



Artificial intelligence (AI)derived computer-aided detection (CAD) software for detecting and measuring lung nodules in CT scan images

Information for the public Published: 5 July 2023

www.nice.org.uk

NICE has said that Artificial intelligence (AI)-derived computer-aided detection (CAD) software can be used to help clinicians find and measure lung nodules in CT scans as part of targeted lung cancer screening, if more evidence is collected by the centres using them. The software are:

Artificial intelligence (AI)-derived computer-aided detection (CAD) software for detecting and measuring lung nodules in CT scan images

- Al-Rad Companion Chest CT
- AVIEW LCS+
- ClearRead CT
- contextflow SEARCH Lung CT
- InferRead CT Lung
- Lung Al
- qCT-Lung
- SenseCare-Lung Pro
- Veolity
- Veye Lung Nodules
- VUNO Med-LungCT AI.

Al-derived CAD software should not be used to help clinicians find and measure lung nodules for people having a chest CT scan:

- · because of symptoms that suggest they may have lung cancer or
- not related to suspected lung cancer.

This is because there is not enough evidence to recommend the software for these people, so more research is recommended.

Lung nodules are small growths in the lung that can be cancerous. They can be seen on CT scans of the chest, which are done:

- as part of targeted lung health checks
- because someone has symptoms that suggest they may have lung cancer
- for other reasons not related to lung cancer, such as heart problems.

Al-derived CAD software can automatically find and measure lung nodules on CT scan images. The software could help healthcare professionals decide whether to do further investigations or if surveillance is needed.

When used for people having a CT scan because of suspected lung cancer or for reasons not related to lung cancer, it could mean more people are identified with lung nodules that are not likely to be cancer. This could mean people have surveillance they do not need, which may cause unnecessary anxiety. But because there is not much evidence about this, research is needed.

There is more evidence on AI-derived CAD software use during lung cancer screening, so it can be used in centres doing this. But because there's not enough evidence to conclude which software is the most clinically and cost effective, centres need to generate evidence while they use it.

Is this treatment right for me?

Your healthcare professionals should give you clear information, talk with you about your options and listen carefully to your views and concerns. Your family can be involved too, if you wish. Read more about <u>making decisions about your care</u>.

Questions to think about

- How well does it work compared with other tests?
- What are the risks or side effects? How likely are they?
- What happens if I do not want to have the tests?
- Can I choose where to have this test? Can I have this test at my local clinic or hospital?
- How long will the test take?
- Will I need, or be offered, sedation or anaesthesia? If so, will I have a choice?
- Will I be able to drive to and from the appointment?
- How do I get my test results? Will there be a follow-up appointment?

Information and support

The NHS website on lung cancer may be a good place to find out more.

The <u>Roy Castle Lung Cancer Foundation</u>, 0333 323 7200, can give you advice and support.

You can also get support from your local Healthwatch.

NICE is not responsible for the quality or accuracy of any information or advice provided by these organisations.

ISBN: 978-1-4731-5274-8