

# Investigating recovery following lung cancer radiotherapy: testing the feasibility of establishing a prospective cohort

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## Introduction

- Little is known about support needs and patterns of recovery among lung cancer patients following curative intent treatment. Existing Quality of Life data is limited, contradictory and does not always address issues important to patients, such as the impact of cancer on their everyday lives [1,2].
- The collection of Patient Reported Outcome Measures (PROMs) using a holistic model of recovery of health and well-being would allow a greater understanding of the factors that enable people to regain their health, what prevents this from happening and what might be put in place to facilitate recovery.
- Following a successful pilot study of patients treated surgically, we are conducting a study to test the feasibility of establishing a cohort of patients to collect PROMs and investigate recovery of health and well-being after curative intent lung cancer radiotherapy.

## Aim

To test feasibility of gathering patient completed questionnaires before treatment begins, from lung cancer patients treated with curative intent radiotherapy (RT), and repeated over time.

## Methods

- A prospective, longitudinal cohort study design was employed.
- Eligible lung cancer patients, due to undergo RT with curative intent, have been recruited at six geographical sites across the UK (see Figure 1).
- The sites were opened between October and December 2015. Recruitment will finish end April 2016.
- Participants complete questionnaires before RT and three months later. Examples of the measures used and data collected during the study are shown in Table 1.
- A process evaluation of study procedures, using semi-structured telephone interviews with patient participants and local site staff, will follow.

Table 1: Study Measures

Type of measure	Source	Key examples
Clinical measures	Patient medical records	<ul style="list-style-type: none"> <li>• Cancer type</li> <li>• Histological diagnosis/EGFR status</li> <li>• TNM stage</li> <li>• RT toxicity</li> <li>• Comorbidities</li> <li>• Performance status</li> <li>• Recurrence</li> <li>• Other treatments</li> </ul>
Patient reported outcome measures (PROMs)	Patient completed questionnaires	<ul style="list-style-type: none"> <li>• General health</li> <li>• Quality of life</li> <li>• Wellbeing</li> <li>• Symptoms</li> <li>• Coping</li> <li>• Depression</li> <li>• Confidence to self-manage</li> </ul>
Demographic and lifestyle measures	Patient completed questionnaires	<ul style="list-style-type: none"> <li>• Socio-demographics</li> <li>• Lifestyle (including smoking status)</li> <li>• Return to work</li> </ul>



Figure 1: Study Sites



## Findings to date

- As of the 25 February 2016, 135 eligible patients have been identified.
- 68 (50%) have given consent for data from their patient records to be analysed, and 63 of these also consented to complete questionnaires pre-radiotherapy and three months post-radiotherapy. They have been recruited from five out of six study sites. 48 pre-radiotherapy questionnaires have been completed and returned so far.
- The three month post radiotherapy questionnaires: 13 have been sent since January 2016 and so far seven questionnaires have been returned.

## Conclusions

- Initial study findings indicate that it is possible to recruit lung cancer patients across the UK using our study methods.
- These early data also suggest that compared to the surgical study completed in 2014 more patients have declined participation (69% consented in the surgical study). We will explore the potential reasons for this difference in our final analysis of survey and qualitative process evaluation data.
- Informed by the results obtained, we plan to develop a larger scale study, including both surgical and RT patients followed over a number of years. This novel approach to understanding lung cancer survival will enhance our ability to offer patients appropriate and timely support and identify who is most at risk of protracted recovery.

135 Eligible patients

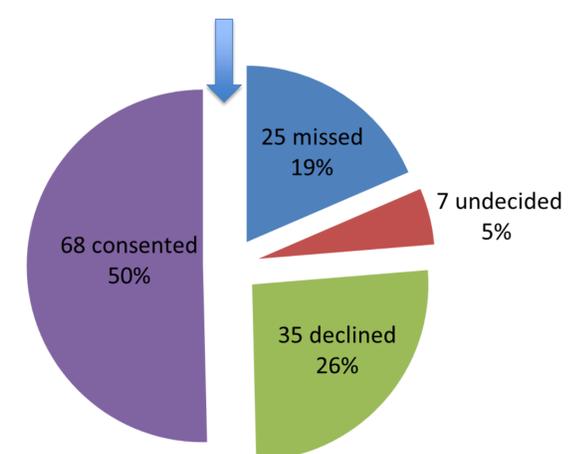


Figure 2: Recruitment Figures 25/02/16

### References

1. Sarna L, Grannis FW, Coscarelli A. Physical and Psychosocial Issues in Lung Cancer Survivors. In: Chang AE, Hayes DF, Pass HI, Stone RM, Ganz PA, Kinsella TJ et al., editors. *Oncology*. Springer New York; 2006. 1881-1900.
2. Corner J, Wright D, Hopkinson J, Gunaratnam Y, McDonald JW, Foster C. The research priorities of patients attending UK cancer treatment centres: Findings from a modified nominal group study. *British Journal of Cancer* 2007; 96(6):875-881.