

Red Cell Mass and Plasma Volume Test

A red cell mass and plasma volume test can detect certain blood disorders. The test, done in the Nuclear Medicine Department, uses a radioactive tracer. The amount of radiation used in this test is small and well within limits that are not harmful to you. Your total test time will be about 2 1/2 hours.

If there is a chance you may be pregnant, please tell us before the test.

Before the test

There is no preparation for the test.

On the day of the test, plan to arrive 15 minutes before it is scheduled to begin. Be sure to bring:

- Your physician's written order for the test if you received one
- A list of your allergies
- A list of all your current medications (prescription, over-the-counter and herbal)
- Photo ID
- Medical insurance information
- Medicare card (Medicare patients only)

Please come to the 8th floor Reception Desk in Galter Pavilion, 201 East Huron Street.

Parking is available for patients and visitors in the garage at 222 East Huron Street, across from Feinberg and Galter pavilions. For a discounted rate, please bring your parking ticket with you. Your ticket can be validated at the Customer Services Desks on the 1st and 2nd floor of Feinberg and Galter pavilions, and the 1st floor of Prentice Women's Hospital.

During the test

When you arrive in the Nuclear Medicine Department, a nurse or technologist (tech) may ask you questions about your medical history. *If you think you might be pregnant or are breastfeeding, please tell the tech before the start of the test and before you are given an injection.*

You then will be taken to an exam room and asked to drink a small amount of iodine in water. This prevents your thyroid from absorbing the radioactive iodine injected during the test. A sample of blood will be drawn from a vein in your arm. Then, 2 radioactive tracers will be added to the blood sample. This process will take about 45 minutes.

During this time, you will be asked to go to the waiting room. When the blood sample is ready, a small portion of the blood will be injected into your vein. After this injection, the technologist will draw another small blood sample 15 and 30 minutes later. After the 30-minute blood sample is taken, the test will be complete.

After the test

You may resume your normal activities and diet after the test. The radioactive tracer you were given is not harmful and becomes nonradioactive within hours.

Talk with your physician about your test results. You may obtain a copy of your results a week after the test from the Medical Records Department, which is located on the 2nd floor of Galter Pavilion.

If you have any questions about this test, please call the Nuclear Medicine Department at 312.926.2320, TTY 312.926.6363, Monday through Friday, 7:30 am to 5:00 pm.