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ALLERGAN INTRODUCES MULTIDOSE RESTASIS

Allergan announced that it has received FDA approval for Restasis Multidose (cyclosporine ophthalmic emulsion) 0.05%, a preservative-free, multidose bottle offering the same preservative-free formulation of Restasis since the drug's launch in 2003. According to Allergan, Restasis is the one and only prescription treatment FDA approved to help patients with a type of chronic dry eye disease make more of their own tears.

Restasis helps increase eyes' natural ability to produce tears, which may be reduced by inflammation due to chronic dry eye disease. Restasis did not increase tear production in patients using anti-inflammatory eye drops or tear duct plugs.

Restasis Multidose is designed with a patented unidirectional valve and air filter technology that eliminate the need for a preservative. The new multidose bottle uses less plastic than a package of single-use vials and will be available for the same price.

"Restasis Multidose exemplifies Allergan's commitment to innovation and customer responsiveness," David Nicholson, chief R&D officer at Allergan, said in the news release. "Through our Open Science model, we drive to deliver advancements in highly engineered developments, such as the new multidose bottle."

Alcon Launches CyPass Micro-Stent

Alcon announced the US launch of the CyPass Micro-Stent at the annual meeting of the American Academy of Ophthalmology in Chicago. The device was approved by the FDA in July for use in conjunction with cataract surgery to lower IOP in adult patients with mild to moderate primary open-angle glaucoma.

The CyPass System consists of the CyPass Micro-Stent, contained within a loading device, and a stent delivery tool. The device is designed for placement in the angle of the eye, with the proximal end extending into the anterior chamber and the distal end residing in the supraciliary space. This allows outflow of fluid from the anterior chamber through the distal end into the supraciliary and suprachoroidal spaces.

In February, Alcon entered into an agreement to acquire Transcend Medical, giving Alcon the rights to the CyPass Micro-Stent System.

"We are excited to launch the CyPass Micro-Stent device in a new segment of glaucoma treatment called minimally-invasive glaucoma surgery, or MIGS," Sergio Duplan, region president, North America, Alcon, said in a company news release. "This new treatment option for cataract patients with mild to moderate primary open-angle glaucoma has been demonstrated to have a lasting, significant IOP-lowering effect."

The CyPass Micro-Stent is implanted during cataract surgery, just below the surface of the eye, into the supraciliary space. The device is designed to lower IOP by enhancing aqueous outflow through one of the natural drainage pathways of the eye, with minimal tissue disruption, which allows the excess fluid in the eye to drain.

Two-year data from the landmark COMPASS clinical trial were published recently in the online edition of *Ophthalmology*.[1] The data are a follow-up for more than 500 patients with mild to moderate glaucoma who underwent cataract surgery. The randomized clinical study demonstrated a safe and sustained 2-year reduction in IOP and glaucoma medication use after microinvasive surgical treatment for mild to moderate primary open-angle glaucoma.

"Findings from the COMPASS and CYCLE studies are significant and further demonstrate Alcon's dedication to bringing to market some of the most innovative surgical technologies to effectively treat diseases like glaucoma," Franck Leveiller, head of global research & development, Alcon, said in the news release. "We are proud to be working with glaucoma experts and surgeons in the US and around the world to bring this new treatment option to as many eligible patients as possible."

1. Vold S, Ahmed II, Craven ER, et al. Two-year COMPASS Trial results: supraciliary microstenting with phacoemulsification in patients with open-angle glaucoma and cataracts. *Ophthalmology*. 2016;123(10):2103-2112.

Sun Pharma to Acquire Ocular Technologies

Sun Pharmaceutical Industries announced that it is acquiring Ocular Technologies, Sarl (OTS), a portfolio company

of private equity firm Auven Therapeutics. OTS owns exclusive worldwide rights to Seciera. Sun Pharma will pay Auven $40 million upfront, plus contingent development milestones and sales milestones as well as tiered royalty on sales of Seciera as consideration for this acquisition.

