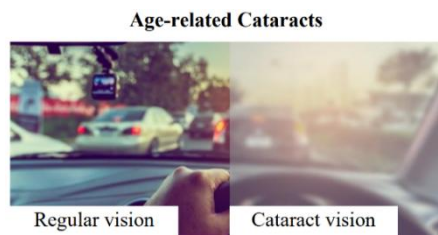


Improving Post-Eye Surgery Patient Satisfaction Through Wearable Adaptive Optics (WAO) Simulation

The Challenge – Visualising Eye Surgery Outcomes

More than half of all people over the age of 65 have cataracts, a condition where clouding of the eyes eventually leads to blindness. Each year, 10 million cataract surgeries are performed globally. However, up to 30% of patients are dissatisfied with the results of this and other interventions, due to unexpected glare, blurring or foggy vision. Current subjective eye tests are too simple and cannot determine how patients would experience optical solutions prior to surgery – a challenge which led Voptica to their novel simulation technology solution.



The Solution – WAO

Voptica's WAO (Wearable Adaptive Optics) project has delivered a wearable wireless headset capable of providing a real view simulation of the effects of proposed, often irreversible, optical eye surgery whilst being used in a real-world setting. The device will increase patient satisfaction rates by providing patients with a realistic expectation and real understanding of surgical outcomes, specifically artificial lens implantation, which may result in life influencing blurred vision and/ or photic phenomena.

The Funding

Working closely with Voptica, the Neon team were able to create a powerful grant application for the prestigious Eureka Eurostars programme. The application was successful and Neon secured a €430k grant as well as a €185k grant for their project partner which allowed them to demonstrate their innovative technology and accelerate their journey to commercialisation.

The Impact

Voptica expects to unlock a €490m market and generate a total profit of €7.6m within six years. Importantly, the real-vision simulation provided by the WAO technology will provide crucial alignment between patient expectations and understanding in a real-world environment and ultimately, enhance patient satisfaction with the outcomes of surgery.



eurostars™



30 months



€430k Grant



Voptica
(ES)
Diestia Systems
(GR)

NEON
innovation