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Illuminating Horizons in Retinal Science

The Constable and Dennis Lam Lectures at APVRS 2023 gave world-class insights on the retinal subfield

by Tan Sher Lynn

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On the second day of the 16th Congress of the Asia-Pacific Vitreo-retina Society (APVRS 2023), the spotlight shone on two eminent lectures, each delivering captivating and profound insights that left the audience enthralled.

Some of the highlights of any ophthalmic conference can be found in its named lectures, and all eyes were on Hall 5G for the marquee event of APVRS 2023.

Two of Asia's most esteemed ophthalmologists were chosen for the marquee *Constable and Dennis Lam Lectures*. Their discussions on modern vitreo-retina's most talked-about topics

– multimodal imaging and diabetic macular edema (DME) – were as timely as ever in this landmark moment in APAC retinal medicine.

Constable Lecture: The Evolution of Imaging in Diabetic Retinopathy

The Constable Lecture, named in honor of the distinguished ophthalmologist Professor Sir

Richard Ernest Constable, has long served as a platform for unveiling the latest advancements in retinal science.

This year's *Constable Lecture* recognized Dr. Gavin Tan, senior consultant at the Retina Centre in Singapore National Eye Centre (SNEC), who presented his talk on the evolution of imaging in diabetic retinopathy (DR).

"We have witnessed numerous changes in imaging for diabetic retinopathy. We started with fundus photography as early as the 1920s and later incorporated techniques such as fluorescein angiography, indocyanine green (ICG), fundus fluorescence – and as technology has advanced – ultra-wide-field imaging of different modalities," Dr. Tan said.

He believes that, at the end of the day, the classification of diabetic retinopathy severity still relies on the 7-field ETDRS imaging and DR severity scale. "This approach allows us to assess the severity of the disease and stratify patients based on the risk of progression to proliferative diabetic retinopathy (PDR), enabling ophthalmologists to manage their patients effectively," he noted.

Dr. Tan continued to emphasize that OCT has significantly contributed to the treatment and management of macular edema. "It provides us with a 3D representation of the disease, allowing us to describe and monitor the response to anti-VEGF treatment."

"Moving forward, having the ultra-wide-field imaging provides us with a wealth of information on the severity of hemorrhagic changes in diabetic retinopathy (DR). Additionally, OCT-based angiography (OCT-A) has enabled us to examine vascular changes in DR with greater detail and frequency, even in the absence of dye," he said.

He also shared that he and his colleagues utilized the information obtained from OCT-A and ultra-wide-field imaging in a virtual telemedicine clinic to evaluate patients, which proved to be especially useful during the pandemic.

"We found that using these multi-imaging modalities is actually more effective than slit lamp-based examinations by clinicians, as some peripheral pathologies can be missed, and it significantly reduces turnover time at our clinic," he said.

Last but not least, Dr. Tan discussed artificial intelligence (AI) as the new darling of diabetic retinopathy (DR) imaging. He shared that he and his colleagues developed a deep-learning AI software system named SELENA+ (Singapore Eye Lesion Analyzer) that can detect potential sight-threatening eye conditions accurately and efficiently. The system is now integrated into Singapore's national DR screening program. And besides that, Dr. Tan's group has also utilized AI to predict DR progression and found that it provides more information than using the ETDRS alone.

"We really feel that AI for opportunistic screening and risk assessment will be the next form of diabetic macular and retinal imaging modality that will benefit our patients. In conclusion, I truly believe that we are going to redefine the management of diabetic retinopathy with the evolution of imaging. Imaging will improve our ability to diagnose, predict and prognosticate DR and DME, and AI will further allow us not only to diagnose but to predict all kinds of systemic complications of diabetes from retinal imaging," he concluded.

Dennis Lam Lecture: Evolution of Managing Diabetic Macular Edema in the 21st Century

Established in 2023 in honor of the APVRS 2023 Congress President Prof. Dennis Lam, this lecture recognizes individuals who have made significant contributions to vitreoretina (VR) training and education for residents, fellows and postgraduate students, fostering the development of future VR leaders in the Asia-Pacific region and beyond.

The inaugural Dennis Lam Lecture award was presented to Prof. Neil Bressler (USA), distinguished for his various leadership and mentoring roles in the subspecialty. Currently serving as the Professor of Ophthalmology and Chief of the Retina Division at the Wilmer Eye Institute at Johns Hopkins School of Medicine, he also holds the position of Editor-in-Chief of *JAMA Ophthalmology*.



