

FREE PATIENT GUIDE

The Lung Nodule Patient Guide

100 honest answers about lung nodules – from the day one is found to the day you have certainty.



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A note from Mr Scarci

If you are reading this, a scan has probably shown a nodule on your lung – and someone may have told you it is “probably nothing.” They are most likely right. More than 95% of small lung nodules turn out to be benign.

But “probably” is a difficult word to live with. In more than twenty years as a thoracic surgeon, I have met thousands of people carrying a question mark between scans – and I have learned that the anxiety is rarely about the nodule itself. It is about not understanding it.

This guide exists to close that gap. It answers, plainly and honestly, the one hundred questions patients most often ask me – about what nodules are, what scan reports mean, how risk is actually calculated, what surveillance is for, and when action is the right choice.

It will not diagnose your nodule; no booklet can. But by the end of it, you should understand your own situation well enough to ask the right questions – and to recognise a properly explained plan when you are given one.

Mr Marco Scarci

PLEASE READ – This guide is for general information and education only. It is not medical advice, and it does not replace a consultation with a qualified clinician who can assess your individual situation, images and history. Figures quoted are rounded, population-level estimates and may not reflect your personal risk. If you have symptoms that concern you – such as coughing blood, unexplained weight loss or worsening breathlessness – seek medical attention promptly rather than waiting for a scheduled scan.

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SECTION 1

The basics

What a nodule actually is, how common they are, and why finding one is not the news it first sounds like.

Q1. What exactly is a lung nodule?

A lung nodule is a small, roughly round area of denser tissue within the lung, up to 3cm (30mm) across, usually discovered on a CT scan. Anything larger than 30mm is called a mass and is assessed differently.

Q2. Is a nodule the same as a tumour?

"Tumour" simply means a growth of tissue, and growths can be benign or malignant. A nodule is a description of what the scan shows – not a diagnosis. Most nodules are not cancer.

Q3. How common are lung nodules?

Very. As many as one in four chest CT scans show at least one small nodule. Modern scanners are so sensitive that they detect findings which would have been invisible a generation ago.

Q4. Does finding a nodule mean I have cancer?

No. More than 95% of small nodules turn out to be benign – old scars, inflammation or harmless growths. Finding one means the scan deserves further thought, which is sometimes nothing more than a single check scan.

Q5. Why didn't I feel anything?

Nodules are almost always far too small to cause symptoms, and lung tissue itself has no pain sensors. That is why nearly all nodules are found incidentally, on scans done for another reason.

Q6. Could the nodule be causing my cough or chest pain?

Usually not. Small nodules very rarely cause symptoms, so a cough or pain generally has a separate explanation. A good assessment considers both – the symptom and the nodule – on their own merits.

Q7. What's the difference between a "nodule", a "spot", a "shadow" and a "lesion"?

In practice, nothing. These are interchangeable words doctors and letters use for the same finding – "lesion" simply means any abnormal area. The choice of word does not signal how serious it is.

Q8. I have more than one nodule - is that worse?

Not necessarily. Several tiny nodules are commonly the footprints of an old infection or inflammation. What matters is the overall pattern, which a specialist assesses as a whole rather than counting.

Q9. Can a chest X-ray find nodules?

Sometimes, if they are large enough — but X-rays miss most small nodules. CT is far more sensitive, which is why nodules are a CT finding and why CT is the tool used to follow them.

Q10. What does "incidental finding" mean on my report?

It means the nodule was noticed while scanning for something else — a heart check, an injury, a screening scan. This is by far the most common way nodules come to light, and it says nothing about seriousness.

Q11. Will my nodule go away on its own?

Some do. Nodules caused by infection or inflammation can shrink or disappear entirely on a repeat scan — and when that happens, the disappearance is itself the reassurance.

Q12. Who should assess a lung nodule?

Radiologists find and describe them, but decisions are best made by clinicians who manage lung disease — respiratory physicians and thoracic surgeons — ideally reviewing your actual images, not just the written report.

SECTION 2**Why nodules happen**

The causes behind the finding — most of them stories your lungs have already survived.

