## Ocuexplorer 5G

**Objective:** to offer a quality ophthalmological telediagnosis service in real time to groups with difficult access to advanced ophthalmology, such as the rural population or groups with reduced mobility.

**Description:** in ophthalmology, access to early diagnosis is especially critical, as 80% of cases of blindness are avoidable if detected in time. For this reason, ophthalmologists recommend at least an annual checkup, a recommendation that increases for patients with eye diseases.

The Ocuexplorer 5G prototype takes hundreds of high-definition images of the eye per second with a robotic arm and sends them to a computing centre at the Edge where it makes an early diagnosis using artificial intelligence algorithms and contacts a remote ophthalmologist in the event of signs of disease. The optical technology used is based on that used in Formula 1. In this way, Ocuexplorer 5G helps to facilitate both access and prior telediagnosis, which is so important for the prevention and control of eye diseases. It was one of the projects planned to be presented at MWC2020 for its contribution in the field of eHealth.

<u>Additional References</u>













Computing

Artificial Intelligence

















