

THE VBS DEBATES IN BRIEF



Presenters battled over the utility of new therapies, technologies, and business models.

BY RACHEL S. MOGIL, MD, AND VIET CHAU, MD

The annual Vit-Buckle Society (VBS) meeting is known for its top-notch education, innovative presentations, and themes. During this year's debates, experts sparred over medical and surgical topics, helping attendees better understand the latest innovations in the field.

SURGICAL DEBATES

Moderated by Joseph M. Coney, MD, FACS, FASRS; Chirag D. Jhaveri, MD; and Katherine E. Talcott, MD, the first round touched on the latest technology and techniques.

Heads-up Displays

The first session discussed the use of 3D heads-up displays in the OR. Opposing views were presented by Jaya B. Kumar, MD, (pro) and Dr. Talcott (con). Dr. Kumar began by explaining that the heads-up surgery systems provide safer illumination of the retina and improved visualization. The displays have excellent resolution and contrast, allow for better posturing, and make switching between surgeons more efficient. Furthermore, it is an excellent educational tool.

According to Dr. Talcott, heads-up displays require head-gear and can cause neck pain because the head is constantly turned. Positioning is difficult in a cramped OR, and moving the units between cases can increase OR turnover time. The videos still have some lag also. The numerous color filters are unnecessary, and the colors themselves are oversaturated. She added that the digitized images, while helpful, can compromise the view of the instruments. She noted that viewing the periphery can be challenging, as is depressing for assistants. While 3D heads-up displays offer great views of the macula and are helpful for teaching, Dr. Talcott indicated that they cannot replace standard microscopes just yet.

Polling indicated that the audience agreed with Dr. Kumar!

Macular Displacement

Rajeev H. Muni, MD, MSc, FRCSC, ("yes, it is") and Michael N. Cohen, MD, ("no, it's not") debated whether retinal displacement, possible in up to 35% of retinal detachment (RD) repair cases, matters. Dr. Muni is adamant that it does because the resultant metamorphopsia and aniseikonia

affect patients' quality of life. The ALIGN trial found that vitrectomy was associated with a greater risk of displacement and worse aniseikonia compared with pneumatic retinopexy (PnR). PnR decreases the incidence of macular displacement due to the reduction in contact force.

Dr. Cohen contended that the percentage of displacement after RD repair varies widely. Wills Eye Hospital conducted a comparative case series and found that among 200 patients, only 15% displaced after vitrectomy and 17% after scleral buckle, which are comparable with the rates of displacement in the Canadian PnR arm. Importantly, the displacement had no measurable effect on vision (although aniseikonia was not assessed due to the retrospective nature of the study).

Dr. Cohen won this debate by a hair.

ICG Versus Brilliant Blue

Lastly, Ferhina S. Ali, MD, MPH, ("go green!") and Prethy Rao, MD, MPH, ("go blue!") debated the merits of ICG versus brilliant blue for internal limiting membrane (ILM) staining (Figure 1). Dr. Ali explained that ICG provides better visualization and maneuverability of the ILM than brilliant blue. ICG causes biomechanical changes of the ILM, making it more rigid and easier to peel, she said. Toxicity from ICG is rare, and brilliant blue also has reports of toxicity in the literature. A single vial of brilliant blue may be cheaper than an entire bottle of ICG, but one bottle of ICG can be used for multiple cases, making it more cost effective.

Dr. Rao noted that brilliant blue is the only FDA approved dye for ophthalmic use. She added that ICG toxicity can lead to reduced visual acuity, visual field defects, and retinal pigment epithelium changes and, if injected subretinally, can cause outer retinal toxicity and decreased ERG responses. Brilliant blue comes in easy-to-use pre-filled vials with, theoretically, less risk of endophthalmitis compared with ICG. Polling results were 32% versus 68% in Dr. Rao's favor.

MEDICAL RETINA DEBATES

The next debate session, moderated by Carl D. Regillo, MD, and Priya Vakharia, MD, included a look at new therapies and the effect of private equity (PE) on the field.