Seciera is currently in a phase 3 confirmatory clinical trial for the treatment of dry eye disease, an inflammatory ocular disease affecting approximately 16 million people in the United States alone. Seciera is a patented, novel, proprietary formulation of cyclosporine A 0.09%. It is a clear, preservative-free, aqueous solution. In a completed phase 2b/3 clinical trial in 455 patients, Seciera demonstrated a rapid onset of action and was well tolerated by the study population. Based on the published data in literature, the efficacy and safety endpoints in these trials compared favorably to other formulations of cyclosporine A.

"This potential acquisition signifies continued momentum in enhancing our global branded specialty portfolio," Dilip Shanghvi, managing director, Sun Pharma, said in a company news release. "Coupled with our existing pipeline consisting of BromSite, DexaSite, and Xelpros, this initiative will enable Sun Pharma to significantly expand its ophthalmic presence and reach millions of patients globally."

"This is an important milestone for us," said Jerry St. Peter, vice president and head, Sun Ophthalmics. "As a specialty business dedicated solely to the needs of eye care practitioners and their patients, Sun Ophthalmics is excited at the potential to expand our existing portfolio. We hope to bring Seciera to ophthalmologists and optometrists globally and participate in a dynamic market that is estimated to reach almost $5 billion worldwide by 2020.

The transaction is subject to approval of the US Federal Trade Commission as required under the Hart-Scott-Rodino Act and other closing conditions and is expected to be completed by end of 2016.

Mati Therapeutics Granted New Patent

Mati Therapeutics has been granted US Patent No. 9,445,944 titled "Lacrimal Implants and Related Methods," according to a company press release. The patent, which expires in 2028, claims a method of providing a sustained drug release to an eye using a proprietary punctal plug design placed in the punctum over the treatment period. This proprietary technology is used for multiple disease states with reportedly consistent, sustained efficacy. The patents cover 17 patent families, including important elements of the Evolute punctal plug delivery system for treatment of ocular indications.

The Evolute platform includes features for retaining the punctal plug within the nasolacrimal system of the eye during drug elution and sustained-release formulations currently in development for postoperative pain and inflammation. The device has already been approved to treat dry eye disease, but Mati is the first to conduct clinical trials in the United States using punctal plugs as an anchoring device for a drug delivery platform, the company reports. A drug-eluting core is inserted into Mati's proprietary punctal plug, which allows medication to be continuously released into the tear film of the eye over a period of time.

Mati believes the Evolute platform has the potential to become a more reliable alternative to several eye drop therapies. Mati has completed multiple phase 2 clinical trials using the Evolute platform, including trials in glaucoma, ocular hypertension, and allergy patients.

Wearable Artificial Vision Device May Help the Legally Blind to Read

A wearable artificial vision device may help people who are legally blind read, recognize faces, and accomplish tasks with significantly greater ease than using traditional assistive reading devices, suggests a study presented at the 2016 American Academy of Ophthalmology annual meeting.[1] Orcam's My Eye is a hands-free device that clips to glasses and features a miniature camera that sees and recognizes what the user is looking at and then reads what it is seeing to the user via a small bone-conduction earpiece. The user activates the device by pointing a finger to the object or text, tapping it, or pressing a trigger button.

Researchers at the University of California, Davis, tested the device on 12 legally blind individuals, all of whom had a visual acuity of less than 20/200. Study participants performed a 10-item test simulating activities of daily life, including recognizing products and reading a variety of items such as emails, letters, newspapers, books, and signs. They earned one point for the successful completion of each item and a zero for each not completed. The total possible score was 10. The researchers studied the participants at three stages. First, they observed the participants doing the tasks without the device, then while wearing it after receiving a 90- to 120-minute training session, and finally after wearing the device for 1 week.

The researchers' findings were as follows:

- Without wearing the device, the participants' average score was 2.5 out of 10.
- When they first tried the device, their average score improved to 9.5 out of 10.
- After a week of wearing the device, the average score improved to 9.8 out of 10.
- Seven patients completed the test using other low-vision aids such as magnifying glasses, resulting in an average score of 6. When they switched to the portable device, their average score improved to 9.7.

