

# Swiss Academy of Ophthalmology

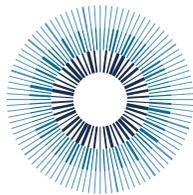
FOUNDATION

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**NEWSLETTER**

January 2018

[www.SAoO.ch](http://www.SAoO.ch)



Swiss Academy  
of Ophthalmology  
FOUNDATION

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### FOUNDATION

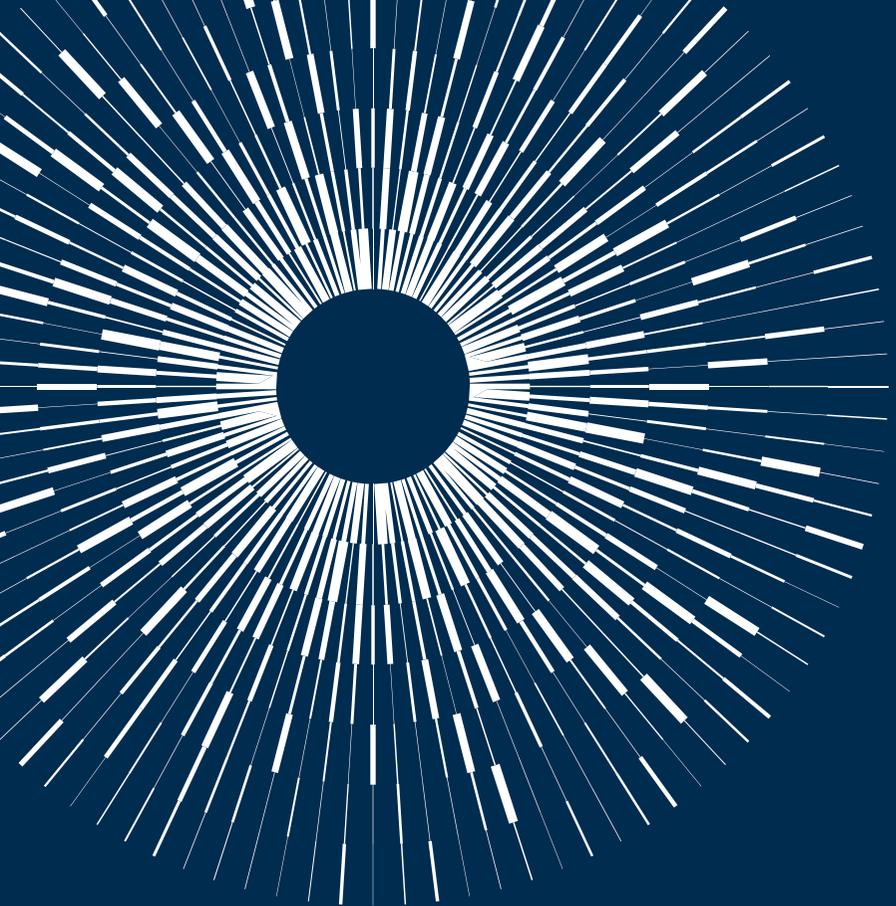
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2018

Dear Colleagues,

We at the Swiss Academy of Ophthalmology would like to offer everyone our best wishes for 2018. May the year quicken our senses and the delight we take in our profession, despite the increasingly icy winds blowing in the healthcare sector, and render the work we do on, and with, our patients successful and satisfying. We wish you good fortune and every blessing and success in your professional and private lives.

In this spirit and on behalf of the entire foundation council, I remain,

Dietmar Thumm  
PRESIDENT

On behalf of the whole foundation council  
and the programme committee

## CONGRESS 2018

The congress is fast approaching. For me as President a few points merit particular mention:

### Congress Specials

The SAoO focuses on the needs of the practitioner. Since a fair amount has been achieved in the surgical sector in recent years, non-ophthalmic surgeons also need to know which operation makes sense with a given indication (e.g. MIGS in the treatment of glaucoma), and what the specifications are today of aftercare following surgery etc. For this reason we have also included refreshers in the programme for surgical topics. Incidentally, we prefer the term refreshers to updates as we find it more refreshing!

