Change in disability in activities of daily living over time among adults with advanced respiratory disease during the COVID-19 pandemic

Submission date	Recruitment status No longer recruiting	Prospectively registered		
30/11/2020		[X] Protocol		
Registration date 14/12/2020	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	[] Individual participant data		
21/01/2025	Respiratory			

Plain English summary of protocol

Background and study aims

The researchers are very interested in finding out more about how people with advanced lung cancer or respiratory disease manage daily activities (e.g. washing, dressing, shopping, and walking) and how this changes over several months during the Coronavirus (COVID-19) pandemic. This is so they can identify when people with these conditions may become unable to manage everyday activities, what may cause them to have more difficulty (e.g. breathlessness) and what might help to improve their independence, in order to guide clinical practice and service provision.

This is important because people are living longer with advanced lung cancer or respiratory disease due to an ageing population and advances in treatment prolonging survival. This may change the illness trajectory of these conditions in terms of prolonging symptoms and disability. Disability in advanced disease has a specific effect on a persons' ability to perform daily activities, limiting a patients' independence and quality of life, impacting on care needs.

Who can participate?

Adults with a diagnosis of either advanced non-small cell lung cancer or respiratory disease (chronic obstructive lung disease (COPD) or interstitial lung disease (ILD))

What does the study involve?

This is an observational study of patients with advanced lung cancer or respiratory disease looking at how disability changes over time in daily activities (e.g. washing, dressing, shopping, walking) and associated factors including symptoms and social isolation. The researchers are recruiting from hospital and hospice in/outpatient settings throughout the UK and will be following participants for 6 months. Following consent, participants will complete a baseline questionnaire upon enrolment over the telephone and a series of monthly postal questionnaires over 6 months.

What are the possible benefits and risks of participating?

This research does not involve any changes to patient care, and so patients are unlikely to benefit personally from taking part, though participation may help to improve the care of others in future. The risks to taking part are very small, this research will not in any way affect the standard of clinical care participants might receive, care options, or any relationships they have with any staff or researchers. Some people may find some of the questions upsetting, but participants can choose not to answer questions if they do not want to and can withdraw at any time.

Where is the study run from? Cicely Saunders Institute King's College London (UK)

When is the study starting and how long is it expected to run for? January 2020 to August 2021

Who is funding the study? National Institute for Health Research (NIHR) (UK)

Who is the main contact? Lucy Fettes lucy.fettes@kcl.ac.uk

Contact information

Type(s)

Scientific

Contact name

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ORCID ID

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Public

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Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

271894

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

IRAS 271894

Study information

Scientific Title

Comparing disability in activities of daily living over time among adults with advanced lung cancer or respiratory disease during the COVID-19 pandemic

Acronym

DIScOVER

Study objectives

- 1. People with advanced lung cancer develop greater disability in activities of daily living over time than people with advanced respiratory disease
- 2. Symptom severity is positively associated with subsequent disability in activities of daily living
- 3. Use of an assistive device is positively associated with increased independence in activities of daily living
- 4. Social isolation is positively associated with increased dependence in activities of daily living

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 11/02/2020, London - Camberwell St Giles Research Ethics Committee (Level 3, Block B, Whitefriars, Lewins Mead, Bristol, BS1 2NT, UK: +44 (0)207104 8204; nrescommittee.london-camberwellstgiles@nhs.net), REC ref: 19/LO/1950

Study design

Multi-center longitudinal prospective cohort study

Primary study design

Observational

Secondary study design

Cohort study

Study setting(s)

Community

Study type(s)

Other

Participant information sheet

See study outputs table

Health condition(s) or problem(s) studied

Exploring disability in patients with non-small cell lung cancer or respiratory disease

Interventions

Sample: advanced no small cell cancer or respiratory disease

Recruitment sites: hospital lung cancer and respiratory inpatients and outpatient clinics; hospice /palliative care inpatients, outpatients, or community teams.

Outcome variable: disability in activities of daily living

Explanatory variables: symptom burden; assistive device use; social isolation

Outcome measures: Barthel Index; Lawton Brody IADL scale; WHO Disability Assessment Scale (WHODAS 2.0); Palliative Outcomes Scale-Symptoms; Chronic Disease Self-Efficacy Social Support Sub-scale

Data collection: Baseline self-reported questionnaire via telephone and monthly postal survey for 6 months or until death.

