

# Blood test may revolutionise prostate cancer treatment

By Daily Telegraph Reporter

A REVOLUTIONARY three-in-one blood test could pave the way to precision-personalised treatment for advanced prostate cancer, say scientists.

The test has the potential to transform the way the disease is tackled by targeting specific gene mutations, it is claimed. By looking for cancer DNA in

blood samples, researchers were able to identify men with defective BRCA genes who were likely to benefit from a class of drugs called PARP inhibitors.

They also used the test to monitor DNA in the blood after treatment started, so patients who were not responding could quickly be switched to an alternative therapy.

Finally, the same test was used to

pick up signs of evolving cancer showing the first signs of drug resistance.

Prof Johann de Bono, who led the team at the Institute of Cancer Research in London, said: "We were able to develop a powerful, three-in-one test that could in future be used to help doctors select treatment, check whether it is working and monitor the cancer in the longer term. We think it could be used

to make clinical decisions about whether a PARP inhibitor is working within as little as four to eight weeks of starting therapy.

Prof de Bono added: "The test... could also be adapted to open up the possibility of precision medicine to patients with other types of cancer as well."

PARP inhibitors such as olaparib block an enzyme used by cancer cells

with defective BRCA 1 and 2 genes to repair their DNA. When PARP is disabled, the cells die.

Men responding to the drug were found to experience an average drop in circulating cancer DNA of 49.6 per cent after eight weeks of treatment.

By contrast, cancer DNA levels rose by 2.1 per cent in patients who did not respond.