Skin cancer tumours busted with red dye 'tattoo' trial



SAVED BY SCIENCE: Boer goat farmer David Deakin successfully underwent an experimental treatment for cancer.

Picture: Glenn Barnes

Melanoma breakthrough

Janelle Miles MEDICAL REPORTER

SOON after Queensland goat farmer David Deakin was diagnosed with advanced melanoma, he was given the option of trialling an experimental treatment using a red dve, called rose bengal.

He's glad he agreed.

The 59-year-old had a melanoma surgically removed from his back in mid-2008. Only days later, six more tumours sprouted on his head, face and neck - evidence the cancer had spread with a vengeance.

"They just exploded. It was quite scary at the time." Mr

Deakin said.

Instead of having the tumours cut out, which would have necessitated skin grafts. doctors injected them with rose

bengal. "They sit there with a tiny

The Rose Bengal story

- The dve is believed to have been named after the red dot worn by women from the Bengali region of India as a symbol of marriage
- In 1919, Rose Bengal was found to be an effective stain for visualising corneal ulcers. It is still used as a biological staining agent of the eye.
- In the late 1990s, researchers stumbled across a three-line sentence in a Japanese study indicating tumour-prone mice fed Rose Bengal had a survival advantage.



little needle and syringe and tattoo it, basically," Mr Deakin

"It falls off as a big scab."

Doctors used rose bengal again when another tumour developed on his chest. The soon-to-be grandfather, who will walk two daughters down aisle next month, has

remained tumour-free for more

than a year. Mr Deakin was one of 80 patients who took part in the trial. Melanoma specialist Sanjiv Agarwala, of St Luke's Hospital in Pennsylvania, said the tumours treated with rose bengal disappeared in 30 per cent of patients and in another

per cent, the tumours shrunk.

"What has been found is that this drug specifically targets cancer cells and destroys them. and also sets up an immune response," Dr Agarwala said.

He said the treatment had been designed for melanoma patients with secondary cancers on or underneath the skin.

"However, if the patient also has a tumour elsewhere, for example in the lungs, we have sometimes seen that not only the tumour we inject shrinks. but the tumour in the lung can shrink as well.," Dr Agarwala said.

Oueensland Melanoma Prohead Mark Smithers stressed rose bengal was not a cure and it was too soon to say whether it improved survival.

"I wouldn't for one second try to say we have the answer to melanoma, because we don't,"

Associate Professor Smithers said. "But we've got a treatment for a very difficult problem."

He said side effects were milder than chemotherapy. "People are hypersensitive to the sun for the first week and

have to be careful." he said. Doctors are planning a larger trial that they hope will lead to medical regulators approving the drug for use in advanced

melanoma patients. Brisbane-based cancer specialist Paul Mainwaring, who was not involved in the trial, said some melanoma patients undoubtedly sponded to treatments such as rose bengal.

"Many chemotherapy and immunotherapy agents have been tried, all reporting isolated responses," he said. "The question that is raised is why some patients' immune systems respond and why some don't."