UK lung volume reduction trial

Submission date 08/11/2016	Recruitment status Recruiting	 Prospectively registered Protocol
Registration date 09/01/2017	Overall study status Ongoing	 Statistical analysis plan Results
Last Edited 12/10/2022	Condition category Respiratory	 Individual participant data Record updated in last year

Plain English summary of protocol

Background and study aims

Chronic obstructive pulmonary disease (COPD) is the name for a group of lung conditions that cause breathing difficulties. In some patients with emphysema (damage to the air sacs in the lungs), an operation called lung volume reduction surgery is effective at removing the worst affected area of the lung. New techniques have been developed where emphysema can be treated using a fibre-optic camera called a bronchoscope. Studies have shown that using a bronchoscope to place implantable medical devices called endobronchial valves into the airways can be very effective in carefully selected patients and the technique is now being adopted in hospitals across the UK. The aim of this study is to collect data from people undergoing these procedures at hospitals across the UK to find out how well they work in practice and what factors influence response.

Who can participate?

Patients aged over 18 with emphysema undergoing a lung volume reduction procedure

What does the study involve?

The study involves collecting routine data about lung volume reduction procedures onto a central database. Results from across the UK can then be used to improve understanding of the procedures. Participants are not required to do anything in addition. Data is collected at the start of the study and at 3-month and 12-month follow up, including lung function data, measures of exercise capacity (maximum amount of exercise that a patient can sustain), questionnaires about health status and CT scan results.

What are the possible benefits and risks of participating?

This study will make it easier to assess lung volume reduction procedures and bring new treatments into play more quickly. There are no risks to participants.

Where is the study run from?

- 1. Royal Brompton Hospital (UK)
- 2. Glenfield Hospital (UK)
- 3. Addenbrooke's Hospital (UK)
- 4. Oxford Health NHS Foundation Trust (UK)
- 5. University Hospitals Bristol NHS Foundation Trust (UK)
- 6. Liverpool Heart and Chest NHS Foundation Trust (UK)

7. University Hospital of Wales (UK)
 8. University Hospital of South Manchester NHS Foundation Trust (UK)
 9. Sheffield Teaching Hospitals NHS Foundation Trust (UK)
 10. Leeds Teaching Hospitals NHS Trust (UK)
 11. The Newcastle on Tyne Hospitals NHS Foundation Trust (UK)
 12. The Royal Wolverhampton Hospitals NHS Trust (UK)
 13. Heart of England NHS Foundation Trust (UK)

When is the study starting and how long is it expected to run for? April 2015 to December 2026

Who is funding the study? British Lung Foundation (UK)

Who is the main contact? Ms Sara Buttery s.buttery@rbht.nhs.uk

Contact information

Type(s) Public

Contact name Ms Sara Buttery

Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number 190196

ClinicalTrials.gov number

Secondary identifying numbers IRAS Project ID: 190196

Study information

Scientific Title

UK Lung Volume Reduction: a multicentre observational study

Acronym UKLVR

Study objectives

COPD is poorly responsive to medical therapy, but new bronchoscopic treatments for emphysema offer the prospect of significant benefits for patients, improving lung function, exercise capacity and possibly survival. It is important to ensure that benefits seen in clinical trials are in fact reflected in clinical practice. The study will collect data on procedures being performed across the UK to establish whether the clinical effects are similar to those seen in trials and which factors predict the best outcomes.

Ethics approval required

Old ethics approval format

Ethics approval(s)

London – Camberwell St Giles Research Ethics Committee, 21/07/2016, ref: 16/LO/1107

Study design Multicentre longitudinal observational study

Primary study design Observational

Secondary study design Longitudinal study

Study setting(s) Hospital

Study type(s)

Treatment

Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet

Health condition(s) or problem(s) studied

Emphysema

Interventions

Lung volume reduction procedures for emphysema include lung volume reduction surgery, endobronchial valve placement, lung volume reduction coils. This study collects data from people undergoing these procedures at hospitals across the UK to evaluate how well they work in practice and what factors at baseline influence response. Baseline, 3-month and 12-month follow-up data are collected. This includes lung function data, measures of exercise capacity, questionnaires about health status and CT scan results.

Intervention Type

Procedure/Surgery

Primary outcome measure

Forced expiratory volume in one second, measured by spirometry at baseline and 3 months post procedure

Secondary outcome measures

 Walking distance, measured by 6 minute walk test or incremental shuttle walk test, at baseline, 3 and 12 months
 Health status, measured by COPD assessment test (CAT) score or SGRQ at baseline, 3 and 12 months
 Residual volume, measured by body plethysmography at baseline, 3 and 12 months

Overall study start date 01/04/2015

Completion date 01/12/2026

Eligibility

Key inclusion criteria

Patients aged over 18 with emphysema undergoing a lung volume reduction procedure

Participant type(s) Patient

Age group Adult

Lower age limit 18 Years

Sex Both

Target number of participants 300

Key exclusion criteria Not meeting the inclusion criteria

Date of first enrolment 01/12/2016

Date of final enrolment 31/03/2026

Locations

Countries of recruitment

England

United Kingdom

Wales

Study participating centre Royal Brompton Hospital Fulham Rd London United Kingdom SW3 6NP

Study participating centre Glenfield Hospital Groby Rd Leicester United Kingdom LE5 4QF

Study participating centre Addenbrooke's Hospital Hills Rd Cambridge United Kingdom CB2 0QQ

Study participating centre Oxford Health NHS Foundation Trust John Smith Dr Oxford United Kingdom OX4 2GX

Study participating centre University Hospitals Bristol NHS Foundation Trust Marlborough Street Bristol United Kingdom BS1 3NU

Study participating centre Liverpool Heart and Chest NHS Foundation Trust Thomas Dr Liverpool United Kingdom L14 3PE

Study participating centre University Hospital of Wales Heath Park Cardiff United Kingdom CF14 4XW

Study participating centre

University Hospital of South Manchester NHS Foundation Trust Southmoor Rd Manchester United Kingdom M23 9LT

Study participating centre

Sheffield Teaching Hospitals NHS Foundation Trust Herries Rd United Kingdom S5 7AU

Study participating centre Leeds Teaching Hospitals NHS Trust Beckett Street Leeds United Kingdom LS9 7TF

Study participating centre

The Newcastle on Tyne Hospitals NHS Foundation Trust Freeman Road Newcastle on Tyne United Kingdom NE7 7DN **Study participating centre The Royal Wolverhampton Hospitals NHS Trust** Wolverhampton Rd Wolverhampton United Kingdom WV10 0QP

Study participating centre Heart of England NHS Foundation Trust Bordesley Green East Birmingham United Kingdom B9 5ST

Sponsor information

Organisation Imperial College London

Sponsor details

Faculty of Medicine Centre Room 5L10B, Lab Block London England United Kingdom W6 8RF

Sponsor type University/education

ROR https://ror.org/041kmwe10

Funder(s)

Funder type Charity

Funder Name

British Lung Foundation

Alternative Name(s) BLF

Funding Body Type Private sector organisation

Funding Body Subtype Trusts, charities, foundations (both public and private)

Location United Kingdom

Results and Publications

Publication and dissemination plan

To be confirmed at a later date

Intention to publish date

01/12/2027

Individual participant data (IPD) sharing plan

Participant data is held in a secure database. This includes procedures performed, lung function exercise capacity and health status measures. Researchers can apply to the trial steering committee if they have research questions that they wish to address.

IPD sharing plan summary Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
HRA research summary			28/06/2023	No	No