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Clinical Practice Guidelines - Breast Disease Site

Guideline Title:	Staging of Primary Breast Cancer - **Summary**	**Date:**	**(O):** **(R):**	July 31, 2011
Tumor Group:	Breast Disease Site Group	**Page:**		1 of 3
Issuing Authority:	Dr. Kara Laing Clinical Chief, Cancer Care Program	**Date Signed:**		May 23, 2012
Adapted From:	Alberta Health Services "Staging investigations for asymptomatic and newly diagnosed breast cancer" guideline, April 2011 (12).			

Target Population:

These recommendations apply to asymptomatic patients, with a newly diagnosed primary cancer of the breast, who have undergone surgical resection.

Recommendations:

The Eastern Health Breast Disease Site Group has developed staging guidelines for patients with newly diagnosed stage I-III breast cancer, who have completed surgery, are asymptomatic, and have no physical findings or laboratory abnormalities to indicate metastatic disease. These include:

- All patients should undergo history and physical exam, complete blood count, renal and liver function tests, bilateral mammography, and determination of estrogen/progesterone receptor (ER/PR) and human epidermal growth factor receptor (HER2) status of the tumor.
- Staging investigations should be performed postoperatively according to pathological stage.
- No staging investigations are necessary for patients with in situ carcinomas or T1-2, N0 disease.
- A baseline bone scan and CT scan of chest/abdomen should be performed in patients with T3 or node positive disease.
- Patients with documented contrast allergy or other contraindications to intravenous contrast should have an unenhanced CT scan of the chest and abdomen, and an US of the liver.
- Routine use of tumor markers or PET scanning as part of baseline staging is not recommended at this time.

If the patient has symptoms of metastatic disease (e.g. abdominal pain, dyspnea), physical findings (e.g. abdominal mass) or abnormal laboratory testing (e.g. liver function anomalies), then it is reasonable to stage these patients accordingly.
Note: These guidelines do not apply to patients with locally advanced breast cancer who may require neoadjuvant therapy. These patients are considered to have a higher risk of metastases and should be staged preoperatively with a bone scan and CT of chest and abdomen (1).

Supporting Evidence:

Detecting metastatic disease during baseline staging is highly dependent on pathological stage and therefore, baseline staging should be performed in accordance with the American Joint Committee on Cancer (AJCC) classification system (2-6).
Bone scanning with technetium-99m should be performed has baseline staging for all patients with node positive breast cancer. The evidence is strongest for stage III patients, but some regulatory bodies suggest performing bone scans in stage II as well, especially those with positive lymph nodes (7,8).
Imaging for lung and liver metastases should be performed in all stage III patients (8-12). However, controversy exists for stage II patients which consists of both node positive and node negative tumours (7,13-16). For the stage II cohort, the staging working group recommends performing staging investigations in the lymph node positive patients only. This recommendation is based on the heterogeneity of the stage II group, retrospective nature of the evidence and the uncertainty among our own disease site team members and other expert organizations regarding the role of performing baseline investigations in stage II patients with chest and liver imaging.

Qualifying Statements:

- Patients with a diagnosis of cancer of the breast should undergo only those screening investigations warranted by the pathological stage of the disease.
- When staging investigations are recommended, it would be beneficial for to the patient if these are ordered prior to the patient's visit to an oncologist. Ordering the recommended investigations is sufficient – patients should not be delayed in their referral to an oncologist while waiting for the results.
- Based on emerging evidence that some biological subtypes of breast cancer may behave more aggressively at presentation, oncologists may elect to stage some node negative patients based on pathological and patient characteristics (i.e. triple negative tumours).

Disclaimer:

These guidelines are a statement of consensus of the Breast Disease Site Group regarding their views of currently accepted approaches to diagnosis and treatment. Any clinician seeking to apply or consult the guidelines is expected to use independent medical judgment in the context of individual clinical circumstances to determine any patient's care or treatment.

Contact Information:

For more information on this guideline, please contact Dr. Melanie Seal MD FRCPC, Dr. H. Bliss Murphy Cancer Center, St. John's, NL; Telephone 709-777-8515. For the complete guideline on this topic or for access to any of our guidelines, please visit our Cancer Care Program website at www.easternhealth.ca

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