NOTES FROM THE VISIONARIES

Insights on the current and future states of glaucoma care, shared at the 2019 IGC meeting.



YVONNE OU, MD ON ADVANCES IN RESEARCH

It is an exciting time in glaucoma. Research advances in neuroprotection and neuroregeneration are opening the possibility for interventional glaucoma specialists to focus not only on controlling IOP but also on addressing other diseased parts of the eye besides the trabecular meshwork. When I came into the field about 10 years ago, it seemed like a daunting task to even think about how to get retinal ganglion cells and their axons to regenerate toward the appropriate targets in the brain and integrate with the appropriate circuitry in the retina. However, substantial progress in these areas is occurring in many laboratories, and some developments are now making their way into the clinic.

As we move forward, one of the primary challenges in this space will be figuring out which intervention is key from the retinal ganglion cell side. It is likely that there will be more than one target and that we will need multiple approaches to address axonal regeneration, whether through stimulating growth pathways, passing inhibitory

pathways, addressing other circuitry elements besides retinal ganglion cells, etc. I look forward to contributing to these efforts and seeing where these advances take us and our patients in the future.



ON THE STATE OF INNOVATION

In the future, innovation will come from within each of us. We will see something that gives us an idea, and we will find a creative way to approach a problem differently than we have been approaching it. There will always be challenges with reimbursement and regulations. We faced the same challenges with OCT in the 1990s, when insurers were assessing the utility of the technology. They wanted to see the evidence that OCT truly helped in making a diagnosis or detecting disease progression. Eventually, we worked through those issues, and the insurers were convinced that it was a good idea to cover testing. Overcoming these hurdles takes time, but it should not limit our drive to innovate.



JEFFREY L. GOLDBERG, MD, PHD ON THE NEED FOR COMPARATIVE STUDIES

Although controlling the data produced by registries and other large analyses may seem like a significant task, this is the same challenge we face with retrospective chart review studies. As clinicians, we should be encouraged not to ignore big data but to continue to ask questions prospectively in the clinic.

A high volume of MIGS procedures are being performed around the world. How many years were we implanting Ahmed (New World Medical) and Baerveldt (Johnson & Johnson Vision) glaucoma drainage devices in clinical practice before they were directly compared in a prospective study? Will we, as a field, wait that long to directly compare different MIGS procedures? The questions that we want to answer cannot alone be answered through big data approaches.

► THE INTERVENTIONAL GLAUCOMA MINDSET



RICHARD A. LEWIS, MD ON CONSIDERING QUALITY OF LIFE

It is incumbent upon whoever is conducting a study in glaucoma, whether industry or clinicians, that issues other than efficacy and safety are included, such as quality of life metrics and economic issues. We have yet to see an emphasis on this, and it could be hurting patients' access to treatment advances. When a new product comes to market, insurers will be reluctant to cover it without data to support how it alters patients' quality of life. We need a new mindset in how we design studies, especially in this era of interventional glaucoma.

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