Biology of Cancer and the Breast
Frequently Asked Questions

Question

Is research being done to create a blood test for breast cancer?

Answer

Research in Experimental Stage
All research into finding substances in the blood that may be able to predict breast cancer risk is in the experimental stage. The tumor marker HER2/neu is being investigated as a potential marker to identify women with a higher risk of breast cancer. But, it's unlikely that a single marker could accurately predict breast cancer risk.

Combined Factors Cause Breast Tumors
The problem is that breast tumors are so complex. No one particular change in cells is associated with breast cancer. Many different changes which occur over a long period of time, make a normal cell change into a breast cancer cell. Because of this complexity, it is unlikely that a test for a single substance (like the prostate specific antigen, PSA, used to predict prostate cancer risk), will be able to predict breast cancer risk. It is possible that a combination of factors may be used to predict breast cancer risk. Scientists are looking at combinations of factors to develop blood tests for many other cancers, including ovarian cancer.

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