## 5.06 Is PET-CT essential prior to mediastinal staging of lung cancer with EBUS

<sup>1</sup>Helen O'Brien, <sup>1</sup>Laura Piggott, <sup>1</sup>Finbarr O'Connell, <sup>1</sup>Parthiban Nadarajan <sup>1</sup>St James's Hospital, Dublin, Ireland

**Background :**Lung cancer is the fourth most common cancer in Ireland, with over 2500 new cases diagnosed annually. In our centre, patients often undergo EBUS prior to PET-CT. We hypothesise that mediastinal staging should not be delayed until PET-CT is completed and proceeding without this imaging modality does not result in unnecessary duplication of procedures. **Methods:** Data on patients who underwent an EBUS in 2023 were collated and categorised based on timing of their PET-CT and need for repeat procedure. **Results:** In 2023, 459 EBUS procedures were performed. 56%(n=258) of cases were done for new diagnosis of lung cancer. In 95 patients who had EBUS prior to PET, 15(16%) of those required repeat EBUS, 7(7%) for repeat mediastinal staging based on PET-CT, the remaining 8(8%) for further molecular analysis. Only 1 case resulted in an upstaging in the final staging. 128 patients had PET prior to EBUS. 32 were upstaged by PET-CT compared to final histological diagnosis as confirmed by EBUS, giving PET-CT a false positive rate of 25% in this cohort. **Conclusion:** While PET-CT is in the diagnostic algorithm in lung cancer, mediastinal staging and tissue sampling should not be postponed if access is delayed. **Conflict of Interest:** The authors declare that they have no conflict of interest.