

Laboratory Tests (Tumor Markers)

Laboratory tests called tumor markers are not diagnostic in themselves but can provide information that is used to:

- **Screen.** Although most markers are not suited for general screening, some are used in patients with a strong family history of a particular cancer. Genetic markers may be used to help predict risk in family members.
- **Help diagnose.** In patients that have symptoms, tumor markers may be used to help identify the source of the cancer, such as CA-125 for ovarian cancer, and to help differentiate it from other conditions.
- **Stage.** If a patient has cancer, tumor marker elevations can be used to help determine how far the cancer has spread into other tissues and organs.
- **Determine prognosis.** Some tumor markers can be used to help doctors determine how aggressive a cancer is likely to be.
- **Guide Treatment.** Some tumor markers, such as Her2/neu, will give doctors information about what treatments their patients may respond to (for instance, breast cancer patients who are Her2/neu positive are more likely to respond to Herceptin therapeutic drug treatment).
- **Monitor Treatment.** If the marker level drops, the treatment is working; if it stays elevated, adjustments are needed. The information must be used with care, however. CEA, for instance, is used to monitor colorectal cancer, but not every patient will have elevated levels of CEA. If the marker level is not initially elevated with the cancer, it cannot be used later as a monitoring tool.
- **Determine recurrence.** One of the biggest uses for tumor markers is to monitor for cancer recurrence. If a tumor marker is elevated before treatment, low after treatment, and then begins to rise over time, it is likely that the cancer is returning. (If it remains elevated after surgery, then chances are that not all of the cancer was removed.)

For a table of tumor markers currently in use, visit:

http://labtestsonline.org/understanding/analytes/tumor_markers/glance.html

Source: Lab Tests Online (a public resource on clinical lab testing; peer-reviewed, non-commercial, patient-centered)