Aciont’s Paper, "Transscleral Iontophoresis for Noninvasive Ocular Drug Delivery of Macromolecules" Published in JOPT

Salt Lake City, UT – April 17, 2020 – Aciont Inc. announced today that results from preclinical studies of its Visulex-I technology is published online ahead of print in the Journal of Ocular Pharmacology and Therapeutics under the title “Transscleral Iontophoresis for Noninvasive Ocular Drug Delivery of Macromolecules.”

The research demonstrates through various preclinical models (pharmacokinetic, MRI and efficacy) that potentially a therapeutically relevant dose of high molecular weight antibody drug can be delivered transsclerally using iontophoresis. The lead author of the paper was Dr. Sarah Molokhia and it was co-authored by Dr. Kongnara Papangkorn, Charlotte Butler, John W. Higuchi, Dr. Balbir Brar, Dr. Balamurali Ambati, Dr. S. Kevin Li, and Dr. William I. Higuchi.

The abstract and full article can be found in the journal and on the publisher’s website. 


About Aciont

Aciont Inc. is a mid-clinical staged, specialty biopharmaceutical company located in Salt Lake City, Utah. Aciont’s Visulex noninvasive drug delivery technology platforms endeavor to advance therapeutics in ophthalmology. Our world-renowned research team is focused on developing noninvasive therapeutics for sight threatening diseases affecting both the anterior and posterior sections of the eye addressing a potential wide range of ocular diseases and drug transport challenges. Our lead clinical staged product, DSP-Visulex, addresses key ocular inflammation related indications such as severe uveitis, post-operative pain/inflammation and macular edema.

About the Visulex Ocular Application Device

The Visulex device is a self-adhering eye drug delivery applicator designed to facilitate drug diffusion entering primarily through the conjunctiva-scleral surface and minimizing drug clearance due to tearing and drainage into the nasolacrimal duct. Most small drug molecules are suitable for Visulex-P (passive diffusion-based method) which enables a high drug driving force across the intrascleral barriers via in office or potentially at home treatments of five minutes or less. Aciont’s Visulex-I technology platform through a process known as electroosmosis also incorporates a novel noninvasive iontophoretic (mild electrical current) method for delivering macromolecules such as antibodies to the back of the eye.
About DSP Visulex

DSP-Visulex is a noninvasive drug delivery system of dexamethasone sodium phosphate (DSP). It utilizes a combination of a proprietary high concentration DSP solution and Visulex-P drug delivery technology to enable a simple administration of DSP to treat inflammation conditions of both anterior and posterior eye tissues. Numerous preclinical studies have demonstrated the ocular drug distribution, safety, and efficacy of DSP-Visulex. Visulex-P is based on passive diffusion to deliver small molecules such as most immunosuppressive agents. DSP-Visulex’s lead program was supported by two phase 2 NEI SBIRs, reference by Grant R44EY014772, and the completed phase 1/2 clinical study demonstrating efficacy and safety under an ocular inflammation treatment protocol is registered at clinicaltrials.gov under identifier NCT02309385.

Contact Information

Aciont Inc.
Website:  www.aciont.com
Phone:  801-895-4089
Email:  admin@aciont.com