

**Name of the test**

CEA (Carcinoembryonic Antigen)

**What is this test used for?**

This test measures the level of CEA in the blood. CEA is a protein that can be found in some tissues of fetus. CEA levels are very low since birth and become elevated in wide variety of cancers. CEA may be also increased in other conditions - inflammation, colitis, peptic ulcer, etc.

So, CEA is used as a tumor marker, but it lacks specificity and is not used for screening purposes. If the patient is diagnosed with cancer and CEA is elevated, then this marker can be useful for monitoring response to cancer treatment and determining prognosis.

**When is the test ordered?**

CEA test may be initially ordered when the patient has been diagnosed with colon cancer. It is also used as a marker for some other types of cancer - cancers of lung, liver, breast, rectum, etc.

If cancer is producing CEA, the test is reordered regularly to monitor response to therapy, determine prognosis and cancer stage, detect recurrence.

This test is usually performed along with other tumor markers.

**How is this test performed?**

A blood sample is taken from a vein.

**How to prepare for the test**

No preparation is needed.

**Interpretation of results**

CEA level is not always increased in patients with cancer.

If it was initially elevated and after treatment CEA started decreasing, this indicates that the therapy is successful. If CEA starts elevating again after treatment, this could be a sign of recurrence.

Usually CEA levels are higher in late stage cancers.

Smokers have higher levels of CEA and it can also be increased due to peptic ulcer, ulcerative colitis, rectal polyps, etc.