

Bionic eye study in Australia paves way towards human trials

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Promising results for University of Sydney bionic eye

A bionic eye being developed by a team of biomedical researchers at the University of Sydney and University of New South Wales (UNSW) in Australia has shown to be safe and stable for long-term implantation in a three-month study, paving the way towards human trials.

The Phoenix99 Bionic Eye is an implantable system, designed to restore a form of vision to patients living with severe vision impairment and blindness caused by degenerative diseases, such as retinitis pigmentosa. The device has two main components which need to be implanted: a stimulator attached to the eye and a communication module positioned under the skin behind the ear.

The researchers used a sheep model to observe how the body responds and heals when implanted with the device, with the results allowing for further refinement of the surgical procedure. The biomedical research team is now confident the device could be trialed in human patients.

The team will now apply for ethics approval to perform clinical trials in human patients, as they continue to develop and test advanced stimulation techniques.