

British Skin Foundation

PRESS RELEASE

Scientists able to stop the spread of skin cancer cells in the body

For immediate release

A group of scientists in East Anglia have managed to block a rogue gene responsible for the spread of skin cancer cells through the body. This could prove to be the vital step needed in finding a cure for the deadliest type of skin cancer, malignant melanoma, and potentially many other types of cancer.

Thanks to funding by the skin disease research charity the British Skin Foundation, Dr Andrew Chantry and his team at the School of Biological Sciences at the University of East Anglia have focused their efforts looking at a newly discovered gene called WWP2.

It is believed that the WWP2 gene plays a key role in determining how cancerous cells spread. The gene is closely linked to a secreted growth known as TGF β , which in turn is a driving force behind the spread of melanoma cells in the body, a process known as metastasis. WWP2 attacks and breaks down a natural cellular inhibitor in the body which under normal circumstances would prevent cancer cells from spreading.

The team at UEA found that by blocking WWP2 activity, levels of the natural inhibitor are increased and the cancer cells remain dormant and inactive. It is hoped that by developing a series of drugs that 'deactivate' WWP2 from functioning, conventional therapies and surgery could be used to remove the primary tumours without fear that the cancerous cells had spread to other parts of the body.

Within the next ten years, this development could lead to a new generation of drugs that can stop the most aggressive forms of cancer, including breast, brain, and colon as well as skin cancer. It is a significant step forward in terms of being able to stop malignant melanoma from progressing into its latter, and most dangerous, stages. Once melanoma cells start spreading, survival rate drops to about 15%, with life expectancy generally no more than a year. At present, malignant melanoma kills just over 2000 people in the UK every year.

Dr Andrew Chantry, head researcher of the team at the University of East Anglia, said: "This is an important step forward in terms of understanding how skin cancer cells spread through the body, and more importantly, how we can stop this from happening. The challenge now is to identify a potent drug that will get inside cancer cells and destroy the activity of the rogue gene. This is a difficult but not impossible task, made easier by the deeper understanding of the biological processes revealed in this study."

Matthew Patey, Chief Executive of the British Skin Foundation, said of the research: "This is an exciting breakthrough to have been made by Dr Chantry and his colleagues, and hopefully it will point us in the right

direction of being able to cure the devastating disease. It is crucial that research charities like the British Skin Foundation can continue to fund research like this, otherwise we risk losing the momentum we are gaining in terms of understanding this and many other skin diseases.”

The British Skin Foundation (BSF) is a charity committed to raising funds for skin disease research. 100% of the money raised for the charity goes back into funding vital research. Over the last four years, the BSF has awarded in excess of £2,700,000 to numerous studies, £1.8 million of which has been dedicated to research into the various types of skin cancer.

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