Q13. What causes most lung nodules?

Most are the harmless remains of things your lungs have dealt with: scar tissue from healed infections, small patches of inflammation, benign growths, or ordinary lymph nodes that happen to sit within the lung.

Q14. What is a granuloma?

A tiny knot of immune cells your body formed while fighting a past infection or irritation — tuberculosis and fungal infections are classic causes. Granulomas are very common, benign, and often develop calcium over time.

Q15. What is a hamartoma?

The most common benign lung tumour — a disorganised but harmless bundle of normal tissue types. Hamartomas often have a characteristic appearance on CT and, once identified, usually need nothing more than observation.

Q16. Can an old chest infection or TB leave a nodule?

Yes, and it is one of the most frequent explanations. A pneumonia or TB infection from decades ago can leave a small scar nodule that persists for life and never causes harm.

Q17. Can conditions like rheumatoid arthritis or sarcoidosis cause nodules?

They can. Several inflammatory conditions produce lung nodules as part of their picture, which is one reason your medical history genuinely changes how a scan is interpreted.

Q18. What is an intrapulmonary lymph node?

A completely normal lymph node that happens to lie inside the lung rather than beside it. Its typical position — often alongside a lung fissure — and shape allow specialists to recognise it as benign.

Q19. Can cancer from somewhere else appear as lung nodules?

It can. Because the lungs filter the entire blood supply, cancers elsewhere occasionally seed small deposits there, usually as multiple nodules. This mainly matters if you have had a cancer before — another reason history counts.

Q20. So when is a nodule an early lung cancer?

In a minority of cases. And here is the crucial point: when a nodule is an early cancer, catching it at nodule size is exactly what makes it most curable. That is the entire reason nodules are taken seriously rather than ignored.

SECTION 3

Understanding your CT report

A plain-English translation of the words radiologists use — so your own report stops being a foreign language.

Q21. What does "solid nodule" mean?

A nodule of uniform density that blocks the scan's view through it — the most common type. The great majority of solid nodules are benign, and their risk is judged on size, shape and change over time.

Q22. What is a "ground-glass" nodule or opacity (GGO)?

A hazy, partly see-through area, named for its frosted-glass look. Causes range from simple inflammation to the very earliest, slowest end of the cancer spectrum — which is why ground-glass nodules are followed patiently rather than dismissed or rushed.

Q23. What is a "part-solid" or "sub-solid" nodule?

A mix of ground-glass haze with a denser solid centre. These are watched the most carefully of all, because the combination carries a higher risk than either pattern alone; the solid component is what gets measured over time.

Q24. My report says the nodule is "calcified" – good or bad?

Usually good. Calcium laid down in the patterns typical of healed infection or a hamartoma is one of the most reassuring features a nodule can have, and often allows it to be declared benign on the spot.

Q25. What does "spiculated" mean?

Edges with fine spikes radiating outwards, like a star. It is a feature that raises concern and normally prompts further assessment. It is not proof of cancer – but it is never ignored.

Q26. What do "well-circumscribed" or "smooth margins" mean?

A clean, rounded, clearly defined edge – generally a reassuring description, more typical of benign nodules such as granulomas and hamartomas.

Q27. What does "perifissural" mean?

Sitting alongside one of the lung's natural folds, called fissures. This is the classic address of a benign intrapulmonary lymph node, and recognising it can spare you unnecessary follow-up.

Q28. Why does the report say which lobe the nodule is in?

Partly because location feeds the risk calculation – upper-lobe nodules carry slightly more weight – and partly because location matters for planning any future biopsy or operation.

Q29. What do the measurements in mm and mm³ mean?

Millimetres describe diameter; cubic millimetres describe volume. Volume measurement (volumetry) detects change far more accurately, and UK guidance prefers it for tracking nodules where the software is available.

Q30. What does "stable" mean on a follow-up report?

No meaningful change since the previous scan. For solid nodules, stability over time is powerful evidence of a benign cause – it is precisely what surveillance is designed to demonstrate.

Q31. What does "indeterminate" mean?

It is honest radiology language for "this single scan cannot say for certain." It is the trigger for surveillance or further tests – not a code for hidden bad news.

