Tumor Markers

Tumor markers are substances, often proteins, which are produced by the cancer tissue itself or sometimes by the body in response to a cancer growth. Because some of these substances can be detected in body samples such as blood, urine, and tissue, these markers may be used, along with other tests and procedures, to help detect and diagnose some types of cancer, predict and monitor a person's response to certain treatments, and detect recurrence.

Newer types of tests have been developed that look for changes in genetic material (DNA, RNA), rather than proteins, in patient samples. The genetic changes have been found to be associated with certain cancers and can be used as tumor markers to help determine prognosis, guide targeted treatment, and/or detect cancers early on.

While tumor marker tests can provide very useful information, they do have limitations. Many tumor markers may also be elevated in persons with diseases other than cancer. Some tumor markers are specific for a particular type of cancer, while others are seen in several different types of cancer.

Not every person with a particular type of cancer will have an elevated level of the corresponding tumor marker and not every cancer has a tumor marker that has been identified as associated with it. Tumor markers alone are not diagnostic for cancer; for some types of cancer, they provide additional information that can be considered in conjunction with a patient's medical history and physical exam as well as other laboratory and/or imaging tests.

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Tumor Indicators

Tumor markers are substances that are produced by cancer or by other cells of the body in response to cancer or certain benign (noncancerous) conditions. Most tumor markers are made by normal cells as well as by cancer cells; however, they are produced at much higher levels in cancerous conditions. These substances can be found in the blood, urine, stool, tumor tissue, or other tissues or bodily fluids of some patients with cancer. Most tumor markers are proteins. However, more recently, patterns of gene expression and changes to DNA have also begun to be used as tumor markers. Markers of the latter type are assessed in tumor tissue specifically. There are some limitations to the use of tumor markers. Sometimes, noncancerous conditions can cause the levels of certain tumor markers to increase. In addition, not everyone with a particular type of cancer will have a higher level of a tumor marker associated with that cancer. Moreover, tumor markers have not been identified for every type of cancer.

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BETA 2 MICROGL... 1.76
(mg/L)
Range: < OR = 2.51

BETA 2 MICROGLOBULIN, SERUM
(mg/L)