

Cancer Cures Within Reach Treatments

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colorectal cancer. Our team has been directly involved in the research leading to this development. Vectibix™ is an antibody that targets the epidermal growth factor receptor on the surface of the cancer cells.

Prostate Cancer: A study of over 1,300 patients receiving hormonal therapy showed that those whose PSA became undetectable with hormonal therapy fared much better in the long run than those whose PSA only dropped partially. Following the PSA values closely during hormonal therapy, therefore, can be helpful in predicting a patient's prognosis.

A new medication known as DN-101 (calcitriol) was found to be associated with less development of blood clots in patients receiving chemotherapy for prostate cancer. This medication is now being tested to determine its efficacy in improving the response of patients with prostate cancer to chemotherapy and also the potential reduction in complications (see clinical trial summary page 13).

Another study looked at the use of chemotherapy before hormonal therapy for patients with prostate cancer whose PSA is rising after either prostatectomy or radiation therapy. The goal is to increase the chances that a more complete remission is obtained in these patients, and additional research in this regard is ongoing.

Lung Cancer: The administration of chemotherapy following surgery is now a standard procedure to reduce the risk of recurrence in many lung cancer patients. The main question addressed at the meeting was: how do we improve cure rates further? The answer pointed to the addition of new targeted treatments that attack the cancer cells directly and specifically or cut their blood supply (see clinical trials summary, page 13). These are either intravenous or oral new medications that hold the promise of increasing significantly the numbers of patients we can cure of lung cancer.

For patients with advanced non-squamous, non-small cell lung cancer, Avastin® has been approved for use in combination with chemotherapy. This intravenous drug helps cut off the blood supply to cancer cells.

Of great importance is the unique presentation of lung cancer in young non-smoking women; public awareness increased recently when Dana Reeve, widow of the actor Christopher Reeve, died of lung cancer at age 44. She had been a life-long non-smoker. Lung cancer kills more American women than breast, ovarian and uterine cancers combined. Gender-specific clinical trials are now being conducted focusing on lung cancer in women (see clinical trials summary page 13).

Myelodysplastic Syndromes: This condition that affects the bone marrow causing low blood counts, including low white cells, low red cells, and/or low platelet counts, was quite intractable until very recently. However, three new medications have been recently approved and these are Vidaza™ (5-azacytidine), Revlimid® (lenalidomide), and Dacogen™ (decitabine).

Many more studies were presented encompassing the entire spectrum of all cancers; these few highlights introduce some of the concepts and strategies being advanced at this point.

Breast Cancer

by Kalust Ucar, MD

Breast cancer is the most common cancer among women. But we are long past the time when a breast cancer diagnosis meant the end of life. In most instances, breast cancers are curable; when they are not, they are treatable.

Like most other cancers, breast cancer has four stages. Stages I, II, and III are considered curable; but as one moves from stage I towards stage III, the risk of a cancer recurrence in the future increases. Stage IV usually is treatable but not yet curable. At this stage, blood circulation has spread the cancer to other parts of the body.

For most curable breast cancers, initial management consists of surgery. A partial mastectomy (also known as lumpectomy) followed by radiation therapy can help avoid a total mastectomy. Therefore, breast conservation usually is possible.

Doctors use adjuvant treatment to reduce the risk of cancers coming back in the future. These treatments – including chemotherapy, immunotherapy, radiation therapy and hormonal treatments – are appropriate for many patients with stage I, II, or III breast cancer. Recently, immunotherapy and several new drugs have come to play crucial roles. Significant advances in supportive care and anti-nausea medications allow us to administer adjuvant therapy effectively and safely. For more than 20 years now our team at Pacific Shores Medical Group has played an integral role in many clinical trials that led to these breakthrough advances.

About 25% of breast cancers are found to have large amounts of a cell membrane receptor called Her-2. This is a very aggressive form of the illness, and patients with these cancers have a high risk of recurrence. Dr. Dennis Slamon and his team at UCLA discovered this receptor, and his work over 20 years led the way to a monoclonal antibody (Herceptin®) specifically designed to block the Her-2 receptor. By using Herceptin®, doctors have decreased the risk of cancer recurrence by 50% in patients with this particular Her-2 positive type of breast cancer. Our team, and our patients participated in the clinical trials leading up to the dramatic results.

Hormonal treatments help control breast cancer by reducing the effects of estrogen. Doctors have used Tamoxifen for many years for this purpose. It is effective before and after menopause. Aromatase inhibitors (Arimidex®, Femara®, Aromasin®) are effective for women who are past menopause. Tamoxifen and aromatase inhibitors can also be used in sequence to increase their effectiveness.

In Stage IV or metastatic breast cancer, doctors use chemotherapy or hormonal therapy to control the cancer for as long as possible. Chemotherapy drugs such as taxanes, anthracyclines, Gemzar®, Xeloda®, Navelbine®, and others have contributed to our success in treating patients with stage IV breast cancer. Herceptin® is of critical value in Her-2 positive patients. Lapatinib is a new oral medication that works on more than one receptor (see clinical trials in page 13).



Joan Wheatly, breast cancer survivor. She participated on Herceptin® trial program at Pacific Shores Medical Group.

Angiogenesis inhibitors are a new class of medications that block the formation and growth of blood vessels that feed the cancer cells. One such drug, Avastin™, is being tested (see clinical trials in page 13)

Breast cancer frequently causes bone destruction leading to pain and fractures. Research published by our team at Pacific Shores Medical Group and other centers has proven that Zometa® can reduce the bone destruction caused by cancer cells. Patients who have suffered from damaged bone structures due to bone metastases have shown reduced bone complication rates when they are treated with this medication.

Recent research proves that, in some cases, breast cancer can even be prevented in high-risk patients. Our group has been a primary center for the National Surgical Adjuvant Breast and Bowel Project (NSABP) for more than 20 years. Recent trials conducted by NSABP have shown that some breast cancers can be prevented with hormonal treatment.

The meaning of the word cancer is ever-changing. In recent years, it is changing for the better. Newer technologies are rapidly moving us towards a future where cancer means an often curable and sometimes a chronic but treatable condition.