

Scientists discover a way to kill off tumors in cancer treatment breakthrough

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Scientists from the School of Pharmacy at Queen's University Belfast and Almac Discovery Ltd have developed a new treatment for cancer which rather than attacking tumours directly, prevents the growth of new blood vessels in tumours, starving them of oxygen and nutrients, thereby preventing their growth.

Targeting tumour [blood vessels](#) is not a new concept, however, this drug attacks the blood vessels using an entirely different pathway and therefore could be useful for treating tumours which don't respond to or which are resistant to current therapies of this type.

Professor Tracy Robson and her research team at Queen's, in collaboration with researchers at Almac Discovery, developed a new drug to disrupt the tumour blood supply. They have demonstrated that this leads to highly effective inhibition of tumour growth in a number of models as reported this month in [Clinical Cancer Research](#), a journal of the American Association for Cancer Research. Almac Discovery is developing the [drug candidate](#) and expects to start clinical trials within the next year.

Professor Tracy Robson from the School of Pharmacy at Queen's explains: "By understanding the anti-angiogenic potential of the natural protein, FKBPL, we have been able to develop small peptide-based drugs that could be delivered to prevent tumour growth by cutting off their blood supply. This is highly effective in models of prostate and [breast cancer](#).

"However, this also has the potential for the treatment of any solid tumour and we're excited about continuing to work with Almac Discovery as this drug enters clinical trials."

Dr Stephen Barr, President and Managing Director of Almac Discovery said: "This is a first class example of a collaboration between a university and industry to produce a novel approach to [cancer therapy](#) that has a real chance of helping patients".

The Almac Discovery / Queen's University drug is currently undergoing preclinical development and may provide a first-in-class therapy for targeting tumour angiogenesis by an entirely different pathway to those agents currently approved.

Provided by Queen's University Belfast

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