
EAZ171 Clinical Trial Results Summary

Docetaxel or Paclitaxel in Reducing Chemotherapy-Induced Peripheral Neuropathy in African American Patients with Stage I-III Breast Cancer

What did this trial involve and who was it for?

This study sought to determine which of the regularly prescribed taxane-based chemotherapies, docetaxel or paclitaxel, is less likely to result in the side effect known as peripheral neuropathy in Black patients with early-stage breast cancer. Peripheral neuropathy is damage to the nerves, often in the hands or feet, that can be painful and feel like pins-and-needles, throbbing, burning, or numbness and can significantly impact patients' quality of life. Previous research has shown that Black patients with breast cancer, or those with genetic African ancestry, experience significantly more peripheral neuropathy than other racial/genetic groups.

EAZ171 is the first National Cancer Institute (NCI)-sponsored trial to focus specifically on evaluating side effects in a minority or underserved population that is known to have worse outcomes. Black patients are often underrepresented in clinical trials, including cancer studies, so more work is needed to improve equity in healthcare and treatment outcomes. A total of 249 patients participated in EAZ171.

What are the results?

- Black patients with early-stage breast cancer who were treated with docetaxel chemotherapy every 3 weeks were less likely to develop peripheral neuropathy and/or require dose reductions compared to those who received weekly paclitaxel chemotherapy.
- Researchers also sought to determine if two inherited gene alterations may predict which patients are more at risk of developing peripheral neuropathy. They found the presence of these genes alone were not enough to predict the risk of developing taxane-based peripheral neuropathy.

What do the results mean for patients?

- These results suggest that for Black patients, docetaxel may lead to fewer side effects and therefore better treatment outcomes than paclitaxel.
- ECOG-ACRIN researchers are now planning more trials to determine how to further improve taxane-based chemotherapies for Black patients.
- Trial enrollment succeeded because of the partnership with Black patients. The study also offers a blueprint for how to design and recruit for trials focused on a minority or underserved patient population.

For more information, go to:

- United States National Institutes of Health (NIH) Library of Medicine:
<https://clinicaltrials.gov/study/NCT04001829>
- ECOG-ACRIN Website:
<https://ecog-acrin.org/press-release-ecog-acrin-completes-first-trial-of-black-patients-with-early-stage-breast-cancer/>
- *Journal of Clinical Oncology*:
<https://ascopubs.org/doi/10.1200/JCO.24.00526>

About ECOG-ACRIN

This trial was led by the ECOG-ACRIN Cancer Research Group (ECOG-ACRIN). ECOG-ACRIN is a membership-based scientific organization that designs and conducts cancer research involving adults who have or are at risk of developing cancer. ECOG-ACRIN is a component of the National Cancer Institute's National Clinical Trials Network. Learn more at www.ecog-acrin.org.

To all the patients that participated in this trial, thank you. Without the involvement of patients like you, this research would not have been conducted.