

Lung cancer session at WCA

primary care event

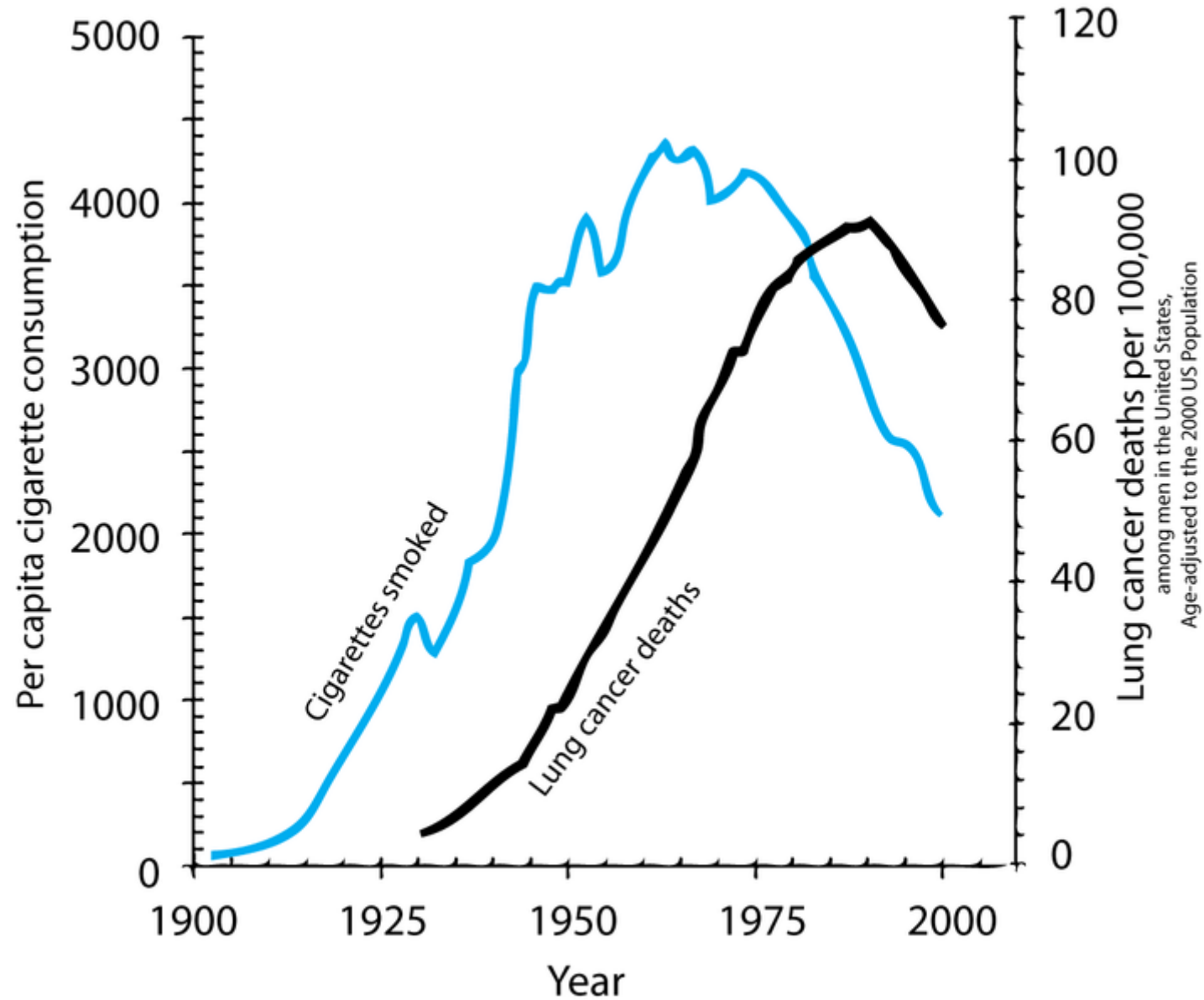
Edwin Woo

Consultant thoracic surgeon
Southampton General Hospital

WCA primary care event Lung cancer session

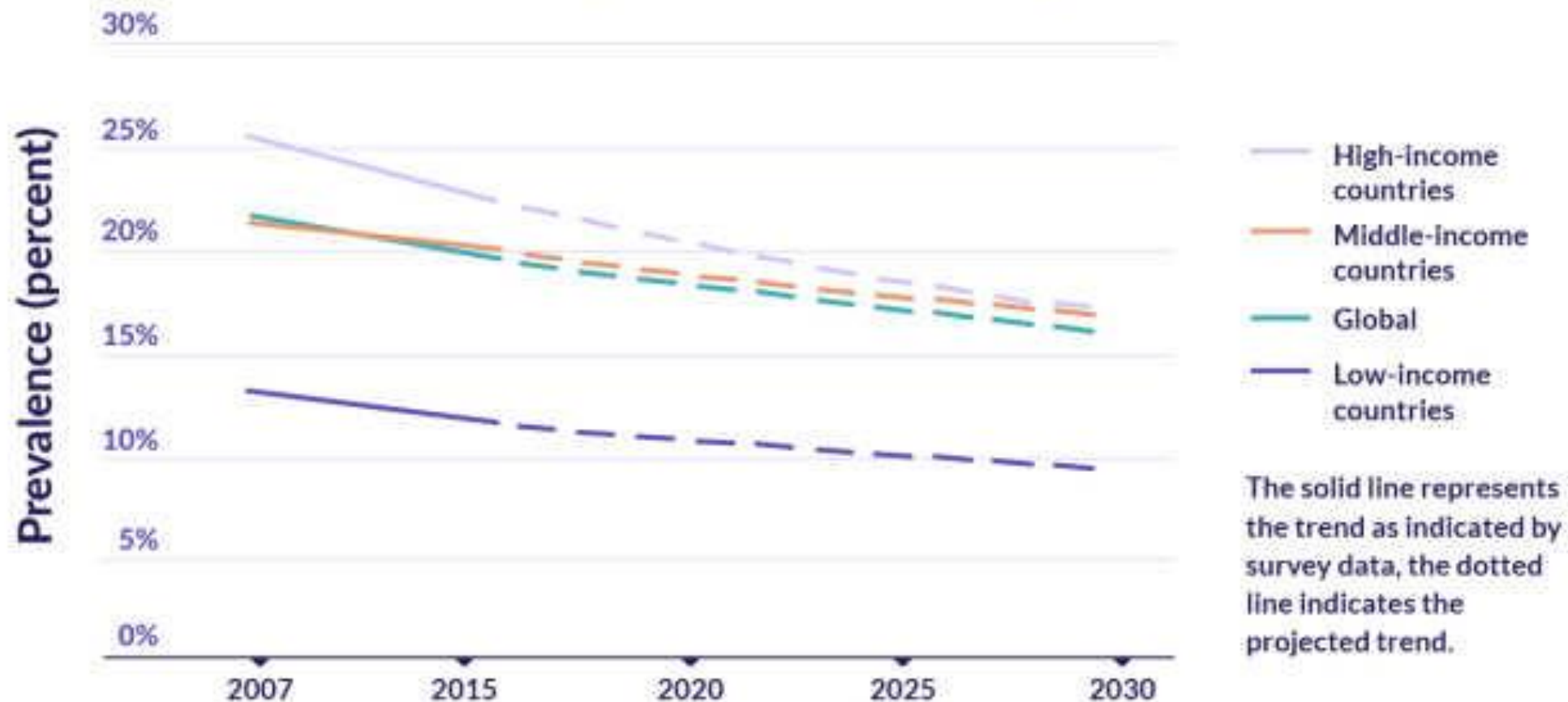
- Smoking & lung cancer
- Lung cancer outcome
- Impact of TLHC
- Innovation in thoracic surgery

Lung Cancer - smoking



Lung Cancer - smoking

WHO-Estimated Trend in Current Smoking Prevalence, Ages 15+



Lung Cancer – never smokers

27/11/2023, 13:35

NIH study illuminates lung cancer origins in never smokers - NCI

- Different disease sub-type
- 10% - 20% of lung cancer diagnosis
- Distinct molecular characteristics
- Passive smoking

