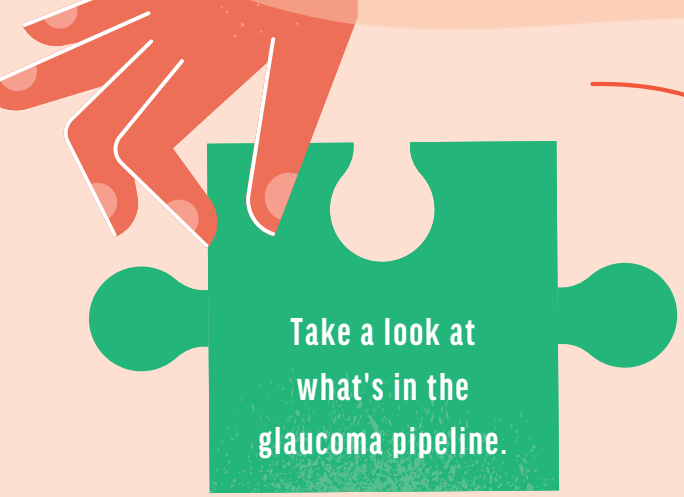

NEW SOLUTIONS FOR SUSTAINED DRUG DELIVERY

POLYACTIVA

PA5108

PolyActiva is developing a sustained-release latanoprost ocular implant (PA5108) designed to reduce IOP in patients with open-angle glaucoma or ocular hypertension. The implant features the company's proprietary Prezia technology, which chemically attaches a drug to a carrier polymer. With this technology, PA5108 can deliver a constant fixed daily dose of drug to provide consistent IOP reduction over 6 months, according to the company.[1] The implant fully biodegrades within 4 to 6 weeks after the treatment period. According to the company, additional implants can be safely administered near the end of therapy. PA5108 is designed to be implanted in an in-office procedure.

PolyActiva recently announced that the implant met safety and efficacy endpoints in its phase 2 clinical trial and demonstrated repeat dosing capability.[2] A total of 15 patients in Australia and New Zealand received continuous therapy for more than 48 weeks after receiving their first and second implants at week 0 and week 21. The investigators found statistically significant IOP changes from baseline for each mean diurnal measurement at weeks 12, 21, 33, and 42 ($P < .0001$). Clinically meaningful IOP reductions at 8:00 AM over 48 weeks were observed, with mean IOP reductions between 26% and 35%. Overall, 94% of patients did not require additional drop therapy over the 48-week treatment period. PA5108 was found to be safe and generally well tolerated. No adverse impact on the corneal endothelium was observed following repeat dosing and 48 weeks of monitoring, the company said.

PolyActiva is preparing for a phase 2b investigation of PA5108 in the United States.

1. Pipeline. PolyActiva. Accessed December 1, 2024. https://polyactiva.com/pipeline/
2. PolyActiva showcases promising clinical data highlighting its polymer technology's potential to transform glaucoma care [press release]. PolyActiva. October 30, 2024. Accessed December 1, 2024. https://polyactiva.com/wp-content/uploads/2024/10/PolyActiva-Eyecelerator-Press-Release_FINAL.pdf

RIPPLE THERAPEUTICS

RTC-620 IC and RTC-1119 IC

Ripple Therapeutics is developing the RTC-620 IC and RTC-1119 IC prodrug implants for the treatment of open-angle glaucoma and ocular hypertension. RTC-620 is designed to release bimatoprost over 6 months, and RTC-1119 is designed to release latanoprost over 18 months. Both implants can be placed in an in-office procedure.

According to the company, Ripple's patented technology platform is based on a discovery that drugs can be engineered into controlled-release pharmaceuticals without the use of polymers or excipients.[1] These proprietary prodrugs undergo surface erosion to give zero order release kinetics and are customizable to tailor both drug dose and duration. The technology features high drug loading and the elimination of a polymer carrier, allowing for smaller implants, and a lack of degradation products. The intracameral implants shrink over time to allow safe repeat dosing and no endothelial cell loss, the company reported.

In a canine study, RTC-620 demonstrated IOP-lowering durability before and after repeat dosing.[2] The implant also demonstrated a favorable corneal safety profile with repeat dosing. Also in a preclinical investigation, RTC-1119 demonstrated IOP-lowering durability and no loss of corneal endothelial cell density over 18 months.

