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Pancreas cancer drug failure clue

Scientists are working to find more effective ways to tackle pancreatic cancer

Experts believe they have discovered why pancreatic cancer can be so resistant to drug treatment.

There are 7,600 new cases in the UK each year - but only 3% of those diagnosed are alive five years later.

Cancer Research UK scientists led an international team which used mouse tests to show tumours have poor blood supply, stopping drugs working.

Writing in Science, they say the findings could help overcome resistance to the chemotherapy drug gemcitabine.

This is a very substantial finding
Dr Lesley Walker, Cancer Research UK

Tests on human pancreatic cancer samples also contained a deficient blood supply, suggesting that their observation should also be applicable to patients.

Dr David Tuveson, of Cancer Research UK's Cambridge Research Institute, led the research.

He said: "We're extremely excited by these results as they may help explain the disappointing response that many pancreatic cancer patients receive from chemotherapy drugs."

Treatment boost

The team, which included scientists from the US and Europe, also tested a new chemical compound called IPI-926, which was created by US company Infinity Pharmaceuticals.

They found that when this was used in combination with gemcitabine in genetically modified mice, there was increased cell death and a reduction of the pancreatic tumour size.

The scientists suggest the compound could be added to a number of other treatments which had previously proved disappointing in trials.

Each type of cancer needs its own specific research
Maggie Blanks, Pancreatic Cancer Research Fund

Cancer Research UK director of cancer information Lesley Walker said: "This is a

very substantial finding.

"If these results hold in future studies, we hope that scientists will be able to make better use of current treatments and develop a range of new options which will help people with pancreatic cancer live longer.

"Results like these give us real confidence that we will combine this focus with our other research efforts and meet our goals of improving survival from all forms of the disease," Dr Walker added.

Maggie Blanks, founder of Pancreatic Cancer Research Fund, said: "Pancreatic cancer patients have very few treatment options.

"If these findings help in the development of more effective treatments, this will be a big step forward in improving the outlook for pancreatic cancer patients.

"This research illustrates the point that cancer is not one disease, and that each type of cancer needs its own specific research.

"Pancreatic cancer has had little research attention in the past and so the understanding of the disease - that can advance diagnosis and treatment - lags behind other cancer types.

"The findings of Dr Tuveson and his team can add significantly to that understanding."