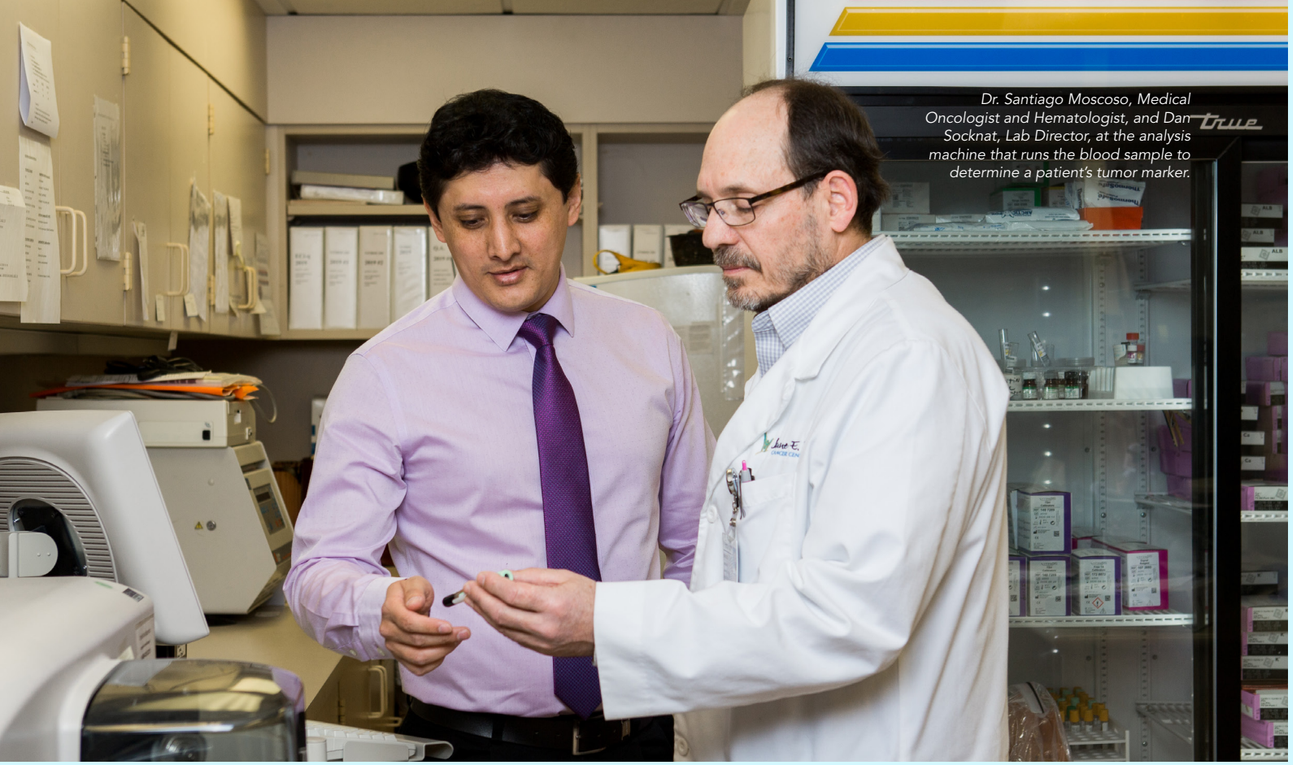
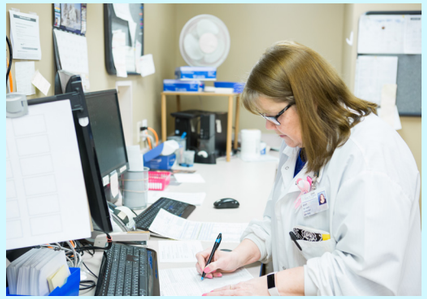
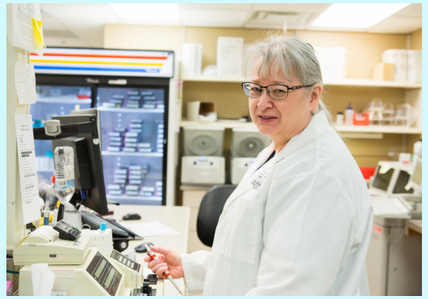


Dr. Santiago Moscoso, Medical Oncologist and Hematologist, and Dan Socknat, Lab Director, at the analysis machine that runs the blood sample to determine a patient's tumor marker.





