

乳癌之荷爾蒙療法

Hormonal Therapy and Breast Cancer

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<p>Hormonal therapies for breast cancer change the balance of estrogen in the body. The effect of these treatments is to block hormones that can stimulate growth of breast cancer cells in breast cancers with hormone receptors. Hormonal therapies can prevent cancer from coming back in early breast cancer or control disease in advanced breast cancer.</p> <p>When a breast cancer is removed or a biopsy is done, one of the tests in the laboratory determines whether or not there are estrogen and/or progesterone receptors on your breast cancer cells. These receptors are like "docking stations" that the hormones estrogen and progesterone can connect to and stimulate the growth of breast cancer. When the receptors are present, the breast cancer is estrogen receptor positive (ER+) and/or progesterone receptor positive (PR+). If the breast cancer cells have estrogen and/or progesterone receptors, this predicts that the hormonal therapies will be a useful part of your treatment. If your breast cancer cells have few</p>	<p>荷爾蒙療法會改變體內雌激素的平衡去治療乳癌。這治療可以阻止激素刺激乳癌細胞生長和乳癌的荷爾蒙接收體的增生。荷爾蒙療法既可預防早期乳癌復發，也可控制晚期乳癌。</p> <p>當乳癌被切除或在完成活檢後，就會在實驗室中做一個測試去判斷乳癌細胞是否有雌激素或孕激素接收體。這些接收體就像“塢站”，雌激素和孕激素可以連接到接收體去刺激乳癌的生長。當接收體存在，乳癌的雌激素接收體會呈陽性反應（ER+）或孕激素接收體會呈陽性反應（PR+）。如果乳癌細胞具有雌激素和/或孕激素接收體，荷爾蒙療法將會是治療你有效的一部分。如果患乳癌細胞有很少或沒有雌激素或孕激素接收體（ER</p>

or no estrogen or progesterone receptors (ER-negative, PR-negative) it is unlikely that the anti-estrogen therapies will benefit you.

If either of the hormone receptors is positive (ER+ or PR+), then the hormone therapies are used as a treatment for early stage breast cancer. Large clinical trials have shown that hormone therapies can prevent recurrence and death from breast cancer. Hormone therapies can also be used to treat a recurrence in the breast and lymph nodes or to treat advanced or metastatic breast cancer.

If you are pre-menopausal (still having periods, menstruating) most of your estrogen is made in your ovaries. If you are post-menopausal (no menstrual periods for a year, often confirmed by blood tests) you still produce small amounts of estrogen in your body - just not in the ovary. The adrenal glands (near your kidneys) produce a hormone, androstenedione (a weak male hormone) that is then changed into estrogen by an enzyme called aromatase.

The aromatase enzyme is found in many cells including fat and muscle. Therefore, whether you are pre or post menopausal will effect your treatment options for hormone therapy. Blocking estrogen stimulation of hormone receptor positive breast cancer is the goal in both pre- and post-menopausal women, but the treatment strategies may be different.

陰性，PR 陰性），這表示用抗雌激素療法將不會對你有效。

如果任何一個激素接收體是陽性（ER+ 或 PR+），即可用荷爾蒙療法來治療早期乳癌。大型的臨床試驗顯示，荷爾蒙治療可防止乳癌復發和防止因乳癌而死亡。荷爾蒙療法也可以用於治療復發的乳癌和淋巴結或治療晚期或轉移性的乳癌。

如果你是在停經前期（仍然有月經），大部分的雌激素是由你的卵巢產生。如果你是在停經後（沒有月經一年，通常是由血液檢查證實），你身體仍然會產生少量的雌激素 - 只是不在卵巢產生，是由腎上腺（靠近腎臟）產生一種荷爾蒙，叫雄烯二酮（一種弱雄性荷爾蒙），然後雄烯二酮再被芳香酶變成了雌激素。

芳香酶可以在很多細胞找到，包括脂肪和肌肉。因此，無論你是停經前或停經後都會影響你的治療方案。停經前和停經後的治療目標同是要阻止激素接收體呈陽性反應，但用的治療策略可能不同。

Hormonal Therapy in Early Breast Cancer

The use of anti-hormone medications in early stage breast cancer is called adjuvant therapy (treatment given after surgery or surgery and radiation to decrease the risk of cancer recurrence). It may be the only systemic (systemwide) treatment or it may also be given following chemotherapy. The recommendations that you will hear from your physician(s) take many factors into consideration including: your overall health, your menopausal status, estrogen and progesterone receptors, another receptor called HER1/neu, the stage (how far along the cancer is), the grade (a measure of tumor biology and behavior) and other tests that are done to predict risk. Hormone therapy is usually given for 5 years; some studies are looking at longer term treatment in higher risk cancers.

