

Whānau Information Sheet

Study title: Imaging the lymphatic vessels in the arm using advanced devices

Principal Investigator: Dr Hayley Reynolds

Ethics committee reference: 2025 FULL 21518

This information sheet is for whānau or a support person of someone who is thinking about taking part in this study. It is designed to inform whānau about the research being carried out and what it involves. It explains what will happen during the study so you can understand their experience and talk through any questions together or with the research team.

What will happen during the study?

If the volunteer takes part they will:

- Attend one appointment at the Auckland Bioengineering Institute. This visit will take about 1½ hours.
- Have simple measurements taken such as height, weight, and arm size.
- Have locations marked on the skin of the arm to guide the imaging, either using a pen or a small marker attached to the skin with a skin-safe glue.

Their arm will be scanned using two methods:

1. Optical Coherence Tomography (OCT):

A small handheld scanner is placed gently on the skin. It takes pictures under the surface of the skin. This does not break the skin and there is no radiation.

2. Indocyanine Green (ICG) imaging:

Four very small injections of dye are given into the hand and wrist. The dye helps show how fluid moves through the lymphatic vessels. Special cameras are then used to take images. The skin is cooled briefly before each injection to help numb the area and reduce discomfort.

What are the possible risks or discomforts?

The risks are low.

- OCT scan: may feel slightly warm or light gentle pressure from the scanner.
- ICG dye: there is a small chance of mild skin irritation or an allergic reaction. The team screens for allergies beforehand and can provide care if needed.
- Cooling the skin may cause brief cold discomfort, but the temperature is carefully controlled.
- If a colouring agent (tartrazine) is used to improve the images, there is a small chance of mild skin irritation. A small test patch will be checked first.

Rights and Support

- Taking part is completely voluntary.
- The volunteer will have at least 24 hours to decide whether to take part (or longer if needed).
- They can withdraw from the study at any time without any negative consequences.
- Whānau or a support person are welcome to attend the appointment.
- Cultural needs can be discussed at any time. The team is committed to working in ways that respect Te Tiriti o Waitangi and kaupapa Māori values.

Who to Contact

Dr Hayley Reynolds, Auckland Bioengineering Institute, University of Auckland

Email: Hayley.Reynolds@auckland.ac.nz | Phone: 022 5161 584

Independent health and disability advocate: 0800 555 050

Email: advocacy@advocacy.org.nz | www.advocacy.org.nz