### **Aerie Initiates Phase 3** Safety-Only Registration Trial of Rhopressa in Canada

Aerie Pharmaceuticals commenced dosing of the first patients enrolled in the company's phase 3 registration trial of Rhopressa in Canada. The once-daily, triple-action eye drop is being tested for its ability to lower IOP in patients with glaucoma or ocular hypertension. The study, named Rocket 3, is designed to evaluate Rhopressa's safety and tolerability in patients over a 12-month period. The US trials, Rocket 1 and Rocket 2, are focused on demonstrating noninferiority of IOP lowering for Rhopressa compared to timolol. According to a news release, Aerie anticipates a total enrollment of approximately 1,300 patients across the three trials.

"Our Rhopressa study in Canada is the third and final trial to commence in our phase 3 program, which continues to show strong momentum and interest from the ophthalmology community," Vicente Anido Jr, PhD, chairman and CEO of Aerie, said in a news release. "This

trial will supplement the safety studies required to file our [New Drug Application] in the United States and potentially result in sufficient safety data for submission to the European regulatory authorities for product approval in Europe. Further, it establishes our name and presence in Canada, which could become an important market for Aerie in the future."

The company said it anticipates top-line 3-month efficacy results for the phase 3 program in the middle of 2015, with a potential New Drug Application filing 1 year later. Pending progress of the program and regulatory approvals, Aerie intends to commercialize Rhopressa in North American markets with its own sales force. The company will seek commercialization partners in other key territories, including Japan and possibly Europe. Aerie fully owns its product candidates, has no licenses, and has patent protection for both use and composition of matter through 2030.

#### Alcon to Acquire WaveTec Vision

Alcon has entered into an agreement to acquire WaveTec Vision, a privately held company that developed the ORA System, the first commercialized intraoperative guidance system for surgeons implanting IOLs.

According to a news release, the ORA System, which complements Alcon's Verion image-guided preoperative diagnostic system, allows surgeons to see incisions and IOL alignment in real time to support optimal positioning of the lens during cataract surgery. The device performs additional measurements to confirm the surgeon's lens selection and the IOL's placement within the eye.

Alcon says it plans to integrate the ORA System into its existing cataract refractive suite, which includes Verion, the LenSx femtosecond laser, the Centurion phacoemulsification system, and the LuxOR LX3 microscope.

Upon closing, Alcon will acquire full rights to the ORA System technology and immediately begin the integration of the company into its surgical business franchise. The transaction is subject to closing conditions, including antitrust approval.

#### **Combined ECP and Phacoemulsification Reduced Need for Medication in Patients** With Open-Angle Glaucoma and **Cataract**

Combined endoscopic cyclophotocoagulation (ECP) and cataract extraction resulted in lower IOP and a greater reduction in glaucoma medications than cataract extraction alone in patients with medically controlled open-angle glaucoma and visually significant cataract.1

In the prospective study, patients were treated with ECP and cataract extraction (study group; n = 80) or cataract extraction alone (control group; n = 80). The groups were matched in age and baseline IOP. The main outcome measures were the change in IOP and number of glaucoma medications. Secondary measures included visual acuity and postoperative complications.

According to the investigators, the number of glaucoma medications required in the study group decreased from 1.5  $\pm$ 0.8 to 0.4  $\pm$ 0.7 at 1 and 2 years, respectively.

# Online Survey Results July/August 2014

Have you discussed with a glaucoma patient's internist modifying the dosing of blood pressure-lowering medication?

Yes 59.09% No 40.91%

Which of the following seems to be the number-one cause of nonadherence in your patient population?

