

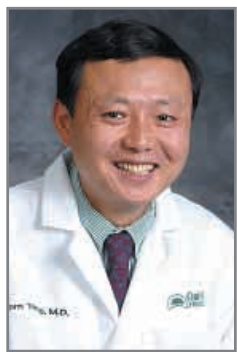
Hormonal treatment of breast cancer

Florida Cancer Institute

Thomas H. Tang, MD

Most breast cancer cells express estrogen receptors [ERs]," observes Thomas H. Tang, MD. "These are protein molecules which are activated by estrogen. Breast cancer cells proliferate once the estrogen binds to the receptor."

Theoretically, two hormonal approaches can be used to treat breast cancer, notes the doctor: prevention of the binding between estrogen and its receptor by using *antiestrogen*, and reduction of estrogen production by using *aromatase inhibitors*. Aromatase is a key enzyme in the synthesis of estrogen.



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survival advantage in postmenopausal women with ER-positive breast cancer who were treated with Arimidex over Tamoxifen. Anastrozole has thus become the new standard of care in this setting. Other trials conducted in Europe have also shown the superiority of Femara® and Aromasin® over Tamoxifen."

Hormonal treatment also plays an important role in the management of metastatic hormone receptor-positive breast cancer. Tamoxifen and aromatase inhibitors are commonly used oral agents. Faslodex® (fulvestrant) is a novel agent given by monthly intramuscular injection. It is indicated for the treatment of hormone receptor-positive metastatic breast cancer in postmenopausal women with disease progression following antiestrogen therapy. It works by binding estrogen receptors, and this leads to rapid degradation of ER protein.

"For many years, Novaldex® (tamoxifen), an antiestrogen, has been the standard treatment for estrogen-positive breast cancer patients with either early stage or metastatic conditions," explains Dr. Tang. "Tamoxifen has been proven to be highly effective in multiple clinical trials.

"Aromatase inhibitors such as Arimidex® (anastrozole), Femara® (letrozole) and Aromasin® (exemestane) work by decreasing the production of estrogens in postmenopausal women with ER-positive breast cancer. Recently, multiple clinical trials in Europe and North America have shown that this class of medication is superior to Tamoxifen in terms of efficacy and side effect profile.

"Notably, the ATAC (Arimidex or Tamoxifen Alone or in Combination) trial conducted in Europe and North America showed a better than three percent absolute disease-free survival

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"The last few years have witnessed significant advances in the management of both early stage and metastatic breast cancer with the completion of several landmark clinical trials involving new agents of hormonal manipulation," concludes Dr. Tang. "Without doubt, these clinical trials, along with new trials, will profoundly change the paradigm of breast cancer management." **FHCN**

Leading the charge against cancer...

Dr. Tang welcomes calls from those who are interested in learning more about new cancer treatment and related topics. For further information, please call (352) 596-1926. Florida Cancer Institute is located at 7154 Medical Center Drive in Spring Hill.

Current hormonal medications in the treatment of ER-positive breast cancer

Class	Medication	FDA-Approved Clinical Indications
Antiestrogens	Tamoxifen® (Novaldex®)	Early stage (adjuvant) and metastatic breast cancer
	Fulvestrant (Faslodex®)	Metastatic breast cancer
Aromatase Inhibitors	Anastrozole (Arimidex®)	Early stage (adjuvant) and metastatic breast cancer
	Letrozole (Femara®)	Early stage (adjuvant) and metastatic breast cancer*
	Exemestane (Aromasin®)	Metastatic breast cancer**

*Approved for extended adjuvant treatment of early stage breast cancer in post-menopausal women who have received five (5) years of adjuvant tamoxifen therapy.

** Clinical trials support its use in early stage breast cancer (adjuvant treatment). However, FDA has not approved this indication yet.

Newest technology in cancer care, close to home

FHCN photo by Nerissa Johnson



Florida Cancer Institute has been providing radio-therapy and chemotherapy to patients in Hernando County since 1986," relates Practice Administrator Marc Panarisi. "For nearly twenty years, our ten thousand square-foot facility provided many patients with needed services, but now we can offer even more."

On December 20, 2004, Florida Cancer Institute officially opened its new state-of-the-art cancer center in Spring Hill, combining the latest technology in cancer care with the warmth and comfort patients have grown to expect from their hometown cancer center.

Any cancer patient knows that the schedule for treating cancer can be very arduous. In addition, most treatments for cancer have fatigue as a side effect. While this fatigue is usually manageable, easy access to treatment in a warm, personable environment helps make the process easier on patients and their loved ones.

Florida Cancer Institute's new facility is located at 7154 Medical Center Drive in Spring Hill. It is an expansive 24,000 square-foot facility with ample room for leading edge technologies like diagnostic Computed Tomography (CT), positron emission tomography (PET), chemotherapy and radiation therapy, including intensity modulated radiation therapy (IMRT) — all in one location.

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"Our CT scanner is one of only three of its kind in the state of Florida," notes Mr. Panarisi, "and one of the others is in our center in New Port Richey."

The scanner has advanced features that allow diagnostic data to be transmitted digitally to work stations, where visualization and treatment planning for medications, 3-D conformal radiation and IMRT can take place.

Comfortable recliners are also in place to accommodate patients requiring infusion therapies.

"With the exception of surgery," says Mr. Panarisi, "there is no aspect of cancer treatment that can not be delivered to our patients in this full-service, state-of-the-art cancer center."