

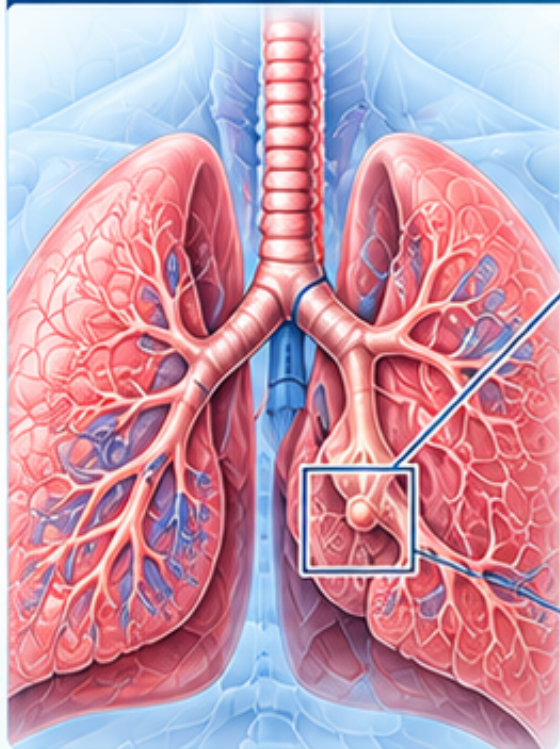
LUNG NODULES & LUNG CANCER SCREENING

Earlier detection. Better outcomes.

Lung nodules are small, round or oval growths in the lung. Most are benign (non-cancerous), but some can be early lung cancers. Lung cancer screening with low-dose CT (LDCT) can detect cancer earlier, when treatment is more effective.

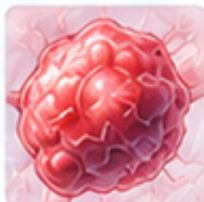
DETECT
ASSESS
MONITOR
TREAT
LIVE WELL

WHAT ARE LUNG NODULES?

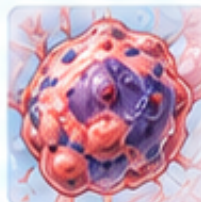
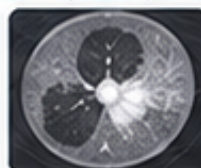


TYPES OF NODULES

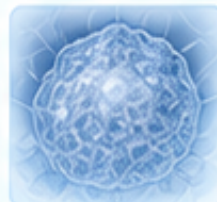
Solid nodule
Most common



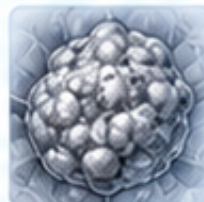
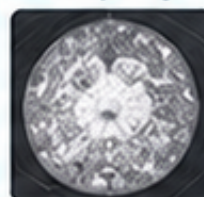
Part-solid nodule
Part solid, part ground-glass



Ground-glass nodule
Hazy appearance



Calcified nodule
Usually benign

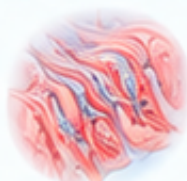


- Lung nodules are small, round or oval growths in the lung tissue.
- They are usually found incidentally on a CT scan.
- Most are benign, but some can be early lung cancers.

COMMON CAUSES



Previous lung infections (e.g. bacterial, COVID-19, TB)



Scarring from previous inflammation or injury



Inflammatory conditions (e.g. sarcoidosis, rheumatoid arthritis)



Smoking related changes and exposure to environmental carcinogens

RISK FACTORS FOR LUNG CANCER



Current or past smoking (highest risk)



Family history of lung cancer



Exposure to radon, asbestos, silica and other occupational exposures



Increasing age (risk rises after 50)



Previous lung disease (e.g. COPD, pulmonary fibrosis)



Previous personal cancer history

SYMPTOMS



Often no symptoms early on



Persistent cough



Chest discomfort



Fatigue



Unintentional weight loss



Coughing up blood (less common)

A NEW ERA IN LUNG CANCER CARE

FIVE-YEAR SURVIVAL (USA)

~18% to ~30%

Over approximately eight years

EARLIER DIAGNOSIS

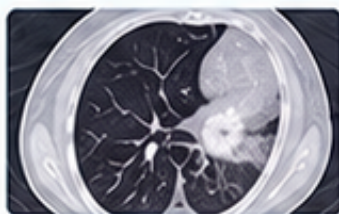
Low-dose CT can identify more cancers before they spread, when curative treatment is more likely.

