

YORKSHIRE POST

Fast-track cancer test unveiled by Yorkshire team

Mike Waites
Health Correspondent

TESTING for diseases including cancer and multiple sclerosis could soon be as simple as using a pregnancy test kit, Yorkshire scientists claim today.

A team from Leeds University has developed technology that uses antibodies to detect biomarkers - molecules in the human body which are often a marker for disease - more than current tests. The technology

by doctors for more accurate referral to consultants and in hospitals for rapid diagnosis.

Tests have shown that a wide range of substances can be detected using the approach including biomarkers in prostate and ovarian cancer, stroke, multiple sclerosis, heart disease and fungal infections.

The team also believes that the technology could even be versatile enough to test for diseases

of researchers and commercial firms.

Paul Millner from the university's faculty of biological sciences said almost any biomarker could be detected faster, cheaper and more easily using the technology.

"We believe this to be the next generation diagnostic testing," he said.

Currently blood and urine are tested using a method developed in the 1970s, which takes on

The Leeds team are confident their new technology, which provides results in 15 minutes or less, could be developed into an easy-to-use device the size of a mobile phone into which different sensor chips could be inserted depending on the disease being tested.

Professor Séamus Higson, dean of the faculty of medicine and biosciences at Cranfield University in Bedfordshire, one of the partners in the programme, said:

ment of many diseases and will permit testing in environments such as GP surgeries."

A spinout company has been set up to bring the technology to the market.

Tim Gibson of Leeds University, who has managed the programme, said there were other potential uses for the technology.

"We've also shown it can be used in environmental applications, for example to test for her-

in water and he added.
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The Daily Telegraph

Hand-held device can detect disease

By Richard Alleyne
Science Correspondent

DIAGNOSIS of diseases such as cancer and multiple sclerosis could soon be as simple as using a pregnancy testing kit, scientists claim today.

A team led by scientists at the University of Leeds has developed a hand-held device that can test for serious diseases from a tiny sample of blood or urine in just 15 minutes.

Using nanotechnology, which manipulates matter at a tiny scale, a sensor detects biomarkers, the molecules in the body associated with different conditions.

The device, which is about the size of a credit card payment machine, will return a decision on a test for one disease at a time.

Researchers say the device, which will cost less than £1,000, could "revolutionise" diagnosis which

be carried out by highly trained staff in a pathology laboratory.

The machine, which could be commercially available in three years, may even be used at home to monitor conditions such as HIV, although ethical concerns over self-diagnosis must first be overcome.

The technology was developed through a European collaboration of researchers and commercial partners in a £2million EU project



CANCER TEST IN MINUTES

SCIENTISTS have invented a 15-minute test for cancer and other killer illnesses.

They say the detector could be as small as a mobile phone and as easy to use as a pregnancy test kit.

The Leeds University team said a drop of blood from a

patient would be dripped on to a biosensor.

Different chips in the device would check for tell-tale molecules pointing to illnesses such as prostate and ovarian cancer, MS and HIV.

And it could all be done at a doctor's or in hospital,

instead of waiting up to two weeks for lab results.

Dr Paul Millner said: "We believe this is the next generation of diagnostic testing."

They could be available to doctors within three to five years if the project gets the right commercial backing.

Respecting IP

Working with a team of scientists at the universities of Leeds and Cranfield, along with two industrial partners, we secured national mainstream coverage for a new technology which could revolutionise diagnostic testing as we know it. We were mindful of potential IP issues and worked closely with the team to achieve great coverage, whilst ensuring that critical IP remained protected.