New drug fights cancer stem cells

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A new drug has been designed that could tackle cancerogenic stem cells, which are responsible for the onset and development of cancer. These cells are also vital for growth and development of cancer, and whether the disease returns after chemotherapy treatment.

An Andalusian team of researchers led by the University of Granada created the new treatment, which has been successfully tested in mice. According to initial findings, the drug is able to selectively target cancerogenic stem cells for breast and colon cancer, as well as melanoma.

Cancerogenic stem cells appear in small quantities in tumours, and one of their key roles is to encourage metastasis in different places within the original tumour, allowing the disease to spread further. Although these cells remain dormant under normal conditions, they are therefore not picked up by conventional chemotherapy and radiotherapy.

Published in the prestigious journal Oncotarget, the new report states that the drug is able to inhibit the HER2 signalling pathway, and stops new vessels from forming in the tumour, according to the team.

Researchers are currently conducting safety tests and they expect that this new drug, as well as its derivatives, can be run through clinical tests with patients in the near future.

Posted by Philip Briggs

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