Intervention Type

Other

Primary outcome measure

Disability (independence) in basic activities of daily living measured using the Barthel Index at baseline and monthly for 6 months

Secondary outcome measures

- 1. Disability (independence) in instrumental activities of daily living measured using the Lawton Brody IADL scale at baseline and monthly for 6 months
- 2. Disability severity in activities of daily living measured using the WHO Disability Assessment Scale (WHODAS 2.0) at baseline and monthly for 6 months
- 3. Symptom burden measured using the Palliative Outcomes Scale-Symptoms (POS-S) at

baseline and monthly for 6 months

4. Confidence to receive social support measured using the Chronic Disease Self-Efficacy Social Support Sub-scale at baseline

Overall study start date

01/01/2020

Completion date

01/08/2021

Eligibility

Key inclusion criteria

- 1. Patients aged >18 years
- 2. Advanced lung cancer or respiratory disease as defined by one of the following:
- 2.1. Lung cancer: Inoperable stage III or IV non-small cell lung cancer
- 2.2. Chronic Obstructive Lung Disease (COPD): Severe or very severe stages of COPD according to the criteria set by the Global Initiative for Chronic Obstructive Lung Disease (GOLD): stage III (FEV1/FVC <70%. $30\% \le FEV1 <50\%$ predicted with or without chronic symptoms (cough, sputum production)) and stage IV (FEV1/FVC <70%. FEV1 <30% predicted plus chronic respiratory failure)
- 2.3. Interstitial lung disease (ILD): Carbon monoxide transfer factor (TLCO/DLCO) level of <40% or FVC <50% predicted
- 3. Patients with capacity to consent
- 4. Patients with ability to understand and complete a questionnaire in English
- 5. Life expectancy of >1 month as assessed by the person taking consent

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

120 (60 non-small cell lung cancer, 60 respiratory disease)

Total final enrolment

201

Key exclusion criteria

- 1. Patients aged <18 years
- 2. Patients who lack the capacity to consent
- 3. Patients who lack the ability to understand and complete a questionnaire in English
- 4. Life expectancy of <1 month as assessed by the person taking consent

Date of first enrolment

01/03/2020

Date of final enrolment

28/02/2021

Locations

Countries of recruitment

England

United Kingdom

Study participating centre

Princess Royal University Hospital (Kings College London NHS Trust)

Farmborough Common Orpington United Kingdom BR6 8ND

Study participating centre Nottingham University City Hospital

Hucknall Road Nottingham United Kingdom NG5 1PB

Study participating centre Macclesfield District General Hospital

Victoria Road Macclesfield United Kingdom

SK10 3BL

Study participating centre

South Tyneside District Hospital (South Tyneside and Sunderland NHS Foundation Trust)

Harton Lane South Shields United Kingdom NE34 0PL

Study participating centre Royal Cornwall Hospital

Treliske Truro United Kingdom TR1 3LJ

Study participating centre Medway NHs Foundation Trust

Windmill Road, Gillingham Kent United Kingdom ME7 5NY

Study participating centre St Christopher's Hospice

51-59 Lawrie Park Road London United Kingdom SE26 6DZ

Study participating centre St Michael's Hospice

25 Upper Maze Hill Saint Leonards-on-sea United Kingdom TN38 0LB

Study participating centre St Barnabas Hospice

Titnore Lane Worthing United Kingdom BN12 6NZ

Study participating centre Worthinh Hospital (Western Sussex NHS Foundation Trust)

Lyndhurst Road Worthing United Kingdom BN11 2DH

Study participating centre York Hospital

Wigginton Road York United Kingdom YO13 8HE

Study participating centre Guys and St Thomas' NHS Foundation Trust

Great Maze Pond London United Kingdom SE1 9RT

Study participating centre Asthma UK and British Lung Foundation Partnership

18 Mansell Street London United Kingdom E1 8AA

Sponsor information

Organisation

King's College Hospital NHS Foundation Trust

Sponsor details

Research and Innovation Office 161 Denmark Hill London England United Kingdom SE5 8EF +44 (0)20 3299 1980 kch-tr.research@nhs.net

Sponsor type

Hospital/treatment centre

Website

https://www.kch.nhs.uk/

ROR

https://ror.org/01n0k5m85

Organisation

King's College London

Sponsor details

Research & Innovation Floor 9, West Wing Becket House 1 Lambeth Palace Rd South Bank London England United Kingdom SE1 7EU +44 (0)207 1884557 reza.razavi@kcl.ac.uk

Sponsor type

University/education

Website

http://www.kcl.ac.uk/index.aspx

Funder(s)

Funder type

Government

Funder Name

National Institute for Health Research

Alternative Name(s)

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal

Intention to publish date

01/02/2023

Individual participant data (IPD) sharing plan

Data will be archived in a secure unit at the Cicely Saunders Institute King's College London for 7 years, which is specified in the participant information sheet.

IPD sharing plan summary

Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	version V3.0	06/05/2020	04/01/2021	No	Yes
Protocol file	version V2	06/05/2020	04/01/2021	No	No
HRA research summary			28/06/2023	No	No
Results article		12/08/2021	04/01/2024	Yes	No
Results article		10/12/2023	21/01/2025	Yes	No