Tumor Markers for Breast Cancer

Tumor markers are substances that are produced by the cancer or by other cells of the body in response to cancer. Tumor markers for breast cancer can be found in the blood and are checked using a blood test. Having a high level of a tumor marker suggests to the healthcare provider that cancer is present in the body, but by itself, a high tumor marker level is not enough to be sure that cancer is present.

Tumor markers may be used in conjunction with other tests (scans, biopsies, etc.) to help diagnose a patient who has symptoms suspicious for cancer. Some markers can help the healthcare providers to determine prognosis and choose the best treatment. However, in breast cancer, tumor markers are most often used to evaluate the patient's response to cancer treatment or to monitor for recurrence (return of the cancer after treatment). A decrease in the level of a tumor marker may indicate that the cancer is responding to treatment. If there is no change or the tumor marker increases, this may indicate that the treatment is not working or that the cancer has returned. These results must be evaluated in combination with radiology tests, physical exam and the increase or decrease in any symptoms the patient may be experiencing.

There are some limits to the use of tumor markers. There are non-cancerous conditions that can cause tumor markers to be elevated, so these must also be considered when interpreting the test results. In addition, not everyone with breast cancer will have an increase in a specific tumor marker. Your doctor will recommend testing for tumor markers only if you need them.

Specific tumor marker blood tests for breast cancer include:

- CA 15-3
- CA 27.29
- CA 125
- Carcinoembryonic antigen (CEA)

Further Reading

The American Society of Clinical Oncology (ASCO) has published clinical practice guidelines on a variety of topics, including tumor markers for breast cancer. These guidelines, called What to Know: ASCO's Guidelines, are available on the ASCO website, www.cancer.net.

OncoLink Patient Guide to Tumor Markers

OncoLink is designed for educational purposes only and is not engaged in rendering medical advice or professional services. The information provided through OncoLink should not be used for diagnosing or treating a health problem or a disease. It is not a substitute for professional care. If you have or suspect you may have a health problem or have questions or concerns about the medication that you have been prescribed, you should consult your health care provider.