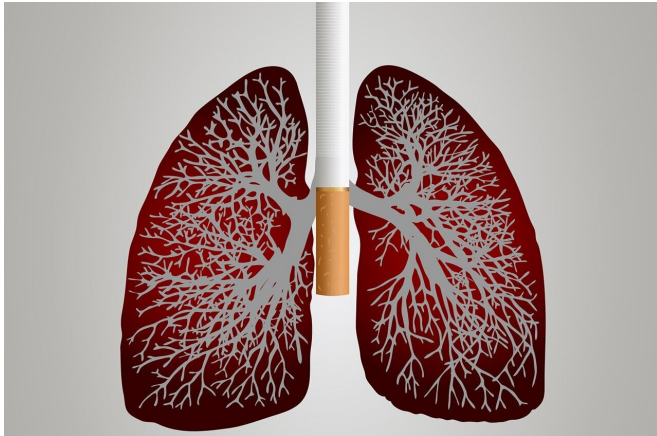


# Black lung cancer patients receiving immunotherapy may fare better than white patients

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Non-Hispanic Black patients with non-small cell lung cancer (NSCLC) who were treated with immunotherapy had a lower risk of death than their non-Hispanic white counterparts treated with immunotherapy, according to results presented at the virtual 14th AACR Conference on the Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved, held October 6-8, 2021.

"Our results show that when people receive the appropriate care, they do better," said Tomi Akinyemiju, Ph.D., an associate professor in population health sciences at the Duke Cancer Institute and lead author of the study. "We need to remove barriers to accessing quality treatment to ensure that everyone receives the best care available."

Although lung [cancer](#) disparities between Black and white Americans are decreasing, Black men are still more likely to die from lung cancer than

white men. Reasons for this disparity include biological differences that affect disease progression and treatment response, as well as differential access to care. Issues such as high cost, lack of access to academic medical centers, and distrust in [health care providers](#) contribute to these gaps, Akinyemiju said.

"We know that African American patients are more likely to be diagnosed at advanced stages compared to white patients, contributing to poorer survival. Because [immunotherapy](#) is typically utilized at advanced stages, we wanted to understand survival differences by race following receipt of immunotherapy in particular," said the study's first author, Anjali Gupta.

In recent years, immunotherapies—such as antibodies targeting the immune checkpoint proteins PD-1 and PD-L1—have emerged as a standard-of-care treatment for advanced NSCLC. The 2020 *AACR Cancer Disparities Progress Report*, however, found mixed results about whether African Americans were equally likely to receive immunotherapy treatment as white Americans. Akinyemiju and colleagues designed their study to control for access-related issues by restricting their study population to patients who had already received immunotherapy.

"We wanted to see whether, among people who had access to immunotherapy, disparities between Black and white patients persisted, or whether they were mitigated," Akinyemiju said. "If they persisted, it could potentially mean that the treatment didn't work as well in certain population groups, but if they were mitigated, it would support the idea that access is a big issue."

The researchers obtained data from the 2016 National Cancer Database on 3,068 patients with

advanced NSCLC who were treated with immunotherapy. After adjusting the survival data for sociodemographic factors—such as age, sex, location, and income—as well as tumor characteristics and the type of treatment received, the researchers found that non-Hispanic Black patients had a 15 percent lower risk of death than non-Hispanic white patients.

Provided by American Association for Cancer Research

Akinyemiju and colleagues also investigated outcomes in specific groups known to have restricted access to care, namely patients living in impoverished areas and those with preexisting health conditions. "People who are healthier may on average be offered more aggressive treatment options because they can withstand the rigors and side effects of these therapies," Akinyemiju said. "If African Americans, on average, have more comorbidities, they may be less likely to be offered immunotherapy."

However, the data showed that Non-Hispanic Black immunotherapy recipients living in counties in the lowest two quartiles of median income had an 18 percent lower risk of death than non-Hispanic white immunotherapy recipients at the same income level. Similarly, among immunotherapy-treated individuals with at least one comorbidity, Black patients experienced a 24 percent lower risk of death than white patients. Akinyemiju suggested that, as people with underlying health conditions are often omitted from clinical trials, this could present a possible area for intervention.

"Making sure everyone has access to the best treatment facilities and providers so they can benefit from groundbreaking novel therapies will be essential to reduce cancer burden," Akinyemiju added.

Limitations of this study include a lack of data on smoking status, which is a significant risk factor for NSCLC, as well as limited data on the types and severity of the comorbidities used to stratify the data.

**More information:** Conference:  
[www.aacr.org/meeting/aacr-virt ... dically-underserved/](http://www.aacr.org/meeting/aacr-virt...dically-underserved/)

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