

Early Liver Cancer Detection Saves Lives: The Case for Multi-Cancer Early Detection Tests

Current cancer screening protocols fall short of saving thousands of lives each year. Only a fraction of the over 200 types of cancer currently has a recommended screening test from the U.S. Preventative Services Task Force (USPSTF), leaving many cancers undetected until symptoms manifest, often at advanced stages. However, early detection significantly improves survival rates by catching cancer before symptoms appear, saving the lives of thousands each year.

Liver cancer is among many cancers lacking a recommended screening test. Each year in the U.S., 25,000 women and 11,000 men are diagnosed with liver cancer and 19,000 men and 9,000 women will die from it. Rates of liver cancer are rising, with incidences more than tripling since 1980.

When caught early, survival rates are considerably higher compared to cases where cancer has spread. Localized liver cancer presents a 5-year survival rate of 37.3%, dropping to a mere 3.5% for distant cases in which the cancer has had time to metastasize. Despite the ability of early detection to save lives, more than half of liver cancer incidences are detected after it has spread, exacerbating mortality rates of the disease.

In cases caught early enough where patients have time to receive a liver transplant — a wait period that can last more than 5 years — survival rates jump to more than 70%.

For the few cancers with recommended screening tests — breast, lung, colorectal, and cervical — mortality rates have been markedly reduced, and incidences of these cancers have also decreased as some tests are able to detect precancerous abnormalities. Since the USPSTF's initial recommendations, total combined screenings have saved an estimated 12.2-16.2 million life years¹.

A recent study also found that a mere 10% uptake of the USPSTF-recommended screenings in 2021 would have prevented 1,010 deaths from lung cancer, 11,070 deaths from colorectal cancer, 1,790 deaths from breast cancer, and 1,710 deaths from cervical cancer — further emphasizing the ability of early screening tests to save lives².

By expanding access to life saving detection tests, thousands of individual lives would be saved by catching cancers, such as liver cancer, at its earliest and most treatable stages. As cancer rates continue to climb, and over 35 million new cancer cases are predicted to occur in 2050, expanding the prevalence of early screenings grows even more imperative³.

Facilitating coverage and equitable access to newly available cutting-edge screening technologies would provide for cancers to be detected in the earliest, most treatable stages, thereby significantly improving survival outcomes.

¹ Philipson TJ, Durie T, Cong Z, Fendrick AM. The aggregate value of cancer screenings in the United States: full potential value and value considering adherence. *BMC Health Serv Res.* 2023 Aug 7;23(1):829

² Knudsen AB, Trentham-Dietz A, Kim JJ, et al. Estimated US Cancer Deaths Prevented With Increased Use of Lung, Colorectal, Breast, and Cervical Cancer Screening. *JAMA Netw Open.* 2023;6(11).

³ World Health Organization. (1, February 2024). Global cancer burden growing, amidst mounting need for services [Press release].