

# Survival and Recurrence Rates Following SBRT or Surgery in Medically Operable Stage I NSCLC

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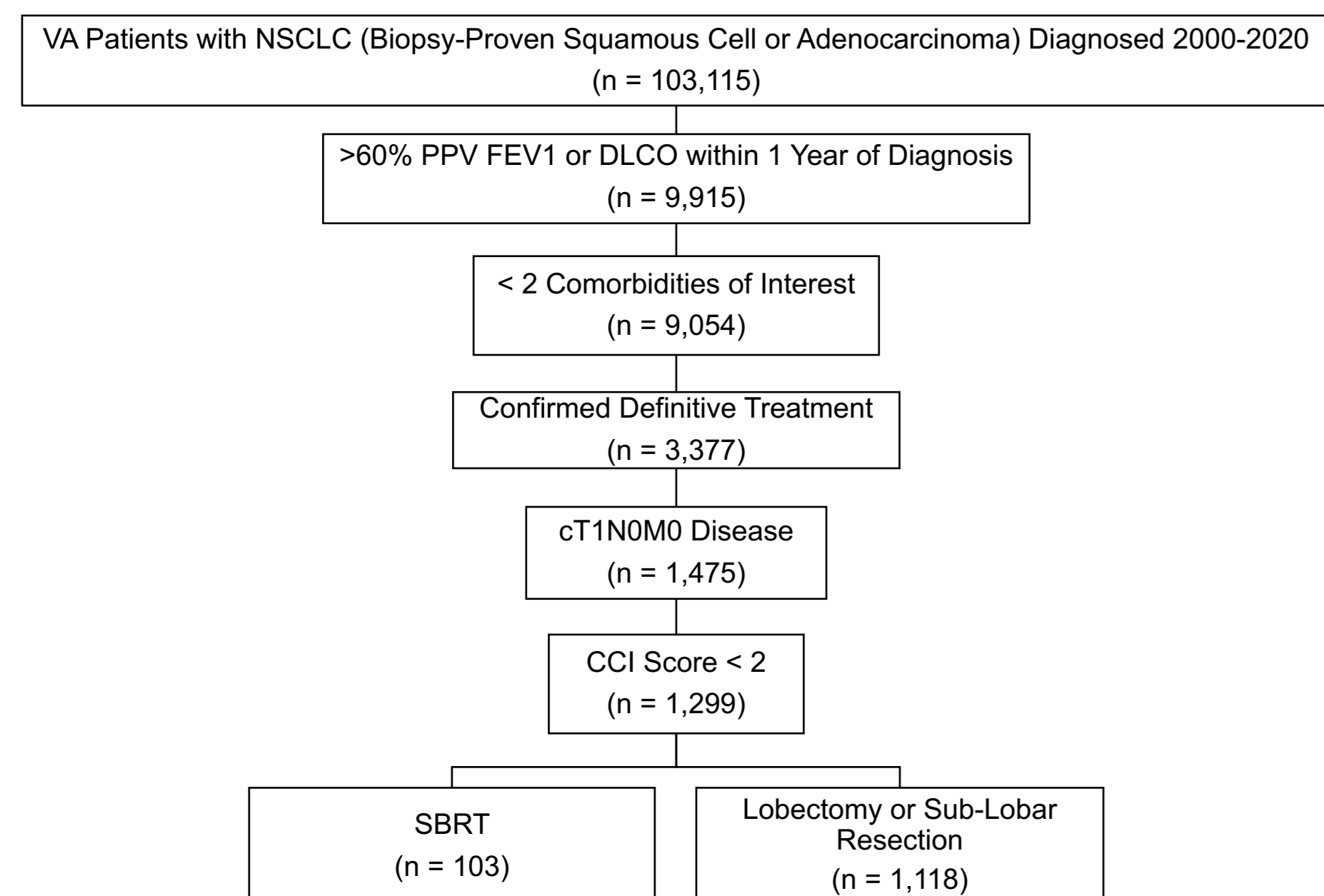
## INTRODUCTION

- Lung cancer is the leading cause of cancer-related mortality in the US, accounting for over a fifth of all cancer deaths (1)
- Current guidelines recommend screening with low dose CT (2), which increases the relative number of stage I lung cancer diagnoses (3)
- Surgical resection is the standard of care for early-stage NSCLC (4), with SBRT reserved for patients who are not surgical candidates
- Limited evidence exists comparing the effectiveness of surgery and SBRT in medically operable patients

