New Study Finds Increased Disparities in Cancer Survival by Health Insurance Status following Introduction of Immunotherapy Drugs

A new study led by researchers at the American Cancer Society (ACS) shows increased disparities in survival by health insurance status among individuals newly diagnosed with advanced cancers in the United States following the introduction of immune checkpoint inhibitors (ICIs). First approved by the U.S. Food and Drug Administration (FDA) in 2011, ICIs improved survival among people newly diagnosed with cancer and have transformed treatment options for many cancers. Unfortunately, due to their high cost, individuals without health insurance coverage may not be able to afford them. The findings will be presented at this year’s annual meeting of the American Society of Clinical Oncology (ASCO) in Chicago, May 31-June 4, 2024.

Researchers, led by Dr. Jingxuan Zhao, senior associate scientist, health services research at the American Cancer Society, identified individuals newly diagnosed with stage IV cancer at age 18-64 years old. They examined patients with cancers with FDA approval for ICI treatment, including melanoma; HR+ HER- female breast cancer; non-small cell lung cancer (NSCLC); and renal cell carcinoma (RCC) from the National Cancer Database. Individuals with private health insurance or who were uninsured at the time of the cancer diagnosis were included. For each cancer, scientists applied a difference-in-differences (DD) approach to examine the changes in two-year overall survival before and after the FDA approval of ICI treatment among individuals without health insurance compared to those with private health insurance, using flexible parametric survival models and controlling for key sociodemographic factors.

The results showed that among individuals diagnosed with melanoma, 2-year survival increased from 17.5% pre-ICI approval to 24.4% after ICI approval among patients who were uninsured and increased from 29.6% to 41.8% among individuals with private health insurance, with the disparity by health insurance status widening by 4.3 (95% confidence interval [CI] = 1.7 to 6.8) percentage points (ppt) after adjusting for sociodemographic factors. Similarly, for individuals diagnosed with stage IV NSCLC, the disparity by health insurance widened by 1.5 (95% CI = 0.9 to 2.2) ppt and for individuals diagnosed with stage IV RCC, the disparity by health insurance widened by 3.9 (95% CI = 1.8 to 6.0) ppt.

Researchers stress the need for policies to improve health insurance coverage options and to make new treatments more affordable.

About the American Cancer Society
The American Cancer Society is a leading cancer-fighting organization with a vision to end cancer as we know it, for everyone. For more than 110 years, we have been improving the lives of people with cancer and their families as the only organization combating cancer through advocacy, research, and patient support. We are committed to ensuring everyone has an opportunity to prevent, detect, treat, and survive cancer. To learn more, visit cancer.org or call our 24/7 helpline at 1-800-227-2345. Connect with us on Facebook, X, and Instagram.

For further information: FOR MORE INFORMATION, CONTACT: American Cancer Society, Anne.Doerr@cancer.org

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