



Exercise and the Prevention of Heart Failure in Breast Cancer Patients

The chemotherapy medications used for breast cancer treatment are important for achieving a cure but a potential side effect is that they can affect heart function and fitness.

Aerobic fitness is an important predictor of outcomes in people with certain forms of heart disease, and having a particularly low level of aerobic fitness (termed functional disability) appears very closely linked with the risk of developing heart failure.

We are interested in whether an exercise program conducted during and following anthracycline chemotherapy can reduce the risk of functional disability. We would also like to understand how the standard test used to measure your heart function during chemotherapy compares to state of the art MRI imaging of the heart in being able to predict your risk of becoming functionally disabled.

The study is being conducted by:

Baker Heart and Diabetes Institute and Deakin University

Who can participate?

- Female
- Aged 40-75 years
- Diagnosed with Breast Cancer
- Scheduled to undergo Anthracycline-based chemotherapy

Who may not participate?

- Significant heart problems
- Implanted metal device such as a prosthesis or pacemaker
- Unable to speak English
- Significant cognitive impairment

This study is has been approved by the Alfred Hospital Ethics Committee

What is involved?

This study involves testing before and after chemotherapy, and again 12 months after starting chemotherapy. At each time point you will need to come in for two testing sessions.

Session 1 (3-3.5 Hours):

Your first session will include tests of your body composition (amounts of fat and muscle mass), your heart function at rest and during exercise, and your maximal exercise capacity. We will also give you a monitor to record your usual physical activity levels.

DXA Scan

A scan to look at your muscle and fat mass



Resting echocardiography

Ultrasound of the heart whilst lying at rest



Exercise VO2max testing

Measuring your maximal exercise capacity



Exercise CMR

Cycling whilst lying in the MRI machine



Session 2 (2 Hours):

Your second session will include tests of your muscle strength, ability to perform functional tasks such as climbing a flight of stairs or getting out of a chair, along with tests of your cognitive function.

Strength Testing

Tests to look at your maximal muscle strength



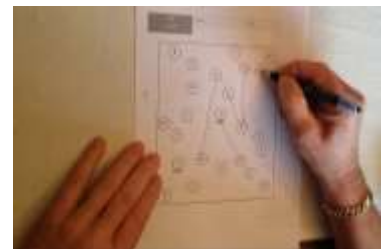
Physical Function

Tests to look at your ability to perform physical tasks



Cognitive Function

Tests to look at your memory and problem solving skills



Exercise Training

You will also have a 50% chance of being randomly allocated (just like a coin toss) to receive 12 months of exercise training during and after your chemotherapy.

This will involve:

- 2-3 exercise sessions per week at the Baker Heart & Diabetes Institute (Melbourne) or Deakin University Clinical Exercise Learning Centre (Burwood) supervised by an Accredited Exercise Physiologist
- A personalised exercise plan for exercising at home or a local health and fitness centre
- Exercise sessions will consist of cycling/aerobic exercise training and resistance training



How to Proceed:

If you are willing, we would like the opportunity to contact you to discuss the study in more detail. By signing the accompanying form you are providing consent to be contacted by the researchers at the Baker Heart and Diabetes Institute.



PERMISSION TO CONTACT



HREC Project Number: 305/17

Research Project Title: Exercise as a diagnostic and therapeutic tool for preventing cardiovascular morbidity in breast cancer survivors – a randomised trial.

Chief Researcher: Associate Professor Andre La Gerche

This form has been given to me by:

- I have been told about this project
- I agree to be contacted by the research team about this project
- My contact details are confidential and will only be used for the purpose described above
- I understand that signing this form does not mean that I have to agree to take part in this study

MY CONTACT DETAILS ARE:

Name:			
Contact phone number:			
Best time to contact:			
Signature		Date:	