Black Patients With Lung Cancer Still Experience Treatment Disparities

Compared with white patients, Black people are less likely to receive curative treatment for early-stage lung cancer.

March 11, 2026 By Eva Lorenz

Despite fundamental progress in the treatment of lung cancer during the past three decades, racial disparities in treatment persist, according to a new study by Yale School of Medicine researchers that builds on a study from the 1990s. Looking at Medicare beneficiaries, the original study found that Black patients were less likely than white patients to receive surgery for early-stage lung cancer.

Published in JAMA Open Network, the new research showed minimal improvement in racial disparities. In fact, data from 2005 to 2019 showed that Black patients were 13% to 15% less likely to receive curative treatment for early-stage non-small-cell lung cancer (NSCLC) than their white counterparts.

“The past 30 years have seen tremendous progress in our fundamental understanding of lung cancer and the development of new treatment strategies,” said senior study author Cary Gross, MD, in a Yale School of Medicine press release. “As treatment options have expanded, understanding how these advances are implemented across patient populations has become increasingly important.”

The three main types of lung cancer are: non-small-cell lung cancer (NSCLC), small-cell lung cancer and lung carcinoid tumor. About 80% to 85% of lung cancers are NSCLC, which can be subdivided into adenocarcinomas, squamous cell carcinomas and large-cell (undifferentiated) carcinomas.

To learn more, including information on the symptoms and risk factors for lung cancer, read Cancer Health’s Basics on Lung Cancer.

According to the National Cancer Institute, early-stage NSCLC is typically treated with a combination of surgery (removal of part or an entire lobe of the lung), radiation therapy, immunotherapy or chemotherapy.

The Yale study included over 28,000 Black and non-Hispanic white Medicare beneficiaries ages 66 to 85 who received a diagnosis of Stage I or II non-small-cell lung cancer during three different time periods: 2005 to 2007, 2011 to 2013 and 2017 to 2019. Using the Surveillance, Epidemiology and End Results (SEER)–Medicare data linkage, researchers assessed curative treatment patterns, such as surgery or radiotherapy, across race and time period.

Between 2005 and 2007, Black patients received surgery in 52.3% of cases compared with 65.9% among white patients. Disparities persisted in the other two time periods as well. Between 2011 and 2013, 48.3% of white patients received surgery, compared with 43.7% of Black patients; between 2017 and 2019, 61% of white patients received surgery, compared with 53.1% of Black patients.

“Our study found persistent racial disparities in the receipt of curative treatment for Medicare beneficiaries with early-stage NSCLC compared with data from the 1990s to early 2000s,” wrote the study’s authors.

In the latter two time periods, lung cancer surgery decreased, possibly due to the introduction of less invasive targeted radiotherapy, known as stereotactic body radiotherapy (SBRT). Overall, no racial disparity was seen for treatment with radiotherapy. However, inequities existed solely during 2010, when SBRT therapy emerged as a treatment option.

“In the 2011 to 2013 time period, only 39.6% of Black patients received SBRT compared with 51.6% of White patients,” wrote the study’s authors. “By 2017 to 2019, this disparity was no longer significant.”

The researchers sought to understand the racial gaps in treatment and identify ways to close them by considering access to care measures, like primary care clinician visits, hospitalization in the year before cancer diagnosis and influenza vaccination in the year before diagnosis. Compared with white patients, Black patients were less likely to have received the flu vaccine and more likely to be frail, hospitalized or have three or more comorbidities (such as diabetes, heart conditions or liver disease), according to the National Cancer Institute comorbidity index).

“Despite all the effort and attention, we haven’t improved as much as we should have,” said the study’s first author Olivia Lynch, MD, MPH, in the Yale press release. “The next step has to ask

why—and what we’re going to do differently.”

© 2026 Smart + Strong All Rights Reserved.

http://beta.docker.cancerhealth.com/article/black-patients-lung-cancer-still-experience-treatment-disparities