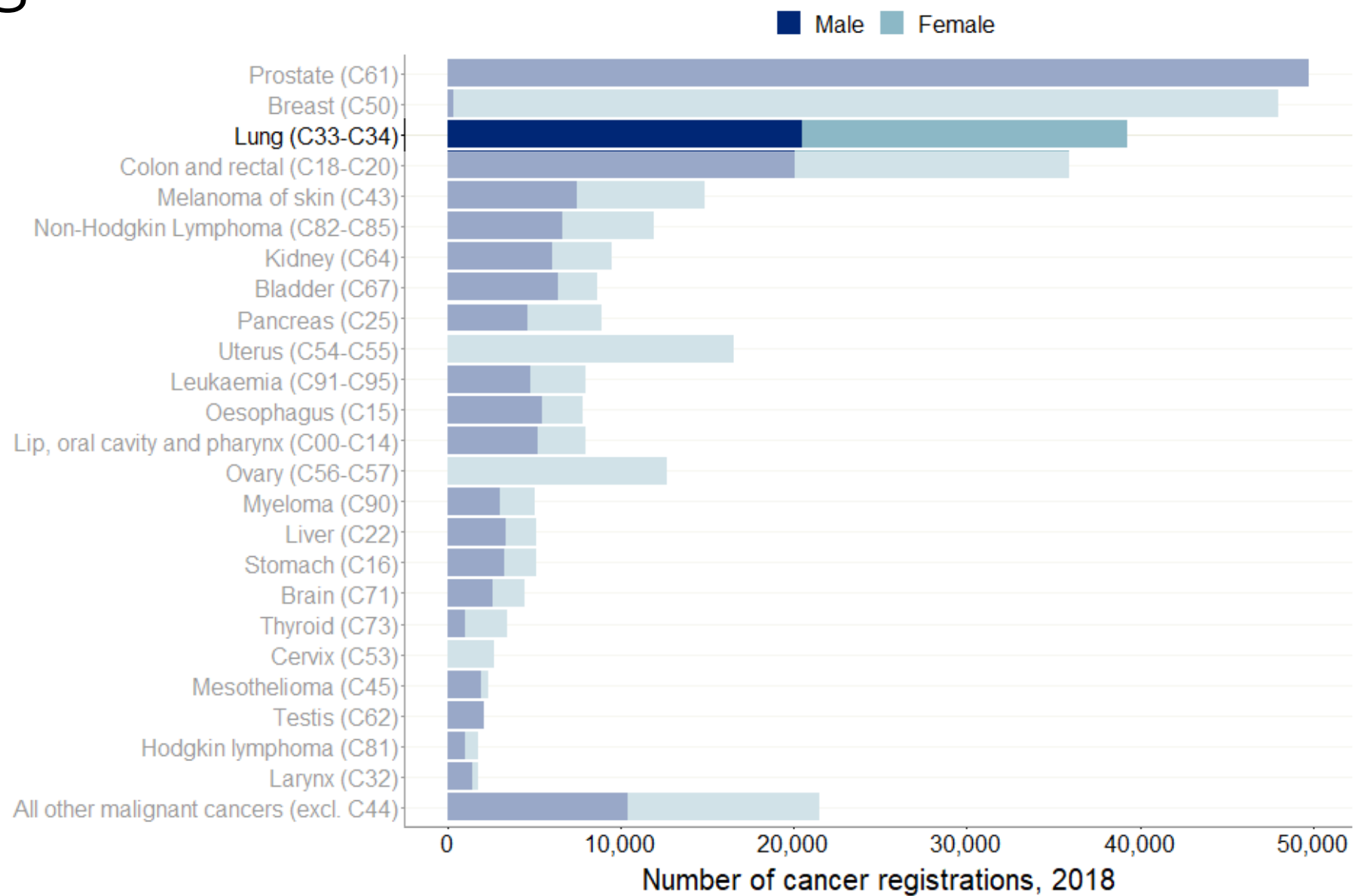


NCI Press Release

NIH study illuminates origins of lung cancer in never smokers

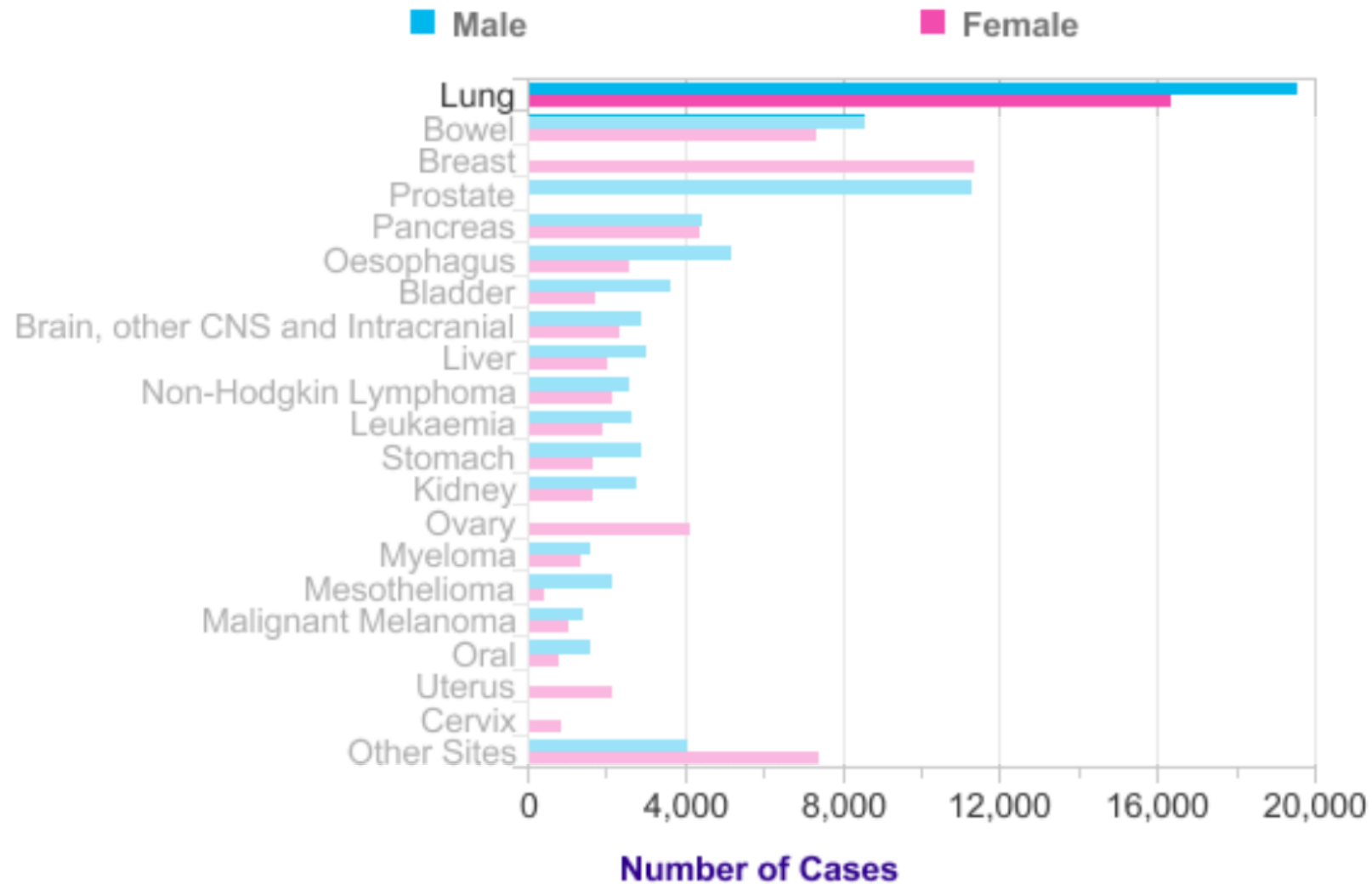
Posted: September 6, 2021

Lung Cancer



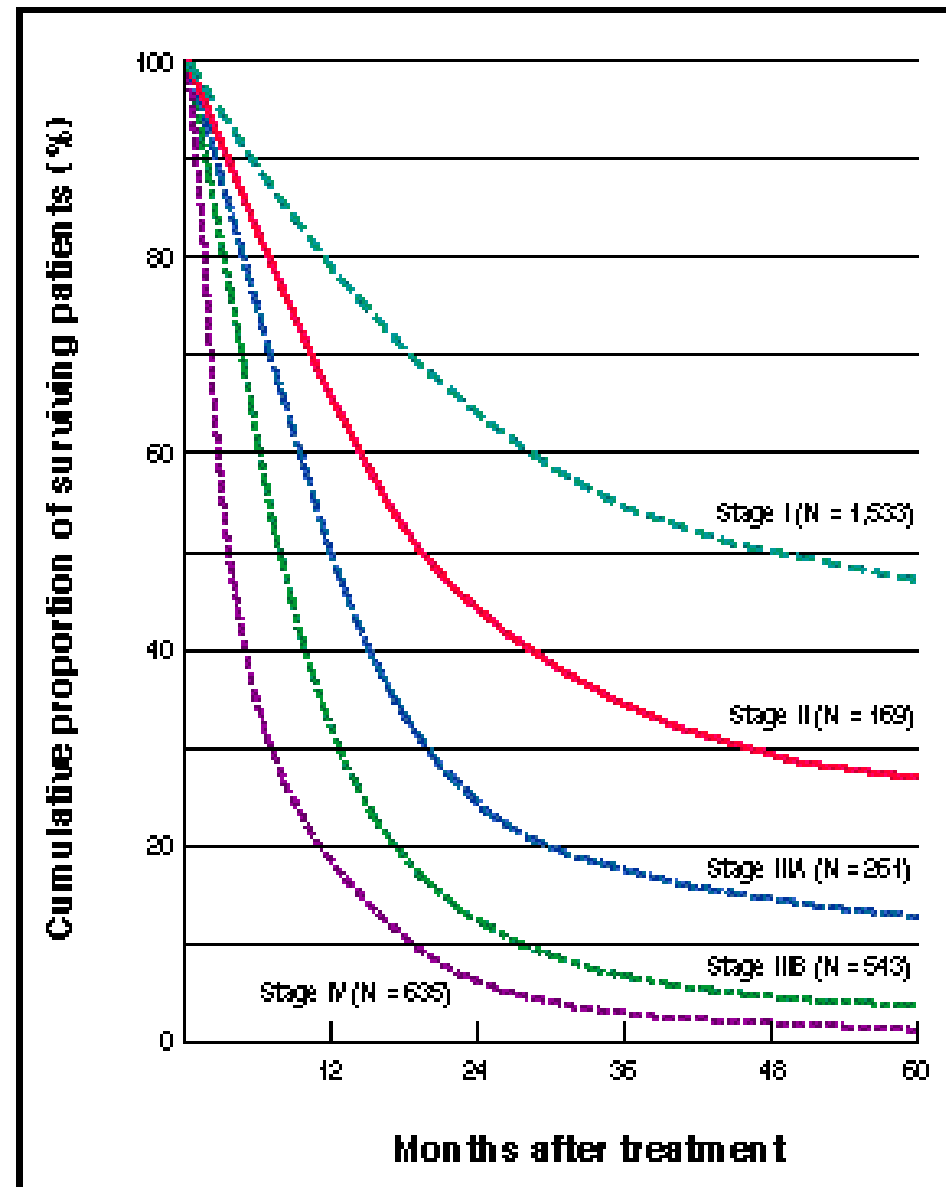
Source: Public Health England, National Cancer Registration and Analysis Service

Lung Cancer



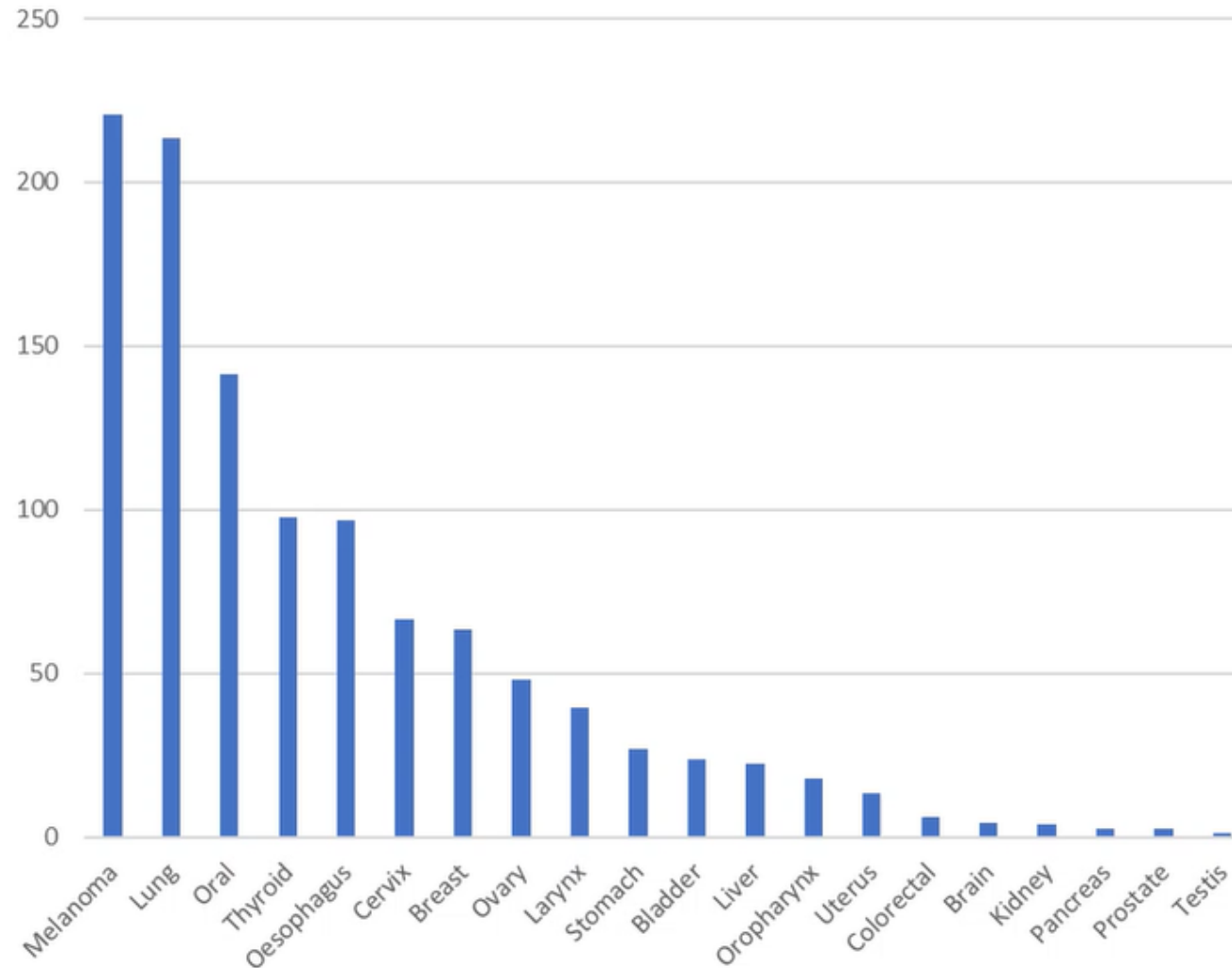
The top 20 most common causes of cancer death in the UK by gender, 2014 (Cancer Research UK., 2016a)