Q32. The report recommends "clinical correlation" or "MDT review" – what is that?

"Clinical correlation" means the images should be interpreted alongside your history and examination. "MDT review" means discussion at a multidisciplinary team meeting of specialists. Both are marks of careful practice, not alarm.

SECTION 4

Size, growth and risk

The honest numbers — what size really predicts, what changes the odds, and how your personal risk is actually calculated.

Q33. Why is size so important?

Because it is the single biggest predictor. The smaller a nodule, the more likely it is benign — and the relationship is strong enough that size alone decides whether some nodules need any follow-up at all.

Q34. What does a nodule under 6mm mean?

Very low risk — well under 1 in 100 prove malignant. Many nodules this size need no follow-up whatsoever, or at most a single check scan, depending on your background risk.

Q35. What about a nodule of 6-8mm?

Still low risk — roughly 1 to 2 in 100. The usual plan is a surveillance CT to confirm the nodule is stable, rather than any immediate intervention.

Q36. And a nodule over 8mm?

This is where proper characterisation begins. Average risk is around 3 in 100 but varies enormously with the nodule's features and your history — so nodules over 8mm deserve a formal risk calculation, and sometimes a PET-CT or biopsy.

Q37. What about 20mm or more?

A meaningful proportion of nodules this size are malignant, and prompt specialist assessment is the right response. Above 30mm the finding is called a mass and is investigated as one.

Q38. My nodule is exactly X mm – can anyone tell me my precise risk?

Not from size alone, and be cautious of anyone who tries. A genuine estimate combines size with shape, type, position, growth and your personal history — and a specialist should be able to show you that calculation, not just assert it.

Q39. What are these "risk models" I keep hearing about?

Validated calculators, used routinely in UK practice, that turn your nodule's measurable features and your history into an individual percentage risk. That percentage is what properly guides the choice between watching, testing and treating.

Q40. Which personal factors raise the risk?

Older age, a smoking history, a family history of lung cancer, emphysema or COPD visible on the scan, previous cancer of any kind, and asbestos exposure. None of these decides the answer alone — they shift the calculation.

Q41. I've never smoked – can my nodule still be cancer?

It can; lung cancer does occur in people who have never smoked, particularly the adenocarcinoma type. But a never-smoker's nodule is, on balance, even more likely to be benign. The assessment process is exactly the same careful one either way.

Q42. What is "volume doubling time"?

The time a nodule takes to double in volume — one of the strongest signals a nodule can give. Cancers tend to grow steadily over months; nodules that balloon within days to weeks usually mean infection, and those unchanged for years are almost always scars.

Q43. My nodule "grew" 1-2mm between scans – should I panic?

Not on that fact alone. Tiny apparent changes can reflect measurement variation between scans, breathing position, or different machines — which is exactly why volume measurement exists. Genuine, sustained growth is the significant finding, and any reported growth deserves a specialist's review.

Q44. Is a shrinking nodule good news?

Generally, yes. Shrinkage or disappearance points strongly to an inflammatory or infective cause, and is often the finding that closes the question for good.

SECTION 5

Surveillance – the "watch and rescan" plan

Why watching is often the right medicine, what it should involve, and what a properly explained plan looks like.

Q45. Why watch a nodule instead of just removing it?

Because for most nodules, the chance of cancer is far smaller than the certainty of an operation. Surveillance lets a harmless nodule prove itself harmless — while keeping every option open if it does not. For the right nodule, watching is not hesitation; it is the evidence-based choice.

Q46. What does surveillance actually involve?

Repeat CT scans at planned intervals — commonly around three months and twelve months for solid nodules that need follow-up — with each scan's measurements compared precisely against the last.

Q47. How long does surveillance last?

For solid nodules, stability across scans over roughly two years is generally accepted as proof of a benign cause. Ground-glass and part-solid nodules change far more slowly and are followed for longer — often several years — by design, not indecision.

Q48. What does "stable for two years" actually prove?

For a solid nodule, two years without growth makes cancer very unlikely, and it is the standard threshold for discharge. Ground-glass nodules need that longer view because even the rare malignant ones move slowly.

