

泰莫西芬治療癌症的問題與解答

Questions and Answers About Tamoxifen Cancer Facts

<p>National Cancer Institute</p> <p>Questions and Answers About Tamoxifen Cancer Facts</p>	<p>美國國家癌症研究中心</p> <p>泰莫西芬治癌藥的問題與解答</p>
<p>What is tamoxifen?</p> <p>Tamoxifen is a medication in pill form that interferes with the activity of estrogen (a female hormone), tamoxifen has been used for more than 20 years to treat patients with advanced breast cancer. It has also been used as adjuvant, or additional, therapy following surgery or radiation therapy for early stage breast cancer.</p> <p>Tamoxifen has recently been found to reduce the incidence of breast cancer in women at high risk of developing this disease. Tamoxifen continues to be studied for the prevention of breast cancer. It is also being studied in the treatment of several other types of cancer.</p> <p>1. How does tamoxifen work on breast cancer?</p> <p>Estrogen promotes the growth of breast cancer cells. Tamoxifen works against the effects of estrogen on these cells. It is often called an "anti-estrogen." As a treatment for breast cancer, the drug slows or stops the growth of cancer cells that are already present in</p>	<p>甚麼是泰莫西芬？</p> <p>泰莫西芬是抗癌藥，用以干擾雌激素的活動，泰莫西芬已被用於超過 20 年來治療晚期乳癌。它也被用作輔助劑，或增強劑，在手術後或在用放射療程治療早期乳癌後用以增強輔助治療乳癌。</p> <p>泰莫西芬最近被發現可以減少高危女性群患上乳癌的發病率。泰莫西芬被繼續研究用於預防乳癌。它也正在被研究可否用於治療其它類型的癌症。</p> <p>1. 泰莫西芬如何對付乳癌？</p> <p>雌激素促進乳癌細胞的生長。泰莫西芬有效地對抗雌激素影響細胞。它經常被稱為「抗雌激素」。作為乳癌的治療，該藥物能減緩或停止已經存在於體內癌細胞的生長。當用於輔助治療時，泰莫</p>

the body. As adjuvant therapy, tamoxifen has been shown to help prevent the original breast cancer from returning and also prevent the development of new cancers in the opposite breast.

2. Are there other beneficial effects of Tamoxifen?

While tamoxifen acts against the effects of estrogen in breast tissue, it acts like estrogen in other body systems. This means that women who take tamoxifen may derive many of the beneficial effects of menopausal estrogen replacement therapy, such as a lowering of blood cholesterol and a slowing of bone loss (osteoporosis).

3. Can tamoxifen prevent breast cancer?

Research has shown that when tamoxifen is used as adjuvant therapy for early stage breast cancer, it not only prevents the recurrence of the original cancer but also prevents the development of new cancers in the opposite breast. Based on these findings, the National Cancer Institute (NCI) funded a large research study, the Breast Cancer Prevention Trial (BCPT) conducted by the National Surgical Adjuvant Breast and Bowel Project (NSABP), to determine the usefulness of tamoxifen in preventing breast cancer in women who have an increased risk of developing the disease.

Results from this study showed a 49 percent reduction in diagnoses of invasive breast cancer among women who took tamoxifen. Women who took tamoxifen also had 50 percent fewer diagnoses of non-

西芬顯示能幫助防止乳癌復發和防止新的癌症出現於另一邊乳房。

2. 泰莫西芬是否有其他效用？

泰莫西芬在乳房組織裡有對抗雌激素的影響，但它在其他的身體部位卻發揮像雌激素的功能。這意味著，服用泰莫西芬的婦女可能有許多更年期雌激素替代療法的有利影響，例如降低血液中的膽固醇和減慢骨骼損失（骨質疏鬆）。

3. 泰莫西芬可預防乳癌？

研究表明，當泰莫西芬被用作輔助治療早期乳癌時，它不僅可防止原癌的復發，也阻止新癌症出現在另一邊的乳房。基於這些發現，國家癌症研究中心（NCI）資助了一項大型研究，由「美國國家乳癌與大腸癌輔助性治療計劃」（NSABP）負責進行的乳癌預防試驗計劃（BCPT），以確定泰莫西芬對有較大機會患上乳癌的女人的效用。

這項研究的結果顯示，服用泰莫西芬減少被診斷患上擴散性乳癌的女性約 49%。例如原位乳腺管癌或小葉原位癌的婦女，服用泰莫西芬後而被診斷患上擴散性乳癌比

invasive breast tumors, such as ductal or lobular carcinoma in situ.

