

# Drug may stop brain cancer in its tracks

Oliver Moody Science Correspondent

An experimental drug could treat twice as many patients with a common and deadly form of brain cancer as the medicine currently available, an early study suggests.

There are about 2,500 new cases of glioblastoma in Britain every year and only one in five patients survives for longer than five years. The "finger-like" tendrils of the cancer spread quickly through the brain and the tumours are usually far advanced by the time of diagnosis. Treatment usually involves surgery followed by a combination of radiotherapy and chemotherapy, but even this often fails.

Doctors in the US have begun testing durvalumab, a drug designed to fight other kinds of cancer, on 148 patients in a clinical trial. The first bundle of data, which was presented last week at a conference on immune system therapies, suggests the therapy may stop the cancer in its tracks in a significant minority of cases.

Of the first 30 patients who received the drug, six had shown no sign of worsening after six months. While this one-in-five hit rate may sound low, it is roughly double the proportion of glioblastoma patients who get the same benefit from present treatment.

David Reardon, clinical director of the Dana-Farber Cancer Institute's centre for neuro-oncology in Boston, Massachusetts, who is leading the trial,

said the findings were promising but very preliminary.

Durvalumab belongs to a family of human antibodies known as checkpoint inhibitors. These Y-shaped proteins clog up the machinery used by cancer cells to hide from the immune system, Dr Reardon said durvalumab targeted a cloaking mechanism called PD-L1, making the tumour visible to the T cells that clear infections.

Elizabeth Stoll, head of a neurobiology laboratory at Newcastle University, who is not involved in the trials, said there was an urgent need for new glioblastoma drugs and the new effort was a good piece of "creative thinking". However, she pointed to the expensive failure of a 2013 trial involving avastin, another much-heralded candidate to treat glioblastoma, as an example of the difficulty of designing effective therapies. "There's a great need to do more work and to find new biomarkers [for diagnosis and prognosis]," Dr Stoll said.

Kieran Breen, of the charity Brain Tumour Research, said: "The results are interesting, although this is only an early-stage clinical trial."

● A breakthrough drug that can shrink lung cancer tumours in patients who no longer respond to medication is now available on the NHS. Tagrisso, a once-a-day tablet, is being commissioned through the Cancer Drugs Fund. About 300 patients in England and Wales are expected to be eligible for the treatment each year.