BBC NEWS

Enzyme behind cancer spread found

Scientists say they have identified an enzyme that helps cancer spread around the body.

Cancer metastasis, where the cancer spreads from its original location, is known to be responsible for 90% of cancer-related deaths.

Institute of Cancer Research scientists have found that an enzyme called LOX is crucial in promoting metastasis, Cancer Cell journal reports.

Drugs to block this enzyme's action could keep cancer at bay, they hope.

The researchers studied breast cancer in mice, but are confident that their findings will apply to humans with other cancer types too.

> " **This new discovery provides real hope that we can develop a drug which will fight the spreading of cancer** "
> Lead researcher Dr Janine Erler

LOX (lysyl oxidase) works by sending out signals to prepare a new area of the body for the cancer to set up a camp. Without this preparation process the new environment would be too hostile for the cancer to grow.

Lead researcher Dr Janine Erler described the discovery as "the crucial missing piece in the jigsaw that scientists have been searching for."

She said it was the first time one key enzyme has been identified as responsible for effectively allowing the cancer to spread.

"If we can interrupt the body's ability to prepare new locations for the cancer to spread to, we can effectively prevent cancer metastasis.

"Cancer metastasis is very difficult to treat and this new discovery provides real hope that we can develop a drug which will fight the spreading of cancer," she said.

Dr Julie Sharp, Cancer Research UK's science information manager, said: "A better understanding of how cancer spreads is crucial to improving the treatment of the disease. This research takes scientists a step closer to understanding this major problem - the next stage will be to find out if the LOX protein can be switched off to stop cancer spreading."

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