1. Moisseiev E. Portable artificial vision device is a useful aid for patients with low vision. Paper presented at: The AAO Annual Meeting; October 15–18, 2016; Chicago, IL

PEARLS FROM THE DEEP

LOOK MA, NO VISCOELASTIC!

By Lance S. Ferguson, MD

As financial challenges mount inexorably, surgeons find ways to control costs and save OR time. Viscoelastics compose a large percentage of case costs and require additional time for removal.

To limit costs, the selected dispersive viscoelastic for phacoemulsification is often used during the lens' insertion. Avoidance of a second cohesive viscoelastic does reduce expense, but it incurs a time penalty, because the dispersive agent is more difficult to remove. Furthermore, the additional irrigation, with its attendant endothelial shear and required maneuvers, is another consideration.

Rather than inject a second aliquot of viscoelastic to inflate the bag, I recommend simply placing a Lewicki cannula through the existing paracentesis incision. An experienced technician can connect this cannula to the infusion line in a few seconds, and I find that the chamber remains remarkably stable for insertion of the IOL. Reconnecting the I/A handpiece to the infusion line is likewise a fast maneuver, allowing one brief final washout of the anterior chamber and refinement of the IOL's position.

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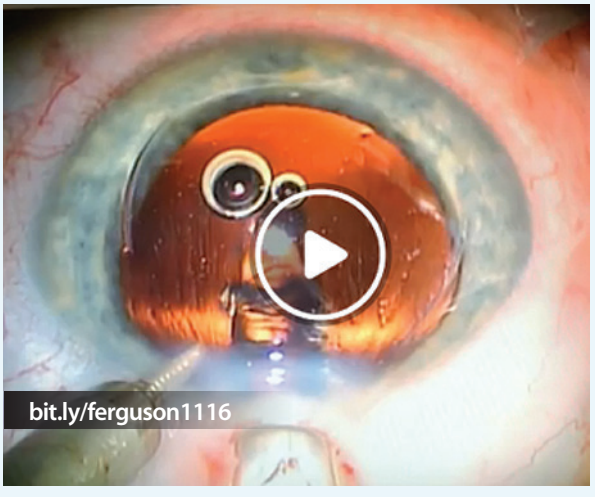
WATCH IT NOW

Lance S. Ferguson, MD, demonstrates lens insertion without viscoelastic.



Bausch + Lomb Introduces Orbscan Anterior Segment Analyzer

Bausch + Lomb has introduced the Orbscan anterior segment analyzer, the third generation of the multidimensional Orbscan topographer, according to the company. The Orbscan offers surgeons the ability to examine anterior and posterior astigmatism and optical pachymetry, providing data points on corneal biomechanics and stability that can inform surgical choices and identify appropriate candidates for all of these procedures. Orbscan reportedly gives an accurate assessment of the size, shape, and extent of surface power abnormalities.

The Orbscan provides a complete, contact-free analysis of the eye's anterior segment by using slit scanning technology with an advanced Placido disc system. It also features touchscreen technology and completely new software, and it is able to analyze elevation and curvature measurements on both the anterior and posterior surfaces of the cornea, full corneal pachymetry, white-to-white measurement, and anterior chamber depth and angle kappa, the news release stated.

FDA Approves Aladdin HW3.0

Topcon Europe Medical's integrated biometer and corneal analyzer Aladdin HW3.0 has received 510(k) clearance from the FDA. Biometry results are complemented with anterior topography, Zernike analysis, and pupillometry in one fast, accurate, and easy acquisition. The Aladdin interferometer also provides anterior measurements such as the central corneal thickness, anterior chamber depth, and lens thickness.

CLARIFICATION: The article "Practice Profiles: Advanced Vision Care" by Rochelle Nataloni, Contributing Editor, that appeared in our October 2016 issue should have credited William Short Photography as the source of the office photos and Barbara Masket as the architect responsible for a redesign of Advanced Vision Care's offices that focused on efficient use of space and culminated in a cost savings of $500 per month in rent. ■