Lung Scan (V/Q Scan)
Patient Instructions

What It Is
A lung scan is a test that uses a small amount of radioactive material or tracer to evaluate the blood flow and airflow to your lungs. This test is made up of two parts: ventilation (airflow) and perfusion (blood flow). The test usually takes 30-45 minutes. There are no expected side effects.

How to Prepare
- A chest X-ray is needed on the same day, usually before the lung scan is performed, to assist the Nuclear Medicine doctor in reading the lung scan.
- No other advance preparation is needed for the lung scan.
- Please try to avoid wearing metal (jewelry, belts, etc.).

What to Expect: Before the Lung Scan
- Prior to the procedure, a technologist will explain the test to you and answer any questions that you may have regarding the exam.
- You will be asked to remove any metal objects from around your neck and chest, including necklaces and pins.
- The technologist will ask you to lie flat on your back with your arms by your side. Blankets and cushions are used to make you as comfortable as possible during your scan.

What to Expect: Ventilation (Airflow Test)
- The scan is used to measure the airflow to the lungs, and it is done using a gamma camera.
- The tracer used is an odorless, tasteless radioactive gas or aerosol.
- You will be positioned underneath the gamma camera and you will be asked to hold a small breathing mask over your mouth and nose.
- The technologist will then give a small amount of a gas through the mask while he or she takes pictures. The airflow test takes 7-10 minutes.
- If an aerosol is used, you will breathe through a mouthpiece for 4 minutes and the images will be taken after the breathing is completed.

What to Expect: Perfusion (Blood Flow Test)
- The technologist will place a small needle into a vein in the arm or hand. They will then inject the radioactive tracer. The needle will then be removed and the scanning will start.
- Four pictures will be taken from different angles of your lungs.
- Each picture will last 2-4 minutes. Some pictures will be taken with your arms above your head.

After Your Scan
After the scan, you will return to your normal clinic area and the results will be given to your oncologist.

Pregnant Women and New Mothers
- Generally, lung scans are NOT performed on pregnant women. If you are pregnant or think you could be pregnant, discuss this with your physician.
- If you are breastfeeding, you should not breastfeed for 48 hours after the scan. Nursing mothers are encouraged to pump and store milk before being injected with the radioactive tracer.
How to Find Us
Longwood Campus (Boston)
Nuclear Medicine is located on level L2 of the Dana building. To get to Nuclear Medicine from Dana-Farber’s parking garage or any floor of the Yawkey Center for Cancer Care, please use one of these route options.

A. From level P2 of the parking garage:
   1. Walk through the Tomsich Family Gallery (gene display) to reach the Dana building.
   2. Turn left after the Tomsich Family Gallery to find the Nuclear Medicine reception desk.

B. From the 3rd floor of the Yawkey Center for Cancer Care:
   1. Cross the PMC Bridge to reach the Dana building.
   2. Take a Dana building elevator down to level L2, where you’ll find the Nuclear Medicine reception desk.

Chestnut Hill Campus (Newton)
Nuclear Medicine is located on the 3rd floor. Enter the parking garage on Boylston Street and park on level P3. Take the Boylston elevators to the 3rd floor and check in at the desk.

For driving directions to Dana-Farber, visit www.dana-farber.org/directions or call 617-632-3400.

Questions?
A staff member will call you to review these instructions and answer any questions about 1-3 days before your scan. If you need to reschedule your appointment, call Nuclear Medicine at 617-632-3223.