

# Race-specific approach to spirometry disadvantages Black patients

July 26 2023, by Elana Gotkine

---



A race-specific approach to spirometry interpretation results in a lower

lung allocation score (LAS) for Black patients and a higher LAS for White patients, according to a study published online May 26 in the *Annals of the American Thoracic Society*.

J. Henry Brems, M.D., from the Johns Hopkins University School of Medicine in Baltimore, and colleagues examined the impact of a race-specific versus race-neutral approach to spirometry interpretation on LAS among 8,982 adults (90.3 percent White; 9.7 percent Black) listed for [lung transplant](#) in the United States between Jan. 7, 2009, and Feb. 18, 2015. At listing, the LAS was calculated using a race-specific and race-neutral approach.

The researchers found that the mean percent predicted forced vital capacity was 4.4 percent higher among White patients and 3.8 percent lower among Black patients. Under both a race-specific and race-neutral approach, Black patients had a higher mean LAS compared with White patients (43.9 versus 41.9 and 44.3 versus 41.3, respectively). Under a race-neutral approach, the mean difference in LAS was  $-0.6$  versus  $+0.6$  for White versus Black patients. Under a race-neutral approach, the differences in LAS were most pronounced for those with pulmonary vascular disease and restrictive lung disease.

"A race-specific approach may have contributed to decreased access to lung transplant among Black compared to White patients on the waitlist," the authors write. "Race-specific equations may promote inequitable care, and their future use must be carefully considered."

**More information:** J Henry Brems et al, Race-specific Interpretation of Spirometry: Impact on the Lung Allocation Score, *Annals of the American Thoracic Society* (2023). [DOI: 10.1513/AnnalsATS.202212-1004OC](https://doi.org/10.1513/AnnalsATS.202212-1004OC)



Citation: Race-specific approach to spirometry disadvantages Black patients (2023, July 26)  
retrieved 2 May 2024 from

<https://medicalxpress.com/news/2023-07-race-specific-approach-spirometry-disadvantages-black.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.