However, there are some risks associated with tamoxifen, some even life threatening. The decision to take tamoxifen is an individual one in which the woman and her doctor must carefully consider the benefits and risks of therapy.

Women with an increased risk of developing breast cancer have the option to consider taking tamoxifen to reduce their chance of developing this disease. They may also consider participating in the upcoming Study of Tamoxifen and Raloxifene that will compare tamoxifen with the osteoporosis prevention drug raloxifene, which could have similar breast cancer risk reduction properties, but might be associated with fewer adverse effects.

At this time, there is no evidence that tamoxifen is beneficial for women who do not have an increased risk of breast cancer.

4. What is the Study of Tamoxifen and Raloxifene (STAR), and how can a woman learn more about it?

The National Surgical Adjuvant Breast and Bowel Project (NSABP), a component of NCI's Clinical Trials Cooperative Group Program, has launched a new breast cancer study. The new trial, known as STAR, began recruiting participants in June 1999. It will involve about 22,000 postmenopausal women who are at least 35 years old and are at increased risk for devel-

起患上非擴散性乳癌約減少了 50%。

不過，服用泰莫西芬也有一定風險，有的甚至危及生命。服用泰莫西芬與否是個人決定，婦女和她的醫生必須慎重考慮其好處和風險。

有增加患乳癌風險的女性應考慮服用泰莫西芬，以減少他們蔓延的機會。他們也可考慮參加泰莫西芬和雷洛西芬(raloxifene) 的研究，比較兩種藥物對骨質疏鬆症的影響，雖然他們都能減少患上乳癌的風險，但其中一種的副作用可能較少。

現時並沒有證據證明服用泰莫西芬對沒有高危得到乳癌的婦女有好處。

4. 比較泰莫西芬與雷洛西芬的研究 (STAR) 是甚麼和怎麼令女性更了解它?

「美國國家乳癌與大腸癌輔助性治療計劃」(NSABP) 是 NCI 中其中一個臨床試驗協作計劃組的一部分。這是它推出的新的一個稱為 STAR 的乳癌研究。研究從 1999 年 6 月開始招募參加者，涉約 22,000 名至少 35 歲並均有高風險患上乳癌的停經婦女。

oping breast cancer.

The study is designed to determine whether raloxifene, a drug similar to tamoxifen, is also effective in reducing the chance of developing breast cancer in women who have not had the disease, and whether the drug has benefits over tamoxifen, such as fewer side effects.

Women can learn more about the STAR trial in several ways. They can call NCI's Cancer Information Service at 1-800-4-CANCER (1-800-422-6237). The number for deaf and hard of hearing callers with TTY equipment is 1-800-332-8615. Information is also available on NSABP'S Web site at <http://www.nsabp.pitt.edu> or NCI's clinical trials web site at <http://cancertrials.nci.nih.gov> on the Internet.

5. Does tamoxifen cause blood clots?

Data from large treatment studies suggest that there is a small increase in the number of blood clots in women taking tamoxifen, particularly in women who are receiving anticancer drugs (chemotherapy) along with tamoxifen. The total number of women who have experienced this side effect is small. Women in the BCPT who took tamoxifen also had an increased chance of developing blood clots. The risk of having a blood clot due to tamoxifen is similar to the risk of blood clots for women on Single-agent estrogen re-

該研究的目的是確定雷洛西芬，一種類似泰莫西芬的藥物，是否也能有效地減少沒有乳癌的女性將來患上乳癌的機會，並且該藥物是否能超過泰莫西芬的好處，如較少副作用。

婦女們可透過以下數個渠道去知道更多 STAR 研究的資訊。可致電 1-800-4-CANCER (1-800-422-6237) 給國家癌症研究中心的癌症資料服務。失聰或聽力較弱的人士可用電傳打字設備致電 1-800-332-8615。該研究計劃在網頁上也有相關資訊，你可瀏覽網址 <http://www.nsabp.pitt.edu> 或者研究中心的臨床研究網頁 <http://cancertrials.nci.nih.gov>。

5. 泰莫西芬是否會引起血栓？

治療研究數據表明，女性服用泰莫西芬會有小幅增加血栓的機會，特別是正在接受抗癌治療（化療）的婦女。總數來說，有這副作用的女性是小數。在「預防試驗計劃」中服用泰莫西芬的女性，顯示會增加有血栓的機會。因為服用泰莫西芬而患上血栓的風險是類似於服用單劑雌激素替代療法的風險。

placement therapy.

