



Recreating a world of vision for people who have lost their sight

About Pixium Vision

Pixium Vision is developing innovative Vision Restoration Systems (VRS) that stimulate the retina to progressively obtain bionic vision. Our VRS aim to significantly improve the independence, mobility and quality of life of patients who had lost their sight to degenerative retinal diseases.

These systems harness the latest developments in micro-, nano-, opto-electronics, neuromodulation and intelligent software algorithms, and enable Pixium Vision to develop solutions aimed at providing bionic vision as close as possible to normal.

Pixium Vision was created in December 2011 by Bernard Gilly, Prof. José-Alain Sahel, and several renowned scientists from prestigious academic and technology institutes in France, such as the Institut de la Vision, le Centre National Hospitalier d'Ophtalmologie des Quinze-Vingts (CHNO), Université Pierre et Marie Curie (UPMC).

The Company is also collaborating closely with scientific groups and clinicians at leading research institutes and clinical centers around the world, including Universities of Ulm and Munich (Germany) and Stanford University (USA).

Pixium Vision is listed on Euronext Paris stock exchange under the ticker PIX and ISIN FR0011950641.



Our mission is to provide the best-in-class vision restoration systems enabling the blind to regain greater autonomy and improved quality of daily living

Blindness: an unmet medical need



285 million people in the world are visually impaired¹

Retinitis Pigmentosa (RP) and Age-Related Macular Degeneration (AMD) are major causes of blindness³

Blindness costs tens of billions of USD in Europe and the US⁴ **40** million people in the world are **totally blind**²

In Europe there are around 3 million blind and visually impaired people

There is currently no cure for blind patients

¹⁾ Global health statistics, World Health Organisation, 2011

Global health statistics, WHO, 2011; NIH, Global estimates of visual impairment: 2010; S.P. Mariotti, D. Pascolini, Br J Ophthalmol. May 2012; 96(5):614-8

http://www.nei.nih.gov/health/fact_sheet.asp; Company forecasts

NORC|Cost of Vision Problems: The Economic Burden of Vision Loss and Eye Disorders in the United States 2013, European Forum Against Blindness 2013

Vision Restoration Systems

Pixium Vision is currently developing two VRS systems called IRIS® and PRIMA.

Each one is built around three components:

A retinal implant, a visual interface and a pocket processor.

The implant is surgically placed into the eye of a patient. The patient wears a pair of glasses containing an integrated mini-camera and a wireless transmitter. The glasses are connected to a pocket processor, which processes the image captured by the camera into a signal that is transmitted to the brain through the implant.



IRIS®



- In clinical trial
- Epi-retinal implant
- Up to 150 electrodes
- Simple surgical procedure
- Powered by induction
- Tunable software

PRIMA

- In development
- Sub-retinal implant
- Up to several thousand electrodes
- Simpler and shorter surgical procedure
- Advanced processing algorithms
- Powered by Near InfraRed light
- Reduced energy requirements enabling miniaturization of components



Unique proprietary camera that functions like the human retina



To provide the visual input for the VRS, Pixium Vision and its collaborators have developed a biomimetic event-based minicamera integrated into glasses that replicates normal vision in real time and generates output corresponding directly to signals that the visual cortex can understand.

Contrary to conventional frame based cameras, Pixium's unique camera features an advanced optical sensor which only sees changes in the environment (contrast, intensity, luminance, etc) and captures information like independently activated photoreceptors.

Company contacts

Khalid Ishaque, CEO Pierre Kemula, CFO +33 (0)1 76 21 47 30 info@pixium-vision.com www.pixium-vision.com @pixiumvision

Press contacts

Citigate Dewe Rogerson Lucie Larguier (Paris) / Mark Swallow (London) **1** +33 (0)1 53 32 84 78 / + 44 (0) 20 7282 2948



pixium-vision@citigate.fr pixium-vision@citigatedr.co.uk