APVRS 2023's Named Lecture awardees (center) – Prof. Neil Bressler and Dr. Gavin Tan – in a ceremonial photo with the society's Council Members.



Prof. Neil Bressler

Discussing the evolution of managing diabetic macular edema (DME) in the 21st century, Prof. Bressler highlighted the ongoing battle against the disease, emphasizing the increasing prevalence of diabetes in the present day.

In his enlightening talk, he offered valuable advice and tips on managing DME, including insights into the selection of anti-VEGF treatment based on the visual acuity (VA) of the patient.

“If VA is 20/32 or worse, consider managing DME with anti-VEGF. There’s a median of 14 injections over 2 years, but the early OCT response wouldn’t predict 2-year VA, he suggested.

“If VA is 20/32 to 20/40, on average you’re not going to get superior outcomes with one anti-VEGF over another. Choose the anti-VEGF that may be best for the individual patient.

“If VA is 20/50 or worse, on average, clinically relevant VA outcomes are likely

superior at 1 year and over 2 years using aflibercept compared with bevacizumab or ranibizumab for patients similar to those participating or managed in the DRCR Retina Network’s Protocol T,” he said, pointing out that if one is required to start with bevacizumab, follow the switching criteria used in Protocol AC, where 70% of eyes that switched to aflibercept resulted in no worse VA outcomes over two years.

Prof. Bressler also noted that faricimab or aflibercept high dose would likely provide similar efficacy, but there is no evidence on superior outcomes or stronger durability. Nevertheless, aflibercept and other biosimilars may be available in 2024 to reduce the costs of anti-VEGF treatment.

“And when the VA is 20/25 or better, a median of 8 injections over 2 years, consider either starting with aflibercept or focal/grid laser followed by aflibercept if vision loss is observed, or observation followed by aflibercept for vision loss,” he advised.

Meanwhile, he mentioned that for non-central DME, or no DME, prophylactic aflibercept reduces risk of DME or PDR, but VA outcomes are similar if one monitors and rescues eyes with aflibercept when central DME with vision loss or PDR develops.

“There’s no better calling than being an ophthalmologist and saving people’s vision. The icing on the cake, however, is the opportunity to share this passion with our colleagues, mentor individuals who then go on to mentor others.” He said in his closing remarks.

“I believe this embodies the spirit of Prof. Dennis Lam. I’m thrilled to be able to do this in his honor and alongside all our colleagues here. Thank you.” He said concluding his memorable talk to the sound of applause from the audience – adulation that many sufferers of retinal disease may now share, thanks to the work of clinician scientists like Prof. Bressler and Dr. Tan. 🙌

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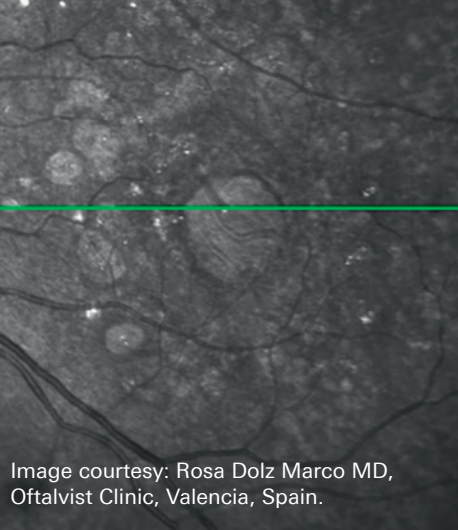
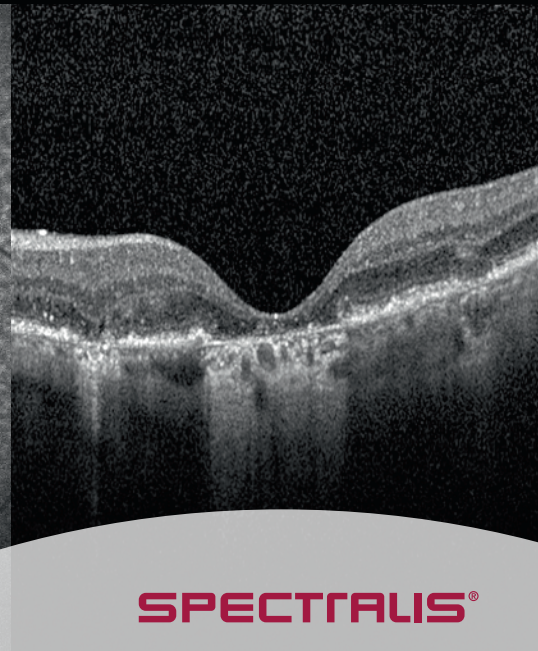
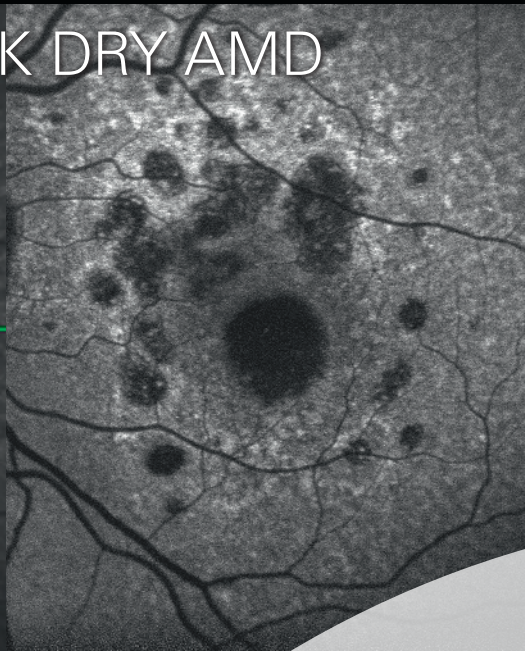


