EMERALD In-Person Assessment Overview

Thank you for agreeing to participate in the EMERALD study. Your involvement will help improve understanding of the effects of cancer treatment-induced menopause and improve care for future patients.

What to Expect During Your Appointment:

What should you bring?

- Wear comfortable/athletic clothing you can easily move around in.
- Wear a sports bra or clothing that has no metal in it (this includes the underwire of a bra)
- Avoid wearing metal jewelry (can be removed before the DXA scan)
- A water bottle
- Reading glasses if you require (for reading text on an iPad)

Assessments Overview:

Please note: All assessments will take place within the STRIDE Centre located in Arthur Child Cancer Centre and will take approximately an hour and a half (90 minutes).

Order of Assessments

1. DXA Scan- an X-ray scan to measure bone mineral density.
2. Blood sample- a small blood sample will be drawn and collected by a member of the team.
3. Fitness Testing- accessing various non-strenuous physical movements.
4. Cognitive Testing- activities to assess memory, attention, thinking, and communication.

DXA Scan

A DXA (Dual-Energy X-ray Absorptiometry) scan is a safe, non-invasive imaging test that measures bone health and body composition, including muscle mass and body fat. During the scan, you will lie comfortably on a table while the scanner passes over your body. The procedure is painless and typically takes only a few minutes to complete. No injections or contrast dyes are required.

What do I wear for the scan?

You will be asked to remove your socks and shoes and any metal including jewelry and/or your bra if it contains an underwire. You may leave your clothes on for this exam.

How is a DXA scan different from an MRI or CT scan?

A DXA scan is different from an MRI or CT scan in both its purpose and how the machine looks. A DXA scan uses very low-dose X-rays to measure bone health and body composition, including muscle mass and body fat. It does not evaluate your cancer or other medical conditions in the same way that MRI or CT scans do. This scan is being performed specifically for research purposes and will not affect the treatment or care you are currently receiving.

Will I be in a confined space during the DXA scan?

No, unlike an MRI, a DXA scan is not performed in a tunnel or enclosed space. You will lie on an open table while the scanner moves slowly above you. Most participants find the scan comfortable, and there is very little risk of feeling claustrophobic.

A male member of the study team will perform the scan and remain in the room with you throughout the assessment. If you would prefer a female member of the study team to conduct the scan, we would be happy to arrange this whenever possible. A member of the team will be available throughout the assessment to answer any questions and address any concerns you may have.

Image of what a DXA scanner looks like:



Blood Test

A member of the study team will collect a small blood sample consisting of two tubes of blood. You do not need to fast before this blood sample is taken.

If I already had blood drawn today, do I still need to provide a study sample?

Yes, the blood sample collected for this study is used specifically for research purposes and will undergo analyses that are different from those performed as part of your routine clinical care. For this reason, a separate blood sample is required even if you have already had blood drawn during a treatment or clinic appointment that day.

Fitness Test

All fitness tests in this assessment are optional. We encourage you to try each one, but if a test could aggravate an existing condition, or if you simply feel uncomfortable, we will skip it. You're always in control; you can choose which tests to complete and may stop at any time.

1. **Height, Weight and Waist Circumference**

We'll measure your height, weight and waist circumference using a standard scale and measuring device (stadiometer).

2. **Heart Rate and Blood Pressure**

We will measure your heart rate and blood pressure using an automated machine while you're seated and relaxed.

3. **Shoulder Range of Motion**

Using a small angle-measuring tool (goniometer), we'll check how far you can move your shoulder in different directions.

4. **Sit and Reach**

To assess your hamstring and lower back flexibility, you will sit and reach forward toward your toes using a sit-and-reach box.

5. **Muscular Strength and Flexibility**

This includes three tests:

- 30-second sit-to-stand: how many times you can stand up and sit back down from a chair in 30 seconds, to assess lower body strength
- Hand grip strength: how hard you can squeeze a small device with your hand
- Sit and reach: as described above, to assess flexibility

6. **6-Minute Walk Test**

You'll walk at your own pace for 6 minutes to measure your fitness and endurance.

Cognitive Testing

The cognitive assessment looks at areas such as memory, attention, thinking, and communication. The assessment is completed on an iPad, where you will follow prompts and complete a variety of short tasks. A member of the study team will guide you through the process and be available to answer questions about the instructions.

Some tasks may feel easier or more challenging than others, and it is very common not to answer every question correctly. These activities are not a measure of intelligence or personal ability. We simply ask that you try your best.

To ensure the assessment is conducted fairly and consistently for all participants, the team member administering the assessment will not be able to provide feedback on your performance during the test.

Contact Us

If you are running late, having difficulty finding us, or are unsure where to go, please contact us at emerald@ucalgary.ca or 403-210-6587

Location

The STRIDE Center | 2nd Floor (Near the green elevators just before entering the connector.)

Arthur J.E. Child Comprehensive Cancer Center

3395 Hospital Dr NW, Calgary, AB T2N 5G2

A member of the EMERALD team will meet you at the main lobby of the cancer center and guide you to the STRIDE Center.

Scan for Map

Parking

The Emerald team is pleased to cover the cost of your parking at the Arthur J.E. Child Comprehensive Cancer Centre. A member of our team will meet you in the main lobby and provide a parking voucher code for your vehicle.

There is a short grace period for parking at the center, so there is no need to worry about arranging payment before meeting with us.

If you have another appointment at the Arthur Child Cancer Center earlier that day, we can also meet with you and arrange your parking coverage.

You do not need to put the parking receipt on your vehicles dash