FDA CLEARS SENSIMED TRIGGERFISH ELECTRONIC CONTACT LENS

The FDA issued marketing clearance of the Triggerfish (Sensimed). A telemetric sensor embedded in this soft silicone contact lens detects tiny fluctuations in the eye's volume. The technology is the first of its kind, classified in a newly created category called *diurnal pattern recorder system*. According to a company press release, the prescription device is indicated to detect the peak patterns of variation in IOP over a maximum period of 24 hours to identify the window of time to measure IOP by conventional methods. The Triggerfish is indicated for patients 22 years of age and older.

According to the company, a recently published study linked this unique continuous volumetric eye measurement to glaucomatous progression and concluded that the Triggerfish might help clinicians detect which patients are at increased risk of disease progression while receiving treatment.[1]

1. De Moraes CG, Jasien JV, Simon-Zoula S, et al. Visual field change and 24-hour IOP-related profile with a contact lens sensor in treated glaucoma patients [published online ahead of print on December 30, 2015]. *Ophthalmology*. doi:10.1016/j.ophtha.2015.11.020.

Endowment Creates Glaucoma Education Resource

The David E.I. Pyott Foundation has pledged $2 million to the American Academy of Ophthalmology's (AAO's) educational foundation. Mr. Pyott is the former chairman of the board and CEO of Allergan. The endowment represents the largest gift ever contributed to the AAO's foundation from a single individual. It will enable the Academy to establish a unique online glaucoma education resource for physicians worldwide.

According to a press release, "the David E.I. Pyott Glaucoma Education Center will help speed online medical training in glaucoma treatment. It will provide an array of learning activities that hold the greatest promise for improving patient care. This resource will provide ophthalmologists with a peer network for them to discuss and manage challenging cases. It will also include interactive cases and simulations, an extensive searchable online library of clinical support materials and surgical videos, as well as patient-education resources. It is expected to launch at the end of 2017."

The center will significantly expand the AAO's Ophthalmic News and Education Network, the organization's flagship educational resource for evidence-based medicine, surgical advances, and improvements in quality of care.

"Having served as Allergan's CEO for 17 years, I have an intimate connection with the glaucoma community," Mr. Pyott said in a press release. "This is my way of giving back. I am delighted to continue a long and rewarding heritage of helping physicians everywhere speed improvements in patient outcomes."

"David Pyott is an extraordinary philanthropist," David W. Parke II, MD, CEO of the AAO, said in a press release. "He is knowledgeable and personally experienced and engaged in the problem of treatable global blindness. This endowment will serve as a legacy gift for decades to come—helping current and future physicians around the globe, as well as providing resources for their patients. We are deeply grateful for his steadfast generosity that enhances our capability to protect sight and empower lives."

MIGS Evolution Will Expedite the Global Glaucoma Surgical Devices Market Through 2020

The global glaucoma surgical devices market is expected to reach $3.11 billion by 2020, increasing at a compound annual growth rate of close to 41%, according to the latest report by Technavio, a market research company with global coverage. The report covers the market outlook and growth prospects of the global glaucoma surgical devices market for 2016 to 2020. To calculate the market size, the report considered revenue generated from the sales of glaucoma implants and glaucoma surgical instruments.

In 2015, the Americas were the largest market for glaucoma surgical devices with more than 48% market share. The United States is the leading revenue contributor, followed by Canada.

The high prevalence of glaucoma will increase the demand for glaucoma surgical devices in the market. The evolution of microinvasive glaucoma surgeries will also increase the sales of these devices.

Rapid Visual Field Loss Causes Depression

A prospective observational cohort study found an association between rapid visual field progression and the occurrence of depressive symptoms in patients with glaucoma.[1] The research involved 204 eyes of 102 patients with glaucomatous visual field defects on standard automated perimetry.

The investigators obtained Geriatric Depression Scale questionnaires and visual field tests over a mean follow-up period of 2.2 ±0.6 years for all patients. The researchers found a significant correlation between changes in binocular standard automated perimetry mean sensitivity and the Geriatric Depression Scale scores during follow-up.

"We saw more depression symptoms reported by people who were losing their vision to glaucoma at a faster pace compared to those in which the disease progressed slowly," Felipe Medeiros, MD, PhD, told the American Academy of Ophthalmology. One of the investigators on the study, Dr. Medeiros is director of the Laboratory of Performance and Visual Function at the University of California, San Diego. "If losing your vision starts to impact your ability to do daily activities, such as driving and reading, that could certainly lead to feelings of depression," he said.

Dr. Medeiros commented on the study's practical implications: "What this research emphasizes is the need to consider emotional counseling and support for seniors who are living with glaucoma and who are experiencing vision loss, especially if the loss of vision is occurring at a relatively fast rate. In addition, it underscores the importance of careful assessment of the rate of disease progression."

1. Diniz-Filho A, Abe RY, Cho HJ, et al. Fast visual field progression is associated with depressive symptoms in patients with glaucoma [published online ahead of print January 20, 2016]. *Ophthalmology*. doi: 10.1016/j.ophtha.2015.12.014.

Aerie Reports Positive Safety Results for Rhopressa

In mid-February, Aerie Pharmaceuticals reported successful 12-month interim safety results of Rocket 2, the company's second phase 3 registration trial for netarsudil ophthalmic solution 0.02% (Rhopressa).

According to the company, the first 118 patients using the drug once daily for 12 months demonstrated safety results consistent with those observed during the 90-day efficacy period. No new adverse events developed over the 12 months, and there were no drug-related serious adverse events. The most common adverse event was conjunctival hyperemia, observed at a rate of 30%, of which 76% was mild. Other adverse events included conjunctival hemorrhages, corneal deposits, and blurry vision in 5% to 23% of the patients.

"We are very pleased to see that Rhopressa QD continues to demonstrate a positive safety profile and, very importantly, consistent IOP lowering throughout the 12-month period," Vincente Anido Jr, PhD, CEO and chairman at Aerie, commented in a press release. "Our [new drug application] filing remains on track for the third quarter of 2016." ■