

Preparation for Nuclear Medicine

DaTscan

What is DaTscan?



DaTscan is an imaging technology that allows visualisation of the dopamine system in the brain. It involves injection of a small amount of radioactive tracer (Iodine-123 Ioflupane) that is then measured by a single-photon emission computed tomography

(SPECT) scanner.

DaTscan may be used for selected patients for the evaluation of certain neurological disorders as recommended by your primary clinician. The results of the scan will help your doctor decide on possible treatment.

Who is unsuitable for DaTscan?

DaTscan is contraindicated for patients who are pregnant or allergic to the active substance or any of the ingredients of the radioactive tracer. The reported hypersensitivity reactions include skin redness (rashes) and itchiness.

DaTscan is not recommended for patients who are breastfeeding or patients with poor renal or liver function.

What are the risks?

The amount of radioactivity in the body from DaTscan is very small. It will be passed out from the body in a few days without need for you to take special precautions.

DaTscan may cause side effects such as headache, nausea, vertigo, dry mouth, or dizziness in less than 1% of patients.

If you have questions regarding the scan or your suitability for the scan, consult your doctor.

How to prepare for the scan and what to expect?

A. Before the exam

You will be notified of the appointment details to see the Nuclear Medicine doctor from the Department of Diagnostic Imaging for a pre-scan assessment and filling of a questionnaire.

Please bring all your medications on the day of appointment.

In addition, please inform us if:

- (1) You have an allergy or sensitivity to the active substance, any of the other ingredients of Iodine-123 loflupane or iodine.
- (2) You are taking drugs such as anti-psychotics, anti-depressants or cocaine.
- (3) You have liver or renal disease/impairment.
- (4) You are pregnant or nursing.

In the same visit, you will be prescribed with a drug called **Lugol's iodine**. This prevents unwanted absorption of the radioactive tracer by the thyroid gland and improves the quality of imaging.



Instructions for Lugol's iodine:

- To take for 3 days, starting on the day of the scan.



To facilitate the ordering of radioactive tracer (Iodine-123 loflupane), a payment of S\$3,000¹ (before GST) will be collected from you in the same visit. The payment is non-refundable if the scan is cancelled within 2 weeks from the scan appointment date.

B. On the day of the exam



Please remember to bring all the images and results of your previous brain scans if they have been performed in another hospital.

¹ Refers to the full price of the radioactive tracer before GST, surcharge or subsidy.



Our doctor will go through the DaTscan questionnaire with you again at the point of registration to ensure you are well prepared for the scan. Do inform us if there are any changes in your medications in the interim.



A cannula will be inserted on your hand or arm. This will be used to administer the radioactive tracer. Please ensure you drink plenty of fluids while waiting for the scan to be done.

C. During the exam



You are not required to fast the day before or on the day of the scan. **Please remember to take the Lugol's iodine as prescribed by your doctor.**



After administration of the radioactive tracer, a **3-hour wait is required before the scan**. This allows the radioactive tracer to be fully taken up by the dopamine cells in the brain.



You will be asked to lie on the scanner and an imaging technologist will position your head on a headrest. The scan takes **approximately 45 minutes** to complete.

D. After the exam



Please drink plenty of fluids after the exam for 2 days.



The nuclear medicine specialist will review your scan and the results will be sent to your doctor. Your doctor will discuss these results with you and explain what they mean in relation to your health.

Where to find us?

Diagnostic Imaging @ Main Building Level 1, Zone F, F01-31

Opening Hours: Monday - Friday: 8.30am to 6.00pm

Saturday, Sunday & Public Holidays: Closed



Contact us

National University Hospital

Department of Diagnostic Imaging

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The information in this brochure is meant for educational purposes and should not be used as a substitute for medical diagnosis or treatment. Please seek your doctor's advice before starting any treatment, or if you have any questions related to your health, physical fitness or medical condition.

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