

GROUP 1: Prehabilitation in Lung Cancer

Time: 20 minutes

YOUR CANCER: CONTEXT

Lung cancer is the leading cause of cancer death in the UK. Surgery (removing part or all of a lung) is the main treatment for early-stage non-small cell lung cancer. Patients often have reduced lung function before surgery due to smoking history or the tumour itself. This makes prehabilitation particularly important, and particularly challenging.

YOUR TASK

Prehabilitation means preparing a patient physically, nutritionally, and psychologically BEFORE their treatment begins, so they go into it in the best possible condition.

Your group has been assigned one cancer. Use your phones, laptops, or any available resource to find answers to the questions below.

Record every source you use in the source table at the end. You will be asked to share and evaluate your sources in the debrief.

OUTCOME MEASURES TO LOOK FOR

When you find evidence of prehabilitation benefits, look for these specific measures:

Length of hospital stay (LOS): did prehabilitation reduce how long patients spent in hospital after surgery?

Complication rates: did prehabilitation reduce infection, wound healing problems, or other post-operative complications?

Functional capacity: look for the six-minute walk test (6MWT) or cardiopulmonary exercise testing (CPET) as measures of fitness before and after prehab.

Nutritional status: handgrip strength and blood protein levels (albumin) are common markers.

Fatigue and psychological wellbeing: Patient-Reported Outcome Measures (PROMs) are increasingly used.

If you find a study, note the outcome measure used. Not all studies measure the same things.

Questions

Q1

Is there evidence that exercise-based prehabilitation improves outcomes for lung cancer patients before surgery? What types of exercise have been studied and what outcomes were measured?

Q2

Lung cancer patients often have reduced lung function. Are there specific breathing exercises or pulmonary rehabilitation approaches used as prehabilitation? What do they aim to achieve?

Q3

What nutritional challenges do lung cancer patients commonly face before surgery, and is there evidence that nutritional support as part of prehabilitation improves outcomes?

Q4

Lung cancer carries significant stigma, particularly around smoking history. How might psychological support feature in a prehabilitation programme for lung cancer, and is there any evidence it improves outcomes?

Source Record

Record every source you used below. You will discuss these in the debrief.

Source (name or URL)	Type (e.g. NHS, journal, charity)	How reliable do you think it is?