Bringing Hope to Those with Severe Corneal Disease

On a mission to restore sight in patients blinded from severe corneal disease.

Competitive advantage

- Identification of a new biomarker for severe corneal disease, which will become a point-of-care test to gauge disease severity and outcome of therapy
- Technology offers patients with blindness an opportunity to restore their sight and eye health
- An opportunity for clinicians to stage their patients in terms of disease severity and ascertain how their therapy has fared

Impact

- Novel therapy and a new diagnostic biomarker will be offered to patients with severe corneal disease that cannot be treated with conventional medical or corneal graft therapy. The aim is to improve the therapy and the diagnostic test so that patients in developing nations will benefit.

More Information

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Successful outcomes

- Phase 1 clinical trial on 16 patients with limbal stem cell deficiency completed. Mid-term follow-up should see a 63% success rate in terms of vision improvement
- In a mouse model of limbal stem cell deficiency, it has been shown that a novel biomarker has the capacity to detect pathological abnormalities well before gold-standard markers

Capabilities and facilities

- Awarded funds from the Medical Research Future Fund (MRFF) Accelerator Research Stem Cell Program.

Our partners

- NHMRC
- Stem Cells Australia
- ARC
- Ophthalmic Research Institute of Australia
- Catholic Archdiocese of Sydney