

INTRODUCTION

- Clinical challenge:** The optimal follow-up strategy for nonsolid nodules (NSNs) remains controversial.
- AIM:** To investigate the natural course of persistent NSNs with follow-up time of 5 years or longer and the clinic-radiological features that influence interval growth over follow-ups.

METHODS

NSN: a radiologic nodule of increased attenuation that does not completely obscure the underlying bronchial and vascular structure.

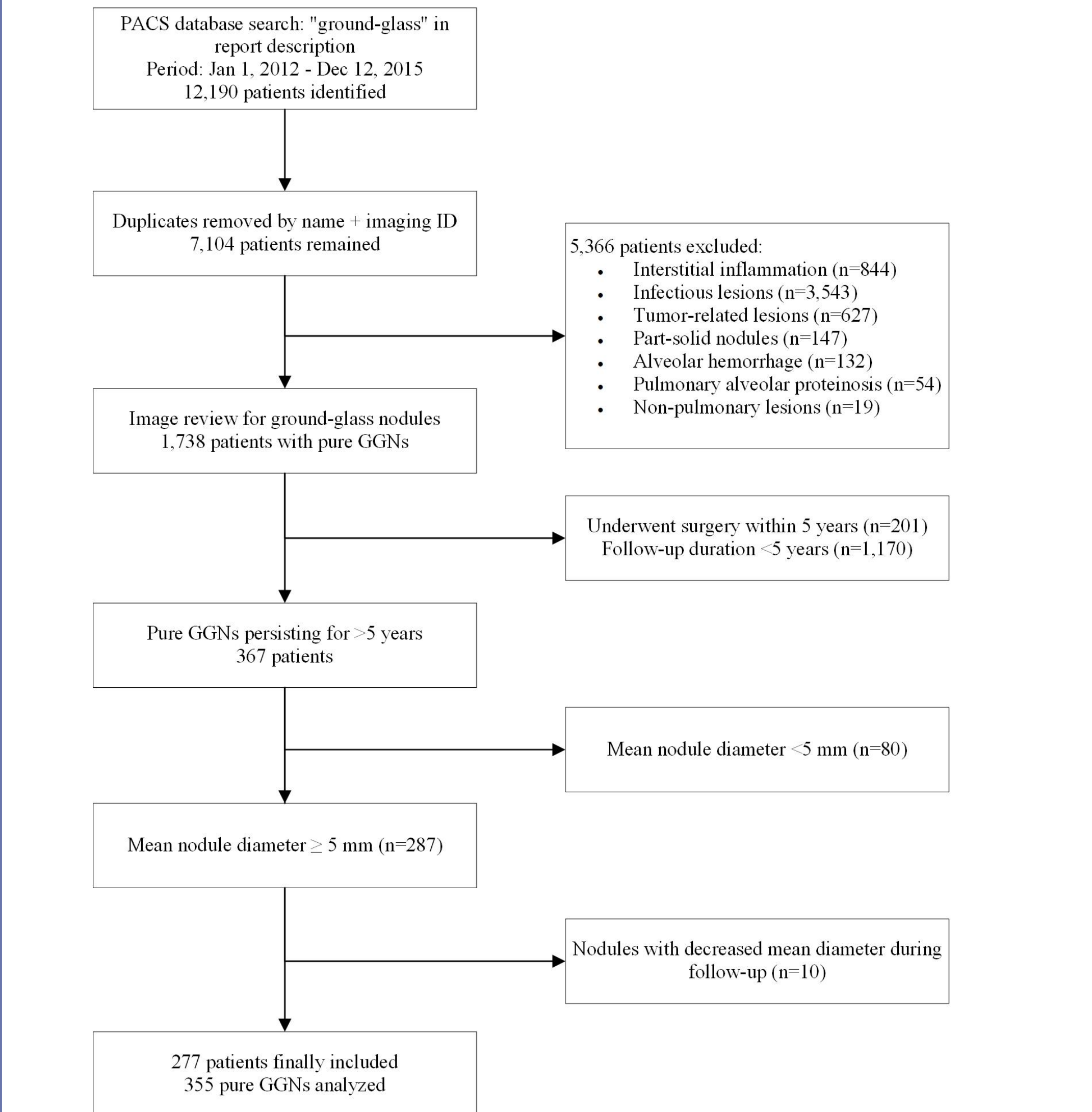


Figure 1: Flowchart of patients selection

RESULTS

- Of the 355 NSNs, 278 (78.3%) were stable and 77 (21.7%) showed growth.
- Nodule diameter (HR=1.10 per 1-mm increase), mean CT attenuation (HR=1.07 per 50-HU increase), unclear margin (HR=2.10), history of lung cancer (HR=1.96), and male gender (HR=0.30) were significant predictors of growth.
- Nodule mean size (HR=1.14 per 1-mm increase), mean CT attenuation (HR=1.09 per 50-HU increase), and personal history of lung cancer (HR=1.73) were significant predictors of solid component development.