Lung Cancer - staging



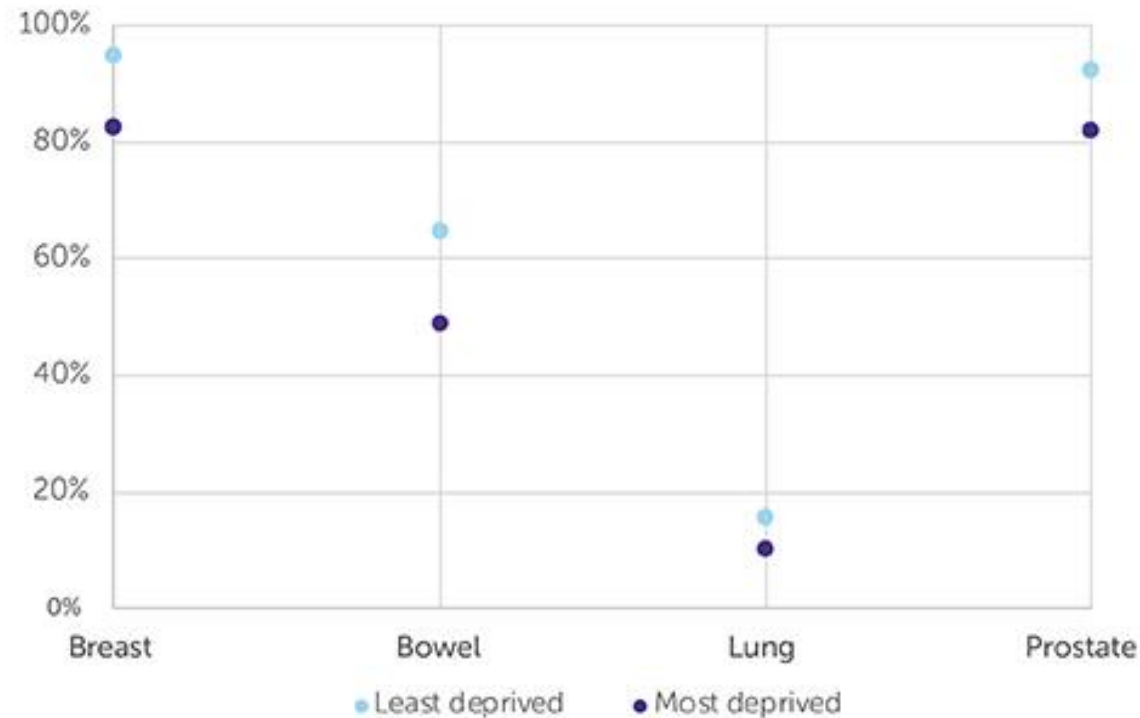
Lung Cancer – delay diagnosis

Loss of life years for each week of delay to diagnosis (England)



Targeted Lung Health Check (TLHC)

Five year cancer survival (net) by socio-economic deprivation, Wales, 2012-2016.



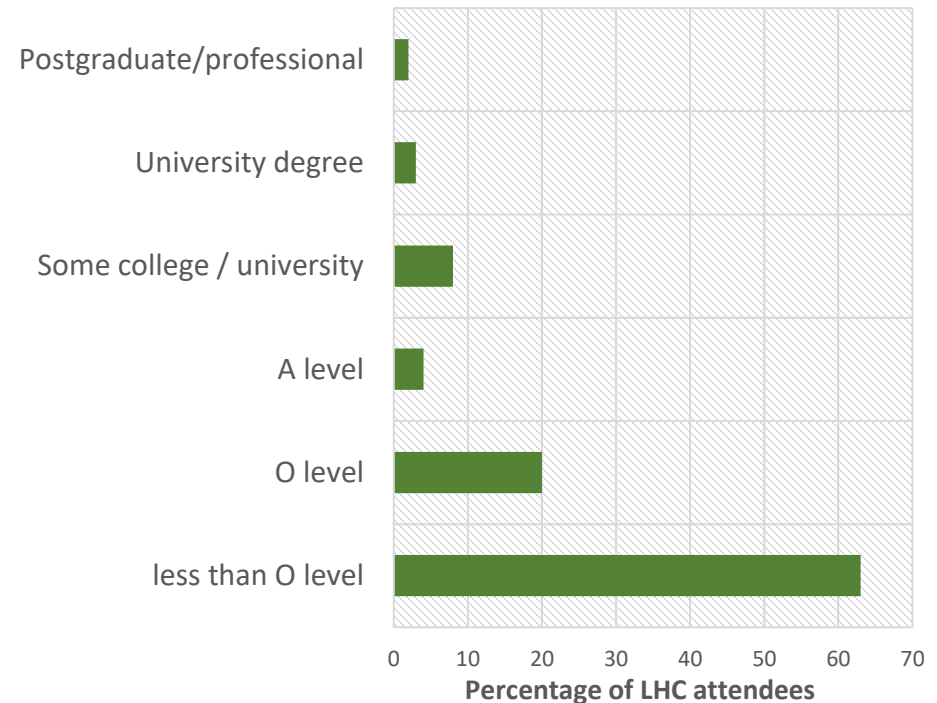
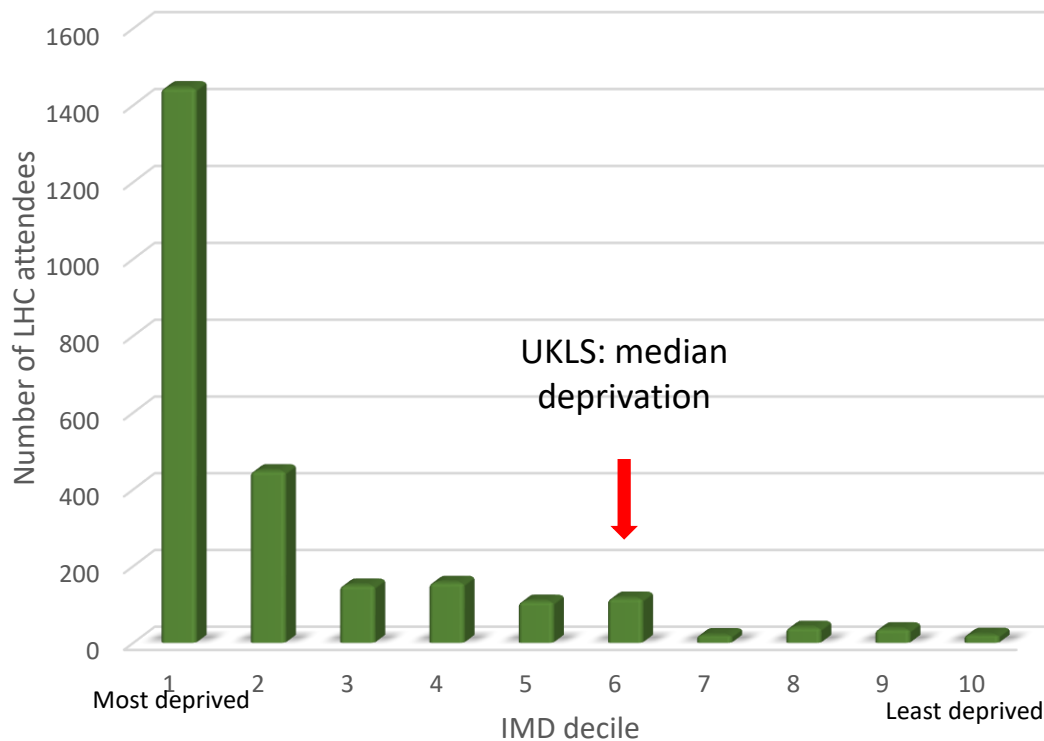
Together we will beat cancer



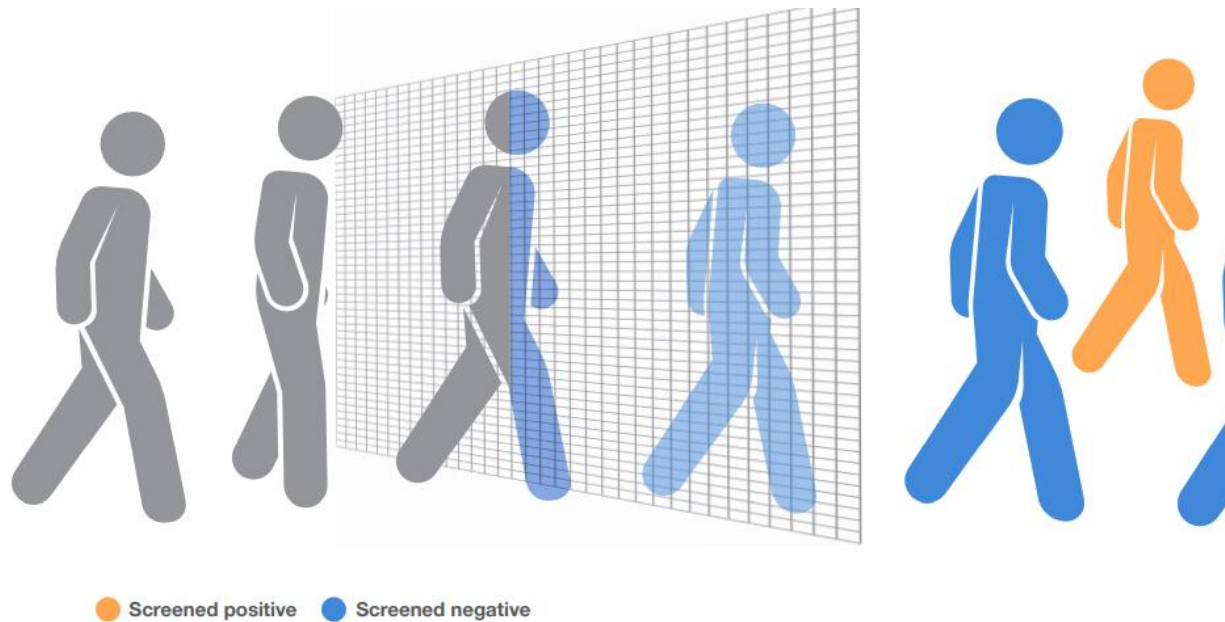
Targeted Lung Health Check (TLHC)

Deprivation: 75% lowest quintile
Over half lowest decile (56%)

Education: 82% left school by 16
62% without any 'O' levels

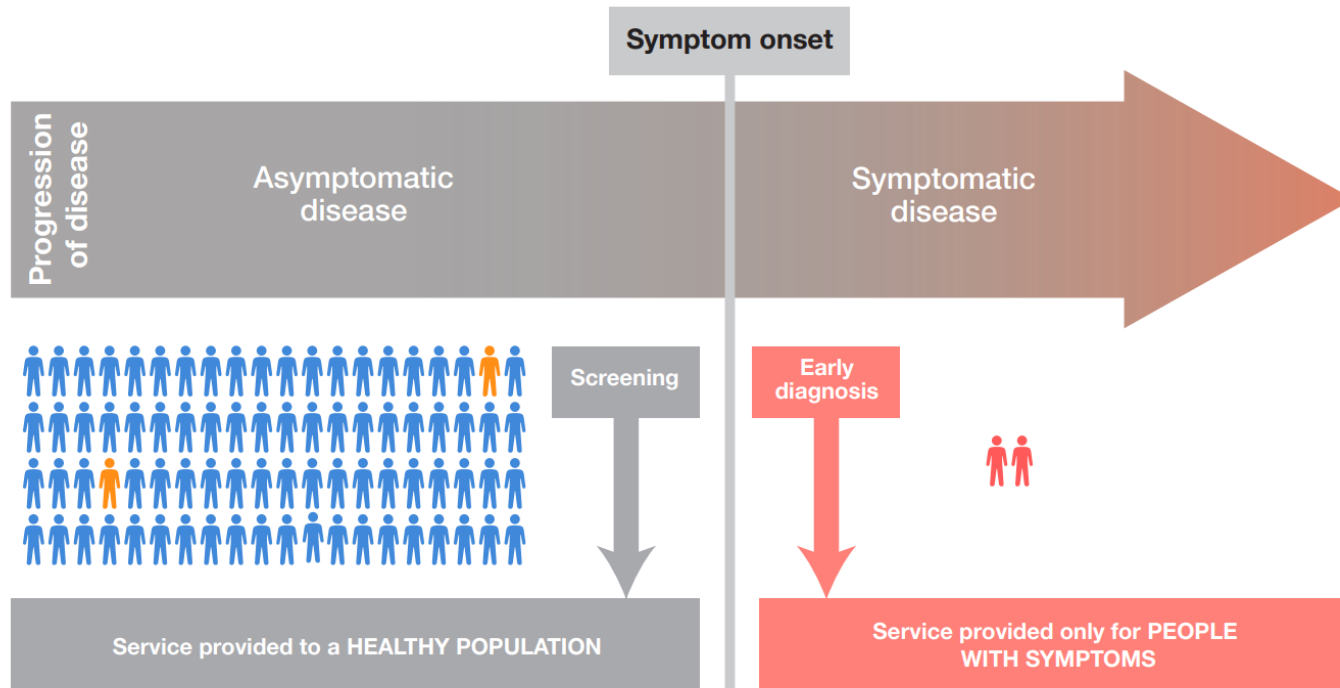


Targeted Lung Health Check (TLHC)



