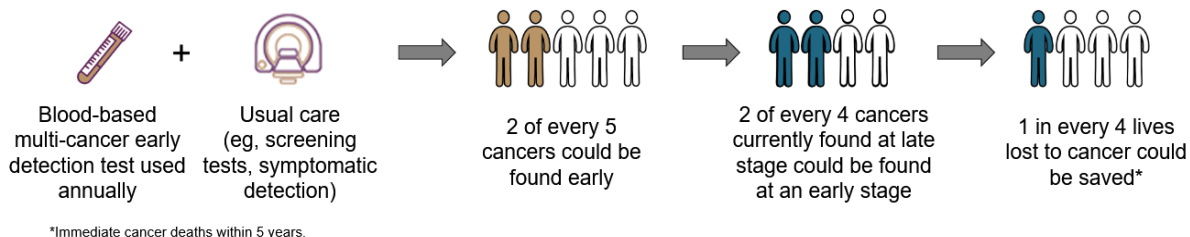


“Modeled reductions in late-stage cancer with a multi-cancer early detection test” Lay Summary

-- Data Published in *Cancer Epidemiology, Biomarkers & Prevention*, December 16, 2020 --



Cancer is the second leading cause of death worldwide¹. Most cancer deaths occur when cancer is detected too late.² Current screening tests, such as mammograms, save lives, however, current screening tests are recommended for only a few cancers and look for only 1 cancer at a time.² Even with existing screening, most cancers are found because of symptoms when it is too late. Furthermore, approximately two-thirds of cancer deaths are from cancers with no recommended screening.³ That’s why GRAIL has developed a multi-cancer early detection (MCED) test that looks for many cancers at the same time from a single blood draw.⁴ The MCED test is designed to complement existing screenings and not replace them. Using the MCED test as an additional screening tool could help health care providers (HCPs) detect more cancers and find them earlier, when treatment is more likely to be effective.⁴⁻⁶ Finding and treating cancers earlier could potentially save many lives.²

To better understand the potential impacts of GRAIL’s MCED test on cancer detection and mortality, researchers modeled the combined benefits of the MCED test when added to the current standard of care for cancer screening and detection (this includes patients diagnosed once symptomatic). To do this, they created a model for all cancer types. The model was based on the number of people in the United States who are diagnosed with cancer of various stages each year. The model then applied details of how the MCED test works to detect multiple cancer

types with a single blood draw to determine what cancers could be found, and how early they could be found.

The model examined the case where the MCED test was used once per year, and found that 2 in 5 cancers could be detected by the MCED test before usual care. This ability to detect (intercept) cancers before they reach late stage (stage III+IV) could potentially reduce late stage cancer diagnoses by more than half in the US. Importantly, because most immediate (within 5 years of diagnosis) deaths occur from late stage cancer, finding this number of cancers early could save approximately 1 in 4 lives lost to cancer (**Figure**).

Results of this analysis were published in December 2020 in *Cancer Epidemiology, Biomarkers, & Prevention* and demonstrated that this MCED test could catch cancers much earlier and potentially reduce cancer mortality substantially. A version of this MCED test, called Galleri, is available and recommended for use in adults with an elevated risk for cancer.

Published Article:

<https://cebp.aacrjournals.org/content/early/2020/12/12/1055-9965.EPI-20-1134>

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