Q49. Is the radiation from repeat CT scans dangerous?

Surveillance uses low-dose protocols, and each scan carries only a very small theoretical risk – far outweighed by the value of not missing a growing nodule. It is a reasonable question to ask, and a sensible trade to accept.

Q50. What happens if a surveillance scan shows a change?

The plan escalates promptly – usually to PET-CT, biopsy, or removal, depending on the change. Knowing in advance exactly what would trigger action is the hallmark of a properly explained plan.

Q51. What if I miss or delay a scan?

Tell your team and rebook – surveillance only works if the scans actually happen. In private care, dates are arranged around your life and chased on your behalf, so nothing slips.

Q52. Can I be discharged and then have the nodule "come back"?

A benign scar does not return or transform. If a future scan ever shows a new nodule, it is a new finding, assessed on its own merits from the start.

Q53. Why do surveillance intervals differ between hospitals?

Guidelines deliberately allow clinical judgement based on your calculated risk, so two different – but both reasonable – plans can exist. What matters is not that your plan matches someone else's, but that it has been explained to you.

Q54. I was never shown my images or given a risk figure - is that normal?

It is common, because clinics are stretched – but you are entitled to both. Sitting with a specialist and seeing your own images changes how understandable, and how bearable, surveillance feels.

Q55. After a scan, is "no news is good news" safe to assume?

Never assume it. Always confirm the result and the next step, in writing. A good service tells you the outcome and the plan every single time – and you are entitled to chase until it does.

Q56. Can I have surveillance privately while staying with the NHS?

Yes. Many patients have a single private review and return, reassured, to NHS surveillance; others continue privately for speed and continuity. Your NHS entitlement is unaffected either way, and letters are shared so care stays joined-up.

SECTION 6

Further tests - PET-CT and biopsy

What each test shows, what it can and cannot prove, and why not everyone needs them.

Q57. What is a PET-CT scan?

A scan that combines CT pictures with a mildly radioactive sugar tracer. Tissue that is metabolically busy – many cancers, but also infections – takes up more sugar and “lights up” on the images.

Q58. When is PET-CT used for a nodule?

Mostly for solid nodules over about 8mm where the calculated risk sits in the middle ground – to help tip the decision between continued watching, biopsy and removal.

Q59. Can a PET-CT be wrong?

Yes, in both directions. Infection and inflammation can light up brightly (a false alarm), while small nodules and ground-glass nodules may not light up at all (false reassurance). That is why PET informs the decision rather than making it.

Q60. What is a CT-guided biopsy?

A needle sample taken through the chest wall under local anaesthetic, guided in real time by CT and performed by a specialist radiologist. Most patients go home the same day.

Q61. What are the risks of a lung biopsy?

The main one is a small air leak around the lung (pneumothorax) – usually minor, occasionally needing a temporary drain – along with minor bleeding. Serious complications are uncommon, and some nodules are simply too small or awkwardly placed to biopsy safely.

Q62. What is a bronchoscopy - and a navigational bronchoscopy?

A thin camera passed into the airways under sedation. Navigation technology – increasingly available – can guide instruments to some nodules deep in the lung and sample them from the inside, without crossing the chest wall.

Q63. Is there a blood test that can diagnose a lung nodule?

Not yet in routine practice. No current blood test can reliably say whether a nodule is benign or malignant. Research is active, but be wary of anything marketed as a definitive answer today.

Q64. Why might a nodule be removed without a biopsy first?

When a nodule would need removal whatever a biopsy showed, or cannot be safely reached by needle or scope, removing it outright is both the diagnosis and the treatment – one procedure instead of two.

Q65. What is a "frozen section"?

Rapid analysis of the removed tissue by a pathologist during the operation itself, while you are still asleep. It lets the surgeon confirm what the nodule is – and, where needed and agreed in advance, complete the definitive operation under the same anaesthetic.

Q66. Do I need all of these tests?

No. The right pathway is chosen from your individual risk calculation, and many patients need nothing beyond a repeat scan. Tests earn their place; they are not a conveyor belt.

