

## Race not root of disparity in lung cancer between whites and blacks

October 2 2010

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Race itself was not a prognostic factor of overall survival among black patients with lung cancer, according to data from a retrospective study presented at the Third AACR Conference on The Science of Cancer Health Disparities.

"In simple terms, if 100 patients who are Caucasian and 100 patients who are African-American have the same age, stage of cancer, type of lung cancer and are treated the same way, there should not be differences in their survival just because they are of different races," said Rajesh Sehgal, M.D., a medical oncologist at the Edwards Comprehensive Cancer Center and an assistant professor of medicine at the Marshall University Joan C. Edwards School of Medicine in Huntington, W.Va.

"African-American patients did have lesser median overall survival, but after compensating for all other factors that affect prognosis, such as age, stage and type of treatment, African-American race was not an independent prognostic factor for poor survival," added Sehgal.

Results of this study also indicated that those patients of other races — including Asian and [Hispanic patients](#) — had a better disease prognosis when compared with African-American and Caucasian patients, indicating that there may be biological differences in the tumors in these races.

Using data from the Cancer Information Resource File, the researchers

examined 130,517 patients diagnosed with lung cancer between 2003 and 2008. Patients were grouped according to race: white (91.4 percent), African-American (6.5 percent) and other (2.1 percent), defined as any non-Caucasian and non-African-American patient.

Median overall survival was 10.3 months for Caucasian patients, 9.1 months for African-American patients and 11.8 months for patients of other races. Patients undergoing chemotherapy had about a 43 percent higher chance of survival and those undergoing surgery had about a 60 percent higher chance of survival.

Data indicated that fewer African-American patients underwent surgery to treat their disease and a greater percentage of these patients presented with metastatic lung cancer compared with Caucasian patients (44 percent vs. 41 percent). These factors may have contributed to less favorable median overall survival compared with Caucasian patients and patients of other races, according to the researchers.

Despite these differences, race alone did not affect overall survival.

However, race was an independent risk factor for patients of other races compared with Caucasian patients.

"If possible, we would like to look into the tumor biology of 'other' races to see when differences exist in their tumors as compared to Caucasian and African-American patients and whether these differences might account for their better prognosis," Sehgal said.

Other factors identified by researchers as having a negative effect on overall survival were age older than 70 years and male sex. Sixty-seven percent of all African-American patients were younger than 70 years of age when they presented with the disease compared with only 54 percent of Caucasian patients.

Patients undergoing radiation therapy and patients with bronchoalveolar lung cancer histology — a type of non-small cell [lung cancer](#) — also had improved prognosis.

Sehgal said that some study limitations did exist, including a lack of data on patients' smoking status, insurance status and comorbidities, all of which could affect overall survival.

Provided by American Association for Cancer Research

Citation: Race not root of disparity in lung cancer between whites and blacks (2010, October 2) retrieved 23 April 2024 from

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