6. Does tamoxifen cause uterine cancer?

The BCPT found that women taking tamoxifen had more than twice the chance of developing uterine cancer compared with women on placebo (an inactive substance that looks the same as, and is administered in the same way as, tamoxifen). The risk of uterine cancer in women taking tamoxifen was in the same range as (or less than) the risk in postmenopausal women taking single-agent estrogen replacement therapy. Additional studies are under way to define more clearly the role of other risk factors for uterine cancer, such as prior hormone use, in women receiving tamoxifen.

Like many cancers, uterine cancer is potentially life threatening. Most of the uterine cancers that have occurred during studies of women taking tamoxifen have been found in the early stages, and treatment was usually effective. However, breast cancer patients who developed uterine cancer while taking tamoxifen have died from the disease. Abnormal vaginal bleeding and lower abdominal (pelvic) pain are two symptoms of the disease. Women on tamoxifen should see their doctor if they experience these symptoms.

7. Does tamoxifen cause eye problems?

As women age, they are more likely to develop cataracts (a clouding of the lens inside the eye). Women taking tamoxifen appear to be at increased risk for developing cataracts. Other eye problems, such as

6. 泰莫西芬會否引起子宮癌？

根據 BCPT 發現，婦女服用泰莫西芬比起服用安慰劑（無活性物質，看起來與泰莫西芬一樣，並且當泰莫西芬被相同方式施用於婦女）會有多過兩倍機會得到子宮癌。服用泰莫西芬的風險是相同於（或小於）停經後的婦女服用單一試劑雌激素替代療法的風險。另外正在進行的研究中，會更清楚界定是否有其他風險因素可以影響得到子宮癌，例如服用泰莫西芬前曾用激素的婦女。

像許多癌症，子宮癌是有生命威脅。大部分婦女在參與服用泰莫西芬的研究時，她們都已被發現有早期子宮癌，而治療通常是有效的。然而，有乳癌而在服用泰莫西芬後有子宮癌患者在治療期間就死於這種癌。陰道異常出血及下腹部（骨盆）疼痛是其中兩種症狀。如果正在服用泰莫西芬的女性遇到這些症狀，應見他們的醫生。

7. 泰莫西芬是否會引起眼睛的問題？

隨著女性的年齡增長，他們更容易患上白內障（眼睛裡面的晶狀體混濁）。婦女服用泰莫西芬會有增加白內障的風險。另外有少數

corneal scarring or retinal changes, have been reported in a few patients.

8. Does tamoxifen cause other types of cancer?

There have been a few reports of liver cancer and reports of other liver toxicities that have occurred in women taking tamoxifen. Although tamoxifen can cause liver cancer in particular strains of rats, it is not known to cause liver cancer in humans. Tamoxifen did not cause liver cancer in the BCPT. It is clear that tamoxifen can sometimes cause other liver toxicities in women, which rarely can be severe or life threatening.

Doctors may order blood tests from time to time to check liver function.

Although one study suggested a possible increase in cancers of the digestive tract among women receiving tamoxifen for breast cancer, other trials, including the BCPT, have not shown an association between tamoxifen and these cancers. Studies such as the BCPT show no increase in cancers other than uterine cancer. This potential risk is being evaluated.

9. Should women taking tamoxifen avoid pregnancy?

Yes. Tamoxifen may make premenopausal women more fertile, but doctors advise women on tamoxifen to avoid pregnancy because animal studies have suggested that the use of tamoxifen in pregnancy can

患者被發現有其他眼疾，如角膜癍痕或視網膜的變化。

8. 泰莫西芬會否引起其他類型的癌症？

有幾宗肝癌報告和其他肝毒性報告指出有婦女服用泰莫西芬時患上肝癌。在老鼠試驗中，泰莫西芬可引起肝癌，但不知道會否導致人類患上肝癌。在 BCPT 中，泰莫西芬並沒有引起肝癌。顯然，泰莫西芬有時會引起婦女肝臟毒性，但很少危及生命。

