Hormonal Therapy for Hormone Receptor-Positive Breast Cancer [1]

Introduction

To help doctors give their patients the best possible care, the American Society of Clinical Oncology (ASCO) developed evidence-based recommendations about hormonal therapy for early-stage breast cancer. This guideline has been updated several times since the original version in 2002. The latest update provides additional guidance on how long women can take tamoxifen (Nolvadex, Soltamox). This guide for patients is based on the most recent recommendations.

Key Messages:

- Hormonal therapy is a commonly used option after surgery and/or radiation therapy or chemotherapy to lower the risk of hormone receptor-positive breast cancer coming back in the breast or other parts of the body.
- The options for hormonal therapy differ slightly depending on whether a woman has been through menopause before diagnosis and include aromatase inhibitors and tamoxifen.
- Women should speak with their doctors about hormonal therapy options, including how long therapy will last, the risks and benefits of the available drugs, the cost of hormonal therapy, and any other concerns.

Background

Hormonal therapy, also called endocrine therapy, for hormone receptor-positive breast cancer is an adjuvant therapy. Adjuvant therapy is treatment given after surgery, chemotherapy, and/or radiation therapy to lower the chance of the cancer coming back.

Hormone receptor-positive breast cancer is the most common type of breast cancer. This kind of cancer depends on hormones called estrogen and/or progesterone to grow. The goal of adjuvant hormonal therapy is to lower the levels of these hormones in the body or to block the hormones from getting to any remaining cancer cells so the cancer cannot use the body?s own hormones to grow. The hormonal therapy options for hormone receptor-positive breast cancer depend on whether a woman has been through menopause before diagnosis. Menopause usually begins in

a woman?s mid-40s or early to mid-50s when her ovaries stop releasing eggs and her body makes less estrogen and progesterone. Women who have not been through menopause are considered premenopausal. Woman who have been through menopause are considered postmenopausal. It is important to note that some women may still be premenopausal even if they stop menstruating.

Hormonal therapy for hormone receptor-positive breast cancer includes the following options:

- Aromatase inhibitors (AIs) reduce the amount of estrogen in a woman's body by stopping tissues and organs other than the ovaries from making estrogen. AIs are not used for women who are premenopausal because of the way AIs work. In women who are premenopausal, the ovaries are still producing estrogen. AIs include anastrozole (Arimidex), exemestane (Aromasin), and letrozole (Femara). All work the same way even though they are three different brands, and research suggests that they are equally effective and have similar side effects.
- Tamoxifen blocks the effects of estrogen on tumor growth. It has been proven to lower the risk of breast cancer returning and improve survival for women with early-stage breast cancer. Tamoxifen is effective both for women who are premenopausal and for those who are postmenopausal.

Recommendations for women who are premenopausal

Women who have hormone receptor-positive breast cancer who are premenopausal before diagnosis or are going through menopause when they are diagnosed have the following options:

- Tamoxifen for five years. Then, treatment is based on whether or not they have been through menopause in those five years.
  - If a woman has not been through menopause after the first five years of treatment, she can continue tamoxifen for another five years, for a total of 10 years of tamoxifen.
  - If a woman has been through menopause after the first five years of treatment, she can continue tamoxifen for an additional five years or switch to an AI for five more years. This would be a total of 10 years of hormonal therapy. Only women who are clearly postmenopausal should consider taking an AI.

Recommendations for women who are postmenopausal

Women with hormone receptor-positive breast cancer who are postmenopausal before diagnosis have the following hormonal therapy options:

- Tamoxifen for 10 years
- An AI for five years
- Tamoxifen for five years, followed by an AI for up to five years. This would be a total of 10 years of hormonal therapy.
- Tamoxifen for two to three years, followed by up to five years of an AI for a total of seven to eight years of hormonal therapy.

What This Means for Patients

Women with breast cancer should discuss options for hormonal treatment with their doctor. This conversation should cover the risks and benefits of different treatment options, including the risk that the cancer will return with or without hormonal therapy, the likely side effects, how long treatment will last, and the costs of treatment. Each woman's specific medical circumstances should be carefully considered when discussing treatment options. Because AIs work only in women who have been through menopause, it is important that a woman is actually postmenopausal before evaluating hormonal therapy options.

At this time, it is not known which treatment option is better at reducing the risk of the cancer returning. AIs and tamoxifen have slightly different side effects, although they are often similar in severity. The side effects of AIs include joint pain and stiffness, vaginal dryness, increased cholesterol, heart disease, and weakening bones and bone breaks. The side effects of tamoxifen include hot flashes, vaginal discharge or dryness, leg cramps, and, rarely, blood clots and a slightly increased risk of uterine cancer. Women who experience too many or too severe side effects from one of the hormonal therapy options should talk with their doctors about changing to a different hormonal treatment.

Questions to Ask the Doctor

For women who are considering adjuvant hormonal therapy:

- Is my breast cancer hormone receptor-positive or hormone receptor-negative? What does this mean?
- Why may I need hormonal therapy?
- How many years of hormonal therapy do I need?
- Are there any reasons to believe I might not benefit from hormonal therapy?
- What are the benefits and risks of AIs?
- What are the benefits and risks of tamoxifen?
- How do the side effects of AIs compare with tamoxifen?
- If I?m worried about managing the costs related to my cancer care, who can help me with these concerns?

For women who were premenopausal when diagnosed:

- What is my menopausal status now, and how does this affect my options for treatment?

For women who have completed two to three years of either tamoxifen or AI therapy:

- Is there a reason I should switch to a different hormonal therapy?
- How many more years of hormonal therapy do I need if I continue to take my current hormonal therapy? If I switch to a different hormonal therapy?
- How will the side effects change if I switch to a different hormonal therapy?

For women who have completed five years of either tamoxifen or AI therapy:

- Do you recommend further hormonal therapy? If so, with what drug and how long would I continue treatment?

- If I start a different drug, what are the possible side effects?

Decision Aid

ASCO has created a Decision Aid [2] to help women who are postmenopausal talk with their doctors about the benefits and risks of adjuvant hormonal therapy.

Helpful Links

Read the entire clinical practice guideline at www.asco.org/guidelines/endocrinebreast [3]

Guide to Breast Cancer [4]

Estrogen and Progesterone Receptor Testing for Breast Cancer [5]

Follow-Up Care for Breast Cancer [6]

Links:
[1] http://www.cancer.net/research-and-advocacy/asco-care-and-treatment-recommendations-patients/hormonal-therapy-hormone-receptor-positive-breast-cancer
[2] http://www.asco.org/ASCO/Downloads/Cancer%20Policy%20and%20Clinical%20Affairs/Clinical%20Affairs%20(derivative%20p
[3] http://www.asco.org/guidelines/endocrinebreast
[4] http://www.cancer.net/node/18618
[5] http://www.cancer.net/node/29856
[6] http://www.cancer.net/node/29911