

Estrogen Receptor–Positive (ER+), Premenopausal, Metastatic Breast Cancer Treatment Journey: Consideration of Ovarian Function Suppression (OFS) Drug Therapy

The metastatic breast cancer journey can resemble a marathon rather than a sprint involving many physical and emotional ups and downs, including some curves as the patient and their caregivers steadily walk along their pathway. A navigator in collaboration with the multidisciplinary team compassionately advocates for the patient throughout this journey providing education, resources, and support.

This pathway is a resource for navigators and patients that portrays common steps and challenges associated with the metastatic breast cancer treatment trajectory with an emphasis on OFS with drug therapy for ER+, premenopausal women.

START



1. New Symptom Occurrence/Suspicious Finding

- Recurrent breast cancer (rBC)
- *De novo* or new metastatic breast cancer (dnmBC)

2. Diagnostic Workup and Staging^{1,2}

- Blood tests
- Imaging (mammogram, ultrasound, MRI, CT, PET, X-ray, bone scan)
- Genetic testing (if patient has a family history of breast cancer) – dnmBC
- Biopsy for tumor receptor and biomarker testing
- TNM staging/grade (used to group patients with respect to extent of disease)

Nurse Navigator Considerations (pre-diagnosis):

- Ensure timely coordination of workup
- Obtain previous test results and treatment plan (rBC)
- Assess family cancer history, facilitate genetic testing if at high risk for hereditary breast cancer, and recommend genetic counseling for patient and family members (dnmBC)
- Offer biomarker testing to all patients with advanced breast cancer and educate on what it may reveal about their disease and potential treatment options

Nurse Navigator Considerations (post-diagnosis):

- Assure patient that diagnosis is not their fault
- Ensure patient's understanding of diagnosis
- Provide patient education specific to cancer staging
- Review biomarker status and next steps: ER, progesterone receptor, and human epidermal growth factor receptor 2 positive or negative²

4. Patient's Goals of Therapy

Nurse Navigator Considerations:

- Determine patient's short- and long-term life goals, quality of life, and fertility goals
- Discuss how the goal of metastatic breast cancer treatment differs from initial/previous diagnosis (disease control vs curative) – rBC
- Describe the goals of care for metastatic breast cancer (disease control) – dnmBC
- Provide fertility consult referral, if applicable

3. Coordinated Care and Support

Nurse Navigator Considerations:

- Assess barriers to care: Insurance, financial, transportation, child and/or elder care, advocacy, psychosocial, etc³
- Connect patient/family to hospital and local resources and support services



5. Possible Metastatic Breast Cancer Treatment Options^{1,2}

Clinical pathways are dependent on many factors including pathology, genetic results, fertility goals, and hormone status

- Local
 - Surgery (for limited symptomatic metastases)
 - Palliative radiation (for limited symptomatic metastases)
 - Oophorectomy
- Systemic
 - Hormone therapy options
 - Targeted therapy
 - Inhibitors—CDK4/6, mTOR, PI3K, AKT
 - Chemotherapy
- Systemic (continued)
 - Immunotherapy
 - Bone-targeted therapy (for bone metastases)
 - Or any combination of these therapies
- Clinical trials

ER+, premenopausal women with recurrent or metastatic breast cancer might be offered the following hormonal therapy options:

| Hormone therapy | Aromatase inhibitor (AI) ⁴ | Gonadotropin-releasing hormone (GnRH) agonist ⁴ | Selective estrogen receptor modulator (SERM) ⁴ |
|----------------------------------|---|---|--|
| Mechanism of action (MOA) | Decreases overall estrogen levels to slow or stop cancer growth ⁵ | Prevents the ovaries from producing estrogen that is necessary for tumor growth, leading to menopausal state ⁵ | Blocks estrogen, needed for tumor growth, from attaching to cancer cell receptors ⁵ |
| Use | Combined with OFS ⁴ | Combined with AI ⁴ | Monotherapy ⁴ |
| Adverse events (AEs) | Elevated cholesterol levels and blood pressure, heart problems, mood swings/depression ⁵ | Cardiovascular diseases, hyperglycemia and diabetes, depression ⁶ | Deep vein thrombosis, pulmonary embolism, uterine cancer, bone loss, cataracts ⁴ |
| Side effects (SEs) | Hot flashes, joint and muscle pain, bone loss, vaginal dryness ⁵ | Hot flashes, tumor flare, nausea/vomiting, edema, fatigue ⁶ | Hot flashes, vaginal discharge, dryness and bleeding, menstrual cycle changes ⁴ |
| Dosing and administration | Daily oral ⁴ | Monthly injection ⁶ | Daily oral ⁵ |

Based on clinical data, ovarian suppression with an AI should become the preferred initial hormone therapy recommendation for all premenopausal women with high-risk (ie, grade 3, T2, and age <35 years) ER+ breast cancer⁷

- Go to the ER immediately
- Report to HCP
- AEs/SEs may vary by individual

Nurse Navigator Considerations:

- Reassure patient that there is available treatment
- Explain that treatment can continue for remainder of life
- Review potential treatment options and the expected short- and long-term side effects
- Determine clinical trial availability and patient's interest in participation
- Encourage patients to participate in the treatment decision-making process

6. Living with Advanced Breast Cancer

- Follow-up visits³
 - Physical exam
 - Blood tests
 - Imaging
- Treatment side effect and disease symptom management⁵
- Palliative care for managing pain and discomfort and increasing quality of life⁸
- Hospice/end-of-life care offers physical, emotional, and spiritual support after treatment has ended and prognosis is ≤6 months⁸

Nurse Navigator Considerations:

- Continue to coordinate recommended follow-up
- Reevaluate goals of care through metastatic breast cancer journey and changes in therapies
- Assess and report treatment side effects and changes in quality of life
- Reinforce education on treatment side effects, signs and symptoms of disease progression, use of supportive medications, and when to report
- Provide tips for self-management of hormone therapy side effects⁵
 - Physical activity (joint/muscle pain)
 - Calcium- and vitamin D-enriched diet (bone health)
 - Non-hormonal vaginal moisturizer (vaginal dryness)
 - Small meals/snacks, ginger tea or ale
 - Complementary therapies (nausea)
 - Ask for help
 - Take breaks and naps
 - Sit down to perform tasks (fatigue)
- Promote healthy lifestyle (mental, physical, and sexual health)
- Discuss patient's wishes and preferences for advanced care planning
- Facilitate referrals to palliative care, hospice, etc

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