Q67. How quickly can these tests happen privately?

PET-CT and biopsy are typically arranged within days rather than weeks. For an anxious wait measured in scan dates, that speed is often the biggest practical difference private care makes.

Q68. Will my NHS team see my private test results?

Yes – with your consent, full reports and images are shared with your GP and any NHS team involved, so nothing is duplicated and your care remains one story, not two.

SECTION 7

Surgery – when and how nodules are removed

What the operation involves, what recovery really looks like, and what happens in each scenario on the table.

Q69. When is surgery recommended for a nodule?

In four situations: the nodule has grown between scans; its calculated risk is high; PET or biopsy findings are suspicious or inconclusive in a nodule that cannot safely be left; or an informed patient chooses the certainty of removal over years of scans.

Q70. What operation removes a nodule?

Usually a wedge resection – removing the nodule with a small margin of surrounding lung – performed through keyhole incisions using VATS or a robotic-assisted approach.

Q71. What is VATS?

Video-assisted thoracoscopic surgery: the operation is performed through one to three small incisions using a camera and fine instruments, instead of a large open cut. Less pain, a shorter stay, and a faster recovery.

Q72. How is a tiny nodule even found during keyhole surgery?

With localisation techniques – a marker or dye placed under CT guidance before surgery, or imaging during the operation – so that even a small, deep nodule is pinpointed and exactly the right piece of lung is removed.

Q73. How long will I be in hospital?

Typically one to two nights for a keyhole wedge resection; some patients go home the following day.

Q74. How long is the recovery?

Most people are up and walking the same day, back to desk-based work within one to two weeks, and back to full activity over the following few weeks. Your own timeline is discussed honestly before you decide anything.

Q75. Will removing part of my lung affect my breathing?

A wedge removes only a very small fraction of lung tissue. For people with reasonable lung function, the effect on everyday breathing is usually negligible — and your lung function is assessed beforehand, so this is known in advance.

Q76. What are the risks of the operation?

All surgery carries risk — air leak, bleeding, infection, and the risks of anaesthesia — but a keyhole wedge resection sits at the smaller end of thoracic operations. Your personal risks are quantified and discussed before any decision is made.

Q77. What happens if the nodule turns out to be cancer?

If the frozen section confirms an early lung cancer, the definitive cancer operation — typically removing the affected segment or lobe together with lymph nodes — can often proceed under the same anaesthetic, if that has been agreed with you in advance. One operation instead of two, and no second wait.

Q78. And if it turns out to be benign?

Then you have certainty — usually with no further follow-up needed at all. Surveillance ends, and so does the question mark.

Q79. Isn't surgery overkill for something that is probably benign?

For low-risk nodules, yes — which is exactly why they are watched instead. Surgery is reserved for nodules whose growth, calculated risk, or your own informed preference genuinely justifies it. A proper risk conversation is what separates the two.

Q80. If an early cancer is found this way, what are the chances of cure?

High — early-stage lung cancers removed surgically have far better cure rates than cancers found later. That difference is the entire argument for taking nodules seriously in the first place.

Q81. Will I have visible scars?

Keyhole incisions are small — typically one to four centimetres — and usually fade well. Your surgeon can show you exactly where they would be before you decide.

Q82. Who will actually perform my operation?

In Mr Scarci's practice, the consultant you meet at your first appointment performs your surgery personally, telephones you with your results, and sees you at follow-up. There is no relay between team members.

SECTION 8

Living with a lung nodule

The human side — anxiety, family, smoking, travel, and the moments that should prompt an earlier call.

Q83. Is it normal to feel anxious between scans?

Completely. “Scanxiety” is real and near-universal, and it thrives on the unknown. The most effective treatment for it is a properly explained plan: your images shown to you, your risk quantified, and the triggers for action defined.

Q84. Should I tell my family?

Most people find that sharing it helps — carrying a secret question mark is heavier than carrying a shared plan. A clear explanation to give them (this guide can be that explanation) turns a frightening word into something manageable.

Q85. I smoke – what should I do?

