



Exam Duration: Varies, usually about 1 hour **IV Required?** No

Exam Preparation: No preparation required.
Other nuclear exams performed within 2-3 days may interfere.

Sentinel Node Mapping is a procedure performed to locate the first site of lymph drainage from the area of a known tumor. This exam is almost always performed in conjunction with a surgical procedure in which the tumor and lymph nodes that may be affected by the tumor are removed. Most commonly, this procedure is performed for patients with melanoma or breast cancer, though it can be useful for other diagnoses as well.

Exam Procedure: To begin the exam, a number of injections (usually four) are performed around the area of the tumor in question (patients with breast cancer may receive injections around the areola instead, depending on the size and location of the tumor). These injections contain a radioactive tracer that can be visualized by a nuclear medicine camera. As the tracer is injected into the soft tissue beneath the skin, there is often a short-lived sensation of burning, stinging, or pain associated with the injection. This usually resolves in a few seconds, though the area may remain red and tender afterward.

In most cases, imaging begins immediately following the injections. Patients are positioned on an imaging table and a series of 5-minute images are acquired over time. As this exam follows a process ongoing within the body (lymphatic drainage), there is no set time frame for the exam to be completed. Once the site of lymphatic drainage has been located, the area may or may not be identified with marker on the patient's skin according to the surgeon's preference.

Notes: There are no lasting side effects associated with this exam.