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Emerging treatments for geographic atrophy demand advanced multimodal diagnostics

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Diabetic Retinopathy Research Hot off the Press

by Hazlin Hassan

Researchers gathered at APVRS 2023 to share the latest in diabetic retinopathy. For many sufferers of the disease, help may be on the way.

Diabetic retinopathy (DR) remains one of the leading causes of blindness in the world, including the Asia-Pacific region. A Day Two symposium on DR highlighted the latest developments in diagnosing and treating the disease as well as diabetic macular edema (DME).

Recently approved therapeutic molecules have greatly increased our armamentarium of treatments for DME. The evidence supporting these newer treatments were discussed during the session.

However, there also remains a significant portion of patients who do not respond to existing treatments. Treatments are currently being trialed for macular ischemia, a condition which has no cure. Here are some snippets from the session:

The new DME menagerie

New approved treatment options for treating DME are now available, session co-chair Associate Prof. Adrian Koh, founding partner and senior consultant at the Eye & Retina Surgeons, Camden Medical, Singapore, shared during his presentation.

The latest evidence-based treatments are brolicuzumab and faricimab. The Phase III KESTREL and KITE multi-center, double-masked, randomized studies compared brolicuzumab 6mg and 3mg versus aflibercept 2mg.

The results showed that brolicuzumab 6mg was non-inferior to aflibercept, with robust visual gains and anatomical improvements in patients with DME. "In terms of non-inferiority,

brolicuzumab achieved this at both 3 and 6mg with the results favoring 6mg," said Prof. Koh.

Faricimab's anti-Ang 2 properties in addition to its anti-VEGF effect may enhance efficacy and prolong the duration of action. In the Phase III randomized and double-masked YOSEMITE and RHINE trials for DME, robust vision gains and greater CST reductions with faricimab were maintained through year 2 versus aflibercept. Results also showed greater reduction in macular leakage area with faricimab.

Meanwhile, A/Prof. Koh also expressed optimism that the use of innovative drug delivery systems such as the Port Delivery System (PDS), an intraocular drug delivery system designed for the continuous delivery of ranibizumab into the vitreous for 6 months and beyond, may increase compliance and reduce visit and treatment burden – all well-noted unmet needs in the retinal space.

Alternatives to anti-VEGF

How does one define and manage DME patients who don't respond to anti-VEGF? This is a conundrum that Prof. Adrian Fung, head of the vitreoretinal unit, Westmead Hospital, Sydney, Australia, attempted to answer in his talk.

While there is no universally accepted definition of a non-responder, poor improvement in vision as well as anatomy may be indications. "We don't yet have a consensus definition for non-responders, but I think we need to consider not just anatomy, but also vision," he said.

But once identified, how does one manage these patients? The options available include switching anti-VEGF agents, intravitreal steroids, macular laser and vitrectomy.

However, all of the options still have their drawbacks. He noted that switching anti-VEGF agents or the intravitreal dexamethasone implant (Ozurdex) can improve central subfield thickness (CST), but often not vision. Moreover, laser often does not provide additive benefits to anti-VEGF. And in some cases, vitrectomy surgery may help if there is vitreoretinal traction.