Stop, with help. It is the single most powerful thing you can do for your lungs whatever this nodule turns out to be, and structured support roughly doubles your chances of succeeding. Your GP, local pharmacy or our practice team can point you to it without judgement.

Q86. Does vaping affect nodules?

The long-term effects of vaping on the lungs are still being studied. If vaping is keeping you off cigarettes, the priority is not returning to smoking — and the honest conversation to have is with your clinician, not the internet.

Q87. Can I fly, exercise and travel with a nodule?

Yes. A nodule under surveillance places no restriction on flying, exercise, work or daily life. The only travel rule that matters is keeping your scan dates, wherever you are.

Q88. Will a nodule affect insurance or medical forms?

A finding that is still under investigation may need declaring on new insurance applications — answer each policy's questions honestly and keep your letters. Existing cover is generally unaffected by a new finding.

Q89. Are my children at higher risk because of my nodule?

A benign nodule carries no implication for your family whatsoever. A family history of lung cancer is one factor among many in risk models – worth mentioning to doctors, not worth fearing at home.

Q90. Which symptoms should prompt me to seek help before my next scan?

Coughing blood, unexplained weight loss, a new persistent cough or chest pain, or clearly worsening breathlessness. These deserve prompt review whatever your surveillance schedule says – do not wait for a date on a letter.

SECTION 9

Practical steps – reviews, costs and getting seen

How a specialist review works in practice, what it costs, and how quickly a question mark can become an answer.

Q91. Will asking for a second opinion offend my NHS team?

No. Second opinions are a normal, well-understood part of medicine, and consultants are entirely used to them. Your NHS entitlement is completely unaffected by seeking one.

Q92. What does a private nodule review involve?

Your imaging is obtained and reviewed by Mr Scarci before you arrive. The consultation then walks through your images on screen, your calculated risk, and your plan – in person at one of five London hospitals, or by video from anywhere.

Q93. How do I get my scans transferred?

You don't have to. With your consent, the practice team obtains your images and reports directly from any NHS or private hospital, in the UK or abroad. No discs to chase, no departments to phone.

Q94. What should I bring to the consultation?

Any letters or reports you have, your questions written down, and – if you would like – someone with you. The images themselves will already have been reviewed.

Q95. What does a consultation cost?

£300–£400, which includes Mr Scarci's review of your existing imaging before you arrive. You leave with a clear explanation and a written plan, and there is never an obligation to take any further step.

Q96. Will private health insurance cover a nodule assessment?

Yes – assessment and any resulting treatment are covered by all major UK insurers as medically necessary care. The practice checks your policy and obtains authorisation before you attend, so there are no surprises.

Q97. How quickly can I be seen?

Routine appointments within 24–48 hours. Urgent findings — a growing nodule, a concerning report — are seen the same day. No GP referral is needed to contact the practice directly.

Q98. Can Mr Scarci review a scan done abroad?

Yes. International imaging is reviewed regularly, and remote video consultations mean the whole assessment can happen before you ever travel — or without travelling at all.

Q99. What questions should I ask whoever is looking after my nodule?

Five good ones: What are my nodule's exact size and features? What is my calculated risk? Why is this plan the right one for me? What, specifically, would trigger a change of plan? And when — and how — will I get each result?

Q100. What is the single most important message of this guide?

Most nodules are harmless — but every nodule deserves a proper answer. Don't settle for living with a question mark. Have your images reviewed, your risk explained in numbers you understand, and your plan made clear. That is what turns waiting into watching.

Ready for a clear answer?

One consultation replaces months of wondering with a clear answer: what your nodule most likely is, what your real risk is, and exactly what happens next. Your existing scans are obtained and reviewed by Mr Scarci before you arrive. Urgent findings are seen the same day; routine appointments within 24–48 hours. No GP referral is needed, and all major UK insurers are accepted.

Book onlinemarcoscarci.co.uk/contact-thoracic-surgeon**Call the practice**

020 7459 4367 – Mon–Fri, 9am–6pm

WhatsApp the team

+44 7300 789 130 – useful for sending scan reports

Consultations

Five London hospitals, Monday–Thursday – remote video available

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