There are many reasons why you should attend the whole congress: The Tarmed conference on Friday morning for instance is, despite its somewhat misleading title, a highly interactive panel discussion for the practitioner, which will cover all important questions and uncertainties two months after the introduction of the new tariffs, and aims to provide plenty of pointers for billing. The same has been conceived for the parallel meeting of surgeons on Wednesday where questions relating to billing will, or can, likewise be discussed.

We would also like to draw your attention once more to the attractive programme of entertainments:

- Apéro riche and a surprise guest on Wednesday evening in the Industry-Exhibition,
- dinner with jazz music on Thursday evening
- a free city tour on Saturday morning.

### First General Assembly of the Swiss Academy Association

It should also be pointed out, dear colleagues, that there is one other excellent reason why you should take part in this year's SAoO congress. All participants will automatically be granted membership of the association. This association supports the foundation, and was founded last year. At the close of one year the first General Assembly is now due. Es-

sential matters will be addressed such as confirming and electing the executive board, and determining the annual membership fee. A list of agenda items has been enclosed with this newsletter. Applications may still be submitted. We would be hugely and infinitely as pleased as Punch if we could welcome a large number of members.

#### DON'T FORGET

Not many days are left for taking advantage of early booking discount running **until 15.1.2018**

As a complement to the Programme Committee we boast a significantly extended Board on which are many practitioners and non-surgeons. For the next congress we have enlarged the programme tremendously to include non-medical practice staff as well as orthoptists, medical practice assistants, secretaries and surgical staff. We would be pleased, therefore, if ideally all of your practice employees took part in the congress.

Thus, a rich programme is also available for practice employees with presentations on emergencies and triage for example, hands-on basic life support (also for orthoptists) and tips and tricks for billing and the practice computer. A very intensive OCT course has now been introduced for a selected group. If it proves successful, we will offer this and similar courses at all future congresses to those interested. We would also welcome inputs at any time to improve the attractiveness of next year's programme.

Moreover, it should be emphasised that all congress participants are of course allowed to wander freely between the talks and the rooms where they are taking place. So if a practice employee wishes to know how her boss is acquitting himself in another hall, she can then of course go inside and take a seat 😊

#### DOWNLOAD-LINKS



[Traktandenliste der ersten GV](#) PDF  
[Statuten des Vereins SAoO](#) PDF

## OPHTHALMOLOGY

### Status of Selective Laser Trabeculoplasty (SLT)

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In recent years, selective laser trabeculoplasty (SLT) has developed as a standard therapy for glaucoma.

SLT can be used in most common forms of open-angle glaucoma and ocular hypertension. In contrast to ALT, SLT is repeatable and requires much less energy (less than 0.1% compared to ALT). There is no negative influence of SLT to other forms of glaucoma treatment. Complications are rare and include intraocular pressure spikes, corneal scarring or corneal decompensation due to endothelial cell damage and cystoid macular edema.

#### IMPORTANT TO KNOW

- SLT is a low risk procedure
- SLT is equally efficacious to argon laser trabeculoplasty (ALT).
- If SLT is performed again, the potential to lower the pressure is comparable to the first treatment
- In comparison to ALT it shows no thermal damage of the tissue applied on
- SLT is an option for patients with adherence problems, side effects of local treatment, and, as still under investigation, a possible option as a first-line treatment to lower the intraocular pressure
- If the angle is heavily pigmented it is advisable to reduce the energy and number of laser spots to avoid pressure decompensation after treatment
- The pressure lowering effect takes a couple of weeks to kick-in after treatment
- The success rate of the pressure lowering effects decreases in the first year to 68%, in the third to 46% and in the fifth year to only 32%

Schlote T. Stellenwert der selektiven Lasertrabekuloplastik,  
Klin Monatsbl Augenheilkd 2017; 234: 1362–1371