## AIM

To examine the outcomes of medically operable patients with early-stage NSCLC treated with SBRT or surgical resection in the Veterans' Affairs Health System (VAHS)

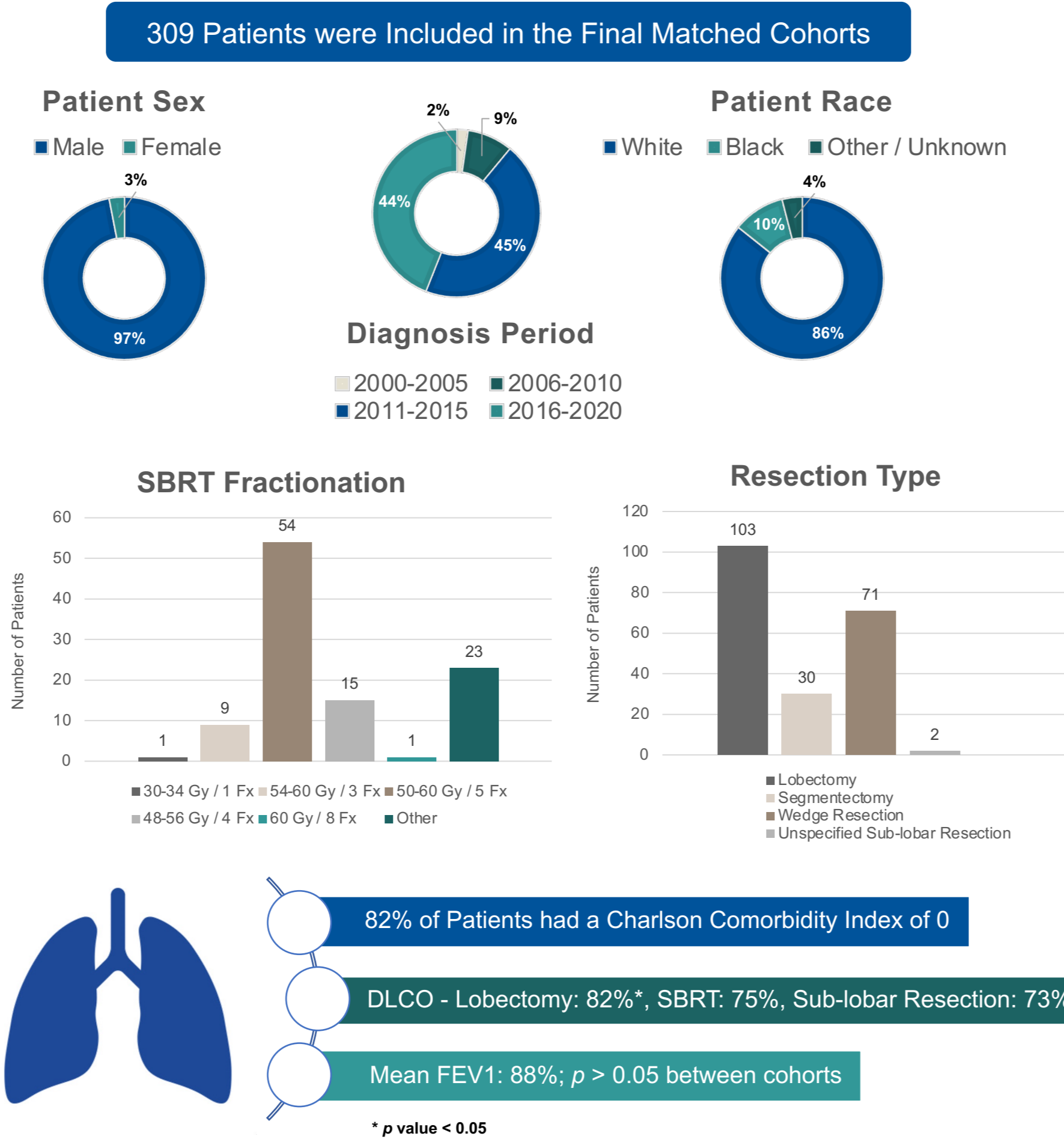
## METHODS



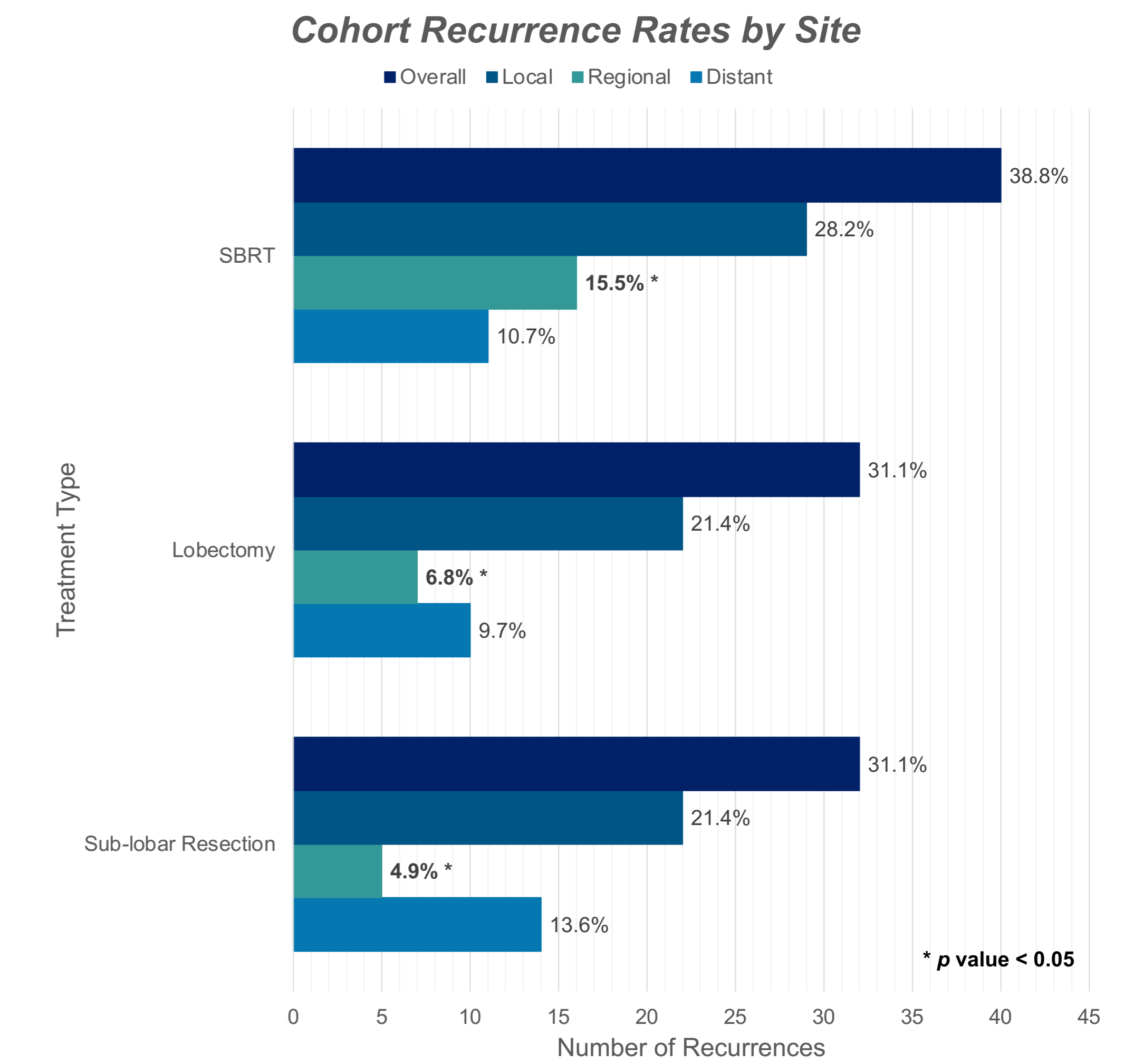
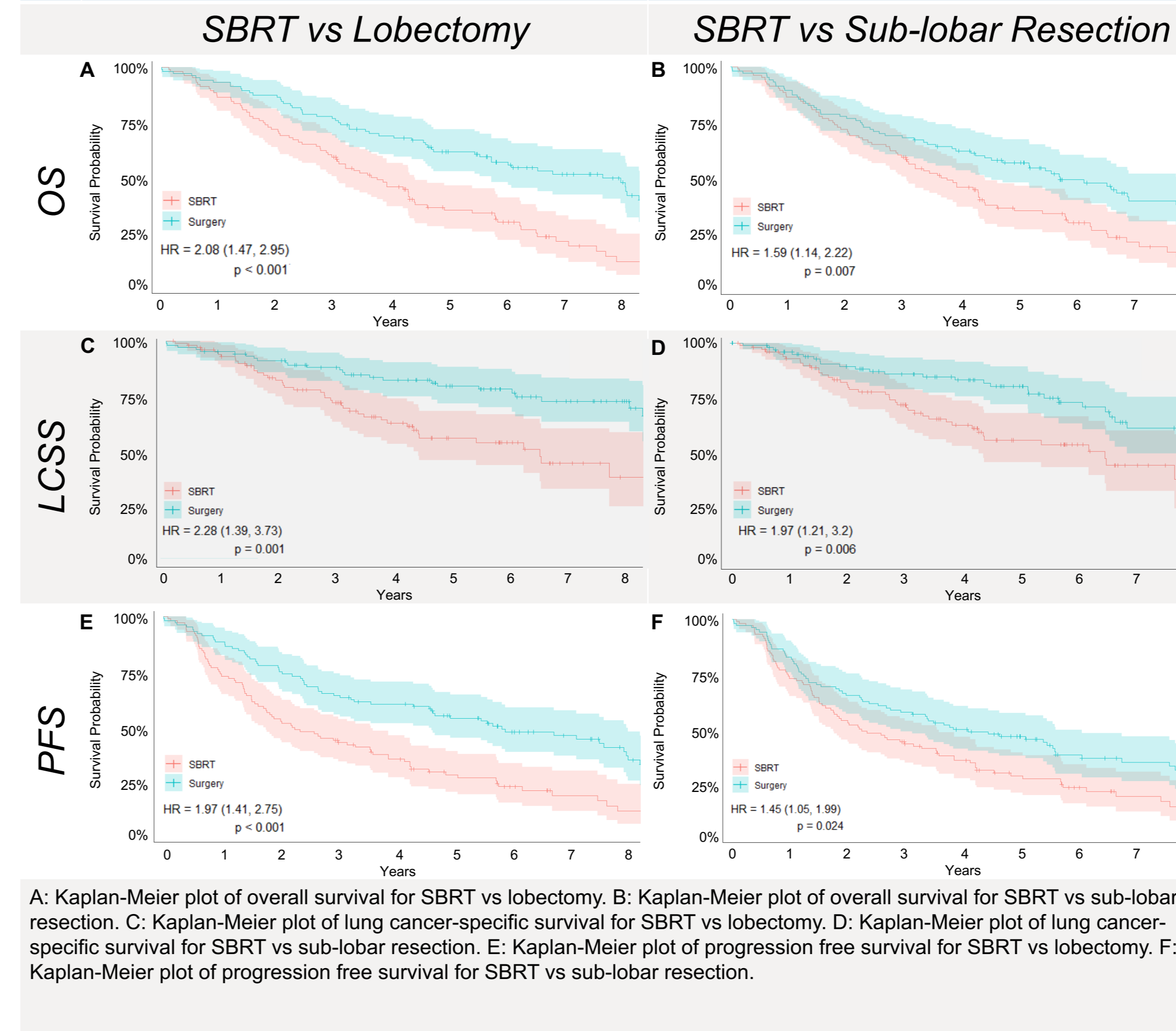
Patients were propensity score matched for age, diagnosis year, sex, race, smoking status, tumor stage, FEV1 and CCI in a 1:1:1 ratio (SBRT:Lobectomy:Sub-lobar resection)

## RESULTS

Highlights of Matched Cohort Demographics and Treatment Characteristics



## Kaplan-Meier Plots of OS, LCSS, and PFS for SBRT vs Lobectomy and SBRT vs Sub-lobar Resection



## CONCLUSIONS

- Both lobectomy and sub-lobar resection demonstrated superior overall survival, lung cancer-specific survival, and progression free survival compared to SBRT for medically operable patients with stage I NSCLC
- Higher regional recurrence rates following SBRT may contribute to the observed survival disparity
- Pulmonary function tests and comorbidity calculations alone are insufficient to determine suitability for SBRT
- Future studies are needed to investigate strategies to reduce regional recurrences with SBRT and better delineate the role of SBRT in medically operable patients

## REFERENCES

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