Dear Readers,

I have been providing this newsletter since August of 2011. Some of you have been with me from the beginning. Please know that the Breast Cancer Advisor is provided for your education. If there are parts of it that you feel need to be expanded, removed or in some way altered, please let me know. I want to be certain that what I provide is what you need.

Best personal regards,
Dr. Silvana Martino

BIOLOGY BASICS

In this issue, I want to discuss what is commonly referred to as locally advanced breast cancer. As I have stated before, most patients are diagnosed with breast cancers that are small in size and with negative lymph nodes. However, we still see patients who present with cancers that are large, or with lymph nodes that are obviously involved with tumor, or where the tumor has spread to the overlying skin or underlying chest wall structures. In these circumstances, it is difficult to perform a surgery that can remove the entire area of tumor and obtain clear margins. The better option is to find a method of reducing the tumor size (shrinking the tumor) before we proceed to surgery. The method commonly employed to achieve this goal is to administer drug therapy first. The drugs used include hormones, chemotherapy, and HER2 directed drugs, based on the particular characteristics of the tumor. This concept has been termed neo-adjuvant therapy. What it really means is pre-operative administration of drug therapy.

Two objectives are achieved in this process: (1) for some people, tumor size is reduced enough that a lumpectomy becomes

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possible instead of a mastectomy. Even if a mastectomy is still necessary, reducing tumor volume will improve the chance of obtaining clear margins; (2) by using drugs while the tumor is still in place, you can directly evaluate whether the drugs you are using are causing it to shrink or not. It gives you more confidence that the therapy is, in fact, working. If tumor reduction is not achieved, one can change therapy. Because of this second advantage, many oncologists are now using the concept of pre-operative drug administration even for tumors that are small where surgery could easily be done.

Biology Basics continued

WHAT’S NEW

1. CIRCULATING TUMOR CELLS IN EARLY BREAST CANCER

In some patients with cancer, tumor cells can be found circulating in their bloodstream. This finding is not only useful in predicting prognosis, but also can be used to figure out if the therapy being used is likely to be helpful. During the past few years, these measurements have been used in patients with metastatic disease. The basic principle is to first measure the number of cells prior to starting therapy. Approximately 3-4 weeks after therapy is started, the measurement is repeated. The comparison between these two measurements (a decrease or increase) can often provide the first clue of whether the tumor is responding or not. The more traditional way to make this decision is with scans and x-rays, which are usually done 2-3 months after a new therapy is begun.

A report from Dr. Bernadette Jager of Ludwig Maximilian University Hospital in Munich, Germany, presented at the 8th European Breast Cancer Conference in Vienna, Austria, in March 2012, describes the use of these measurements in patients with non-metastatic, early breast cancer.

In 2,026 patients with either node positive or high risk node negative patients who were being treated with chemotherapy and 2 or 5 years of zoledronic acid (Zometa), they detected circulating tumor cells in 22% of participants prior to starting therapy. By observing the entire group for a median of 35 months, the following observations were made: (1) axillary lymph node involvement was more common in those with circulating tumor cells; (2) there was no association with tumor size, tumor grade or hormone receptor status and circulating tumor cells; (3) there was a correlation between the presence
What’s New continued

of tumor cells in blood and a less favorable rate of tumor recurrence and survival.

This is the first study reporting the use of these measurements in early breast cancer. If these results are confirmed by a second study, I anticipate that they will become very important. It can help us distinguish who needs more or less therapy. It may provide a measurement for patients whose Oncotype score (recurrence score) is intermediate where one is not sure if they will benefit from chemo. We may also find that repeating these measurements during the observation phase once therapy has been completed, may help us anticipate who is about to recur before disease is apparent.

Reference: This presentation was reported in Chemotherapy Advisor by Debra Hughes, Circulating Tumor Cells Shown to Influence Survival in Early Breast Cancer, March 22, 2012.

2. CHANGES IN HORMONE RECEPTOR AND HER 2 STATUS BETWEEN PRIMARY AND METASTASES

The management of metastatic disease is greatly dependent on the hormone receptor (ER and PR) and the HER2 status of a tumor. These measurements serve as guides as to which drugs the tumor is most likely to respond to. These measurements are routinely done at the time of the original diagnosis.

If there is a recurrence, one commonly presumes that the qualities of the recurrent tumor are the same as the original, and treatment choices are made accordingly. Recently, this concept has been called into question. Do the properties of the recurrent tumor really stay the same or do they change? If they change, should therapy now be based on the new measurement? This is the issue addressed by R. MacFarlane and colleagues from the British Columbia Cancer Agency, University of British Columbia, Vancouver, Canada. They performed an analysis on paired tumor samples (from original tumor and that person’s metastatic tumor) from one hundred and sixty patients. They performed estrogen receptor, progesterone receptor and HER2 analysis on these samples and compared the results to see how often they changed versus how often they remained the same. Some results were excluded as they could not be certain that they were, in fact, a recurrence of the original cancer.