Figure 1. Prethy Rao, MD, MPH, (right) discusses her use of brilliant blue with panelists (from left to right) Ferhina S. Ali, MD, MPH; Joseph M. Coney, MD, FACS, FASRS; Katherine E. Talcott, MD; and Chirag D. Jhaveri, MD.

Biosimilars

The first debate was between Maura Di Nicola, MD, arguing that biosimilar drugs are better, and Nika Bagheri, MD, arguing that reference drugs are better. Dr. Di Nicola noted that biosimilars are strictly regulated by the FDA, and the rigorous approval process eases safety or efficacy concerns. Ophthalmology has had positive experiences using anti-TNF-alpha biosimilars. Similarly, ranibizumab biosimilars have demonstrated comparable efficacy to reference drugs. More than 30,000 biosimilar injections had been performed at the time of the meeting without any reported complications, she said. In addition, the lower cost and accessibility can benefit the entire health care system.

Dr. Bagheri pointed out that a biosimilar's safety profile may not be the same as the reference drug, and real-world data is important for assessing safety. In addition, she emphasized that millions of patients worldwide have responded well to the tried-and-true anti-VEGF reference drugs, whereas the biosimilars have only been injected on the scale of thousands. The audience agreed with Dr. Bagheri on this interesting and timely debate.

Dry AMD Injections

For the second debate, Lejla Vajzovic, MD, was assigned the position that dry AMD injections are not sustainable. She said that the greatest challenge is identifying the right patient. A monocular patient with a VA of 20/40 and fovea-involving geographic atrophy (GA) may not need much convincing, whereas patients with extrafoveal GA and no symptoms may be less inclined to opt for treatment. OCT allows for monitoring response to wet AMD therapy, but there is no robust method of detecting treatment response to GA therapy. Dr. Vajzovic stressed the need for better prognostication and risk factors to help stratify patients who progress faster or respond better to these medications.

David Xu, MD, highlighted the unmet need for GA therapy. Even in patients well-treated for wet AMD, post-hoc analyses demonstrate a 30% increased risk of atrophy progression over 2 years, given loss of vascular maintenance,



Figure 2. Philip Storey, MD, MPH, (left) and Esther L. Kim, MD, (middle left) sit down with Carl D. Regillo, MD, (middle right) and Priya Vakharia, MD, (right) to discuss the pros and cons of PE in retina—with a little superhero flair.

he said. He pointed out that data from the OAKS and DERBY trials, as well as the GATHER1 and GATHER2 trials, showed similar benefits in decrease of GA progression, which increased with extended duration of treatment.

PE For Young Retinal Specialists

For the last debate, Philip Storey, MD, MPH, and Esther L. Kim, MD, discussed PE (Figure 2). Dr. Storey felt that PE's strength is the unity between retina specialists and health care business minds. The infrastructure allows for collective bargaining, leading to decreased costs and increased margins. He said that PE provided him flexible personal and professional autonomy. A majority of PE gives equity to its physicians, the path to partnership only requires 3 years, and salary remains in the top 1% in the nation, he said. In addition, research funding in his practice has tripled, allowing involvement in more than 30 prospective clinical trials.

Dr. Kim said that financial profit is PE's singular objective, which misaligns with physician objectives of patient care. PE aims for a 30% return on investments in 2 to 5 years, with the goal of reselling over and over, effectively turning doctors into commodities. Full partners who initially sold the practice benefit from the upfront cash, but at the cost of future earnings and practice autonomy. Non-partner physicians usually receive no financial benefit, losing out on ownership prospects and throttling their earning potential. The audience overwhelmingly agreed with Dr. Kim on this hot topic.

See you next year at VBS 2024 in Miami! ■

VIET CHAU, MD

- Resident, Bascom Palmer Eye Institute, Miami
- vxc422@med.miami.edu
- Financial disclosure: None

RACHEL S. MOGIL, MD

- Vitreoretinal Surgery Fellow, Mayo Clinic, Rochester, Minnesota
- mogil.rachel@mayo.edu
- Financial disclosure: None