

# Pilot study of lung cancer screening for survivors of Hodgkin lymphoma

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## Online supplementary data file

### Additional information on methodology

#### Study exclusion criteria

CT thorax within 12 months, diagnosis of lung cancer, a diagnosis of metastatic cancer, resident in a nursing home or housebound, pregnant women, and those known to have a condition preventing them from providing informed consent.

#### Definitions of negative / indeterminate / positive LDCT scans and their management

- A negative LDCT scan was defined as no nodules, or one or more nodules <5 mm in maximum diameter or <80 mm<sup>3</sup> volume – no further screening offered.
- An indeterminate scan was defined as showing nodule/s ≥80 to <300mm<sup>3</sup>, or ≥5mm and <8mm maximum diameter and <10% risk of malignancy using the Brock model.
  - An indeterminate scan triggered an offer of a 3-month surveillance scan, with the following exception: participants with nodules measuring 5-6mm (an indeterminate scan), could undergo a surveillance scan in 12 months, as per the BTS guidelines, at their local hospital.
- A positive scan demonstrated nodule/s of ≥300mm<sup>3</sup> or ≥8mm maximum diameter with a ≥10% risk of malignancy using the Brock model – a positive scan triggered a referral to lung cancer services at the participants' local hospital.

#### The Decisional Conflict Scale (DCS), Preparedness for Decisional Making Scale (PDMS), Attitude towards lung cancer screening scale and Multidimensional Measure of Informed Decision Making (MMIC) scale

- the DCS scale and subscales were scored out of a possible 100, with lower scores representing lower levels of decisional conflict and uncertainty, feeling better informed, better supported and clearer about personal values
- the PDMS, a higher score indicates greater preparedness for decision making.
- for the DCS and PDMS, there are no defined cut-off values to categorise scores.
- Attitude scale: (possible range 3-21 where a higher score represented a more positive attitude)
- MMIC: A positive attitude was defined as scoring above the midpoint on the attitude scale (12), and good knowledge was defined as scoring above the midpoint (8) on the post-decision-aid knowledge scale. An informed decision was defined as a positive attitude + good knowledge + preference to participate, or a negative attitude + good knowledge + preference to not participate

Supplemental Table 1: Correct responses to individual items on the knowledge scale pre and post exposure to the decision aid

Item on lung cancer risk and screening knowledge scale (response options with correct answer in bold)	Number who answered question; Percentage answered correctly before receiving decision aid	Number who answered question; Percentage answered correctly after receiving decision aid
A lung scan will spot cancers 100% of the time (True/ <b>False</b> /Don't know)	125; 30.5%	98; 78.6%
Most spots on the lung scan are cancerous (True/ <b>False</b> /Don't know)	125; 45.6%	98; 80.6%
If a lung scan is clear you won't develop lung cancer in the future (True/ <b>False</b> /Don't know)	124; 84.7%	98; 94.9%
Lung cancer found on a screening scan can always be cured (True/ <b>False</b> /Don't know)	124; 65.3%	97; 83.5%
A lung scan can tell you if you are likely to develop lung cancer in the future (True/ <b>False</b> /Don't know)	125; 36.0%	97; 75.3%
How many people with an abnormal scan will have lung cancer ( <b>Most will not have lung cancer</b> /About half/Most will have lung cancer/Don't know)	125; 14.4%	98; 66.3%
A CT scan can miss a tumour in your lungs ( <b>True</b> /False/Don't know)	125; 25.6%	98; 64.3%
All tumours in the lungs will grow to be life threatening (True/ <b>False</b> /Don't know)	125; 46.0%	97; 82.5%
Without screening lung cancer is often found at a late stage when a cure is less likely	125; 68.0%	97; 90.7%

( <b>True</b> /False/Don't know)		
A lung scan lowers your chance of dying of lung cancer by ( <b>About 20%</b> /About 50%/About 95%/Don't know)	125; 5.6%	96; 40.7%
A lung scan can find problems other than cancer ( <b>True</b> /False/Don't know)	125; 65.6%	96; 92.7%
Radiation is one of the possible harms from a lung scan ( <b>True</b> /False/Don't know)	124; 37.9%	97; 83.5%
Radiotherapy to your chest can increase your risk of getting lung cancer ( <b>True</b> /False/Don't know)	124; 69.4%	97; 82.5%
Chemotherapy can increase your risk of getting lung cancer ( <b>True</b> /False/Don't know)	124; 46.0%	97; 82.5%
If you have stopped smoking you are still at risk off getting lung cancer ( <b>True</b> /False/Don't know)	121; 84.3%	97; 95.9%
People treated for HL who have never smoked are at risk of getting lung cancer ( <b>True</b> /False/Don't know)	122; 70.5%	97; 93.8%