



Breast Cancer Incidence Rates in Ghanaian and US Black Women From 2013 Through 2015

PATIENT-FRIENDLY TRANSLATION

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This research paper looks at why certain types of breast cancer are more common in women of West African descent. Specifically, it focuses on **Estrogen Receptor-Negative (ER-negative)** breast cancer, which tends to be more aggressive and often appears at a younger age.

Here is a plain-language summary of the study's findings and what they mean for patients.

1. The Main Question

Scientists have long noticed that Black women in the U.S. and women in West Africa seem to get aggressive, ER-negative breast cancer more often than White women. Researchers wanted to know: **Is this because of their shared West African ancestry, or is it just because the populations in Africa are younger on average?**

2. How the Study Was Done

Researchers compared breast cancer data from two main groups between 2013 and 2015:

- **Ghana:** 1,071 women with breast cancer.
- **United States:** Over 120,000 women (comparing both Black and White non-Hispanic women).

They used a method called "age-standardization." This is a statistical tool that allows researchers to compare two different countries as if they had the same age mix, ensuring the results weren't skewed just because one country has more young people than the other.

3. What They Found

The study revealed three key numbers regarding the rate of new cases (incidence) per 100,000 women:

- **ER-Negative Cancer (The Aggressive Type):** The rates were almost identical between women in Ghana and Black women in the U.S. Both groups had significantly higher rates than White women in the U.S.



- **Ghanaian Women:** ~42 cases per 100,000
- **U.S. Black Women:** ~43 cases per 100,000
- **U.S. White Women:** ~24 cases per 100,000
- **ER-Positive Cancer (The More Common Type):** This type was actually **lowest** in Ghana and highest in U.S. White women.
- **Age Matters:** In Ghana, women were diagnosed at much younger ages. About 21% of cases in Ghana were in women under 40, compared to only 7% for Black women and 4% for White women in the U.S.

4. What This Means for You

- **A Potential Genetic Link:** Because the rates of aggressive (ER-negative) cancer are so similar between Black women in the U.S. and women in Ghana, researchers believe there may be shared genetic or biological factors linked to West African ancestry.
- **Not Just Lifestyle:** While things like diet, exercise, and how many children a woman has (reproductive factors) affect cancer risk, they don't fully explain why this specific aggressive subtype is more common in these populations.
- **Importance of Testing:** The study emphasizes that "receptor testing" (finding out if a tumor is ER-positive or ER-negative) is vital. Knowing the subtype helps doctors pick the right treatment, which is especially important for aggressive tumors.

5. The Bottom Line

If you are of West African or African American descent, you may have a higher risk for more aggressive forms of breast cancer at an earlier age. This study suggests this isn't just a coincidence—it's a specific pattern that researchers are working hard to understand so they can develop better prevention and treatment strategies for these communities.

Recommendation: Always discuss your family history and any breast changes with your doctor early, as early detection remains the most powerful tool for a better outcome.