



UNITED KINGDOM
LUNG CANCER COALITION

ENLItN Study

Eastern and North western Lung cancer In Never smokers

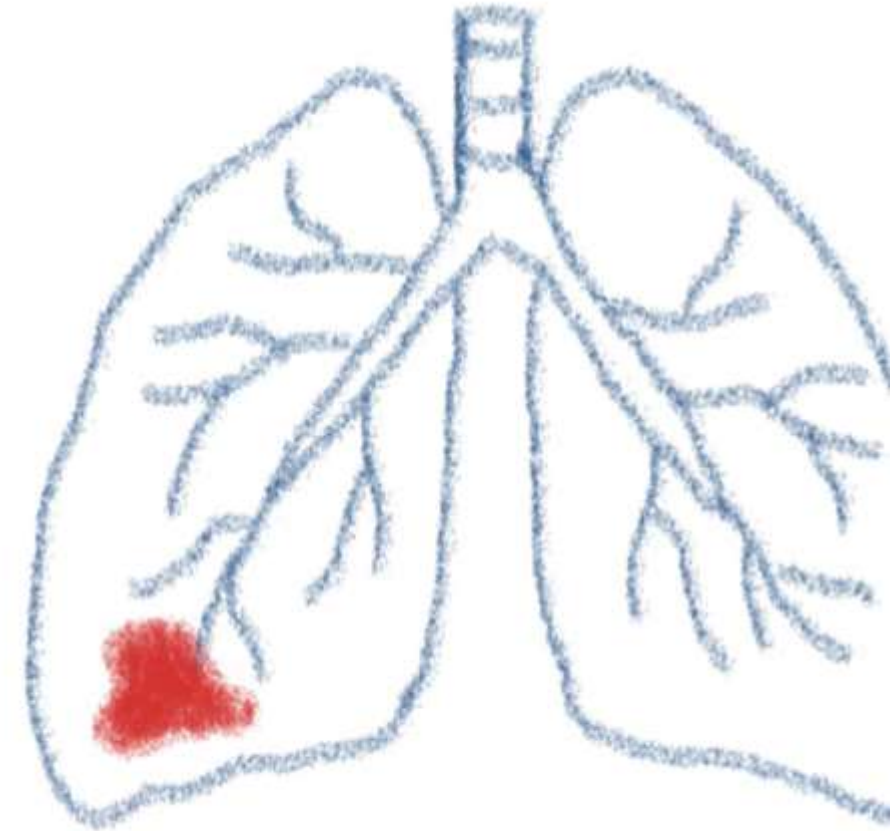
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Celebrating 20 years of the UK Lung Cancer Coalition

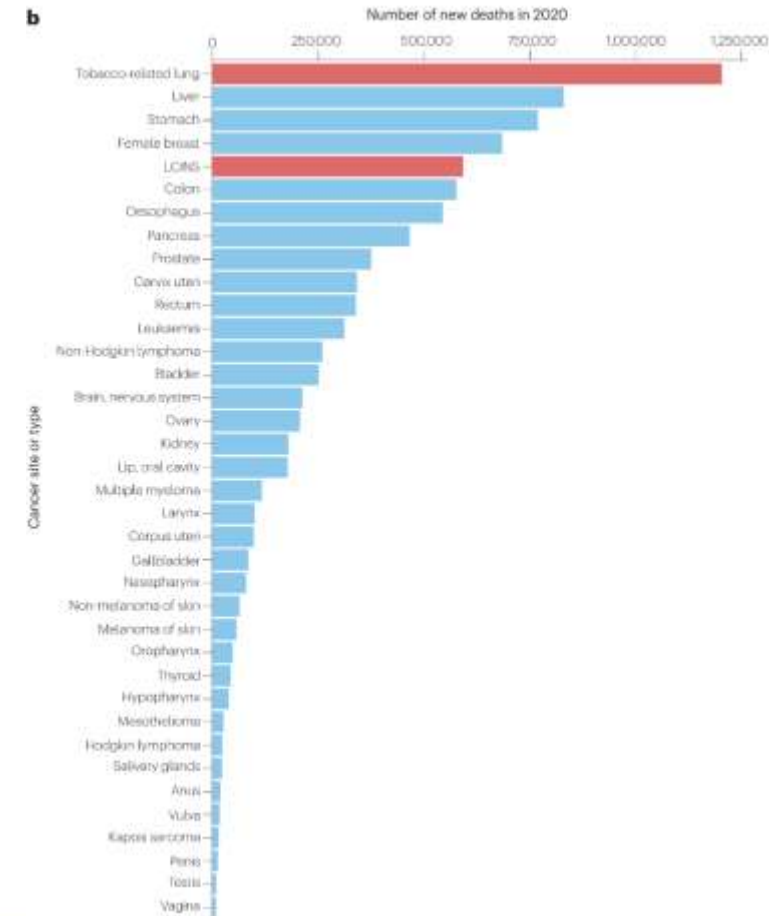
#UKLCC2025

Study Background: LCINS



**<100 cigarettes in
their lifetime**

- 10-25% of all lung cancer diagnoses
- LCINS **5th leading cause of cancer death for men and women worldwide (8th in UK)**
- 7th most prevalent cancer in the world