DMI cure in the works?

The final results of two trials studying potential treatments for diabetic macular ischemia (DMI) are expected early next year, said Prof. Quan Dong Nguyen, professor of ophthalmology from the Byers Eye Institute, Stanford University School of Medicine, USA.

The Phase I/IIa HORNBILL and PARTRIDGE trials are among the first studies to examine potential treatments (BI 764524 and BI 765128, respectively) for DMI, an irreversible vision-threatening complication of DR-associated retinal non-perfusion.

While intravitreal anti-VEGF treatment can halt the progression of DR, a number of patients continue to progress in severity despite treatment. Persistent retinal non-perfusion can lead to retinal ischemia and the development of DMI, for which there is no approved treatment at present.

"We have multiple treatments for DME but absolutely nothing for DMI," Prof. Nguyen said.

While there is limited research on the prevalence of DMI, it appears higher in patients with more severe DR.

Final results from the HORNBILL and PARTRIDGE studies are highly anticipated as the compounds trialed may prove to be a step towards the development of a treatment for DR and DMI. 🐦



B+L Launches SeeLuma™ at APVRS 2023

Delegates get to “test drive” novel digital visualization platform

by Gloria D. Gamat

The 16th Congress of the Asia-Pacific Vitreo-retina Society (APVRS 2023) in the vibrant city of Hong Kong is the last stop in Bausch+Lomb’s “tour” of SeeLuma™’s launch in Asia-Pacific. At APVRS 2023’s Booth S5 on December 9, Bausch+Lomb (B+L) unveiled the highly-anticipated SeeLuma™.

Delegates were able to “test drive” this groundbreaking fully digital visualization platform that’s set to revolutionize the ophthalmic field.

In April this year, B+L and Heidelberg Engineering announced the introduction of the SeeLuma™ Fully Digital Surgical Visualization Platform, first in the United States and Western Europe, and then to the Asia-Pacific region. SeeLuma™ features the world’s

first digital binoculars and promises to transform the way ophthalmic surgery is performed. Its novel features have elevated the standards in surgical precision and have empowered eye care practitioners to provide patients with the best outcomes possible.

According to B+L’s Marketing Manager Surgical International, Florian Kayser, surgeons in the last 30 or 40 years have been sitting in the same position. “They bend forward or sideways to get

a good vision through the microscope. Now, we have designed a microscope in a way so the surgeons don’t need to bend [sideward or forward] – they can sit as they want in a very ergonomic position,” he explained.

The SeeLuma™ boasts intuitive user interfaces and a design that allows surgeons to look straight at a heads-up monitor without having to twist their neck. SeeLuma™ also addresses the ergonomic challenge in ophthalmic surgery with its C-shaped suspension arm. Moreover, the fully digital binoculars can be positioned freely, allowing the surgeon to take on an ergonomic posture and work with greater ease. These features make SeeLuma™ a game-changer in ophthalmic surgery.

SeeLuma™ promises to transform the way ophthalmic surgery is performed and taught to junior surgeons. “The ideal classroom assistant in SeeLuma™ transforms the experience from the inside and outside of the operating room. And everyone [the trainees] will see exactly what the surgeons are seeing on the screen – which makes the experience way much better for the assistants,” shared Mr. Kayser.

Don’t miss the opportunity to see the SeeLuma™ in action and try it out. Hurry and visit the B+L booth (S5) before the exhibition hall closes today! 🐦



Prof. Adrian Fung



Prof. Min Kim



Prof. Nicholas Fung

The Latest Alcon Innovations in VR Surgery

by Hazlin Hassan

Advancements in surgical platforms and tools have provided unprecedented surgical control over critical surgical parameters during vitrectomies, taking patient outcomes and safety to new heights.

During an Alcon-sponsored symposium on modern approaches to vitrectomy surgery at the three-day 16th Congress of the Asia-Pacific Vitreo-retina Society (APVRS 2023) in Hong Kong, several ophthalmologists from the region shared their experiences with some of the cutting-edge surgical tools from the Swiss eye-care company. Moderated by Dr. Manish Nagpal (India), Alcon's notable CONSTELLATION System, NGENUITY 3D Visualization System and the HYPERVIT Dual Blade Vitrectomy Probe, were on spotlight.

When it comes to tools for vitreoretinal surgery, Alcon offers one of the industry's most comprehensive portfolios, enabling numerous combinations of system settings. This means that surgeons can focus on what's most important in the OR – their patients, and achieving optimal outcomes for them.

