LOCAL THERAPY CHOICES FOR BREAST CANCER

- Breast preservation with Lumpectomy + Radiation
  OR
- Mastectomy

LYMPH NODE ASSESSMENT CHOICES (SURGICAL AXILLARY STAGING)

- Sentinel node mapping and excision
  OR
- Axillary nodal dissection

RECONSTRUCTION CHOICES AFTER MASTECTOMY

- This is best explained by an experienced surgical doctor. Please consult your surgeon for details.
THERAPY CHOICES FOR PRE-MENOPAUSAL BREAST CANCER-2009

SYSTEMIC THERAPY CHOICES FOR BREAST CANCER

Chemotherapy for selected scenarios:
- ER negative, pre-menopausal, node positive, high risk etc.
- Oncotype DX or Mammaprint or similar assays can help determine benefit or lack of benefit in certain selected patient groups. (Currently available for ER positive, node negative).

Hormonal therapy if ER/PR positive:
- Oral Pills (post and pre-menopausal) or hormone shots (pre-menopausal).
- (Hormonal therapy is not indicated in ER/PR negative).

Herceptin antibody if HER-2 receptor is positive.
- (Herceptin therapy is not indicated in HER-2 negative).

Combination from above:
- Choice of Sequence and/or combination depends on individual factors

Low fat diet
- Recommended for all breast cancer patients

Participation in a Clinical trial
- This is a voluntary option. Please check with us for currently available clinical trials and eligibility if you are interested.

Above options indicate general information about available choices. The definitive choice of systemic therapy is individualized for each patient depending on many prognostic factors and patient choice.
THERAPY CHOICES FOR PRE-MENOPAUSAL BREAST CANCER-2009

ADJUVANT HORMONAL THERAPY CHOICES FOR PRE-MENOPAUSAL ER/PR POSITIVE BREAST CANCER

Benefits of adjuvant therapy:
1. Reduces the risk of local recurrence
2. Reduces the risk of distant recurrence
3. Reduces the risk of new breast cancers

1. Oral Tamoxifen x 5 years (Drug of choice)

2. Additional Ovarian ablation or Ovarian suppression options: (Only if Tamoxifen is not acceptable or contra-indicated)
   - Medical ovarian ablation (Zoladex or Lupron shots)
   - Surgical removal of ovaries (Not much used)
   - Radiation to ovaries (Not used)

AI agents (Arimidex, Femara or Aromasin) can only be used in post-menopausal women. Tamoxifen can be switched to an AI agent, once menopause is reached.

<table>
<thead>
<tr>
<th>Possible side effects (only major effects listed)</th>
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<td>See the drug booklets or visit website for all possible side effects</td>
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<table>
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<tr>
<th>Arimidex/Femara/Aromasin</th>
<th>Tamoxifen (Nolvadex)</th>
<th>Zoladex/Lupron</th>
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<tr>
<td>--</td>
<td>Endometrial cancer</td>
<td>Induction of menopause leading to hot flashes, risk of osteoporosis and other menopause related effects.</td>
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<td>Blood clots (DVT/PE)</td>
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<tr>
<td>Less Vaginal symptoms</td>
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<tr>
<td>Less hot flashes</td>
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<tr>
<td>Osteoporosis</td>
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<td>Injection site side effects such as needle pain.</td>
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<tr>
<td>Muscle-aches, joint pains</td>
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<tr>
<td>Long term side effects not well known</td>
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FOLLOW UP AFTER COMPLETION OF THERAPY

Purpose of follow up:
- To monitor for recurrent cancer.
- To screen for a new cancer.
- To monitor for short term and long term side effects of treatment.
- Patient education regarding screening, prevention and health maintenance.

ASCO Recommended breast cancer surveillance
In October 2006, the American Society of Clinical Oncology (ASCO) revised their guidelines for the continuing care of women who have been treated for breast cancer. ASCO is a nonprofit organization that represents cancer professionals worldwide. The society offers scientific and educational programs and a wide range of other initiatives intended to foster the exchange of information about cancer. ASCO has developed guidelines for medical care following treatment for breast cancer to help you and your doctor make decisions about your continuing health care. Please remember that the guidelines should be used as an information resource. Final decisions about your care will be made by you and your doctor.

- History/physical examination: Every 3 to 6 months for the first 3 years after primary therapy; every 6 to 12 months for years 4 and 5; then annually.
- Patient education regarding symptoms of recurrence: Physicians should counsel patients about the symptoms of recurrence including new lumps, bone pain, chest pain, abdominal pain, dyspnea or persistent headaches.
- Careful history taking, physical examination, and regular mammography are recommended for appropriate detection of breast cancer recurrence.
- Referral for genetic counseling: Criteria include:
  - Ashkenazi Jewish heritage.
  - History of ovarian cancer at any age in the patient or any first- or second-degree relatives.
  - Any first degree relative with a history of breast cancer diagnosed before age 50 years.
  - Two or more first- or second-degree relatives diagnosed with breast cancer at any age.
  - Patient or relative with diagnosis of bilateral breast cancer.
  - History of breast cancer in a male relative.
- Breast self-examination: All women should be counseled to perform monthly breast self-examination.
- Mammography: First post-treatment mammogram 1 year after the initial mammogram that leads to diagnosis, but no earlier than 6 months after definitive radiation therapy. Subsequent mammograms should be obtained as indicated for surveillance of abnormalities.
**THERAPY CHOICES FOR PRE-MENOPAUSAL BREAST CANCER-2009**

- **FOLLOW UP AFTER COMPLETION OF THERAPY (ct.)**

  - Coordination of care: The risk of breast cancer recurrence continues through 15 years after primary treatment and beyond. Continuity of care for breast cancer patients is encouraged and should be performed by a physician experienced in the surveillance of cancer patients and in breast examination, including the examination of irradiated breasts. If follow-up is transferred to a PCP, the PCP and the patient should be informed of the long-term options regarding adjuvant hormonal therapy for the particular patient. This may necessitate re-referral for oncology assessment at an interval consistent with guidelines for adjuvant hormonal therapy.
  - Pelvic examination: Regular gynecologic follow-up is recommended for all women. Patients who receive Tamoxifen should be advised to report any vaginal bleeding to their physicians.
  - Routine blood tests: CBCs and liver function tests are not recommended.
  - Imaging studies: Chest x-ray, bone scans, liver ultrasound, CT scans, FDG-PET scans, and breast MRI are not recommended.
  - Tumor markers: CA 15-3, CA 27.29, and CEA are not recommended.

*Please visit ASCO website at cancer.net for more detailed information.*

Please note that the ASCO guidelines apply to asymptomatic patients (patient who are feeling fine and have no symptoms). If you are having any symptoms, then you need to contact your physician for proper testing.

At Hope cancer clinic, follow-up care is individualized according to individual patient circumstances (type of cancer, risk of recurrence, type of treatment received, overall health, etc.) as determined by the judgment of the physician and with patient input.

Many cancer recurrences are detected through investigations performed as a result of symptoms reported by patients. Therefore, all patients with prior cancer history are advised to immediately report any new symptoms to their physician for prompt investigations.