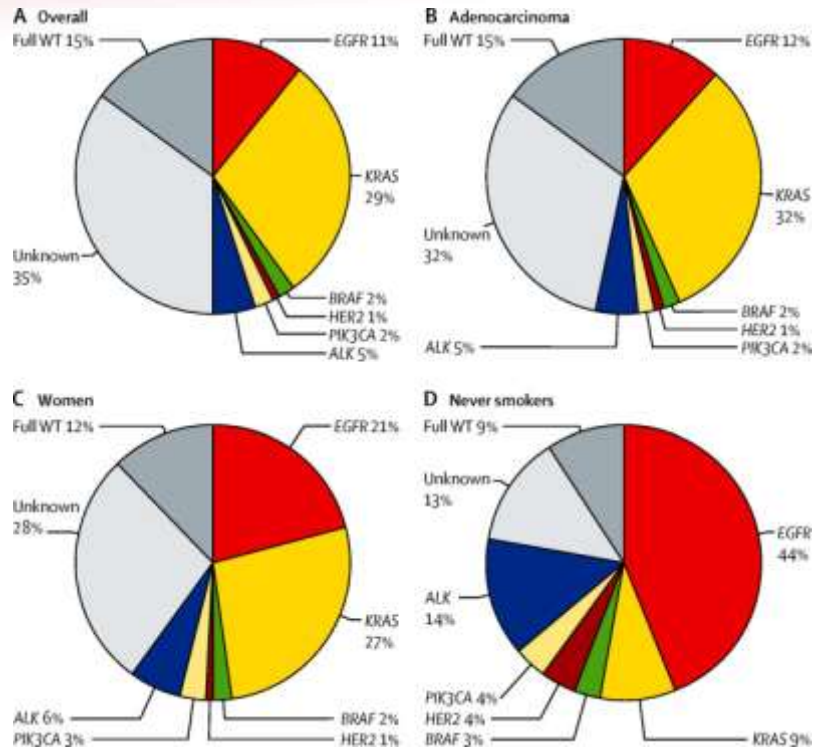
Khan, S., Hatton, N., Tough, D. *et al.* Lung cancer in never smokers (LCINS): development of a UK national research strategy. *BJC Rep* 1, 21 (2023)

LoPiccolo, J., Gusev, A., Christiani, D.C. *et al.* Lung cancer in patients who have never smoked — an emerging disease. *Nat Rev Clin Oncol* 21, 121–146 (2024)

Celebrating 20 years of the UK Lung Cancer Coalition

#UKLCC2025

Study Background: LCINS



- Majority of cases are in **women** (2/3)
- Present at a **younger** age
- Commonly **adenocarcinomas**
- Higher frequencies of **driver mutations: 60-80%**
- **Asian** ancestry
- RFs: pollution, radon, passive smoking, RT, lung disease
- Symptoms often dismissed, present late, emergency presentations
- Stigma
- The cause is poorly understood
- Little detailed information in the UK about those affected

Barlesi F, Mazieres J, Merlio JP, et al Routine molecular profiling of patients with advanced non-small-cell lung cancer: results of a 1-year nationwide programme of the French Cooperative Thoracic Intergroup (IFCT). Lancet. 2016 Apr 2;387(10026):1415-1426.

Key Question



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The majority of patients with lung cancer have a history of smoking

When someone is diagnosed with lung cancer having not smoked cigarettes a recurrent question is

“Why me?”



Aims of ENLItN



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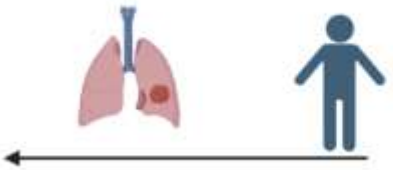
Development of a
LCINS registry with
paired archived tissue
and blood

Comprehensive
individual **clinical** and
environmental
exposure data

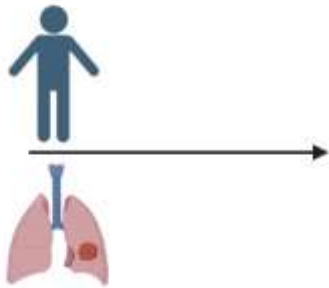
Germline risk and
somatic mutational
events **related directly**
to environmental
exposure

Is it possible to develop a risk score (based on
demographics, exposure and molecular biomarkers) for
future **stratification** of a population for **screening**?

Requirements of participants



Retrospective Cohort (diagnosis in past 5 years)



Prospective Cohort (recruited at diagnosis)



1. A single **blood sample** (20ml)



2. Consent to obtaining **FFPE surgical/biopsy samples** no longer needed for clinical care (no new biopsies needed)



3. Complete an online **lifetime environmental exposure questionnaire** (REDCap)

Consent for remote 5-year follow-up

A big thank you



Eastern and North Western Lung Cancer In Never Smokers

ENLItN



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Research teams
Patients



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