

Lung cancer facts: Lung nodule growth is best measured by volume



Growth matters

- Measuring a tumour's growth is essential to monitor cancer and take the appropriate action.
- A decreasing tumour means the patient is responding to treatment. Lack of change indicates the condition may be stabilizing. Growth signals the cancer is progressing.

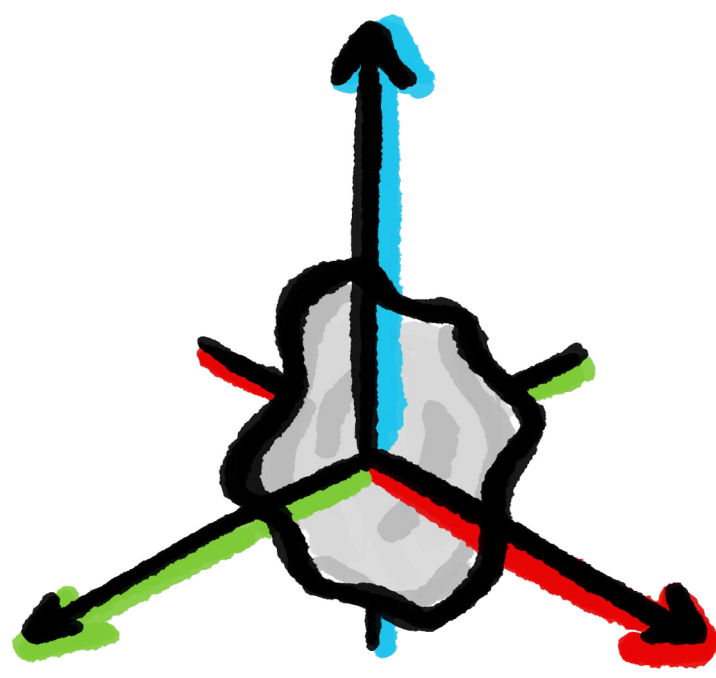
Diameter

- Radiologists commonly rely on diameter measurements to assess lung nodule growth.
- The [RECIST guidelines](#) recommend measuring the longest diameter of the nodule in the current and previous scans.



Volume

- Multiple studies¹ indicate that **volumetric analysis**, including **volume measurement and doubling time**, offers better insight into the growth or decline of a nodule.
- The British Thoracic Society [recommends](#) using nodule volumetry as the gold standard for reporting.



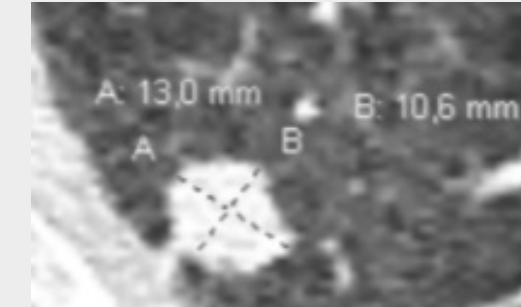
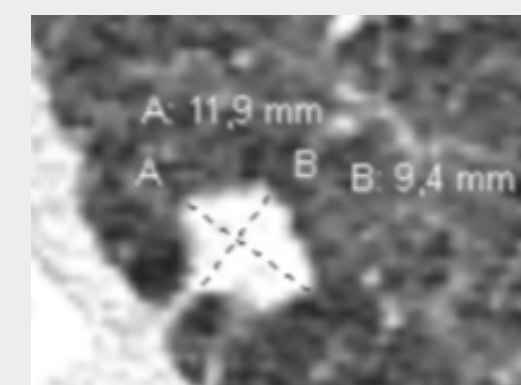
“The data is extensive that volumetry is the way you should be going for nodule assessment and lung cancer screening in terms of growth, so to have the **automated volume is key.**”

Dr Graham Robinson, Radiology Consultant (Thoracic and MSK). Co-founder and Medical Director, Heart & Lung Imaging Ltd. Past President, British Society of Thoracic Imaging

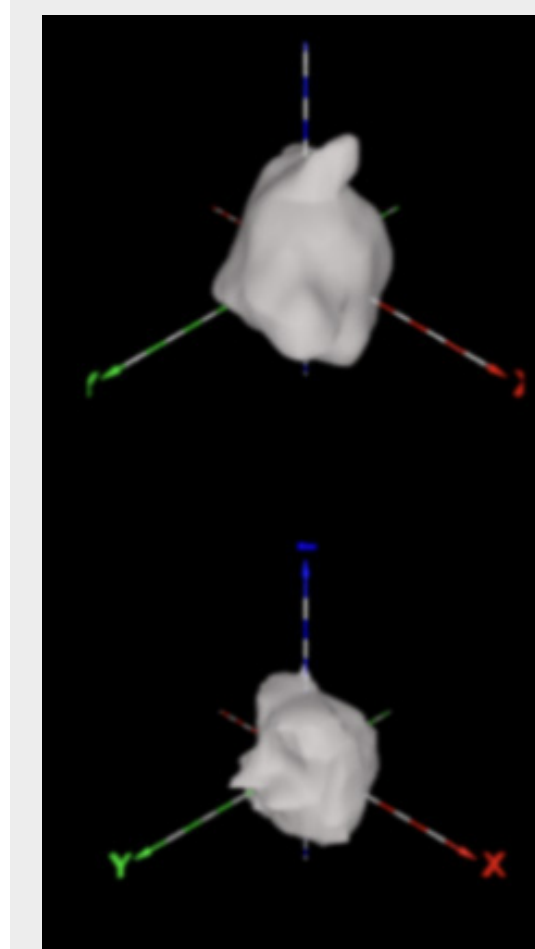
A real-world example: Diameter vs volume

- In this case, **the diameter** of a signalled nodule does not seem to have changed significantly from one scan to the next.
- However, **the growth in volume** is significant.
- The volume measurement and growth assessment are performed by an **AI-based lung nodule management solution**.
- The lung nodule proved to be malignant. Volume measurements supported the choice to take **further action**. It would have likely taken more scans/time to take this decision solely based on diameter measurements.

Nodule diameter: current & prior scan



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