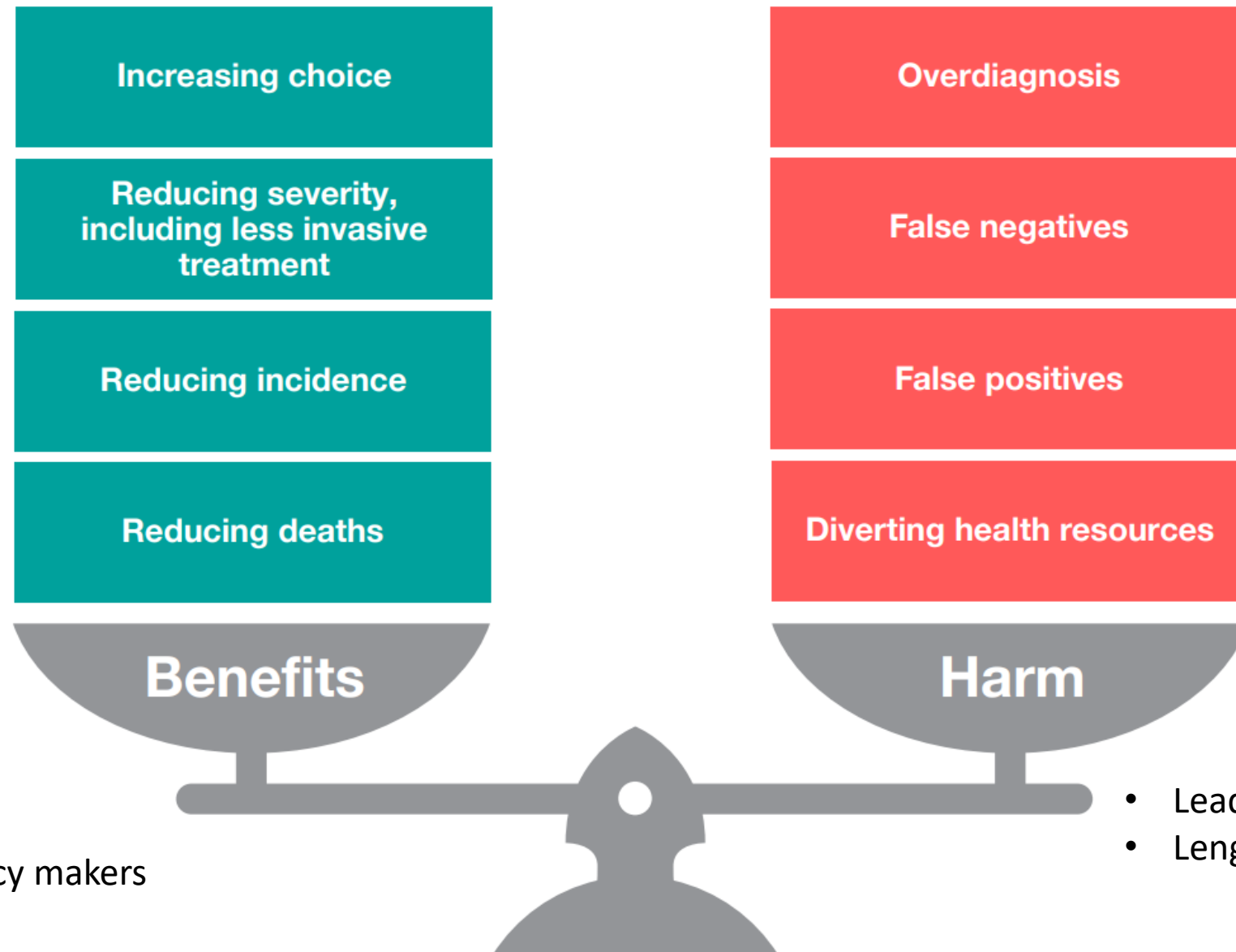
- Rough sorting process
 - Probably do
 - Probably do not
- Never 100% accurate

Targeted Lung Health Check (TLHC)



- Not early diagnosis

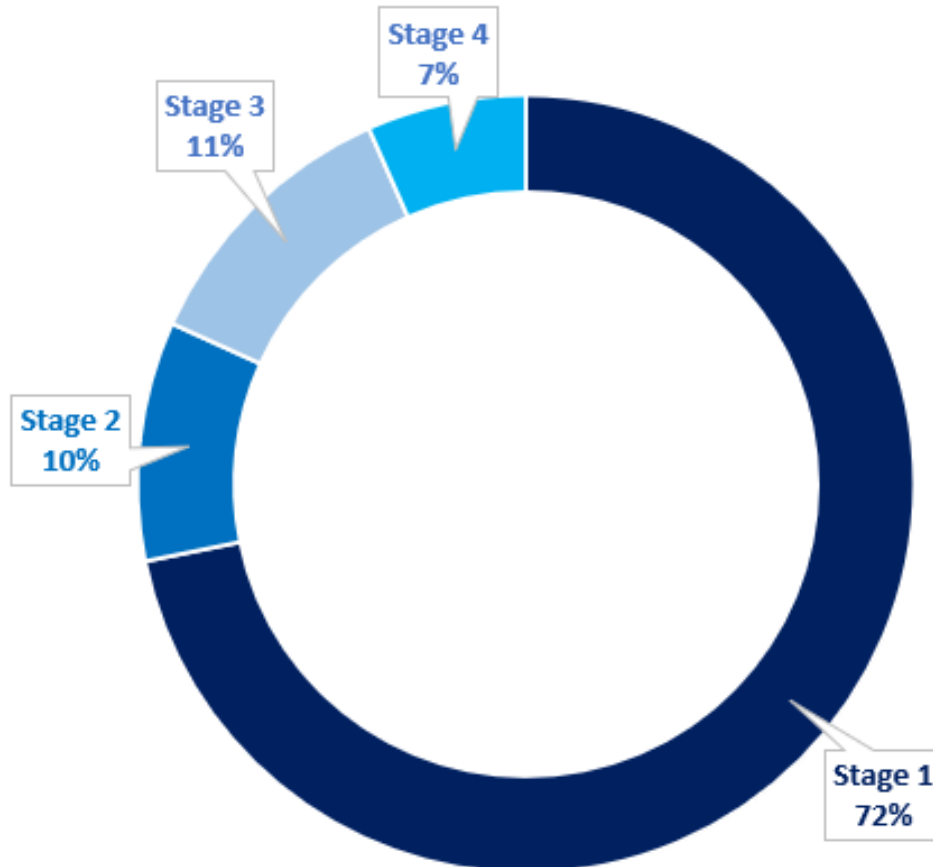
Targeted Lung Health Check (TLHC)



- Challenges to policy makers

Southampton (TLHC)

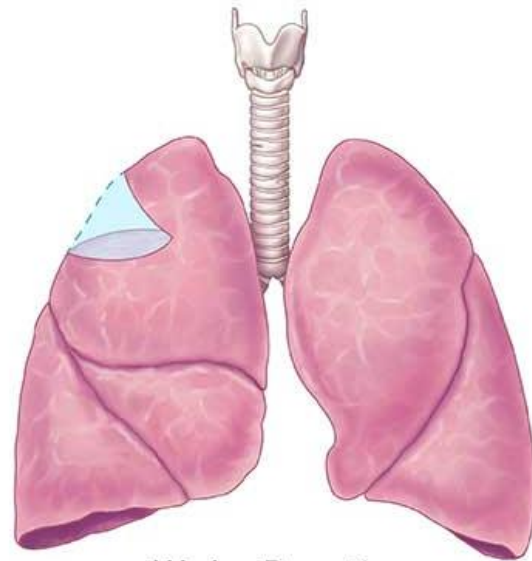
No. of participants invited to TLHC	33,685
No. of lung health checks performed	9,514



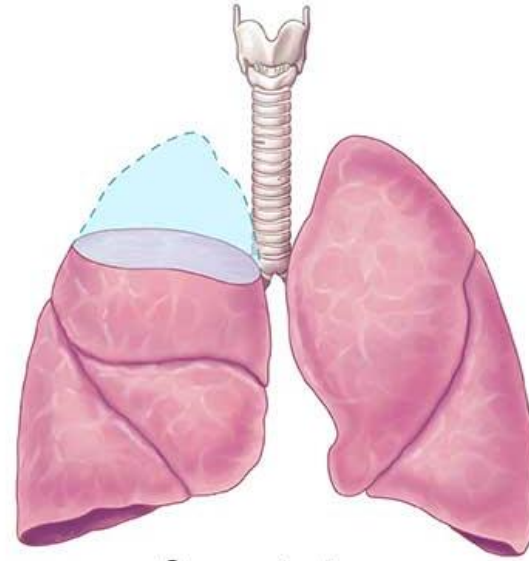
Stage 1	130	72 %
Stage 2	18	10 %
Stage 3	21	11 %
Stage 4	12	7 %
Total	181	