Problems instilling drops
The cost of medication
22.22%
Side effects
7.41%
Forgetfulness or confusion
48.15%

Three years postoperatively, the number of medications decreased to -0.1  $\pm$ 0.8 (n = 45). The mean IOP decreased from 18.1  $\pm$ 3 mm Hg at baseline to 16  $\pm$ 2.80 mm Hg at 1 year, 16  $\pm$ 3.3 mm Hg at 2 years, and 15.4  $\pm$ 2.5 mm Hg at 3 years postoperatively. In the control group, the mean number of glaucoma medications was 2.4  $\pm$ 1 at baseline, 1.8  $\pm$ 1.2 at 1 year, and 2.0  $\pm$ 1 at 2 years. The mean IOP was 18.1  $\pm$ 3 mm Hg at baseline, 17.5  $\pm$ 3.6 mm Hg at 1 year, and 17.3  $\pm$ 3.2 mm Hg at 2 years postoperatively. The difference in IOP and medication reduction between the two groups was statistically significant at all time points. Visual acuity outcomes and complication rates were similar between the study and control groups.

In related news, Beaver-Visitec International recently purchased Endo Optiks. The financial terms of the transaction were not disclosed.

1. Francis BA, Berke SJ, Dustin L, Noecker R. Endoscopic cyclophotocoagulation combined with phacoemulsification versus phacoemulsification alone in medically controlled glaucoma. *J Cataract Refract Surg.* 2014;40(8):1313–1321.

anterior chamber to a diffuse bleb without the use of a scleral flap. The device is undergoing phase 1 FDA trials at 11 centers in the United States. Patients have also been treated in France and the Dominican Republic. InnFocus said it expects surgeries to be performed in additional European countries by the end of 2014. The device has been implanted alone or in combination with cataract surgery in clinical trials outside the United States in patients with glaucoma ranging from early to late stage.

According to a news release, 43 glaucoma patients treated with the InnFocus MicroShunt experienced a reduction in IOP to below 14 mm Hg for over 2 years, and 80% of these patients no longer require glaucoma medication.

#### Survey Finds Efficacy Most Important When Prescribing Adjunctive Treatment

M3 Research in partnership with Allergan surveyed 126 glaucoma specialists across the country to identify what they value most in an adjunctive therapy. Nearly all (91%) of the glaucoma specialists surveyed agreed that efficacy is important when prescribing an adjunctive therapy, and 75% ranked efficacy as the most important attribute, followed by safety (6%), coverage by managed care (6%), dosing (4%), tolerability (4%), duration (4%), and freedom from  $\beta$ -blockers (1%). More than three-fourths of the participants identified a reduction in IOP as the most important quality when defining efficacy, and most (75%) said they look for a decrease in IOP of 3 to 5 mm Hg with adjunctive therapy. Those surveyed said that they treat a majority of their patients with prostaglandin analogues alone (52%), followed by prostaglandin analogues plus one adjunctive therapy (25%).

## First Surgeries Performed in Japan With the InnFocus MicroShunt

The first two surgeries using the InnFocus MicroShunt (InnFocus) were conducted in Japan in a clinical investigational study, according to a news release. The surgeries were performed at the Yotsuya Shirato Eye Clinic in Tokyo.

The InnFocus MicroShunt is a glaucoma drainage implant consisting of a microtube that is about twice the size of an eyelash. The implant reportedly provides a quick and simple method of shunting aqueous humor from the

#### Valeant, Pershing Square Seek Mid-November Shareholder Meeting to Oust Allergan Directors

A Delaware Chancery Court judge has fast-tracked a lawsuit from Valeant and Pershing Square Capital Management against Allergan that could lead to a special meeting's being held by mid-November.

On August 27, Delaware Chancery Court judge Andre Bouchard ordered a 3-day trial to begin on October 6

that is expected to push up the date to November for a special meeting of Allergan's shareholders. Allergan had said it would schedule the meeting for December 18.

Pershing Square, which is run by activist investor William Ackman, and Valeant are suing Allergan to force the company to quickly schedule a special meeting, at which time the pair hopes to replace a majority of Allergan's board. In the lawsuit, Pershing Square alleges that Allergan is trying to avoid a special meeting to give it time to find an alternate deal.