Look to the stars

Vitrectomy is associated with a chaotic pressure environment, said Prof. Min Kim, associate professor and chairperson of the Department of Ophthalmology at Gangnam Severance Hospital in Seoul, South Korea.

Surgeons now have access to tools that help them perform better, and Prof. Kim discussed Alcon's offerings making a massive impact on his practice. This includes advanced viewing systems like the NGENUITY 3D Visualization System and the small gauge trocar and 25-gauge and 27-gauge cannula systems in the 20,000 cut-per-minute (cpm) HYPERVIT beveled probe with dual blade design.

For Prof. Kim, this is all seamlessly integrated to help surgeons in high-pressure surgeries into the CONSTELLATION Vision System,

which allows control of intraocular pressure (IOP) to within +/- 2mmHg.

The CONSTELLATION Vision System is an ophthalmic microsurgical system that is indicated for both anterior segment (phacoemulsification and removal of cataracts) and posterior segment (vitreoretinal) ophthalmic surgery. According to Prof. Kim and others, it is the gold standard in vitreoretinal (VR) surgical platforms, designed for excellent control across its variety of applications.

Able to run at lower pressures without any compromise in the stability of the intraocular environment, it provides maximum safety especially in patients who have vascular compromise.

"In the era of smaller gauge (25/27-G) surgery with the 20,000 dual blade HYPERVIT probe, the system must be able to keep up with the increased demands of the infusion cannula caused by the more efficient vitreous cutter," he said.

This combination of the CONSTELLATION's IOP control system, the valved cannula and 20,000 cpm, 27-G HYPERVIT probe translates into a more efficient and safer surgery and enables stable, closed-system intraocular surgery, he added.

When faster is better

The HYPERVIT Dual Blade vitrectomy probe offers many benefits to vitreoretinal surgeons, and Prof.

Adrian Fung, from Westmead Hospital, Sydney, Australia expanded on Prof. Kim's treatment of the device.

For Prof. Fung, the HYPERVIT's continuously open port and 20,000 cpm were a game-changer in his operating room. "It allows us to have improved fluidic stability because we reduce our peak tractional forces by the fact that the cutter is always open," he said.

Among other benefits, he noted that the probe also reduces fluidic turbulence, and together with the dual-pneumatic drive allows for more efficient vitreous removal. He also appreciated the versatility gained from the HYPERVIT's bevel tip. Overall, this increased control made all the difference.

"I now use the HYPERVIT in all my cases, totalling 1,183 cases since October 2021," said Prof. Fung. The best cases to start with are those involving vitreous hemorrhage and bullous retinal detachments, he added.

Performance, safety and efficiency

Clinical Assistant Prof. Nicholas S.K. Fung, Li Ka Shing Faculty of Medicine, Hong Kong University, further

The advantages of the HYPERVIT Dual Blade Vitrectomy Probe, by the numbers:



Increased vitreous flow with continuously open port in dual-pneumatic drive. The vitreous flow rate is up to **90% higher with the 25-G probe, and up to 48% higher with the 27-G probe.**



Reduced peak traction force. Peak traction force is up to **28% lower with the 25-G probe and up to 31% lower with the 27-G probe.**



Closer access to tissue plane. The beveled tip of the HYPERVIT Dual Blade vitrectomy probe facilitates improved port-to-surface distance. Port-to-surface distance is **47% closer with the 25-G probe and 40% closer with the 27-G probe.**



The use of dual-cutting 20,000 cpm probes resulted in less back flow/less retropulsion and improved intraoperative flow stability.

elaborated on the safety profile of the HYPERVIT Dual Blade Vitrectomy Probe.

"The 20,000 HYPERVIT cutter is an efficient and safe instrument with the potential to shorten vitrectomy times in most case types," he said.

He also added that there is a significant improvement in efficiency for simple vitrectomy cases. Vitrectomy time is no longer limited by the cutter and surgeon

preference, however, and technique and ocular pathology may play a more important role.

In a randomized controlled study comparing performance, safety and efficiency between the 20,000 cpm HYPERVIT Dual Blade Vitrectomy Probe versus the 10,000 cpm ULTRAVIT vitrectomy probe, using a 25-G cutter, results showed that faster cutters may result in fewer intraoperative complications.

Patients undergoing vitrectomy for macular hole, epiretinal membrane, rhegmatogenous retinal detachment, or vitreous hemorrhage without tractional detachments were included in the study.