Innovation in thoracic surgery

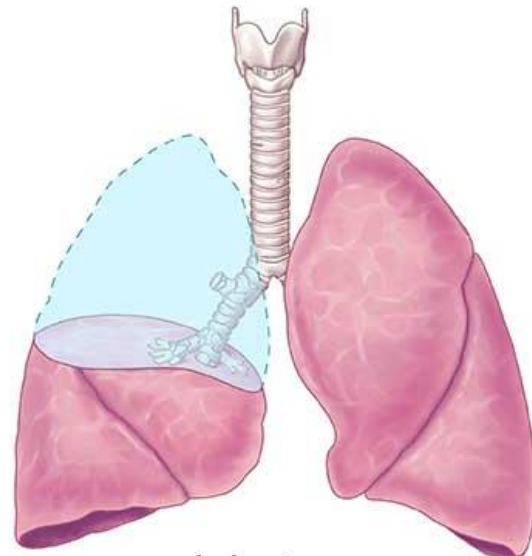




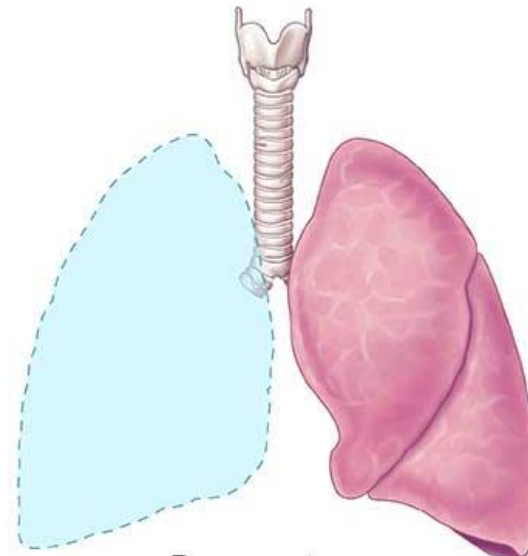
Wedge Resection



Segmentectomy



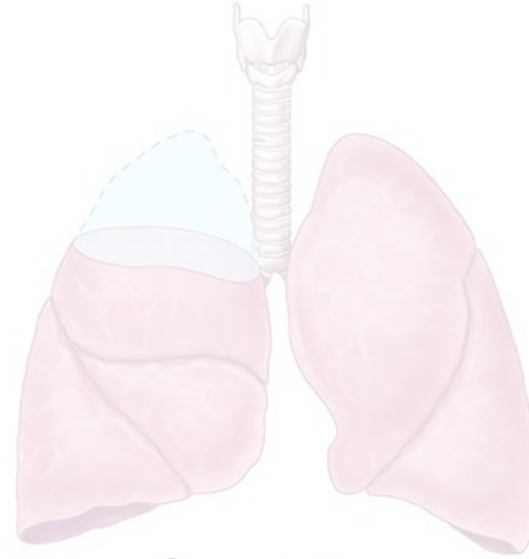
Lobectomy



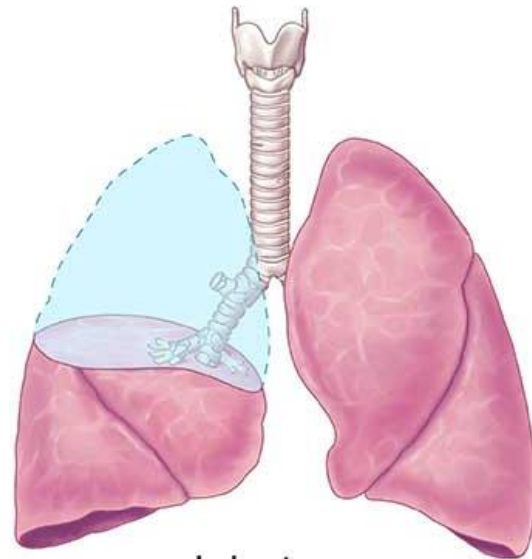
Pneumectomy



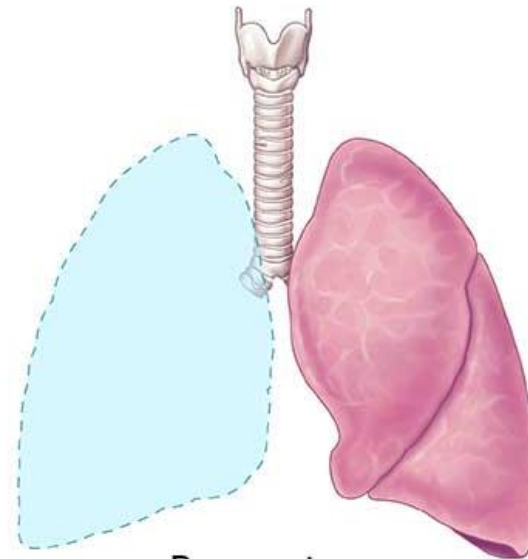
Wedge Resection



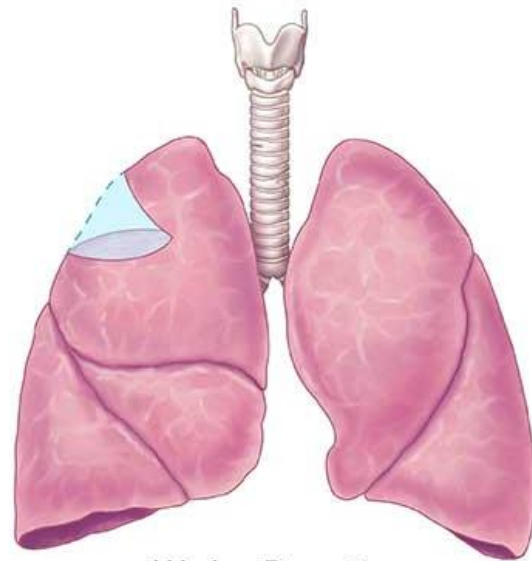
Segmentectomy



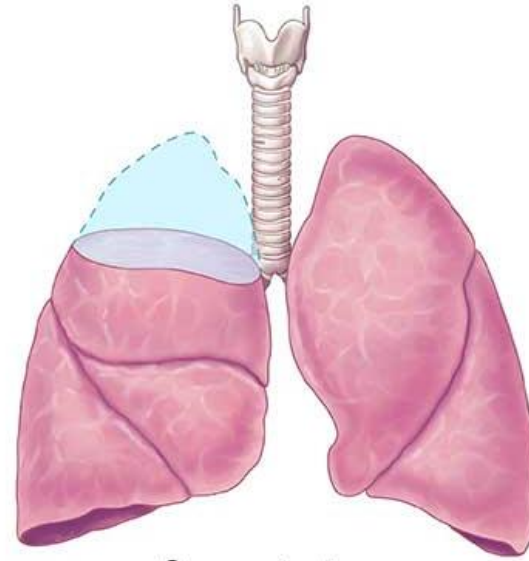
Lobectomy



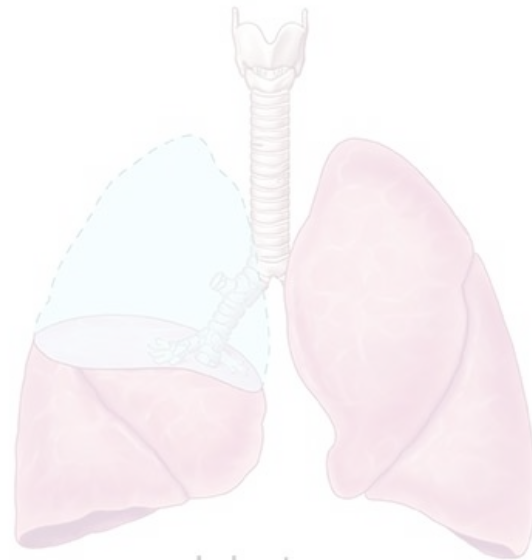
Pneumectomy



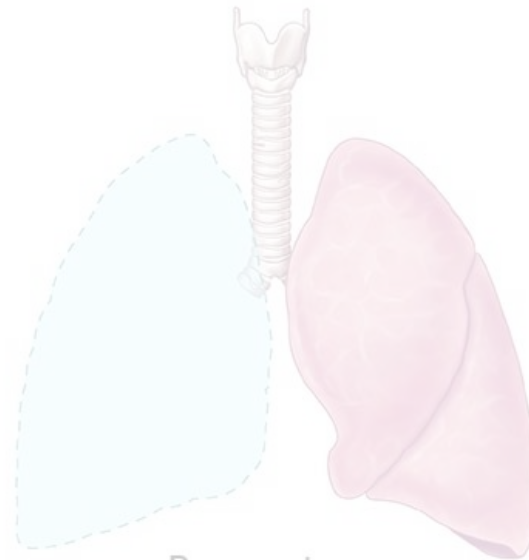
Wedge Resection



Segmentectomy



Lobectomy



Pneumectomy

Lung preserving surgery

- NSCLC T1a N0
- 697 randomised
- 7yrs median follow up
- Sub-lobar resection not inferior to lobectomy:
 - disease free survival
 - Overall survival
 - Loco-regional or distant recurrence

The image shows the title page of a journal issue. The title 'The NEW ENGLAND JOURNAL of MEDICINE' is printed in red serif font on a light yellow background. Below the title, the text 'ESTABLISHED IN 1812', 'FEBRUARY 9, 2023', and 'VOL. 388 NO. 6' is printed in a smaller, dark blue font. The main title of the article, 'Lobar or Sublobar Resection for Peripheral Stage IA Non-Small-Cell Lung Cancer', is printed in a dark blue serif font below the journal information.