In September, Ripple Therapeutics announced a collaboration and option-to-license agreement with AbbVie to develop RTC-620, a fully biodegradable, sustained-release intracameral bimatoprost implant.[3] In October, Ripple announced evaluation and licensing agreements with Glaukos, which enable Glaukos to leverage Ripple's proprietary technology to create sustained-release implants for targeted delivery of active pharmaceutical ingredients, the company said.[4]

1. Ripple Therapeutics. Accessed December 1, 2024. https://www.rippletherapeutics.com/about
2. Reeves T. Ripple Therapeutics. Presented at: Glaucoma 360 New Horizons Forum. February 2024; San Francisco, CA.
3. Ripple Therapeutics announces collaboration and option-to-license agreement with AbbVie to develop next-generation therapies for glaucoma management [press release]. Ripple Therapeutics. September 17, 2024. Accessed December 1, 2024. www.rippletherapeutics.com/ripple-therapeutics-announces-collaboration-and-option-to-license-agreement-with-abbvie-to-develop-next-generation-therapies-for-glaucoma-management
4. Ripple Therapeutics announces evaluation and licensing agreement with Glaukos [press release]. Ripple Therapeutics. October 15, 2024. Accessed December 1, 2024. www.rippletherapeutics.com/ripple-therapeutics-announces-evaluation-and-licensing-agreements-with-glaukos

SPYGLASS PHARMA

SpyGlass Pharma Drug Delivery Platform

The SpyGlass Pharma Drug Delivery Platform (SpyGlass Pharma) is designed to deliver 3 years of bimatoprost to targeted tissues.[1] The technology is implanted with the SpyGlass IOL into the capsular bag in routine cataract surgery. The platform consists of a single-piece hydrophobic acrylic IOL and two drug-eluting pads that slide over each haptic and securely attach at the haptic-optic junction. With the drug pads securely attached, the IOL and pads are loaded into a standard IOL injector. The lens is advanced and injected through a 2.4-mm incision and implanted directly into the capsular bag. The drug pads remain outside the visual axis and continuously elute directly in the aqueous humor, carrying the active drug to targeted tissues.

In October, SpyGlass Pharma released 18-month data from a first-in-human study of 23 patients with glaucoma or ocular hypertension implanted with the SpyGlass Drug Delivery Platform at the time of cataract surgery.[2] A sustained reduction in IOP was observed across all three dose strengths investigated, with patients achieving a 43.7% mean IOP reduction at 18 months. All patients remained off topical IOP-lowering therapy at 18 months, and distance BCVA was 20/30 or better. The SpyGlass platform was well-tolerated, and no product-related adverse events occurred, the company said in a news release.

SpyGlass Pharma recently announced it has completed enrollment in a phase 1/2 multicenter, randomized controlled study designed to investigate the safety and efficacy of its Drug Delivery Platform in a larger pool of patients with open-angle glaucoma or ocular hypertension.[3] ■

1. Our technology. SpyGlass Pharma. Accessed December 1, 2024. www.spyglasspharma.com/our-technology
2. Spyglass Pharma presents promising 18-month data of its innovative drug delivery platform implanted during routine cataract surgery in eyes with glaucoma [press release]. SpyGlass Pharma. October 17, 2024. Accessed December 1, 2024. www.globenewswire.com/news-release/2024/10/17/2965175/0/en/SpyGlass-Pharma-Presents-Promising-18-month-Data-of-its-Innovative-Drug-Delivery-Platform-Implanted-During-Routine-Cataract-Surgery-in-Eyes-with-Glaucoma.html
3. SpyGlass Pharma completes enrollment in phase 1/2 study of its promising long term delivery platform for glaucoma and ocular hypertension [press release]. SpyGlass Pharma. Accessed November 19, 2024. December 1, 2024. www.globenewswire.com/news-release/2024/11/19/2983547/0/en/SpyGlass-Pharma-Completes-Enrollment-in-Phase-I-II-Study-of-its-Promising-Long-Term-Drug-Delivery-Platform-for-Glaucoma-and-Ocular-Hypertension.html