On August 23, Valeant and Pershing Square said they received written requests from 31% of Allergan's shareholders, who support their effort to call a special meeting as part of Valeant's takeover bid. Under Allergan's bylaws, 25% of investors are required to force a shareholder meeting. Allergan confirmed that Pershing Square delivered the written requests.

Meanwhile, in its own lawsuit in federal court in California, Allergan is suing Valeant and Mr. Ackman. Allergan is alleging that the two parties violated federal securities laws and profited from insider trades tied to the takeover bid. In its preliminary injunction motion, Allergan is seeking an order barring Valeant, Pershing Square, Mr. Ackman, and entities affiliated with them from exercising any rights or benefits associated with Allergan shares that have been acquired unlawfully.

According to a report in *The Wall Street Journal*, the US Securities and Exchange Commission has launched a civil probe into Valeant Pharmaceuticals' and Pershing Square's joint attempt to take over Allergan. The report, citing a person familiar with the matter, said the US Securities and Exchange Commission civil probe is focused on potential breaches of insider trading laws. The inquiry is at a relatively early stage and may not lead to any enforcement action, the source said.

Under the latest bid, Valeant is offering about \$53 billion in cash and stock, made up of a cash component of \$72 a share and 0.83 share of Valeant. The bid includes the possibility of an additional \$25 a share, depending on the future revenue of Allergan's DARPin drug candidate for wet age-related macular degeneration.

1. Hoffman L, Eaglesham J. SEC examines pursuit of Allergan by Valeant, Ackman. The Wall Street Journal. August 14, 2014. www.wsj.com. Accessed August 14, 2014.

#### Nicox to Copromote Lanoprostene **Bunod in United States**

Nicox will exercise the option to copromote lanoprostene bunod in the United States. In 2010, the company licensed the drug to Bausch + Lomb (B+L), a division

of Valeant Pharmaceuticals International. Nicox and B+L will begin negotiating a copromotional agreement, which will be signed in the future.

Lanoprostene bunod is a nitric oxide-donating prostaglandin F2- $\alpha$  analog. The drug is in phase 3 clinical development for the potential treatment of glaucoma and ocular hypertension. B+L's phase 3 clinical program includes two studies, APOLLO and LUNAR, which are pivotal for US registration. The studies are designed to compare the efficacy and safety of lanoprostene bunod administered once daily with timolol maleate 0.5% administered twice daily for lowering IOP in patients with open-angle glaucoma or ocular hypertension.

Valeant recently stated that it expects to receive topline efficacy results from the first of these phase 3 studies in the third quarter of 2014. The company added that the drug could be launched in the United States in 2016, pending FDA approval.

#### **Quantel Medical's Optimis Fusion** Receives FDA 510(k) Clearance

Quantel Medical received FDA 510(k) clearance for its Optimis Fusion integrated laser platform, indicated to treat both cataract and glaucoma, according to a company news release.

The Optimis Fusion system combines selective laser trabeculoplasty, photoregeneration therapy, and traditional YAG photodisruption treatments. The YAG mode delivers high-performance photodisruption for capsulotomy and peripheral iridotomy surgical procedures, according to the news release. The Gaussian laser beam allows for precise laser delivery at minimum energy levels, avoiding adverse side effects such as lens pitting.

According to Quantel, the Optimis Fusion system can also be integrated with the company's Vitra Monospot and Multispot pattern-scanning retina laser systems, providing comprehensive treatment options to physicians in multispecialty practices looking to treat with one laser platform patients who have glaucoma, cataract, and retinal conditions.

"We are extremely excited to bring our breakthrough laser platform to the US market," Jean-Marc Gendre, CEO of Quantel Medical, said in the news release. "The Optimis Fusion has proven to be a very attractive laser platform since introduction earlier this year in other markets. Driving the acceptance of this product introduction is the ability to combine a 532-nm monospot or multispot retina laser, a unique feature to Quantel's laser line."