The NEW ENGLAND
JOURNAL *of* MEDICINE

ESTABLISHED IN 1812

FEBRUARY 9, 2023

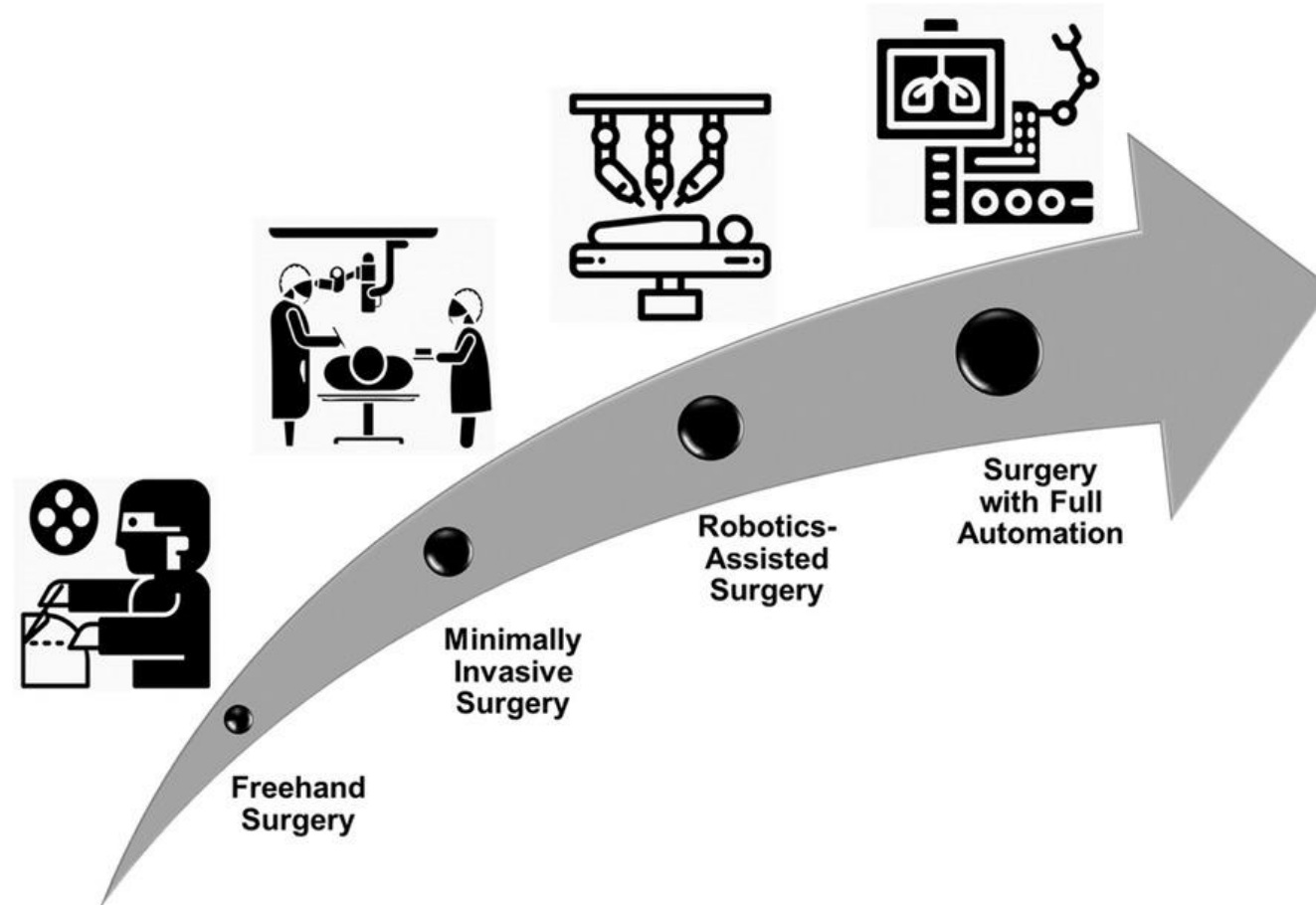
VOL. 388 NO. 6

Lobar or Sublobar Resection for Peripheral Stage IA
Non-Small-Cell Lung Cancer

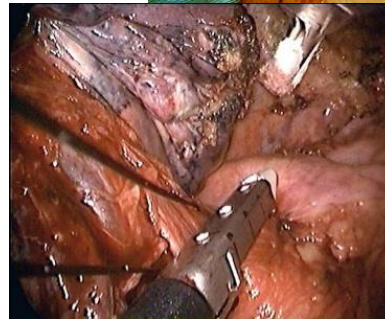
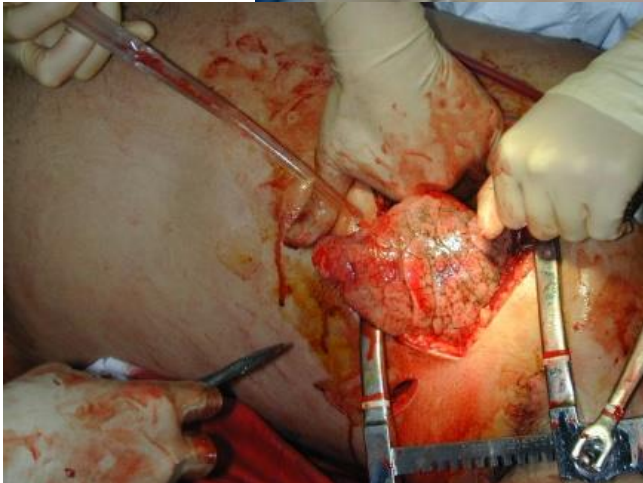
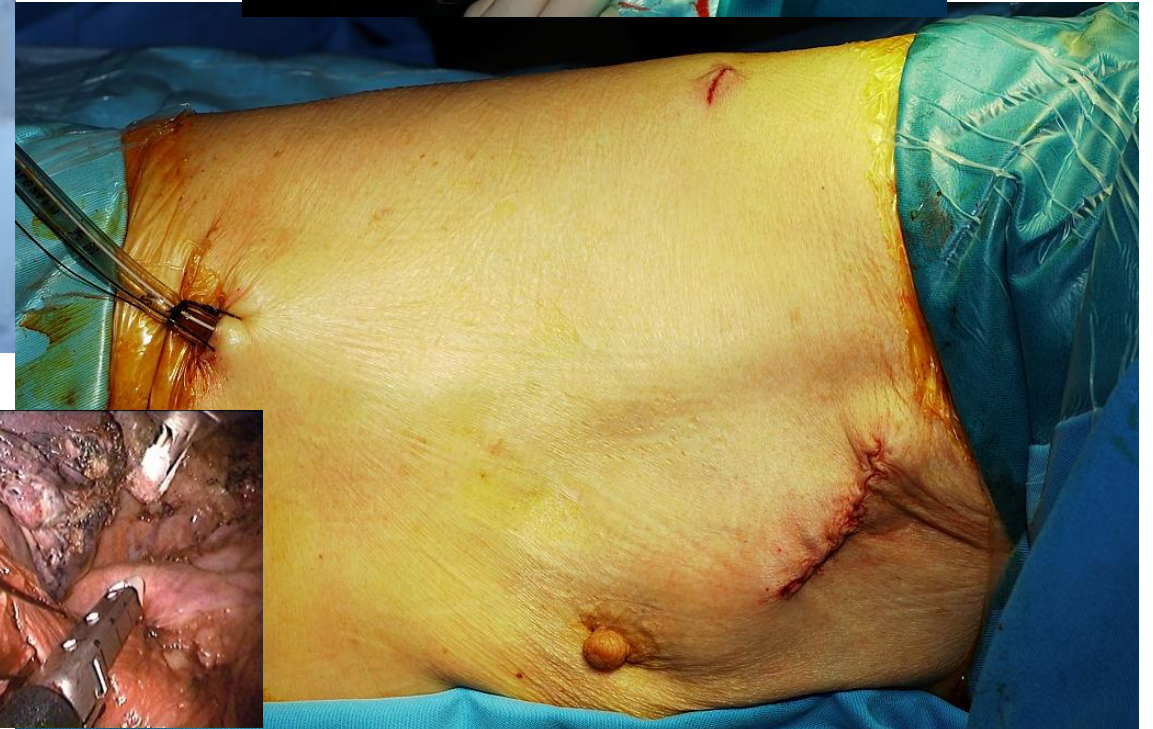
Lung preserving surgery

- New technologies
 - TLHC
 - Surgical robotic
 - 3D reconstruction of CT images

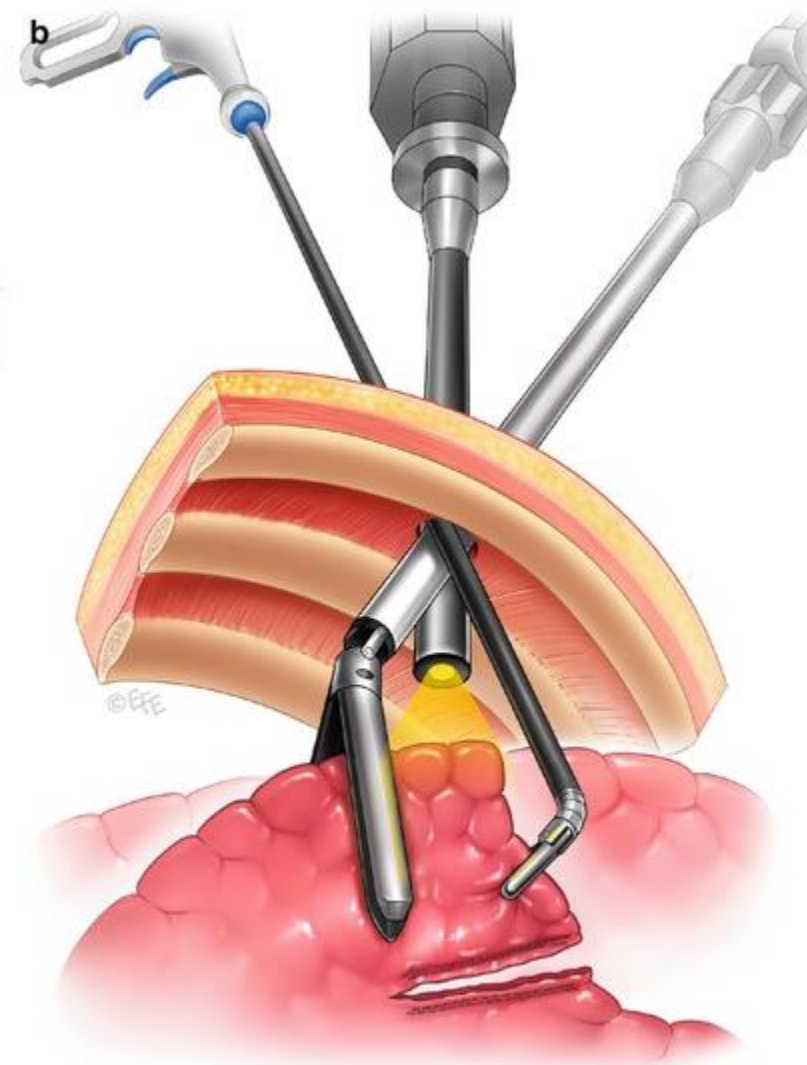
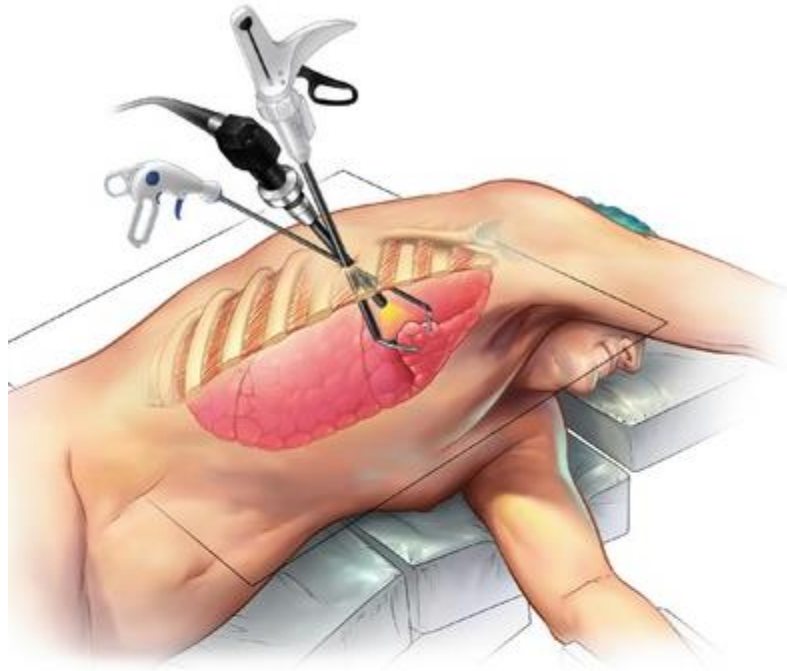
Evolution of surgical access



Surgical Access



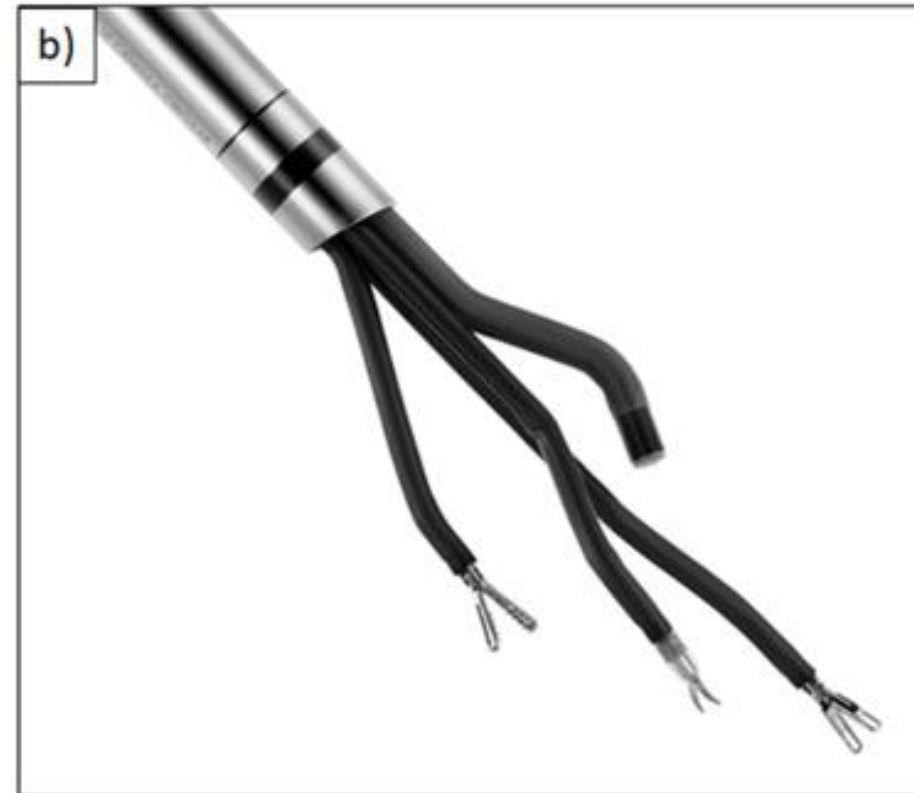
Uni-portal VATS




Surgical Robotics




Single port robotic system





Benefits of robotic system





For the patient

- 


More precise surgery
- 

Less pain
- 


Fewer surgical complications
- 


Reduced need for hospital stay
- 


Shorter recovery time



For the surgeon

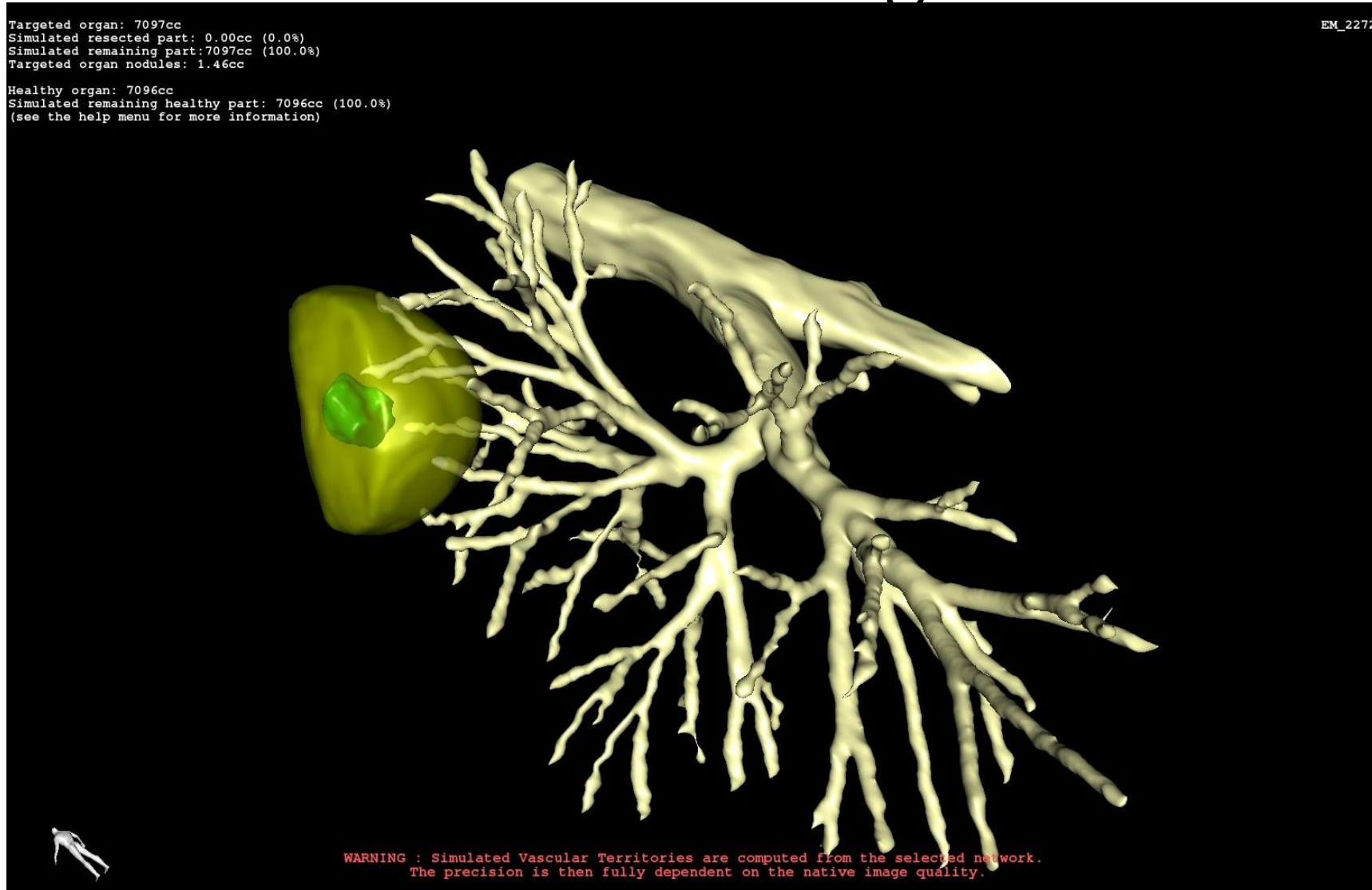
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An enhanced visual field
- 

