

## Foreword



### **Elizabeth Yeu, MD**

*Elizabeth Yeu, MD graduated from a combined medical school program at the University of Florida. She completed her ophthalmology residency at Rush University (Chicago, IL), where she served as Chief Resident. Upon completion of her Cornea fellowship in 2008 at the Cullen Eye Institute, Dr. Yeu remained on faculty there and served as an Assistant Professor at the Baylor College of Medicine until 2013. She currently teaches residents as an Assistant Professor at the Eastern Virginia Medical School. She serves several national organizations, and is currently the Chair for the Young Eye Surgeons (YES) Clinical Committee for the ASCRS, an Examiner for the American Board of Ophthalmology and serves on various committees for the AAO as a Communications Secretariat and a Reviewer for the Annual Meeting Program Refractive Surgery Committee. Dr Yeu has authored numerous articles and is a frequent lecturer in the areas of refractive cataract surgery, ocular surface disease management and surgical treatment of astigmatism.*

Welcome to the Spring 2017 edition of *US Ophthalmic Review*. It is a bustling time in ophthalmology now, with a growing number of innovative techniques and technologies, particularly in the fields of cataract surgery, glaucoma, and retina. This issue takes a deeper dive into such innovations. We open with an expert opinion on the subject of co-existing glaucoma in those patients with pediatric corneal disease by Dr Zaidman. Another very informative perspective on infectious keratitis is provided by Dr Jeng on his update on diagnosis and management of various forms of microbial infections, from the more routine bacterial infections to the exotic acanthamoeba and fungal diseases. Regarding antibiotic susceptibilities, the Antibiotic Resistance Monitoring in Ocular Microorganisms (ARMOR) Surveillance Study, by Drs Asbell and Sanfilippo, provides great insight into the behaviour and trends of resistant microbes, particularly with regards to various *Staphylococcus* and *Pseudomonas* species.

Within the retina world, anti-vascular endothelial growth factor (VEGF) therapies have been a mainstay in exudative and proliferative disease management. Take a look at how anti-VEGF modalities may be utilized to treat retinopathy of prematurity by Drs Conrady and Hartnett. Furthermore, anti-VEGF is also an effective treatment option, as are corticosteroids, in the treatment of diabetic macular edema, as described by Drs Iverson and Clark. When treating and following patients along for diabetic macular edema, Drs Singer and Bahadorani demonstrate how area under curve (AUC) analysis may serve as a more ideal tool for data analysis particularly when it comes to sustained release therapies such as dexamethasone (Ozurdex®) and intravitreal fluocinolone acetonide implant (0.2µg/day FAc implant; ILUVIEN®). Unlike single time-point outcomes, AUC analysis provides the average letters gained per day over the entire treatment period, providing a better measure of long-term effectiveness. From a diagnostics perspective, Ultra-widefield retinal imaging may offer more rapid capture and efficient diagnosis of retinopathy and other diseases through an undilated pupil. Insights are provided by Dr Brown, Dr Tornambe, and Drs Assil and Batra.

Glaucoma treatment options are more acutely changing now with greater micro-invasive glaucoma surgical (MIGS) interventions and devices becoming available. Dr Mosaed reviews the role of the recently approved Cypass® Micro-Stent, presenting the positive 2-year outcomes analysis of the COMPASS study, which demonstrated an average reduction of 7.4 mmHg in intraocular pressure (IOP) after 2 years provided by the CyPass device. As a refresher, Dr Ahmad provides a primer to gonioscopy in this issue, and Drs Christakis and Ahmed summarize the 5-year results of the Ahmed versus Baerveldt (AVB) Study. Dr Fontana addresses the aggressive inflammation that can be seen in post-surgical cataract patients who have underlying pseudoexfoliation syndrome.

Lastly, take a look at Dr Singh's prospective study on the Epidemiology and Implications of Ocular Trauma Admitted to a Tertiary Care Hospital in North India. It should come as little surprise that a good outcome was directly correlated with early presentation in 57% and poor outcome with late presentation seen in 64% cases. Serious ocular trauma frequently occurs at home with the younger population maximum at risk. Good visual acuity is associated with early intervention and purely anterior segment injuries.

This issue provides a nice balance of editorials, reviews, and peer-reviewed manuscripts that span the gamut of our profession. I hope the information can provide insightful and enlightening information for you. □