醫生可以不時驗血以檢查肝功能。

雖然一項研究指其中服用泰莫西芬治療乳癌的女性會增加消化道癌的機會，但其他試驗，包括 BCPT，並沒有顯示出泰莫西芬和這些癌症之間的關聯。如 BCPT 的研究，除了子宮癌，沒有證明會增加患上其他癌症的風險，這潛在患子宮癌的風險正被評估。

9. 服用泰莫西芬的婦女要避孕嗎？

是的。泰莫西芬可以使停經前的婦女更容易生育，但醫生建議正服用泰莫西芬的女性要避孕。因動物研究顯示，在懷孕期間服用泰莫西芬可危害胎兒。哪位婦女如對生育，節育，或懷孕有問題應與醫

cause fetal harm. Women who have questions about fertility, birth control, or pregnancy should discuss their concerns with their doctor.

10. What are some of the more common side effects of taking tamoxifen?

In general, the side effects of tamoxifen are similar to some of the symptoms of menopause. The most common side effects are hot flashes and vaginal discharge. Some women experience irregular menstrual periods, dizziness, headaches, fatigue, loss of appetite, nausea and/or vomiting, vaginal dryness or bleeding, and irritation of the skin around the vagina. As is the case with menopause, not all women who take tamoxifen have these symptoms.

11. Does tamoxifen cause a woman to begin menopause?

Tamoxifen does not cause a woman to begin menopause, although it can cause some symptoms that are similar to those that may occur during menopause. In most premenopausal women taking tamoxifen, the ovaries continue to act normally and produce female hormones (estrogens) in the same or slightly increased amounts.

12. Do the benefits of tamoxifen in treating breast cancer outweigh its risks?

The benefits of tamoxifen as a treatment for breast cancer are firmly established and far outweigh the potential risks. Women concerned about the risks and

生討論。

10. 服用泰莫西芬有甚麼常見的副作用？

在一般情況下，泰莫西芬的副作用類似於一些更年期症狀。最常見的副作用是潮熱和陰道分泌物。有些婦女會月經週期不規則、頭暈、頭痛、乏力、食慾不振、噁心和/或嘔吐等、陰道乾燥和出血、和陰道周圍皮膚容易受到刺激。正如更年期，不是所有服用泰莫西芬婦女都有這些症狀。

11. 泰莫西芬會否令女人踏入更年期？

泰莫西芬不會造成婦女更年期開始，雖然它可能會導致類似症狀。在大多數停經前婦女服用泰莫西芬，卵巢會正常運作，並產生相同或略微增加的雌荷爾蒙（雌激素）。

12. 用泰莫西芬是否好處大於風險？

作為治療乳癌的藥物，泰莫西芬的好處已被肯定，好處且遠遠大於潛在的風險。女性如果擔心正在服用的藥物的風險和好處，我們

benefits of medications they are taking are encouraged to discuss these concerns with their doctor.

13. How long should a woman take tamoxifen for the treatment of breast cancer?

Women with advanced breast cancer may take tamoxifen for varying lengths of time depending on their response to prior treatment and other factors. When used as adjuvant therapy for early stage breast cancer, tamoxifen is generally prescribed for 5 years. However, the ideal length of treatment with tamoxifen is not known.

Two studies have confirmed the benefit of taking tamoxifen daily for 5 years. These studies compared 5 years of treatment with tamoxifen with 10 years of treatment. When taken for 5 years, the drug prevents the recurrence of the original breast cancer and also prevents the development of a second primary cancer in the opposite breast. Taking tamoxifen for longer than 5 years is not more effective than 5 years of therapy.

鼓勵與他們的醫生討論。

13. 婦女們應該服用泰莫西芬多久以治療乳癌？

晚期乳癌所需要服用泰莫西芬的時間長短是根據對之前治療的反應和其他因素。如當作為輔助治療早期乳癌，一般規定為5年。然而，理想的治療時段長度是未知的。

兩項研究都證實服用泰莫西芬五年是有效的。這些研究是比較用泰莫西芬治療5年和10年。當用了5年，該藥物可以防止原乳癌的復發，也可以防止第二主癌症在另一邊乳房的發生。服用多於5年泰莫西芬的效果並不比服用5年更有效。

This fact sheet was reviewed on 6/16/99
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這份料是在99年6月16日檢閱（取材自國家癌症研究中心的「泰莫西芬治療癌症的問題與解答」
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