## CLINICAL TRIALS

## Options, and a healthy dose of hope, for cancer patients

Cancer clinical trials at Salinas Valley Memorial Healthcare System are nothing new. In fact, clinical trials have long played a vital role in providing cancer care for people in Monterey County.

The resulting discoveries and treatment advances continue to expand options and hope for people with cancer. While the primary treatments are still surgery, chemotherapy and radiation, the area of precision medicine has had the most striking developments to evolve over the past five years. And they are growing in promise, thanks in part to cancer clinical trials that work to refine these therapies.

Salinas Valley Memorial has been an aligned affiliate of Stanford Cancer Institute as an Eastern Cooperative Oncology Group community research site since the late 1990s.

"Today's cancer physicians use precision medicine approaches in combination with traditional medicine to treat cancer. With targeted immunotherapy, the individual's tumor itself can be profiled and mutations identified and examined," says registered nurse Terri Nielsen, a certified clinical research professional and SVMHS clinical research program manager.

"Genetic data gathered from the tumor is used to match the patient with medicines that attack the cancer cells and give the body's immune system an advantage in the battle," Nielsen says. "We look for the most effective trials and therapies that exploit weaknesses in the specific patient's tumor."

The immune system helps the body fight infections and other diseases, with the help of white blood cells, organs and tissues of the lymph system. Today, the rapidly advancing field of immunotherapy engages the patient's own immune system in fighting the cancer.



Immunotherapies employ substances made from living organisms to create biologic agents like antibodies, interleukins and vaccines. Immunotherapy is a type of cancer treatment that assists the immune system in battling the tumor cells.

Several types of immunotherapies are used to treat cancer, including immune checkpoint inhibitors, T-cell transfer therapy, monoclonal antibodies, treatment vaccines and immune system modulators. (Read more about immunotherapy at www.cancer. gov/about-cancer/treatment/types/immunotherapy.)

"Targeted therapy focuses on specific driver mutations and immunotherapy aids the body's immune system in attacking the cancer cells," says Dr. Hong Zhao, SVMHS cancer research medical director and principal investigator for cancer clinical trials. "They work differently from traditional chemotherapy."

Because targeted therapies are typically not toxic to cells, unlike traditional chemotherapy, immunotherapies and targeted therapies are better tolerated by patients in general and many of the targeted therapies are available as oral medications, Dr. Zhao says.







public. These experimental drugs are studied with patients who volunteer to receive them while in their doctor's care, under the oversight of an ethics board and the U.S. Food and Drug Administration.

A 60-year-old Salinas resident with stage 4 cancer is one of those patients who was given new hope through a clinical trial that involves targeted therapy.

"I'm grateful to my oncology team for pursuing options that give me hope," he says. "I've seen their persistence in making sure I was able to qualify for a clinical trial that could have a positive impact on my cancer's progression.

"When you're living with cancer of any kind, it makes a difference to have caregivers with knowledge, compassion and resources. I feel as if I have a team of people on my side, helping me navigate a difficult diagnosis."

The team works to connect the patient with the most appropriate clinical trials whether they involve chemotherapy, radiation therapy, or immunotherapy.

"We typically have an array of 15 to 20 cancer clinical trials that are open and ongoing," Nielsen says. "Cancer is unique in nature so we have to put a lot of effort into matching each person with the right trial.

"Cancer clinical trials not only offer hope. They give patients a sense of pride in knowing they're playing an important role in furthering research that not only improves treatment options, but may one day lead to a cure."

Melanie Bretz lives in Monterey and has written on a wide range of topics, including health care, during a writing career spanning more than 30 years.

"At any given time, our program has a diverse portfolio of cancer clinical research trials that align with the types of cancer seen in our patient population," says Dr. Zhao. "This enables our patients to stay close to home while having access to sophisticated clinical research trials and cutting-edge treatments found in large academic research institutions."

"We work on a case-by-case basis to ensure that our patients receive the very best treatment choices and options," Dr. Zhao says. "As a physician working with cancer patients, it is gratifying to be able to connect individuals with the latest available therapies. Today's clinical trials are tomorrow's medical breakthroughs and future cancer treatments."

Nielsen works with oncologists and other specialists and care providers to advocate for patients. "Our team is very proactive in trying to find the most effective and promising trials and therapies for each patient," she says.

Clinical trials are especially relevant and meaningful for both cancer researchers and stage 4 cancer patients since the trials offer a new sense of hope. Experimental cancer drugs are therapies that show promise but are not yet available to the general