The results demonstrate that in 72% of samples, there was no change in measurements. In 19% there was a change in either the ER or HER-2 status. About 4% had a change in PR only. Five percent of tumors changed from ER+ or PR+ to ER- or PR-. Nine percent changed from hormone negative to positive. With regard to HER2 status, 4% went from positive to negative and less that 2% went from negative to positive.

The value of this information is that tumors do change over time. It is likely, though not absolutely certain that the best treatment decisions are made based on the most current information about the tumor. This is most important in a tumor that was originally hormone or HER2 negative and is now positive. This makes available the possibilities of using additional treatments that one might not consider if decisions are based strictly on the status of the original tumor.

**Interview**

(Q) What is acupuncture and how does it work?

(A) Acupuncture is one of the oldest, most commonly used systems of healing in the world. It originated in China about 3,000 to 4,000 years ago, and has been widely accepted throughout Asia and Europe.

Acupuncture (one component of Traditional Chinese Medicine), is based on the idea that the human body is an energy system with Qi (pronounced “chi”) being the “vital energy” or “life force” which is the basis of all life processes. The Qi flows through the body along 20 pathways or meridians from the internal organs to the surface.

As long as the Qi flows freely, health is maintained. If the flow of Qi is blocked or disrupted for any reason, the result is pain or illness. Acupuncture is just one way to access Qi. Each acupuncture point on the pathways has a different effect on the Qi that passes through it, so by stimulating the appropriate points with fine, hair-thin needles, the Qi is regulated, the body is balanced, and health is restored.

(Q) Is acupuncture painful?

(A) When done properly, the procedure is generally not painful and often people cannot feel it. The needles are far different from the hypodermic needles used for injections. The fine, hair-thin needles are specifically designed to be virtually painless.

(Q) Is there a risk of bleeding or infection from the needles?

(A) One can develop black and blue marks if a blood vessel is punctured, but this is rare and should be a minor issue in any case. I am particularly attentive to patients who are on blood thinners so as not to increase the risk of bleeding. Infection is not an issue since the needles are sterile, disposable, and discarded after each treatment.

(Q) What can acupuncture be used for in an oncology patient?

(A) Most of my oncology patients are being treated for controlling nausea and vomiting, peripheral neuropathy, hot flashes, xerostomia (dry mouth), diarrhea, constipation, insomnia, postoperative pain, general calming of moods, and general stimulus of the immune system which also assists patients in tolerating their chemo and radiation treatments (i.e., less side effects).

(Q) It sounds like acupuncture does a lot of things. What does it not do?

(A) Acupuncture is not used to directly shrink tumors, and it does not prevent chemo-related alopecia (hair loss).

(Q) How many treatments are necessary? Is it just one time?

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The number of treatments needed is judged based on the nature and severity of the problem that is being treated. An individual’s response to the treatment also determines the number and frequency of treatments.

How may our readers reach you if they have additional questions?

They are welcome to make an appointment at either of my offices or to e-mail me at p.miura@hotmail.com.

When done properly, the procedure is generally not painful and often people cannot feel it. …
The fine, hair-thin needles are specifically designed to be virtually painless.
(Q) Dr. Martino, I have heard that breast feeding can reduce breast cancer even if you are a BRCA gene carrier. Is this true?

(A) Yes, this does appear to be correct. We have known for many decades that, in general, women who breast fed their children had a somewhat lower risk of developing breast cancer. A recent study conducted by the Women’s Research Institute in Ontario, Canada, found that even women who carry the BRCA1 gene and who breastfed for at least one year reduced their risk of breast cancer by about 30%. This suggests that breast feeding is able to reduce breast cancer risk in all groups of women irrespective of whether they are gene carriers.

E-mail your questions to:
smartino@theangelesclinicfoundation.org

Upcoming Foundation Events

For more information, please call us at (310) 582-7909

**Breast Cancer Seminar**
April 22, 2012 • 3:00 - 5:00 PM
Smith College Club of Los Angeles
Studio City, CA

**Breast Cancer Seminar**
May 3, 2012 • 7:00 - 9:00 PM
Temple Beth Hillel
Valley Village, CA

**Breast Cancer Seminar**
Gospel Luncheon sponsored by Pink Pearls of Hope
May 6, 2012 • 2:00 - 5:00 PM
Skylinks at the Long Beach Golf Course
Long Beach, CA

**Breast Cancer Seminar**
May 21, 2012 • 6:30 - 8:30 PM
The Wellness Community
Westlake Village, CA

The Angeles Clinic Foundation is a nonprofit organization whose purpose is to sponsor and support programs, services, education, advocacy, and research related to cancer. Our goal is to make a difference in all aspects of the lives of people touched by cancer. Your support is important in the fight against cancer and the journey towards a cure.

How To Receive Future Issues

You may request future issues of this newsletter by e-mailing your request to:
smartino@theangelesclinicfoundation.org

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[www.theangelesclinicfoundation.org](http://www.theangelesclinicfoundation.org)
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