In addition, the reduced port-to-retina distance and beveled design can improve the efficiency and safety of small gauge vitrectomy by reducing traction and turbulence. And in this way, Prof. Fung echoed the underlying message of his co presenters – Alcon vitreoretinal technology makes life better for surgeons. And in the end, patients reap the benefits. 🍷



From left to right: Prof. Min Kim (South Korea), Prof. Adrian Fung (Australia) and Dr. Manish Nagpal (India) were panelists during the Alcon-sponsored symposium at APVRS 2023 on December 9.

Advancements in Retinal Vascular Disease Research

From targeting angiogenic pathways to innovative therapies and implants

by Tan Sher Lynn

Day Two of the 16th Congress of the Asia-Pacific Vitreo-retina Society Congress (APVRS 2023) saw experts immerse themselves in a comprehensive exploration of clinical research pertaining to retinal vascular diseases, underscoring the congress' commitment to advancing the understanding and treatment of this disease segment.

We were on hand at this early morning symposium to cover the highlights from the session, entitled *Retinal Vascular Diseases*, for your reading pleasure.

Role of Ang/Tie pathway in RVO

Under healthy typical circumstances, angiopoietin 1 (Ang-1) binds to the tyrosine kinase receptors (Tie-2), thus promoting vascular stability. However, in pathological conditions such as neovascular age-related macular degeneration (nAMD) and retinal vein occlusion (RVO), elevated levels of Ang-2 and VEGF-A lead to vascular instability, and this was the topic of Prof. Timothy Lai's (Hong Kong SAR) talk at the *Retinal Vascular Diseases* symposium.

A bispecific antibody such as faricimab targets Ang-2 and VEGF-A to stabilize vessels, reduce vascular leakage and inflammation, and inhibit neovascularization, reported Dr. Lai. In addition, he shared results from the BALATON and COMINO studies, two

global, randomized, double-masked and active comparator-controlled, Phase 3 trials evaluating faricimab in RVO.

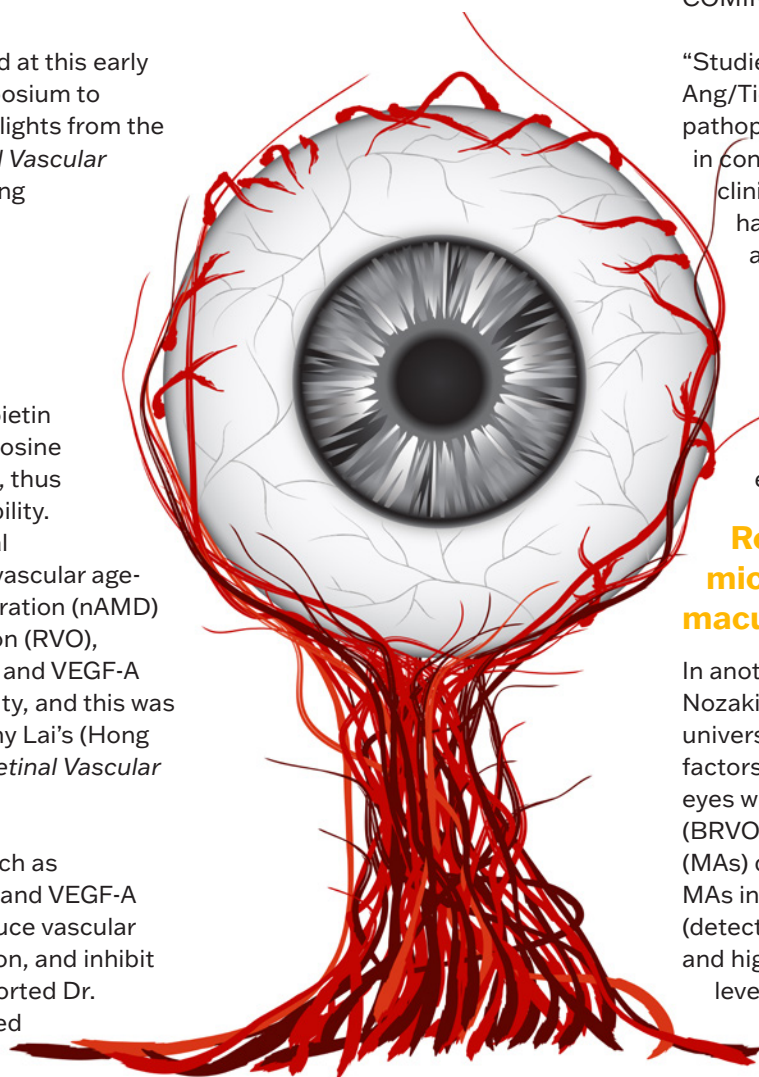
Both trials met their primary endpoint at 24 weeks and showed that the best corrected visual acuity (BCVA) gains with faricimab (57.5 in BALATON, 50.25 in COMINO) were non-inferior to aflibercept (57.64 in BALATON, 50.71 in COMINO). Faricimab was also shown to achieve robust vision gains (+17.9 letters at week 24 in BALATON, +17.3 letters in COMINO) and results were comparable between treatment arms.

