Combining Today's Best Treatments and Latest Research

Best Prescription for Today, Better Prognosis for Tomorrow

by Simon Tchekmedyian, M.D.

Never before in the history of modern cancer care has the need to be familiar with the newest treatments been so essential. In order to offer our patients the best current options, oncologists and their staff have to be familiar and experienced with recent treatments and techniques so that they can be rapidly incorporated in daily practice.

It is, therefore, imperative for an oncology program to have a strong infrastructure of clinical research and to have staff who are experienced with the new treatments that are becoming or will become available. In fact, through this program, patients gain access to rapidly evolving new options sometimes many years before they are fully approved and available at the community practice level. The clinical trials program has been part of our practice since its inception in 1986 and has been enriched by our close cooperation with the National Cancer Institute, the UCLA Oncology Research Network, as well as many innovative pharmaceutical and biotechnology companies.

Here are some examples of the advantages of having clinical trials programs for our patients: Before Iressa®, a new oral drug for lung cancer, became commercially available, we had treated over 150 lung cancer patients with it through our research program. By the time the medication became commercially available, our physicians and nurses already had developed, over the previous two years, one of the largest worldwide experiences with this medication.

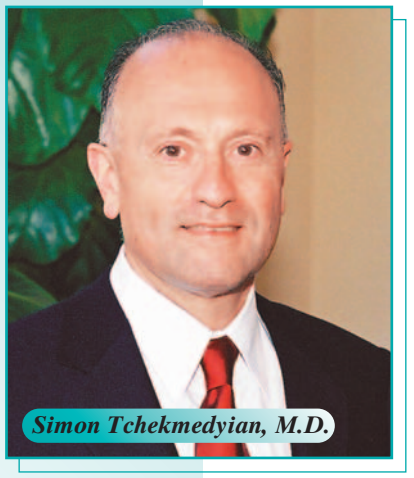
We are also working with new monoclonal antibodies (specific proteins that work through the immune system) for lung cancer treatment. We are also testing medications such as Ethyol® as a means of reducing side effects of irradiation and hemotherapy on normal tissues.

In the treatment of colorectal cancer, the new monoclonal antibody, Cetuximab, also known as C225, is under review by the FDA and potentially could become available in the future. It blocks the epidermal growth factor receptor (EGFR) and leads to inhibition of tumor growth. We have participated in clinical trials with this antibody, and our patients have received it over the last three years; it remains available to our patients through our clinical trials program as part of clinical research. Iressa® and Cetuximab work similarly on cancer cells, and they stop cancer cell division. Iressa® is given orally, and works inside the cells while Cetuximab is given intravenously and works predominantly on specific targets on the surface of cancer cells.

Another new investigational option is the antibody ABX-EGF, which also targets EGFR. Studies with this antibody are ongoing in colorectal cancer, prostate cancer, kidney cancer and lung cancer.

Work is progressing rapidly and forcefully in the field of angiogenesis inhibition. The target of this treatment is new blood vessels that feed tumors. By blocking the formation of these new blood vessels, cancer cells and tumors are deprived of life-sustaining nutrition. This approach can make cancer cells die out and prevent their spread. We are conducting multiple trials with new medications specifically designed to inhibit new blood vessels. These include Avastin™, an antibody given by vein, which was recently found to prolong the life of patients on chemotherapy for colorectal cancer. This drug is now being reviewed by the FDA and may become available in the near future. An oral medication known as PTK787/ZK 222584 also inhibits cancer blood vessels, and is now in clinical testing for patients with colorectal cancer in our program. Additional news in the colorectal cancer front is the recent approval of the chemotherapy agent Oxaliplatin.

New approaches to prostate cancer are evolving, including the use of monoclonal antibodies as well as new oral chemotherapy agents. We are participating in clinical trials of the CTLA-4 antibody, which works through an immune augmentation mechanism. One advantage of antibodies is that they lack some of the side effects of chemotherapy such as nausea and hair loss. The new oral chemotherapy agent satraplatin is a new clinical trial option for patients with advanced prostate cancer. We have also helped develop options to protect prostate cancer patients from bone complications and osteoporosis.



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We are not giving breast cancer a break. A host of new drugs targeting multiple aspects of breast cancer cells are now being tested in the laboratory and in the clinic. These include oral and intravenous molecules that target many of the different switches that need to be "on" for breast cancer cells to survive and thrive. These drugs are intended to "jam" the switches in the "off" position. The use of new molecular biology techniques allows for a speedier progression of our understanding of the intricacies of the behavior of these cells. Included in this group of drugs is the investigational oral drug GW572016, a dual inhibitor that simultaneously blocks two enzymes vital to cancer cell survival. We are also making advances in hormonal treatments. A recent study indicates that suppressing estrogen production with letrozole (Femara®) can prevent breast cancer recurrences after the completion of five years of tamoxifen therapy. We are working with new trials to protect bone health during Femara® treatments.

New chemotherapy drugs close to approval include Alimta®, which has been found to be effective in malignant mesothelioma, an asbestos-related cancer.

Thalidomide, which was banned many years ago because it caused birth defects, has found a new life as an anti-cancer treatment. It is effective in multiple myeloma, and new analogs of thalidomide are being tested, including Revimid®, which target not only multiple myeloma but also melanoma, kidney cancer, and other malignancies.

We are embarking as one of 123 centers in a 21 country, worldwide clinical trial for the treatment of kidney cancer. This trial involves a new oral drug with a unique mechanism of action. This type of worldwide cooperation increases the hope for patients with kidney cancer.

New targets on lymphoma and leukemia cells are the focus of clinical trials now in progress; these new treatments seek to improve the cure rates in these diseases and offer hope when other treatments are not working.

We are testing interventions designed to improve the

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Patients and staff at our new office at the Hoag Health Center in Huntington Beach.