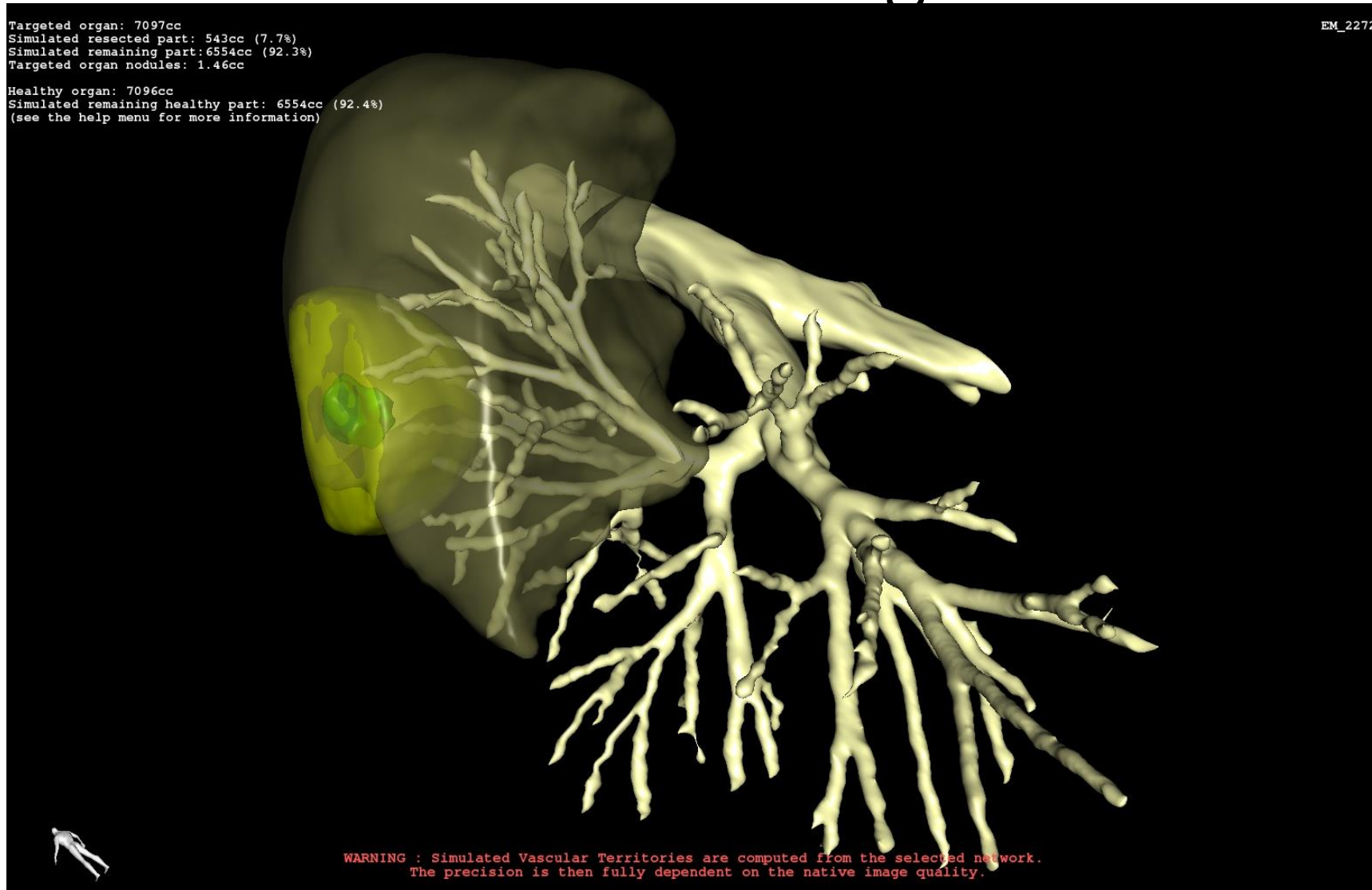
Superior dexterity
- 

Better access to areas of concern

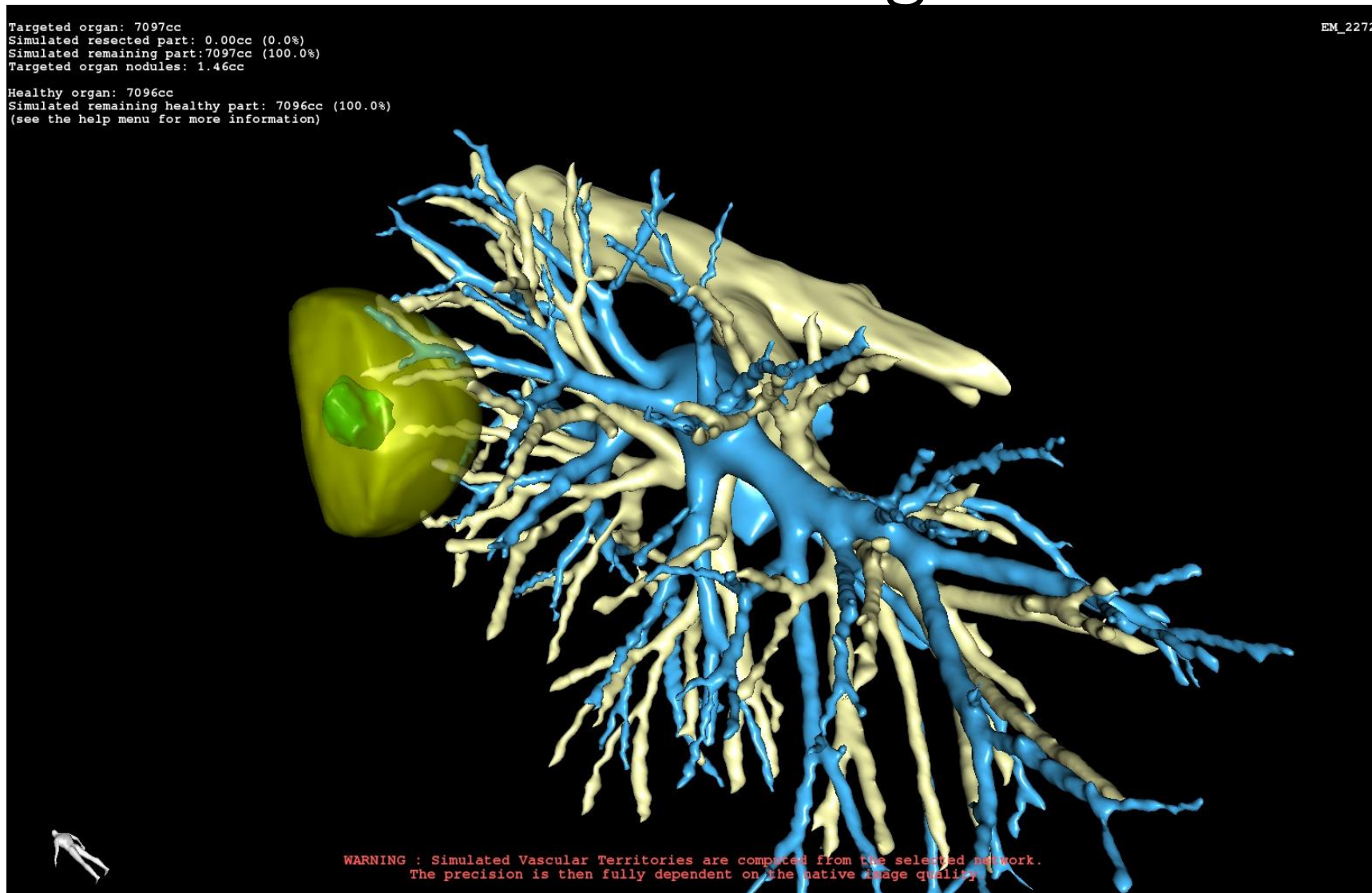
3D reconstruction of CT images



3D reconstruction of CT images



3D reconstruction of CT images



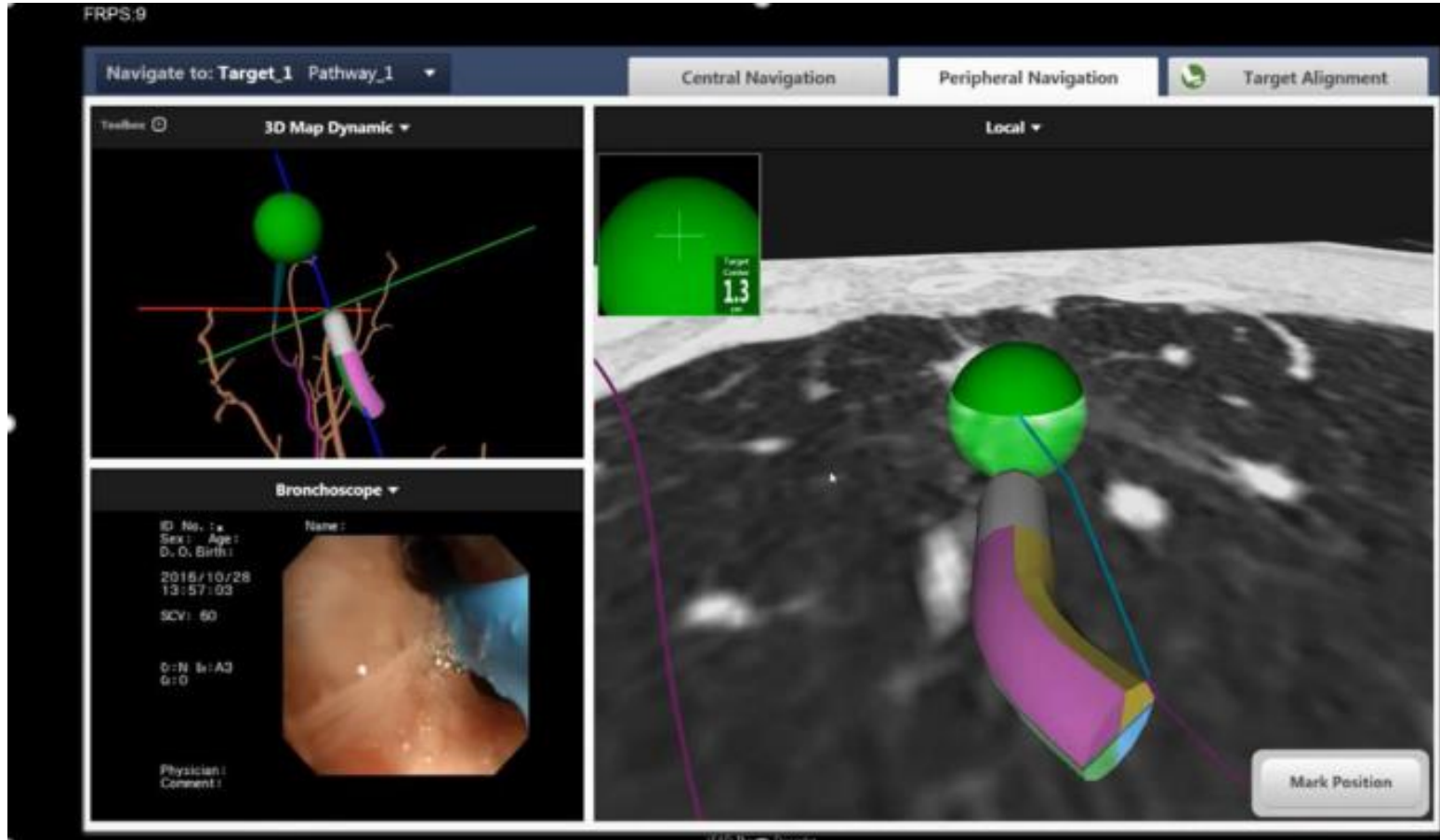
Indocyanine green (ICG)