MORE EFFECTIVE CARE

Improved biopsy tools, minimally invasive surgery, radiotherapy, targeted medicines and immunotherapy expand options.

HOW NODULES ARE ASSESSED

1 CT scan characteristics



- Size (diameter)
- Shape (round, irregular, spiculated)
- Density (solid, part-solid, ground-glass)
- Location in the lung
- Changes over time

2 Risk assessment



- Age and smoking history
- Previous cancer
- Exposure history
- Use of validated risk models (e.g. Brock model)

3 Follow-up or further tests



- Repeat CT scans to monitor
- PET-CT scan (for higher risk nodules)
- Biopsy (CT-guided, bronchoscopic or surgical)
- Multidisciplinary team review

4 Specialist review



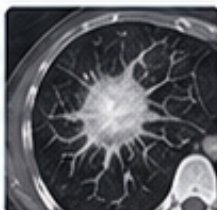
- Discuss results and risk
- Plan surveillance or treatment
- Personalised care based on your individual situation

CT SCAN EXAMPLES

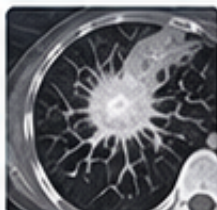
Benign nodule
(smooth, calcified)



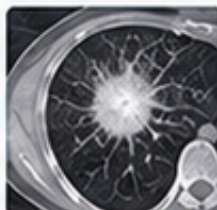
Inflammatory nodule
(post-infection)



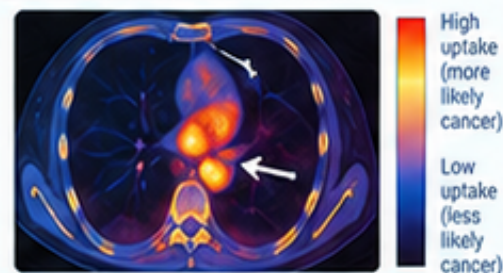
Suspicious nodule
(spiculated)



Part-solid nodule
(mixed density)



PET-CT SCAN



- PET-CT can help identify metabolically active nodules
- Not all nodules take up tracer (e.g. some early cancers)

MANAGEMENT OPTIONS

CT FOLLOW-UP (low-risk nodules)



- Repeat CT at agreed intervals.
- Watch size, growth and density.
- Many tiny low-risk nodules are safer to monitor.

ADVANCED BIOPSY (selected small nodules)



- Robotic or navigational bronchoscopy may reach selected small nodules.
- CT-guided needle biopsy is another option.
- Not every tiny nodule can or should be biopsied.

EARLY LOCAL CARE (when cancer is localised)



- Minimally invasive (VATS/robotic) surgery can be curative.
- Stereotactic radiotherapy (SBRT) suits selected patients.
- Treatment choice depends on stage and fitness.

PRECISION THERAPIES (stage and biology guide care)



- Tumour molecular testing can guide targeted medicines.
- Immunotherapy and chemotherapy help selected patients.
- An expert multidisciplinary team tailors care.

LUNG CANCER SCREENING (AUSTRALIA)



- ✓ Low-dose CT (LDCT) scan
- ✓ Targeted to people at higher risk
- ✓ Aged 50-70 years (current or former smokers)
- ✓ At least 30 pack-year smoking history
- ✓ Quit within the last 10 years (for former smokers)
- ✓ No symptoms required

ng cancer at an earlier, more treatable stage

YOUR LUNG HEALTH ACTION PLAN



Discuss your individual risk with your doctor



Consider lung cancer screening if eligible



Avoid smoking and lung irritants



Stay active and maintain a healthy weight



Seek support from healthcare professionals

