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HEALTH

DNA Said to Protect Hispanic Women From Breast Cancer

Researchers Say a Genetic Trait Is the Reason Latinas Are Less Likely to Develop Disease

A new study shows that a genetic trait protects many Hispanic women from breast cancer. WSJ's Robert Lee Hotz reports on Lunch Break with Tanya Rivero. Photo: AP

By **ROBERT LEE HOTZ**

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A genetic trait protects many women of Latin American descent from breast cancer, researchers probing the ethnic biology of cancer said Monday.

If confirmed, the finding may lead to more effective genetic testing for women at risk, by helping to determine who most needs to take preventative measures. Breast cancer is the most common cause of cancer among women.

Generally, fewer Hispanic women develop breast cancer and fewer of them die from it, compared with women of European or African-American ancestry, medical statistics show. On Monday, an international team led by researchers at the University of California, San Francisco, said they now know why.

A single difference in just one of the three billion letters of biochemical DNA code in the human genome makes Latinas who inherit it about 40% less likely to develop breast cancer, medical geneticist Laura Fejerman and her colleagues reported Monday in *Nature Communications*.

If women have inherited the variation from both sides of their family, they are 80% less

likely to get breast cancer.

“It is strongly protective,” said cancer specialist Elad Ziv at the UCSF Helen Diller Family Comprehensive Cancer Center, who helped conduct the study funded by the National Cancer Institute. “We really need to do more experiments to nail it down and understand what it is doing.”

Women who carry the genetic variant have breast tissue that appears less dense on mammograms. High-density breast tissue is a known risk factor for breast cancer.

A woman gets a mammogram. A new study says a genetic trait protects many women of Latin American descent from breast cancer. *JOCHEN ZICK*

The hereditary quirk, located on Chromosome 6 near an estrogen receptor gene, appears to have originated in indigenous American peoples in South America, and it doesn't appear equally in all Hispanic women.

As many as 20% of Latinas in California are likely to have at least one copy of the variant, significantly lowering their risk of breast cancer, while about 10% of Puerto Rican women are likely to have inherited it, the researchers said.

“It has a lot to do with how much indigenous American ancestry they have,” Dr. Ziv said.

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Corrections & Amplifications

About 10% of Puerto Rican women are likely to have inherited a genetic variant that lowers the risk of breast cancer. An earlier version of this article incorrectly said less than 1% of Puerto Rican women likely inherited it. (Oct. 20, 2014).



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