Melanoma study to aid targeted treatment

- Adam Cresswell, Health editor
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MELANOMA experts are predicting better tests will be available within five years to help pinpoint which treatments will prove most effective for each patient, after the NSW government today announced it will contribute the final $500,000 needed to get a $5.5 million genetic study off the ground.

The two-year project, co-ordinated by the Melanoma Institute Australia, will use samples from the world's largest melanoma tumour bank to identify and catalogue what genetic mutations are present in 500 melanoma samples accumulated over the past 20 years.

They will then match these mutations to the details on file of how those patients responded to the treatments they received.

The researchers will also be able to work out which parts of the body different types of melanoma are more likely to spread to, any differences in the periods of remission patients enjoyed before any relapse, and other key details.

They hope that once this information is analysed, new tests can be developed that will allow doctors to work out what sort of melanoma patients have, and make much better predictions about how it will affect them and how best to treat it.

In due course, it is hoped the new genetic knowledge will yield new targets for drug treatments to improve treatment options.

Rick Kefferd, professor of medicine at Sydney's Westmead Hospital and co-director of research for the Melanoma Institute Australia, said once the mutations were identified, the study would allow them to be matched to different clinical outcomes and survival rates.

"We can in future use this information in new patients to predict the behaviour of their disease, and in due course, decide the most logical forms of targeted therapy," Professor Kefferd said.

Australia is the melanoma capital of the world, with an incidence 10 times higher than in many other countries. One in 20 Australians will develop melanoma at some point in their lives, and it is the most common form of skin cancer in people aged 15 to 39.

Although two drugs have already been successfully developed to treat melanomas caused by a gene mutation known as BRAF, Professor Kefferd said this gene anomaly was the "low hanging fruit" because it accounted for about half of all melanoma cases, leaving the other 50 per cent of cases divided between a large number of lesser known mutations that interacted in ways not yet understood.
Other grants to the research include $500,000 from the Cancer Council NSW, and a further $1 million from philanthropist Greg Poche, whose $40 million gift in 2005 allowed the construction of the Melanoma Institute's North Sydney facility.