SIMPLE BLOOD TESTS FOR MONITORING CANCER PATIENTS:
Benefits of “gold standard” tests for ovarian, breast and colon cancer

Plainview, NY, July 2008 — Together, ovarian, breast and colorectal cancers claim the lives of more than 100,000 Americans each year. Yet, according to the American Cancer Society’s 2008 edition of “Cancer Facts & Figures,” cancer deaths have declined dramatically since the early 1990s – thanks in part to advances in the way doctors can monitor their patients’ progress during and after cancer therapy.

“When dealing with such prevalent and challenging cancers as ovarian, breast and colorectal, accurate and detailed information can make a drastic difference in the progress and ultimate prognosis for the patient,” explains Zsuzsanna Vegh-Goyarts, PhD, Assistant Director of Flow Cytometry and Tumor Markers at Acupath Laboratories. “Today, physicians can order simple blood tests that will tell them how their patients are responding to a particular drug regimen or radiation treatments, or indicate whether or not a patient is in remission.” she adds.

The Triple Threat Against Cancer: CA-125, CA 15-3 and CEA

Many of the advances made in testing for cancer in serum, or blood revolve around the identification of certain proteins that are either made by the tumor itself or created by the body in response to the cancer. Dr. Vegh-Goyarts notes, “Three examples of such substances that are most often tested are CA-125 for ovarian cancer, CA 15-3 for advanced breast cancer and CEA for colorectal cancer.” Yet, she notes that levels of these proteins are not always elevated in cancer, so these tests cannot be used as a diagnostic tool. “These substances can also be elevated in a variety of benign conditions, such as pregnancy, benign cysts, hepatitis and cirrhosis.” Dr. Vegh-Goyarts adds.

Once a cancer diagnosis is confirmed with various other tests and procedures, however, these tests are often performed to provide a baseline level before treatment starts that doctors can use to gauge the success of treatments. “For instance, if CEA levels remain high in a colorectal cancer patient after surgery, this may indicate that the procedure did not effectively remove all the cancerous tissue, and surgeons may decide to operate again,” Dr. Vegh-Goyarts explains. “Or, persistant elevated CA 15-3 levels after a complete course of chemotherapy may suggest that the patient would be more responsive to a different approach,” she adds. Similarly, falling levels – and levels that reach and stay within normal limits – can indicate that a patient is entering remission. Increase from normal to abnormal levels may indicate recurring disease. Follow up a patient’s condition is possible for years using these assays.

“One of the most beneficial aspects of these tests is that they are very easy for patients to tolerate and comply with,” Dr. Vegh-Goyarts notes. “We are able to receive a great deal of valuable information with very little discomfort to the patient, and often avoid more invasive procedures as well,” she adds.

New, More Comprehensive Diagnostic Tests on the Horizon

Research for noninvasive tests for cancer screening from blood, urine or stool has made significant progress in the past few years. The substances scientists test for are either made by the cancer cells themselves or produced during the immune response against the cancer. Many researchers are currently in the process of developing and trialing tests that can help diagnose cancer early – especially cancers like ovarian and colorectal that are often identified. For instance, the American Cancer Society and several other groups recently released new guidelines for colorectal cancer screening that included the “sDNA” test, a screening that can identify DNA derived from cancer cells in stool samples. In addition, a blood test that has been shown to diagnose ovarian cancer in its earliest, most curable stages with nearly 99% accuracy – by detecting the presence of a number of proteins linked to the cancer itself – is currently in Phase III clinical trials with the FDA.

Dr. Vegh-Goyarts concludes, “Because there is no effective diagnostic test for ovarian cancer – and because colorectal cancer is best diagnosed using a procedure (colonoscopy) that has a very poor compliance rate – having simple blood tests that can confirm with reasonable accuracy the existence of these cancers at their earliest stages will be another breakthrough for patients and the medical professionals who work with them to help them win their fight against these diseases.”
About Dr. Zsuzsanna Vegh-Goyarts, PhD

With ample experience in the field of tumor biology and immunology, Dr. Zsuzsanna Vegh-Goyarts, Ph.D. serves as the Assistant Director of the Flow Cytometry and Tumor Markers department. Prior to Acupath, she worked as an Assistant Professor in immunology research at the State University of New York (SUNY) at Stony Brook and served as a consulting Assistant Director of Flow Cytometry at Enzo Clinical Laboratories. She spent her postdoctoral years in prestigious research institutes, including the Immunology Department of Albert Einstein College of Medicine, NY and Tumor Biology Department of the Karolinska Institute in Stockholm, Sweden. Dr. Vegh-Goyarts' research has appeared in an extensive list of peer reviewed publications. In addition, she holds a Certificate of Qualification in Oncology-Sera and soluble tumor markers, Diagnostic Immunology and all four areas of Cellular Immunology from the New York State Department of Health.

www.acupath.com