



[Home](#) > [News](#) > Breast Cancer News



### OncoVue® Offers Improved Estimation of Risk for Breast Cancer

OncoVue® offers a significantly more accurate estimation of the risk of breast cancer than the Gail Model, according to the results of a study presented at the San Antonio Breast Cancer Symposium on December 12, 2008.[1]

Breast cancer is the second leading cause of cancer death in women in the United States, with approximately 180,000 cases diagnosed each year. The risk of developing cancer can be related to genetic, lifestyle, or environmental factors. Some women are at a higher risk of developing breast cancer either because of a family history of the disease or a specific genetic mutation.

Researchers have long sought to find a way to quantify a woman's risk of developing breast cancer. Women who know the degree to which they are at risk can then make appropriate lifestyle changes to reduce their risk and they can also undergo more frequent and vigilant screening in order to detect the disease early when it is most treatable.

The Gail model is a tool that estimates a woman's risk of developing breast cancer. The model has been used to identify high-risk women for inclusion in breast cancer prevention studies, and has also been used to counsel individual women about their risk of breast cancer. The model considers a woman's age, family history of breast cancer, reproductive history (age at first menstrual period and age at first birth), and history of breast biopsies.

OncoVue is a new genetic-based breast cancer risk test that uses a combination of a questionnaire and a saliva test in order to assess risk. OncoVue measures genetic variations in single nucleotide polymorphisms (SNPs), which are small genetic changes within DNA that can indicate disease risk. OncoVue analyzes 22 SNPs in 19 genes and then uses this information in combination with the Gail Model risk factors.

In order to determine the accuracy of OncoVue, researchers collected DNA from 177 women without breast cancer and 169 women diagnosed with breast cancer between 1997 and 1999 in Marin County, California, an area which is known for its higher than average breast cancer incidence and mortality rates. All samples were then anonymously coded and sent to the lab for analysis.

The researchers then performed a blinded analysis that revealed that the OncoVue score was 2.4 times more accurate than the Gail model in estimating individual risk. OncoVue also exhibited a 51% improvement over the Gail Model in assigning elevated risk to cases. The improved performance was statistically significant.

The researchers concluded that OncoVue was significantly more accurate than the Gail Model alone in estimating the individual risk of breast cancer among the Marin county women.

#### Reference:

[1] Dalessandri KM, Miike R, Wrench MR, et al. Validation of OncoVue®, a new individualized breast cancer risk estimator in the Marin County, California adolescent risk study. 31st Annual San Antonio Breast Cancer Symposium. December 10-14, 2008. Abstract 502.

Copyright Breast Cancer Information Center on [CancerConsultants.com](http://CancerConsultants.com)