with lung cancer receiving ICI treatment. Analyses focusing on immune-related adverse events, comorbidities, tumor stage, anatomical pathology, and treatment lines and histology are ongoing.