MARKING YOUR PROGRESS

BY MELANIE OLSEN
PHOTOS BY SHANE MONAHAN PHOTOGRAPHY

When you have cancer, there are so many questions. Once you decide and start treatment, how do you know your treatment is working? Is it time for another scan? What can your body tell you and your doctor? Are you making progress? And what about recurrence?

Substances made by cancer cells or by normal cells in response to cancer in the body called tumor markers can be used by your medical oncologist to guide your treatment and check for recurrence. According to Santiago Moscoso, MD, Medical Oncologist and Hematologist at the June E. Nylen Cancer Center (JENCC) in Sioux City, Iowa, "Tumor markers, in theory, are something that detects cancer. It could be a protein, it could be an antigen, it could be circulating DNA, or it could be the cancer cell itself."

Common tumor markers are carcinoembryonic antigen (CEA) for colorectal and other cancers, CA15-3 or CA27-29 for breast cancer, CA-125 for ovarian cancer, and prostate specific antigen (PSA) for prostate cancer. Each of these tumor markers is either a protein or antigen found in the blood.

"In the beginning, it was thought that we could diagnose cancers using tumor markers, but later on realized that many other reasons can cause elevations," Dr. Moscoso explains. "For example, the protein that is measured for the CEA tumor marker is made in the lining of the intestinal tract. Almost anything that causes irritation of those tissues could cause the tumor marker to be elevated."

Dr. Moscoso notes that tumor markers are now mostly used to determine response to treatment and monitor for reoccurrences. "It's helpful if the tumor marker is elevated to begin with because as we treat the cancer and the number goes down, then we know that at least by this, the treatment is probably working." He adds, "If the number is down following cancer surgery, then the marker can be used to check for recurrence."

Some doctors do check tumor markers in patients with Stage 2 or Stage 3 cancers, but it is not a common practice. Typically, this is often used in Stage 4 cancer.

At JENCC, tumor markers are tested through a blood draw at the on-site lab. Named after a generous donation given by Ted De Vries in memory of his wife, Jo De Vries, the state-of-the-art lab supports the medical team in providing the best care for each patient. You can schedule your blood draw conveniently with your other appointments at the Cancer Center, coming all to one location. These tumor marker lab draws are done at certain milestones in your treatment, such as the first day of a new chemotherapy cycle. For recurrence monitoring, tumor markers are usually drawn every three months for the first year, then every four months for the second year, and then every six months.

"A lot of patients get very anxious when the tumor marker goes up," Dr. Moscoso shares. "Rarely am going to switch treatments based on a tumor marker alone. But it will guide me when it's time to repeat a scan. That's the value of this."

Dr. Moscoso adds tumor markers are a piece of the overall puzzle to be considered in conjunction with a patient's medical information, imaging and other laboratory tests. He explains, "You need to use the tumor marker in the context of that particular patient. If I'm treating a patient who had an elevation, I would check day one of every cycle of chemotherapy. I know it's difficult, but I ask my patients not to put a lot of emphasis on the tumor markers. They help me know when it's time for the next scan and I use tumor markers in conjunction with other information."

As a cancer patient, anxiety is something you know all too well and there are many difficult moments of the cancer journey. But knowing that something in your blood can provide answers to help guide your treatment and future and that the experienced medical team at the June E. Nylen Cancer Center will do all they can for your comprehensive cancer care, should empower you and provide some peace of mind.

If you or a loved one have been diagnosed with cancer, call the June E. Nylen Cancer Center at 712.252.0088 to learn more or visit NylenCancerCenter.com.

June E. Nylen
CANCER CENTER

712-252-0088
230 Nebraska St., Sioux City, IA 51101
www.nylencancercenter.com

The June E. Nylen Cancer Center conveniently offers laboratory services within its facility. Laboratory testing is an important component of detection, diagnosis and treatment of cancers and blood disorders. Patients will have blood drawn and lab tests before or while visiting their physician. Having our on-site lab ensures quick turn-arounds for many tests that help our physicians evaluate and determine treatment as quickly as possible.

These trained laboratory services professionals at the June E. Nylen Cancer Center perform 262,000 various lab tests each year to support the medical team in providing the best care to patients.