Once you know that your breast cancer is ER positive and/or PR positive, the issues that you and your physician(s) will consider include:

1. What is the risk of my breast cancer coming back if I do local therapy (surgery, radiation) alone?
2. How much can hormonal therapy lower my risk of the cancer coming back?
3. What is/are the best hormone therapy medications for me?

早期乳癌的荷爾蒙治療法

在乳癌早期採用抗荷爾蒙藥物治療被稱為輔助治療（用在手術後或手術和輻射治療後以降低癌症復發的風險）。它可能是唯一全身（全系統）的治療，或也可在化療後給予。你醫生的建議是從考慮各個因素而得，包括：你的健康、停經狀態、雌激素、孕激素接收體和其他接收體（被稱為 HER1/ neu）、癌症階段（癌症是多麼嚴重）、分級（腫瘤生物學和腫瘤行為的量度）和其他預測癌症風險的測試。用荷爾蒙治療一般為期 5 年，一些研究正在對較高風險的癌症做更長期限的治療。

一旦你知道乳癌是有雌激素接收體(ER+)或有孕激素接收體(PR+)，你的醫生將與你考慮以下問題：

1. 如果我只做局部乳癌治療（手術，輻射治療），乳癌復發的風險有多少？
2. 用荷爾蒙療法能降低癌症復發的風險多少？
3. 哪種荷爾蒙治療藥物對我最有效？

<p>4. What are the risks and side effects of those medicines?</p> <p>5. Does the benefit outweigh the risk?</p> <p>The recommendations and your preferences can then lead to a treatment decision.</p>	<p>4. 這些藥物有甚麼風險和副作用嗎？</p> <p>5. 好處是否多過副作用？</p> <p>然後，醫生的建議和你個人的選擇會助你作出治療決定。</p>
<p>Treatment Options</p> <p>Block the action of estrogen by blocking the receptors on the breast cancer cells:</p> <p>SERMS (selective estrogen receptor modulators) block the receptors (loading docks) so that the growth signals to the cells are interrupted. Tamoxifen (Nolvadex®) is a SERM and is the standard of care for pre-menopausal women.</p> <p>Tamoxifen works in a setting where estrogen is still being produced by the ovaries as well as in postmenopausal women. Tamoxifen reduces the risk of recurrence and death from hormone receptor positive breast cancer; studies have shown that 5 years of treatment still reduces risk at 15 years after diagnosis.</p> <p>Tamoxifen is a complex medication that has antiestrogen effects on some tissues and estro-</p>	<p>治療的選擇</p> <p>通過阻斷乳癌細胞的雌激素接收體而阻斷雌激素的運作：</p> <p>SERMS (選擇性雌激素接收體調節劑) 阻斷接收體 (塢站)，打斷細胞成長的訊號。泰莫西芬 (諾瓦得士 Nolvadex®) 是 SERMS 的一種。服用它是停經前婦女的標準治療。泰莫西芬會對卵巢仍產生雌激素的婦女以及停經後的婦女都產生作用。泰莫西芬能降低因激素接收體呈了陽性反應的患者復發和死亡的風險。研究發現做 5 年的治療會減低在診斷後 15 年之內復發的風險。</p> <p>泰莫西芬是一種複雜的藥物，</p>

gen-like effects on other tissues. The anti-estrogen effects lead to the primary benefit of reducing breast cancer recurrence risk and the menopausal side effects like hot flashes and vaginal dryness.

The estrogen-like effects lead to an added benefit of maintaining bone strength and side effects of an increased risk of blood clots and a small increased risk of developing uterine cancer. Please see the tamoxifen (Nolvadex®) drug sheet for more information.

