

**Abstract P166 Figure 1** CXRs per patient 6 month period prior to diagnosis

The number of CXRs performed during the 6 months leading up to diagnosis was much higher for both groups, but remained significantly higher for early vs late stage disease (1.32 vs 1.15, p = 0.009). This will include many CXRs which triggered referral to the lung cancer team.

The number of patients with no CXR in the three years before diagnosis (excluding the six months immediately before diagnosis) was higher in late stage (64.6%) than in early stage (45.0%).

Conclusion Differences are apparent in the frequency of CXRs many months prior to lung cancer diagnosis. We speculate that these changes are seen at a time when symptoms attributable to the lung cancer are unlikely to have been present. Instead, this may reflect differences in patient behaviour (threshold for seeking review for respiratory symptoms) and GP behaviour (threshold for requesting CXR). There may be a degree of incidental detection of more indolent early stage cancers (i.e. length-time bias).

A patient-GP relationship that results in increased frequency of CXR seems to be associated with increased detection of early stage disease.

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## A 'VIRTUAL' LUNG NODULE CLINIC: A NOVEL APPROACH TO IMPROVE EFFICIENCY AND ACCURACY OF INDETERMINATE LUNG NODULE SURVEILLANCE

J Thomas, S Grundy. University Hospital Aintree, Liverpool, UK

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Background and objectives With increasing use and fidelity of CT scans the workload relating to surveillance of indeterminate lung nodules is ever increasing and is burdensome in terms of out-patients appointments and/or clinical administrative time. In July 2014 we established a 'virtual nodule clinic' (VNC) for reviewing indeterminate lung nodules. A proforma within our hospital electronic patient record is completed which automatically generates written communication for both the patient and the GP informing of the findings of the latest CT result and any follow-up required. The patients are not seen in clinic unless they request. The clinic template allows review of 40 cases per session.

The objectives of this study are to review the impact of the VNC on concordance with Fleischner guidelines and timeliness of communication of results.

Methods We retrospectively reviewed 50 consecutive nodule follow-up scans performed in November 2013 prior to establishment of VNC and 49 consecutive cases reviewed in VNC in

November 2014. Concordance with Fleischner guidelines and date from CT scan to patient/GP being informed was reviewed. **Results** Demographics were similar between groups.

The VNC has improved concordance with Fleischner guidelines in lung nodule surveillance by 40%. Prior to the VNC, 52% of patients had surveillance concordant with Fleischner guidelines. Following the introduction of the VNC, 92% of patients had follow-up concordant with Fleischner guidelines.

Median time from the date of CT scan to the patient/GP being informed of CT results was 5 weeks. None of the cases reviewed in VNC contacted us to request a face to face consultation despite this being offered within the written communication to patients.

**Abstract P167 Table 1** A comparison between patients seen prior to the VNC and those reviewed in the VNC

	Prior to VNC (November 2013)	Reviewed in VNC (November 2014)
n	50	49
Age (mean)	63	65
Gender	Male 50%	Male 49%
	Female 50%	Female 51%
Mean Size of Nodule (Diameter in cm)	6.17	7.05
Concordance with Fleischner Guidelines	52% (26/50)	92% (45/49)

Conclusion The introduction of a virtual nodule clinic has significantly improved concordance with published guidelines for radiological follow-up of indeterminate lung nodules. It has also allowed a significant reduction in the number of 'unnecessary' out-patient appointments within the lung cancer service. VNC ensures effective and timely communication of scan results to patients and GPs.

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## THE 'REAL WORLD' IMPACT OF THE NEW BTS LUNG NODULE SURVEILLANCE GUIDELINES

J Thomas, S Grundy. University Hospital Aintree, Liverpool, UK

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Background and objectives The BTS published new guidelines for the investigation and management of pulmonary nodules in June 2015. These replace the Fleischner guidelines and are based on an improved evidence base produced predominantly from recent lung cancer screening trials.

The BTS guidelines suggest no radiological follow-up for nodules smaller than 5 mm or <80 mm³ and limit CT follow-up to 12 months when volumetric analysis is used. The guidelines recommend use of the Brock Model (full with spiculation) to estimate the probability of malignancy in nodules  $\geq$ 8 mm. The Brock group also published a parsimonious model which requires fewer clinical variables to calculate risk with almost equivalent accuracy.

The objectives of this study are to establish the impact of the new guidance on the number of patients requiring radiological follow-up and the total number of scans recommended. We also studied any differences between the 2 Brock risk models.

Methods We retrospectively reviewed 99 consecutive patients who were reviewed for indeterminate lung nodules. Their follow-up recommendations were calculated using 3 methods: 1)