

Arden Cancer Centre

Radiotherapy Information for patients undergoing radiotherapy to the left breast using the deep inspiration breath hold technique (DIBH)

What is deep inspiration breath hold (DIBH)?

Deep inspiration breath hold (DIBH) involves taking a deep breath in and holding your breath for a short period of time as radiotherapy treatment is given. This can help to reduce the amount of radiation received by the heart during left breast radiotherapy.

Is this technique suitable for me?

Ideally, you will need to be able to hold your breath for 20 seconds, several times during each treatment to undergo this technique.

The final decision of using DIBH will be when you have your planning CT scan. Due to individual differences in shape, size, internal anatomy, and other factors, DIBH may not be beneficial to you, in which case you will receive standard radiotherapy.

How can I prepare for DIBH?

It is a good idea to practise comfortably holding a deep breath in for 20 seconds, whilst lying flat. Try not to arch your back or lift your chest off the bed /floor when breathing in. You are focusing on filling your lungs with air and expanding your chest.



Patient Information

Breath holding practice

- Lie on your bed or floor with a pillow under your head.
- Raise your arms so they are resting above your head (supported by the pillow).
- Practice taking in slow, controlled, deep breaths. Breathe in, and then out. Breathe in again then out, then on the 3rd breath, breathe in and hold.
- Initially, hold for 5 seconds and return to normal breathing.
- Follow the steps again increasing your breath hold times to 10 second, then 15 seconds and building eventually to 20 seconds.

As above, always ensure you breathe in and out twice prior to each attempt to hold your breath. This will help relax your body and improve how deep a breath you can take.

At the start of your planning session the radiographers will go through this with you again and you will have the chance to practice before the scan.

Useful sources of information

Please refer to the leaflet “Radiotherapy Information for Patients Undergoing Treatment to the Breast, Chest Wall and / or Lymph Nodes” for further information.

Contact us

If you have any questions or concerns about deep inspiration breath hold (DIBH), please contact the Information and Support team on 024 7696 7290.

The Trust has access to interpreting and translation services. If you need this Information in another language or format, please contact us on 024 7696 7290, and we will do our best to meet your needs.

Document History	
Department:	Radiotherapy
Contact:	27290
Updated:	January 2023
Review:	January 2025
Version:	2
Reference:	HIC/LFT/2100/18

The Trust operates a smoke free policy.

To give feedback on this leaflet, please email feedback@uhcw.nhs.uk