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Unmet needs and challenges with sustained drug delivery to the eye

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Abstract

Data confirm that many patients are unable to self-administer chronic eye drops effectively, including the arthritic aging population and uncooperative pediatric glaucoma patients. Patient videos and questionnaires have demonstrated the inability for patients to effectively self dose and administer the drops accurately and as prescribed. Recent data revealed that only 71% of 204 glaucoma patients were able to get a drop into the eye, and only 39% did so without touching the bottle to the surface of the eye. Such studies confirm eye drop wastage, potential contamination of the eye drop bottles, and poor understanding of the situation among participants. Furthermore, the current standard of care for Age Related Macular Degeneration has removed the patient from the equation, yet it is still time and resource intensive requiring roughly monthly in office intraocular injections over years. Thus an alternative delivery mode, with decreased frequency of administration and sustain release potential could 1) greatly improve local ocular and systemic safety and tolerability profiles by decreasing the amount of drug delivered locally, as well as 2) more effectively and efficiently manage ocular disease and resources by effectively targeting the disease and reducing patient visits. There are currently several novel and innovative sustained release (SR) delivery methods in various stages of development for both front of the eye (anterior segment and ocular surface) and back of the eye (intraocular retinal) pathologies.

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Biography

Barbara M Wirostko is co founder and Chief Scientific Officer of Jade Therapeutics Inc, an Ophthalmic drug delivery company located in Utah. Prior to founding Jade, She served as CMO of Altheos, a biotech company developing an NCE for glaucoma. A board certified ophthalmologist, she maintains an academic research and clinical practice with the University of Utah, Moran Eye Center, as a Clinical Adjunct Associate Professor in Ophthalmology. From 2006-2010she was Senior Medical

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