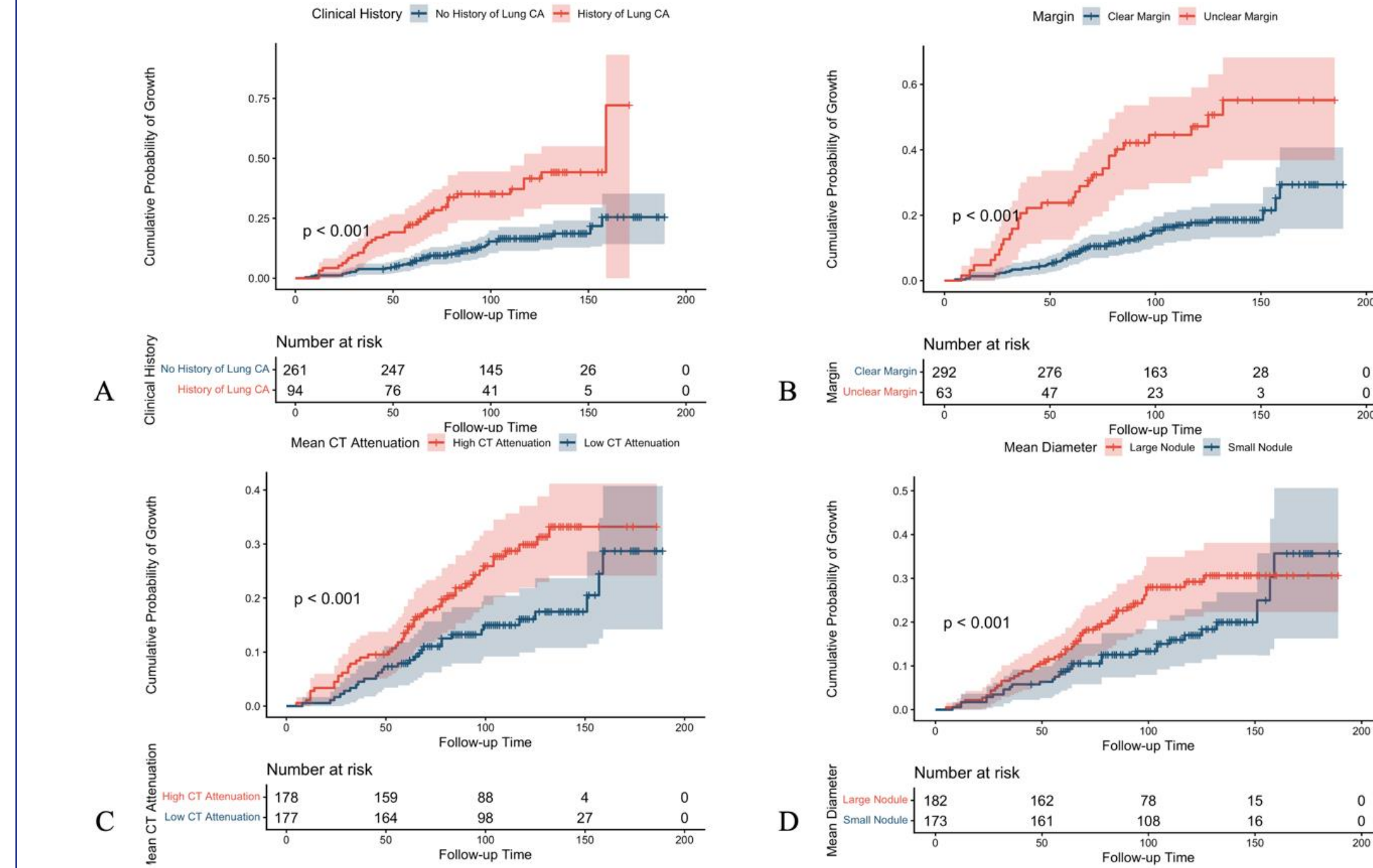


Figure 2: Cumulative probability of nodule growth

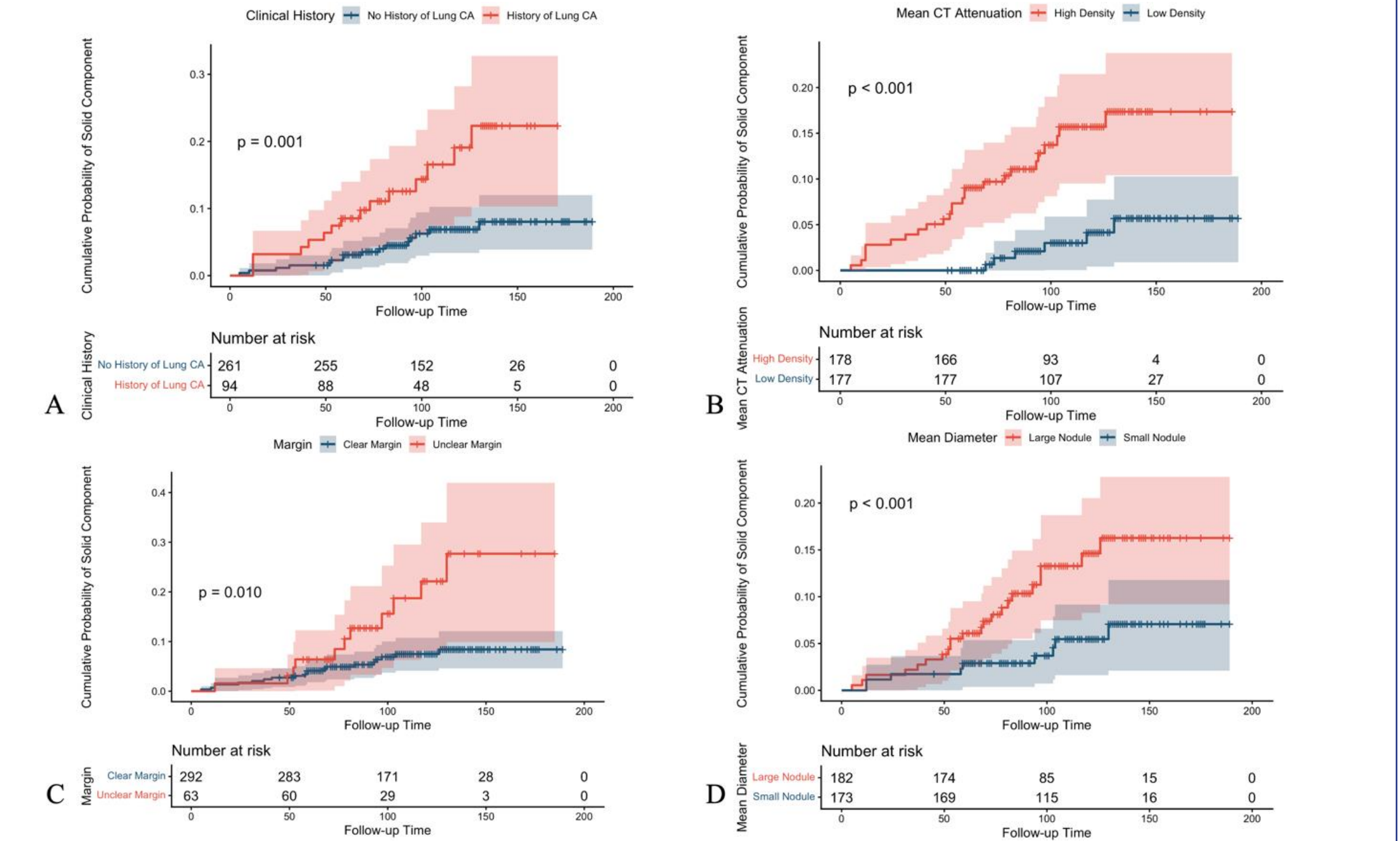


Figure 3: Cumulative probability of new solid component

CONCLUSION

- Actionable Take Away Messages:**
- Among persistent NSNs larger than 5 mm, 21.7% had either increase in size or appearance of solid component with median follow-up time of 9.0 years. We suggest that NSNs may need to be followed up for > 10 years with longer intervals instead of annual follow-up to confirm growth.
- Future Direction for Research**
- Multicenter studies and artificial intelligence-based assessment of three-dimensional nodular changes.