Deep nodule



Electro Magnetic Navigation Bronchoscopy (ENB)



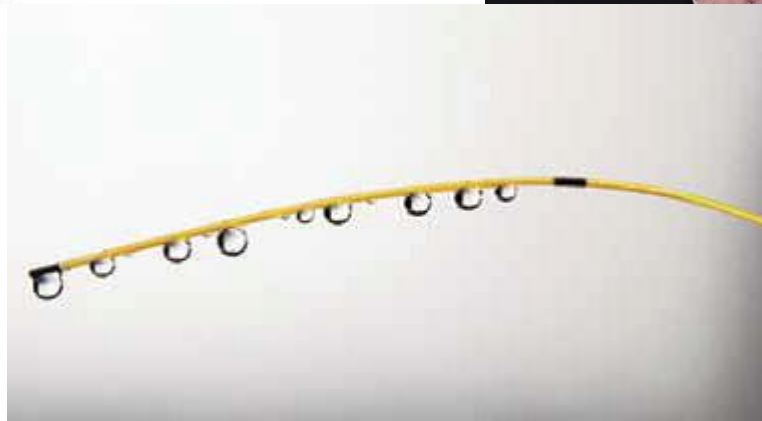
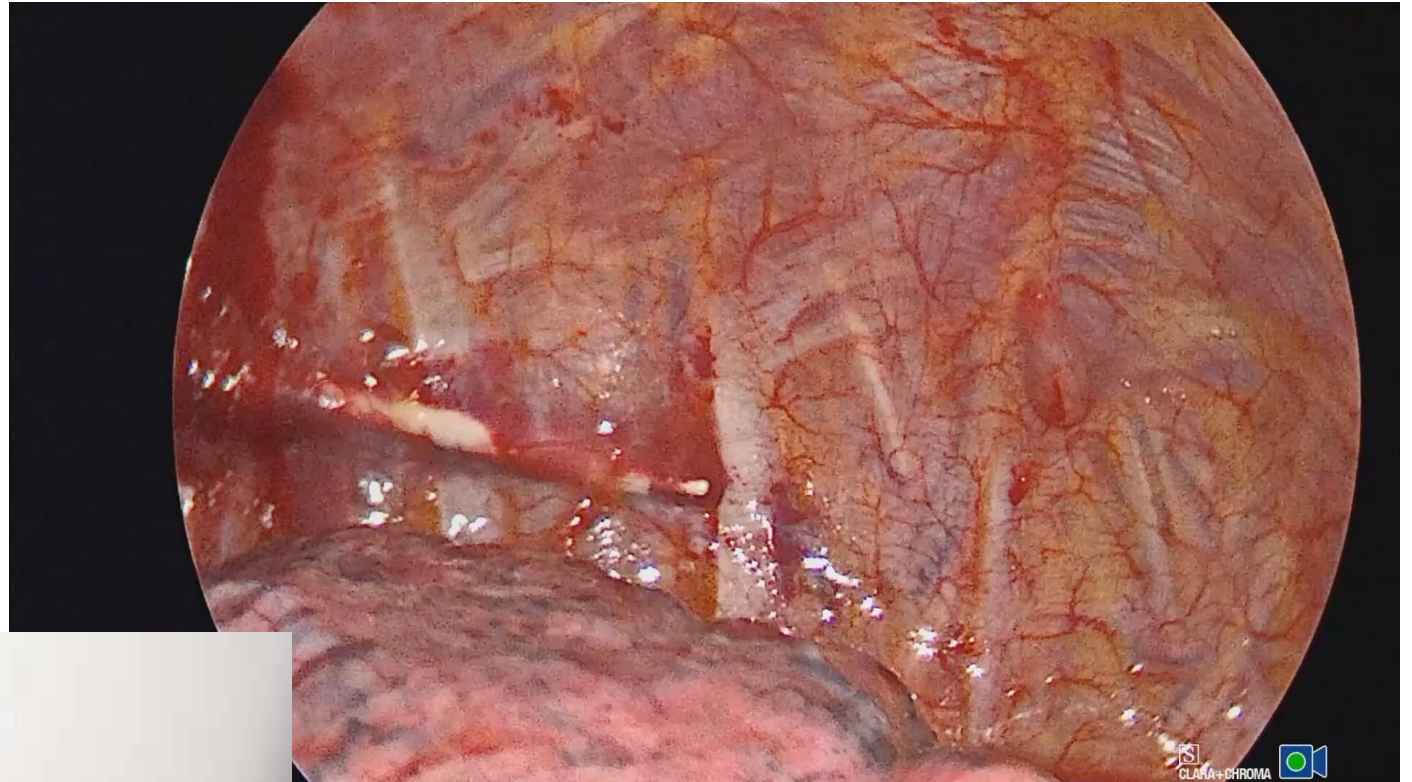
Robot Assisted Bronchoscopy



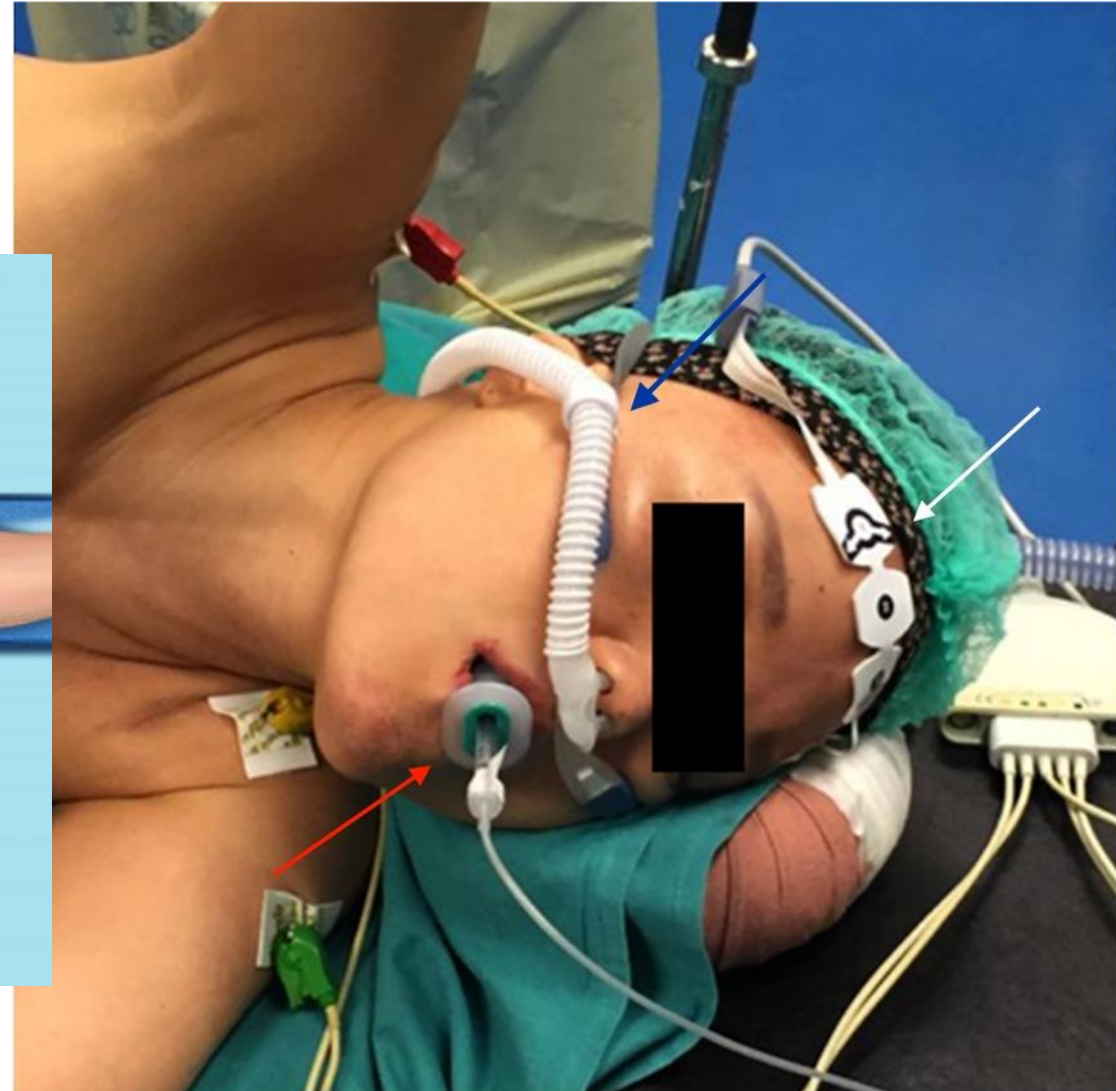
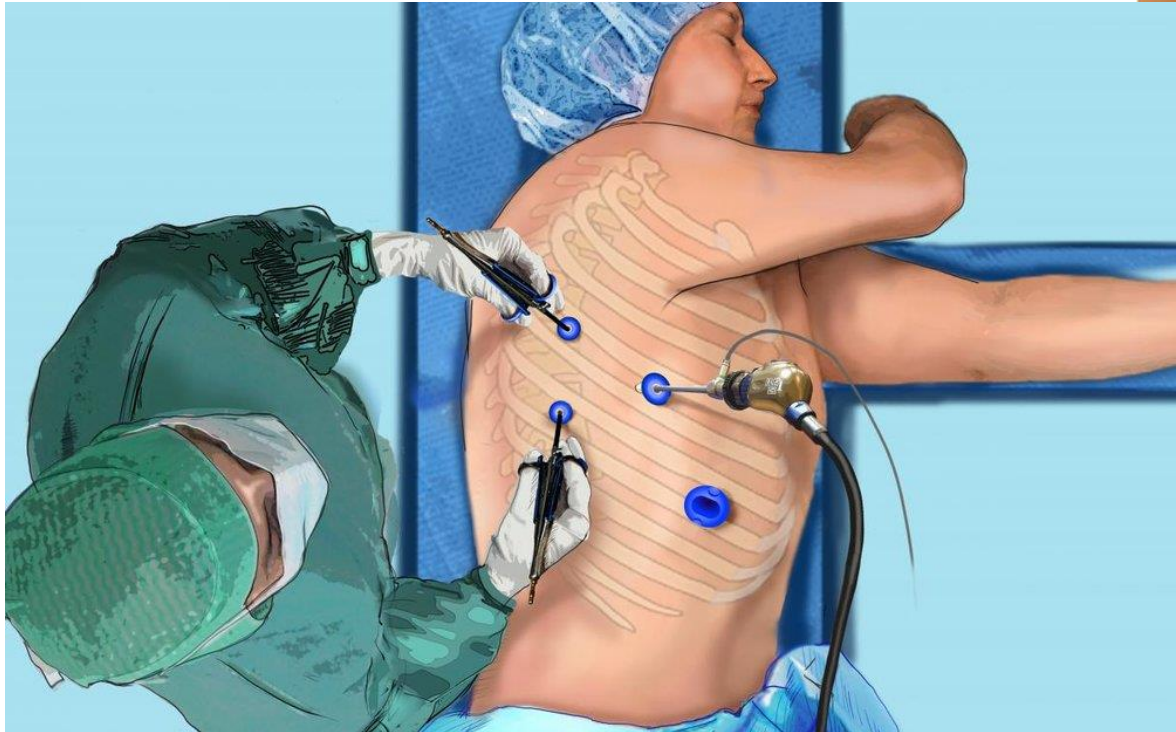
Hybrid Theatre



Epi pleural anaesthetic



Non-intubated thoracic surgery





Proactive Physiotherapy

- Start in recovery room
- Early Mobilisation
- Sitting out
- Walk to bathroom
- Portable drain suction unit

Digital chest drain system



Digital chest drain system



Ambulatory air leak management

