

Step towards blood test for many cancer types

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Scientists have identified more than 800 markers in the blood of cancer patients that could help lead to a single blood test for early detection of many types of cancer in future, according to research presented at the National Cancer Research Institute (NCRI) Cancer Conference in Liverpool today (Sunday).

This is the first time that [cancer](#)-specific blood markers have been comprehensively reviewed and identified for further clinical development. This study, by the UK Early Cancer Detection Consortium, funded by Cancer Research UK, has analysed 19,000 scientific papers and found more than 800 biomarkers.

The aim of this research is to develop a screening test from a single blood sample for multiple cancer types. All cancers produce markers in the blood, so it could be feasible to develop a general screening test for many different forms of the disease.

In the UK, survival rates for cancer are lower than in some other western countries, part of which may be related to late diagnosis. But developing more ways to spot cancers earlier, including research into new screening technologies such as this, could help give more options for curative treatment, and save more lives in the future.

In the UK, cancer is most often detected after patients present symptoms to their doctor, with a small proportion being detected through any of the three national screening programmes for breast, bowel, and cervical

cancer. This study could open the way for less invasive, new [screening tests](#) that could detect more cancers, possibly including some rare types, at an early stage when they are more likely to be treatable.

Cancer Research UK is committed to early diagnosis of cancer, importantly reducing late diagnosis and improving patients' chances of surviving long term.

Study author Professor Ian Cree, a Cancer Research UK funded scientist at the University of Warwick and University Hospital in Coventry, said: "This is a new approach to early detection and the first time such a systematic review has been done. A single blood-based screening test would be a game changer for [early detection](#) of cancer which could help make it a curable disease for many more patients. We believe that we've identified all the relevant biomarkers; the next step is working out which ones work the best for spotting cancers."

The identified biomarkers will be reviewed and categorised before they are developed further in clinical laboratory studies.

Sara Hiom, Cancer Research UK's director of early diagnosis, said: "This is an innovative and promising new approach. And although in its early stages, it shows how our increased understanding of cancers' 'markers' and new technologies are combining to offer new opportunities to detect cancer sooner. Diagnosing cancer at an early stage generally means more effective treatment and that translates into better survival. Our goal over the next 20 years is that three in four [cancer patients](#) will survive at least ten years after their diagnosis."

More information: The Early Cancer Detection Consortium unites expertise from various disciplines including more than 20 universities, hospitals and commercial partners. Abstract to the research: [conference.ncri.org.uk/abstrac ... abstracts/LB003.html](http://conference.ncri.org.uk/abstrac...abstracts/LB003.html)

Provided by Cancer Research UK

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