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| **Reporting of Incidental Findings Identified in Lung Cancer Screening** |
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| **Introduction/Aim:** Incidental findings (IF) are frequently identified on screening low-dose computed-topography (LDCT) scans performed in high-risk smokers to detect lung nodules. Standardisation for reporting of lung nodules exists however standardised methods for reporting IF are lacking. We aimed to describe commonly reported IF and compare variability in reporting of IF using LDCT performed for the International Lung Screen Trial (ILST) at two scan time-points.**Methods:** Eligible participants recruited for lung cancer screen at St Vincent’s Hospital, Sydney as part of the ILST ([www.clinicaltials.gov](http://www.clinicaltials.gov), NCT02871856) had LDCT at baseline and 2 years with prospective reporting of IF. The LDCT reports were reviewed to identify IF grouped into the following categories: emphysema, lung fibrosis, lymph node changes, pleural changes, cardiac findings, upper abdomen findings or other. The reporting of IF in the same patients were compared between their two LCDT using Fleiss kappa coefficient.**Results:** 335 participants were included for review with two LDCT performed in 239 participants following patient dropout (124 female; 124 former and 115 current smokers; mean±SD smoking pack-years 48.2±22.1; age 64±6.1 years). At time-point one, any IF was reported in 275/335 (82.1%) participants. There was at least moderate concordance in the reporting of IF between time-points one and two in the same participant.

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| N=239 | Time-point one | Time-point two | Fleiss kappa coefficient (95%CI) | P-value |
| Emphysema | 123 (51.5%) | 137 (57.3%) | 0.85 (0.72-0.97) | <0.0001 |
| Lung fibrosis | 24 (10.0%) | 26 (10.9%) | 0.64 (0.52-0.77) | <0.0001 |
| Lymph node | 15 (6.3%) | 16 (6.7%) | 0.62 (0.49-0.74) | <0.0001 |
| Pleural | 13 (5.4%) | 17 (7.1%) | 0.64 (0.52-0.77) | <0.0001 |
| Cardiac | 42 (17.6%) | 59 (24.7%) | 0.43 (0.30-0.56) | <0.001 |
| Upper abdo | 78 (32.6%) | 94 (39.3%) | 0.63 (0.50-0.76) | <0.0001 |

**Conclusion:** Reporting of IF in LDCT performed in high-risk smokers demonstrates a range of pulmonary and extra-pulmonary changes with at least moderate concordance between the two scan timepoints in the same participant. The impact of IF detection and variability in reporting of IF on clinical care is not known. Further analysis and longitudinal studies are required to determine a standardised approach to IF reporting. **Grant Support:** Nil |