

# Adenocarcinoma In Situ And Minimally Invasive Adenocarcinoma Of The Lung: Friends Or Foes?

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## INTRODUCTION

Lung adenocarcinoma (ADK) is the most prevalent cancer globally. Low stage at diagnosis remains the most critical prognostic factor.

Nevertheless, Adenocarcinomas in situ (AIS) and Minimally Invasive Adenocarcinomas (MIA) are managed similarly to invasive ADKs.

**This study aims to revise pre-operative parameters predictive of pre-invasive status to guide and optimize early surgical management.**

## METHODS

### Design:

### Patient enrollment & data collection

Retrospective review of n=1415 operated lung ADK (01/2010 - 09/2025) N= 34 AIS/MIA and N=146 T1a/bN0M0 controls

### Group comparisons

**A Propensity Score Matching (1:1 ratio)** N=33 AIS/MIA vs N=33 invasive ADK. The two groups were compared through **Pearson's Chi square tests** and **Mann-Whitney U tests**.

### Survival analysis

Survival analysis with **Kaplan-Meier** method and the **Log-rank test**. Overall survival and disease-free survival analyses conducted for a variety of parameters

## DISCUSSION AND CONCLUSION

- Confirmed role of multiple GGOs and FDG-PET findings for identification of tumor invasiveness.
- Our study found no DFS benefit in less extensive surgery or lymphadenectomy in AIS/MIA patients.
- The use of frozen section histology was found unsatisfactory, despite literature attesting its validity.
- No evidence supporting the grouping of AIS and MIA together as stage 0.

**To date**, a strategy specific for AIS/MIA patients could not be retrospectively identified.

**Future Direction for Research** include the investigation of potential strategies to manage AIS/MIA patients through larger retrospective studies and RCTs.

## REFERENCES & ACKNOWLEDGEMENTS

### Key References

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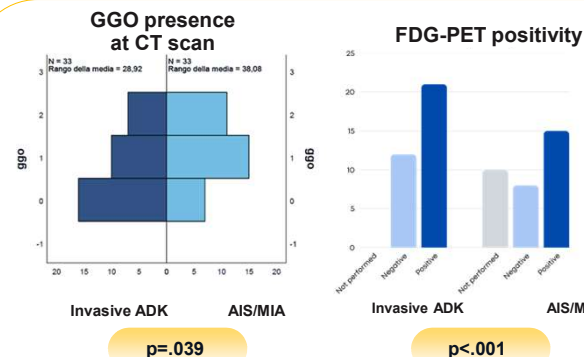
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### AI disclosure

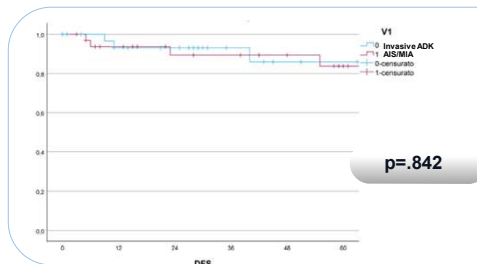
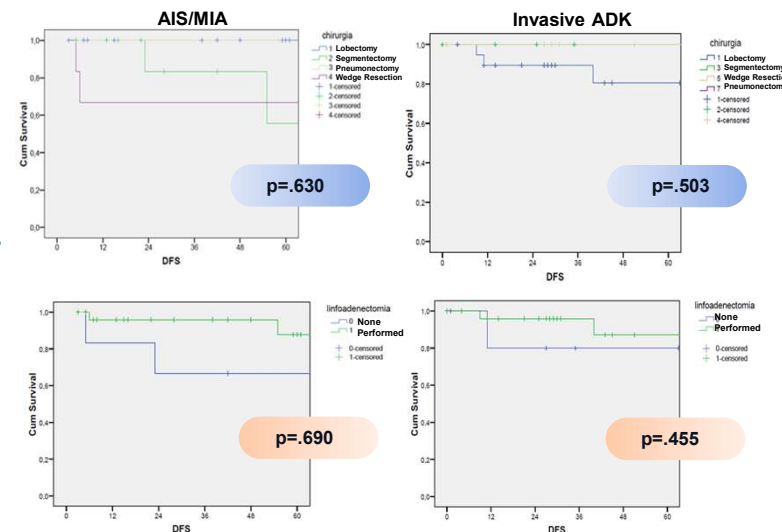
No AI was used in conducting this study, nor in creating graphs and this E-poster.

## RESULTS



- Presence of **multiple GGOs** at CT scan associated with AIS/MIA definitive diagnosis. **Positive FDG-PET** identified as strong predictors of invasive ADK.

**No clear difference** in either disease free survival (DFS) depending on **surgery extension** or **performance of lymphadenectomy** (irrespective of extension) in either AIS/MIA or invasive ADK



- No significant difference** in DFS outcomes if **grouping AIS and MIA** compared to **invasive ADK**, validating current IASLC staging.