

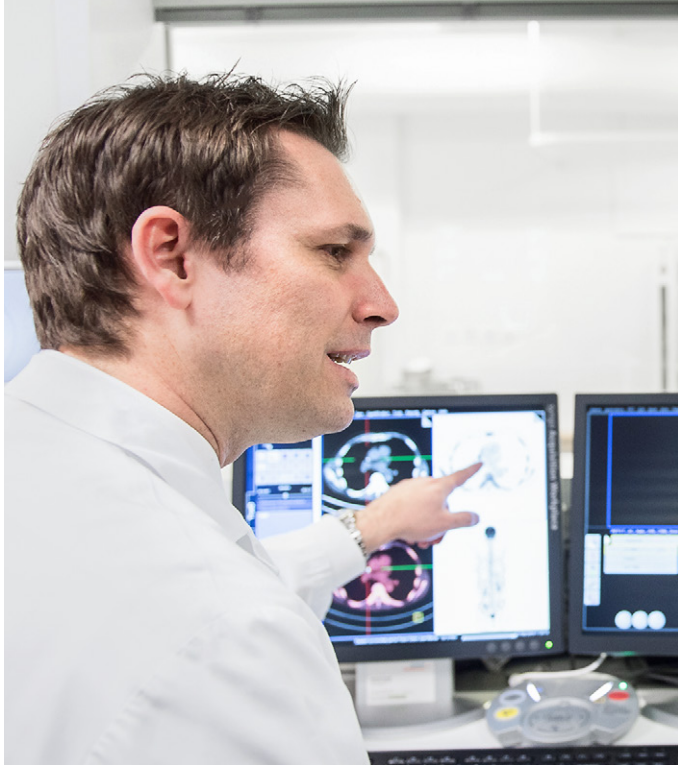


**PET DIAGNOSTIK**  
BERN



**FET PET/CT**  
**for brain tumours**

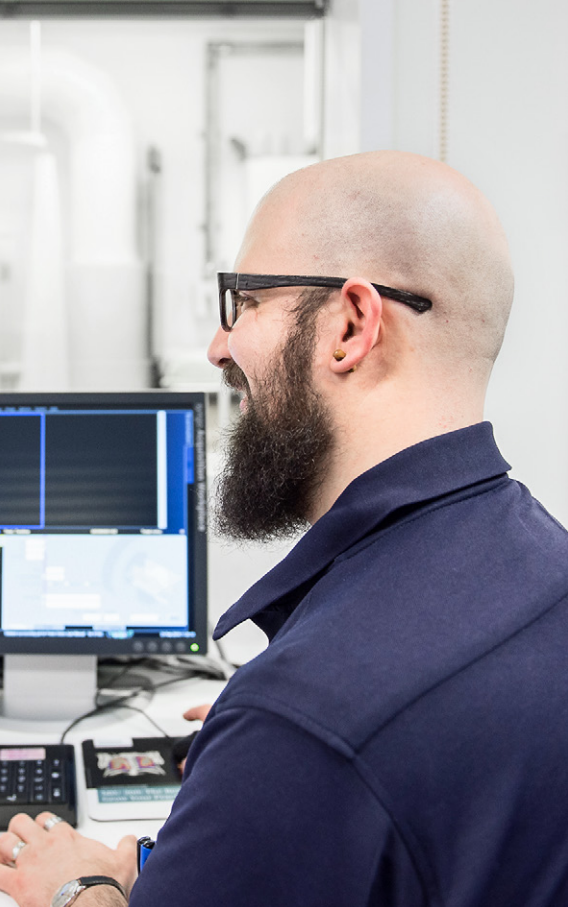
[www.petdiagnostik.ch](http://www.petdiagnostik.ch)



## Dear Patient,

On behalf of the PET Diagnostik Bern AG, we would like to welcome you to the Inselspital, Bern University Hospital.

You have been referred to the Department of Nuclear Medicine for an outpatient nuclear medical procedure. This information leaflet contains further details on the examination procedure.



