

The treatment machine will automatically turn on once you have achieved the correct level while holding your breath. If you are unable to hold your breath during the treatment, the radiation beam will automatically turn off. Should this occur, the radiation therapists will guide you back into the correct level and the rest of the beam will be delivered when you are ready.

The treatment team may give you a visualisation device to help you achieve the correct breath hold.

If you have any questions regarding the use of this technique please contact your radiation oncologist. They will be happy to assist you.

Useful numbers

- Waikato Hospital switchboard 07 839 8899
- Blue Machine ext: 98073
- Green Machine ext: 98249
- Pink Machine ext: 98221
- Yellow Machine ext: 96191
- Breast nurse specialist ext: 98310
- or ext: 95644
- Lymphoedema nurse specialist ext: 96803
- Oncology Outpatient Reception 07 839 8604
- Cancer Society Lions Lodge 07 834 2351

For more information on Radiation Therapy please visit:

<https://waikatodhb.health.nz/about-us/a-z-of-services/cancer-services/radiation-oncology/>

<https://www.healthnavigator.org.nz/>

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Information for patients receiving external beam radiation therapy to the breast/chest wall area using the breath hold technique



Waikato Regional Cancer Centre



Your radiation oncologist has requested that you be assessed for your suitability in receiving the breath hold technique. This treatment technique requires you to hold your breath during your planning CT scan and radiation therapy treatment. By holding your breath, your chest is expanded, pushing your breast and chest wall away from your heart. This can minimise the amount of radiation your heart receives.

Preparation for breath hold

From the time you receive this brochure, we suggest you start to practise holding your breath in preparation for your planning CT scan. It is important you hold your breath **at a comfortable level** as you will be required to do so multiple times during your treatment.

- To best replicate the position you will be in for treatment, we recommend you practise holding your breath in a reclined position e.g. leaning back on a bed or couch.
- Start by holding your breath for 5 seconds and **eventually build up to a total of 30 seconds**.

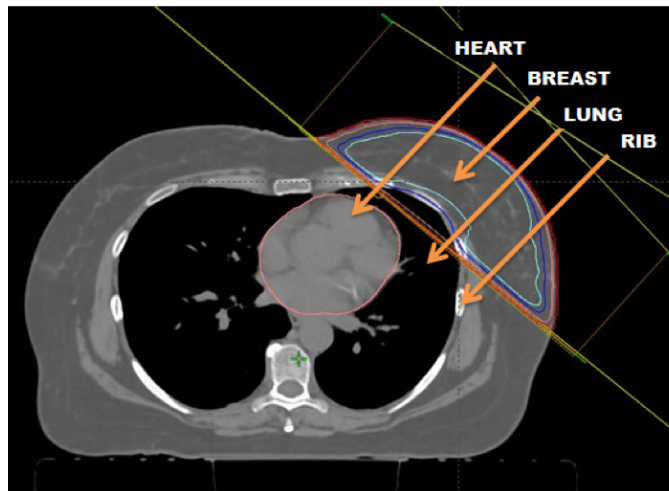
CT planning scan

At your planning CT appointment, your radiation oncologist and radiation therapists will assess whether you are suitable for the breath hold technique. **Please note that this appointment can take up to an hour.**

When you are positioned for your scan, you will be placed in the same position as you will be for treatment. A small light block will be placed on your chest to help monitor your breathing; this block will also be used for your radiation therapy treatment. The radiation therapists will assess the regularity of your breathing pattern and that you can consistently hold your breath at the same level.

During your planning CT appointment, two scans will be taken. One while you are breathing normally and another while your breath is held.

A radiation therapy treatment plan will be developed for you once your radiation oncologist has reviewed both CT scans. All care is taken to reduce or eliminate the amount of radiation to your heart.

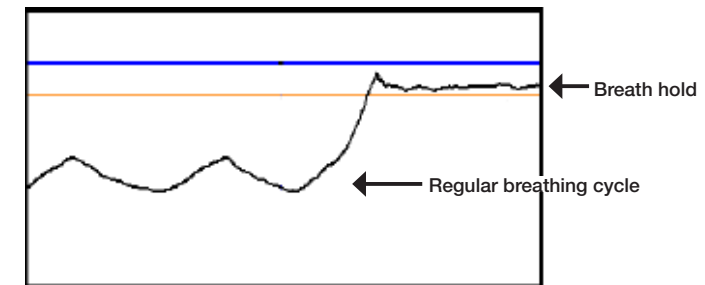


You will be informed by one of the booking clerks prior to starting radiation therapy if you are required to hold your breath during treatment or if the breath hold technique is not beneficial for you.

Treatment

During your first treatment appointment the radiation therapists will ensure that you feel comfortable with the procedure before any radiation treatment is delivered. They will assess that you can consistently hold your breath at the same level you achieved during your planning CT. Images will be taken during this appointment to verify you are in the correct treatment position.

The radiation therapists will monitor your breathing cycle and breath hold level on a computer outside the treatment room. Guidance will be given to you over the intercom to instruct you when to take a breath in and when to let it out (see figure below).



This figure demonstrates a breathing cycle. When your breath is within the blue and orange lines, then treatment will be delivered.