In some settings, pre-menopausal women may receive injections of goserelin (Zoladex®), leuprolide (Lupron®), or triptorelin (Trelstar®) which are drugs that stop hormones from the pituitary gland in the brain from stimulating the production of estrogen in the ovaries. This treatment, called ovarian suppression, is usually done along with treatment with tamoxifen. Clinical trials are evaluating treatment with ovarian

它在對某些組織有抗雌激素作用的同時，也對某些組織起了正雌激素作用。抗雌激素能降低乳癌復發的風險和更年期的症狀，如潮熱和陰道乾澀。

雌激素的正面作用是有它的好處的，例如保持堅強骨骼；但同時，它又增加血液凝塊和患上子宮癌的風險。請看泰莫西芬（諾瓦得士錠）的藥物指南以了解更多。

在某些情形下，停經前的婦女可接收以下的藥物注射：

goserelin（Zoladex®），亮丙瑞林（Lupron®）或曲普瑞林（Trelstar®），這些藥物停止大腦垂體產生荷爾蒙去刺激卵巢產生雌激素。這種治療，稱作卵巢抑制，通常與泰莫西芬的療程一同完成。臨床試驗正

suppression combined with aromatase inhibitors for pre-menopausal women. Ovaries can be surgically removed or radiated to block estrogen but this is not often done (except for preventative surgery in cases where the risk of ovarian cancer is high).

Lower the level of hormones in the body that can stimulate breast cancer cell growth. Estrogen stimulates breast cancer growth. If the amount of estrogen is decreased, breast cancer growth is decreased.

Aromatase inhibitors lower the amount of estrogen made outside the ovaries.

Aromatase inhibitors only work in postmenopausal women because they do not block estrogen from the ovaries. Examples of aromatase inhibitors include: anastrozole (Arimidex®), letrozole (Femara®) and exemestane (Aromasin®). These drugs can be given instead of tamoxifen or after 2 or 3 years of tamoxifen as adjuvant hormone therapy for early stage breast cancer. All are pills taken by mouth on a daily basis.

Please see individual drug sheets for specific information for each drug.

在評估同用卵巢抑制劑與芳香化酶抑制劑對停經前婦女的影响。卵巢可藉由手術切除或利用放射療阻止雌激素的產生，但這不是常用的方法。（除了因卵巢癌風險高而做的預防性手術）

降低體內荷爾蒙的水平可阻止乳癌細胞的生長。雌激素可刺激乳癌的生長。如果雌激素量減少，乳癌的生長速度會減慢。

芳香酶抑制劑降低卵巢外製造的雌激素數量。芳香酶抑制劑只能對停經後的婦女有效，因為它只能從卵巢之外阻斷雌激素。芳香酶抑制劑包括：阿那曲唑（Arimidex®），來曲唑（Femara®）和依西美坦（Aromasin®）。這些藥物可代替用泰莫西芬，或在用了泰莫西芬2年或3年後，作為治療早期乳癌的輔助荷爾蒙治療。這些藥丸需每天口服。

	<p>請參照有每種藥品具體資訊的藥物表。</p>
<p>Decision Making</p> <p>This area of breast cancer care is evolving and will change over time. Clinical trials are ongoing to determine which hormonal therapy is best in different situations. The American Society of Clinical Oncology updates the state of the knowledge as it changes. Changes can be made if one medicine is producing side effects or as the medical knowledge changes.</p> <p>Clinical trials</p> <p>There may be clinical trials available to you and appropriate to your medical story. Your doctor(s) will discuss clinical trials for which you are eligible. Please also visit the clinical trials section of our website. www.ucsfbreastcarecenter.org</p>	<p>決策</p> <p>乳癌的治療會隨著時間不斷演變。臨床實驗會不斷的進行，以確定哪些荷爾蒙治療在哪些情況用是最好的。美國臨床腫瘤學會的知識會隨著變更的醫學資訊而改進。如知道藥物產生的副作用，或醫學的知識修改，治療是會隨之而不斷演變的。</p> <p>臨床實驗</p> <p>可能有臨床實驗會適合你和你的個別醫療情況。你的醫生會與你討論哪些臨床實驗適合你的參與。另請到我們網站裡遊覽臨床實驗的部分。</p> <p>www.ucsfbreastcarecenter.org</p>