

## PATIENT/FAMILY INFORMATION SHEET

### **What is a Breast Sentinel Node Biopsy?**

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A sentinel node biopsy is a surgical procedure which helps determine if a breast cancer has spread (metastasized) to the lymph nodes. When a cancer has been detected, often the next step is to find the lymph node which is the first to receive cells from the tumor site and retrieve it for analysis under a microscope. The sentinel node is often described as the “first node” to drain the area of cancer and allows for a more accurate staging of the cancer. The unaffected nodes are left intact to continue the important job of draining fluids. The procedure involves the injection of a radioactive material and/or dye to pinpoint the breast sentinel node.

#### **How is the Breast Sentinel Node Biopsy Performed?**

To identify the sentinel lymph node, the breast tissue is first numbed with a local anesthetic. Then the patient is injected with a radioactive substance or a dye near the tumor or nipple. The dye takes two or more hours to travel to the sentinel node, which is almost always in the axillary area (armpit). The nodes that collect the radioactive substance or dye first are called sentinel nodes. Additional images may be taken to determine that the dye has traveled to the axilla.

In the operating room, the anesthesiologist will give sedative medication so the patient is comfortable during the entire procedure. The surgeon uses a scanner to find the sentinel lymph node which contains the radioactive substance or dye. Once the sentinel node is located, the surgeon makes an incision in the skin and removes the lymph node(s).

While the patient is still sedated, the sentinel node is sent to the laboratory and checked for the presence of cancer cells by a pathologist (a doctor who identifies diseases by studying cells and tissue under a microscope). If cancer is found, the surgeon will usually remove additional lymph nodes during the surgery.

#### **How should I prepare for the Breast Sentinel Node Biopsy?**

For female patients, if there is any possibility you may be pregnant or if you are breastfeeding, it is important to tell this to the physician and technologist.

Discuss the details of procedures, tests, and surgery and agree on exactly what will be done. You will be asked to participate in marking the surgical side before going to surgery. After surgery, your surgeon will be able to discuss the preliminary test (pathology) results with you.

#### References:

Greenwich Hospital Radiology Department

National Cancer Institute: US National Institutes of Health. Sentinel Node Biopsy: Questions and Answers. Reviewed March 10, 2009. <http://www.cancer.gov/cancertopics/factsheet/Therapy/sentinel-node-biopsy>

Medline Plus: US Library of Medicine and the National Institutes of Health. Sentinel Node Biopsy. Reviewed March 10, 2009, <http://www.nlm.nih.gov/medlineplus/ency/imagepages/19305.htm>

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