Also, the use of faricimab achieved robust reductions in central subfield thickness (CST) (-311.4 μm in BALATON, -461.6 μm in COMINO), and more patients achieved an absence of macular leakage with faricimab versus aflibercept at week 24 (33.6% vs. 21% in BALATON, 44.4% vs. 30% in COMINO).

"Studies have demonstrated that the Ang/Tie pathway is involved in the pathophysiology of RVO," Dr. Lai said in conclusion "Phase 3 randomized clinical trials (COMINO/BALATON) have demonstrated good efficacy and safety in the use of dual Ang-2 and VEGF inhibition with faricimab for ME due to RVO. Hence, dual inhibition of Ang2 and VEGF with faricimab might have the potential to result in better vascular stability and enhanced durability".

Role of OCT in detecting micro aneurysms in macular edema

In another presentation, Dr. Miho Nozaki (Japan) shared studies by her university group showing that risk factors for refractory macular edema in eyes with branch retinal vein occlusion (BRVO) include micro aneurysms (MAs) detected by OCT-A in older age, MAs in the perifoveal capillary network (detected by fluorescein angiogram), and high serum total cholesterol levels. Meanwhile, risk factors for refractory macular edema include MAs detected by OCT-A in the deep capillary plexus.



“However, in diabetic macular edema (DME) eyes, the number of MAs detected by OCT-A was significantly less than that by FA due to slow flow, intermittent RBC flow and presence of only plasma in MAs, which results in reduced visibility in OCT-A,” she said.

“Studies done by our university group showed that more than half of BRVO cases develop MAs within six months of onset and the initiation of anti-VEGF therapy suppresses MAs formation,” Dr. Nozaki shared.

In eyes with DME, Dr. Nozaki’s team found that a greater number of MAs are located within the edema in the DCP, and there is a significant positive correlation between MAs density in the DCP and macular volume. “MAs with focal leakage and located in a thickened retinal area were more likely to be detected on OCT-A than non-leaking MAs in a non-thickened retinal areas,” she explained. These findings, noted Dr. Nozaki, show that the MAs detected by OCT-A are those that are responsible for pathogenesis of DME.

In addition, Dr. Nozaki mentioned that AI-based OCT-A will revolutionize OCT-A-guided laser photocoagulation. “In summary, MAs detected using OCT-A could be responsible for pathogenesis of refractory macular edema. OCT-A-guided focal laser might be one of the treatment options for patients especially those that are not eligible for FA or indocyanine green angiography (ICGA),” she said.

Intravitreal brolocizumab in chronic CSCR without CNVM – a pilot study

The session also featured a talk from Dr. Raja Narayanan (India), who reported that 15% of patients with central serous chorioretinopathy (CSCR) develop chronic disease with persistent fluid. Photodynamic therapy (PDT) is a treatment option, but it has limitations, which include lack of universal availability, equivocal results and adverse effects.

Dr. Narayanan and colleagues evaluated the intravitreal injection of brolocizumab in chronic CSCR patients with persistent macular fluid

for over three months and without choroidal neovascular membrane (CNVM). They found that intravitreal brolocizumab is effective and provides rapid resolution of persistent fluid as well as significant reduction of central macular thickness (CMT) in all patients one month post injection.

“Brolocizumab is a promising solution in the absence of effective therapeutic strategy for chronic CSCR. No case of intraocular inflammation occurred so far in this subset. Further studies are needed to find out the chances of having recurrent fluid that requires further injections,” Dr. Narayanan noted.

Phase 3 studies of the CNTF implant for MacTel type 2

Macular telangiectasia type 2 (MacTel) is a retinal neurodegenerative disease that leads to central vision loss and functional impairment due to the loss of Müller cells and ensuing loss of photoreceptor cells. This was the topic of Prof. Mark Gillies’ (Australia) time at the podium, who shared that ciliary neurotrophic factor (CNTF) is a protein shown to protect against the progressive loss of photoreceptors.