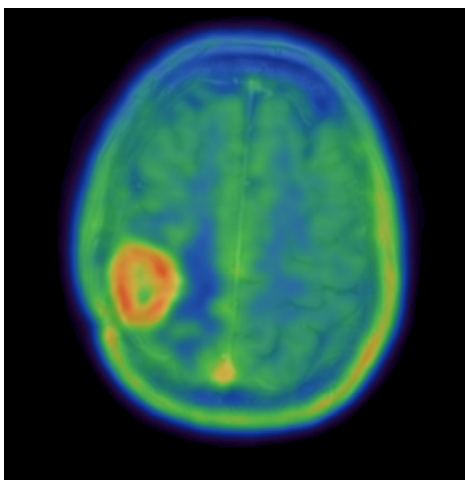
## General Information

Nuclear medicine involves the use of low-level radioactive substances to diagnose and treat various diseases. These substances are usually injected into a vein and transported via the blood stream to the respective organs or their cells. Using PET/CT scanners, the distribution of the radioactive substances in the body can be examined and pathological changes can be visualized precisely.

## Purpose of the examination

The PET/CT examination serves to detect or evaluate various diseases (e.g. cancer, inflammation, heart muscle damage or brain disorders) and involves two examinations, PET and CT, which are performed simultaneously.

A FET-PET/CT is conducted to examine the amino acid metabolism in the cells. Diseased cells, e.g. tumour tissue, frequently display an elevated amino acid metabolic activity compared with healthy brain tissue. By injecting radioactively labelled amino acids, cells with elevated amino acid metabolic activity can be visualised in PET. In the diagnosis of brain tumours, this allows a very good assessment of the location and extent of the tumour. This information is required when determining the biopsy site, planning a resection or radiotherapy. In therapy monitoring following radio- or chemotherapy, it also allows the treating physicians to differentiate between tumour progression and post-therapeutic changes (e.g. pseudoprogression, radionecrosis).



## Preparation for the examination

**It is essential that you fast for at least 4 hours before the FET-PET/CT examination.**

You can drink water and take your medication as normal.

If you suffer from claustrophobia, we can provide you with a sedative to help you relax prior to the PET/CT scan. Please ask us about this once you arrive at the clinic. After taking this medication, you should not drive a car for the rest of the day. Ideally, you should have someone accompanying you who can pick you up after the examination.

## Where does the examination take place?

On the date of your appointment, you should come to the Department of Nuclear Medicine in the building INO, Level B of the Inselspital:

**PET Diagnostik Bern AG  
c/o Department of Nuclear Medicine  
Inselspital, Bern University Hospital  
Entrance 33, INO Level B**

To get to the Department of Nuclear Medicine, please enter the Inselspital through the main entrance (Entrance 33). From there, follow the red line from the main entrance to the elevators (red dot No. 5). Take the elevator to Level B and then continue to follow the red line to the red dot No. 8. Please register at the reception at the Department of Nuclear Medicine. Please bring your health insurance card with you to the appointment.



## Examination procedure

At the beginning of the examination, you will be positioned as comfortably as possible on the examination table. A weak radioactive amino acid solution will be injected into a vein in the arm. The examination will take approximately 40 minutes.

In order to obtain the best quality images, you will need to remain still during the procedure. An intercom allows you to communicate with our staff at any time during the scan.

## Risks and side effects

There are no known side effects from the substances used for PET examination. No allergic reactions are to be expected. The examination procedure can also be carried out for children.

## Exposure to radiation

The radiation exposure from the PET/CT examination is approximately equivalent to 2 times the annual natural exposure to radiation in Switzerland.

## After the examination

- On the day of the examination you should avoid prolonged close contact with children under 16 years of age and pregnant women for a 12-hour period.
- Drinking plenty of fluids and frequent urination helps to flush the radioactive substances out of your body and reduce the exposure to radiation.
- Breastfeeding women should refrain from breastfeeding for 24 hours.
- Following the examination, you can carry out all further activities without any restrictions.

## Contact

If you have any further questions, please do not hesitate to contact us at 031 632 24 24. Additional information is also available on our website at [www.petdiagnostik.ch](http://www.petdiagnostik.ch).

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**petdiagnostik@insel.ch**

## Please note the following:

The radioactive tracer is prepared individually for each patient in advance. If you need to cancel your appointment, please inform us at least 48 hours before your appointment (031 632 24 24). Failing this, we reserve the right to invoice you for the costs incurred (approx. CHF 1000.-).

As some time is needed for the assessment and interpretation of the images, we are unable to provide you with the results immediately after the examination. The examination report and the images will be sent to your referring physician.