Meanwhile, revakinagene tarorectel (NT-501) is a first-in-class encapsulated

cell therapy implanted into the vitreous cavity via a capsule anchored to the sclera to produce long-term sustained levels of CNTF. To find out the effectiveness of NT-501, Dr. Gillies and colleagues evaluated data from NTMT-03-A and NTMT-03-B, which are identically designed, Phase 3 studies of NT-501. In both trials, individuals with MacTel were randomly assigned (1:1) to receive NT-501 in one eye or sham treatment.

Prof. Gillies’ group found that treatment with NT-501 versus sham preserved more photoreceptors through 24 months in both studies (56.4% in NTMT-03-A and 29.2% reduction in NTMT-03-B of ellipsoid zone area loss), meeting the primary endpoint. Also, retinal sensitivity was preserved in participants receiving NT-501 versus sham in NTMT-03-A, while reading speed was better preserved in participants receiving NT-501 versus sham in both studies. Treatment-related serious ocular adverse events were uncommon and predominantly expected.

“The findings demonstrated that intraocular delivery of CNTF using NT-501 encapsulated cell therapy is safe and effective for the treatment of MacTel,” Prof. Gilles concluded. 🐦



Prof. Mark Gillies



Dr. Raja Narayanan



Dr. Miho Nozaki 16th Congress of th

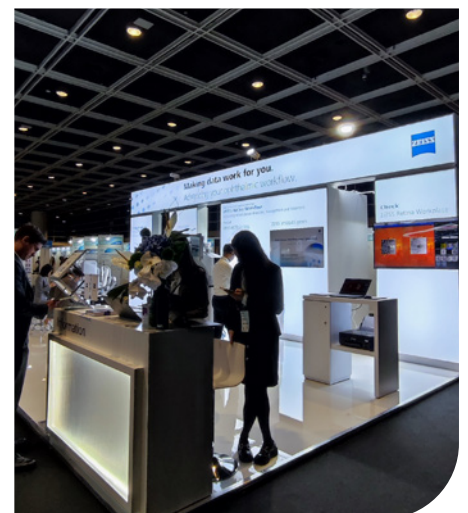
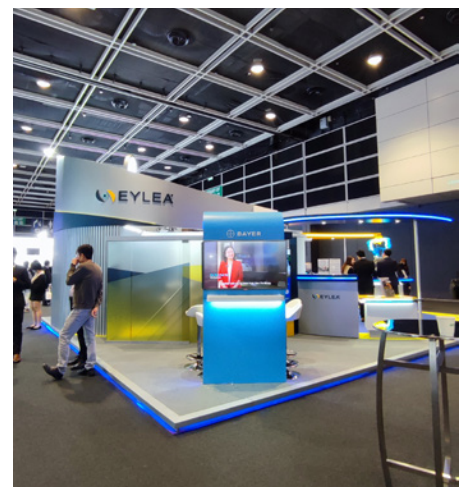
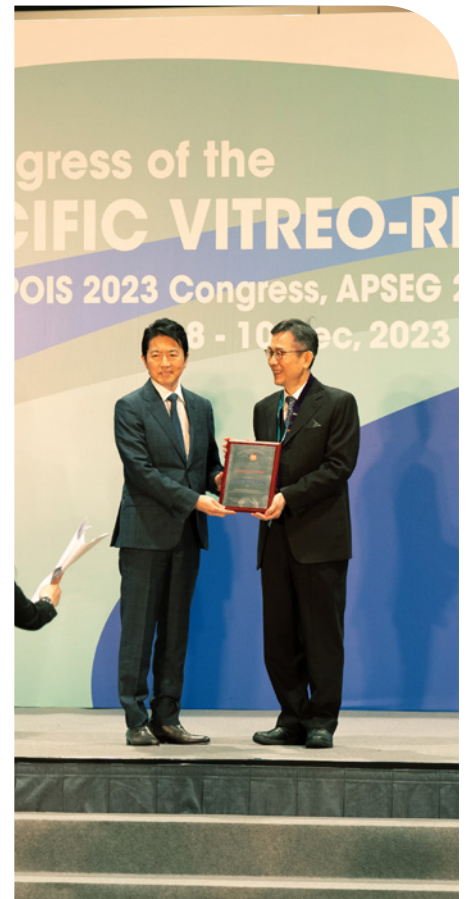


Prof. Timothy Lai

APVRS 2023 Day 2 Highlights

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