### A genetic Revolution for Ophthalmology?

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On October 12, 2017, an FDA advisory panel voted unanimously in favour of Spark Therapeutics' voretigene neparvovec (Luxturna) retinal gene therapy for the treatment of biallelic RPE65-mediated inherited retinal disease (IRD). The treatment consists of a virus loaded with a normal copy of the RPE65 gene. The virus is injected in the subretinal space, where the gene is expressed and supplies a normal copy of the RPE65 protein. Luxturna proved its efficacy and safety in a phase 3 trial involving 41 patients with vision loss. The patients, aged from 4 to 44 years old, had clinically-confirmed biallelic RPE65 mutations and sufficient viable retinal cells.

The trial population to receive the therapy reported statistically significant and clinically meaningful improvements versus control in the mean bilateral multi-luminance mobility testing (MLMT) score, at 1 year.

The FDA will likely follow this advisory panel's recommendation, and it will give a final response by January 2018 regarding its approval status. This will be the first retinal gene therapy to be approved by the FDA, a historic breakthrough for ophthalmology and for the visually impaired, and the first FDA-approved gene therapy for a genetic disease.

## OPHTHALMOLOGY

### AAO 2017 Retina Subspecialty Day: DRCR.net Protocol?

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This study is a multicenter randomized clinical trial of a combination of the dexamethasone intravitreal implant (Ozurdex [DEX], Allergan) + ranibizumab 0.3 mg (Lucentis, Genentech) versus ranibizumab alone for persistent central-involved diabetic macular edema (DME). Persistent DME was defined as being present for more than 6 months, and required at least 3 anti-VEGF injections prior to a run-in-phase that involved an additional 3 monthly ranibizumab injections. Subjects were then randomized to DEX + ranibizumab, or continued ranibizumab. Treatment was as-needed based on visual acuity and OCT treatment criteria. Subjects received the assigned treatment at baseline, but at 4 weeks and 8 weeks, both groups only received ranibizumab if treatment criteria were met. Subsequently at 12 weeks, they received their assigned treatments if needed. At 16 weeks, combination treatment was given if it was not given at 12 weeks, but ranibizumab only for both groups if treatment was provided at 12 weeks. At 20 weeks, combination treatment was administered if subjects hadn't undergone a second combination treatment yet, but ranibizumab only if they had. A total of 129 eyes from 116 patients were randomized. The primary outcome was change in the mean visual acuity letter score at 24 weeks. Combination DEX-ranibizumab injections took place 0-8 days within the first injection, although 95-96% received both injections the same day.

#### PRIMARY OUTCOME

The investigators found an average of 2.7 letters gained in the combination arm, compared to 3.0 letters gained in the ranibizumab alone arm (P=0.73).

#### SECONDARY OUTCOMES

More subjects obtained 15 letters or more improvement in the combination group (11%), compared to the ranibizumab-only group (2%) (P=0.03). Central subfoveal thickness decreased by 110 microns in the combination group compared to 62 microns in the ranibizumab only group (P>0.001). 20% of patients developed ocular hypertension in the combination group (P>0.001).

When looking only at the pseudophakic subjects (25 in the combination group, 32 in the ranibizumab alone group), the mean letters gained was 5.1 letters for the combination group, and 2.0 for the ranibizumab alone group (P=0.08). To conclude, Protocol U showed that based on the protocol's design, adding DEX to continued as-needed ranibizumab treatment did not improve visual acuity at 24 weeks, but it was more likely to reduce macular thickness.

## OPHTHALMOLOGY

### Acute Central Serous Chorioretinopathy – Factors Influencing Episode Duration?

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The aim of this observational, single-center, prospective study was to evaluate the influence of ocular findings and systemic factors on the duration and resolution of first, treatment-naïve, acute CSCR episodes. Because serous retinal detachments resolve spontaneously within six months in most acute CSCR episodes, observation without treatment is generally recommended as initial management. As poorer recovery is associated with longer symptom duration although the duration threshold before permanent functional damage has not been clearly determined. This threshold might help to define the optimal treatment timing for non-resolving cases as there are several treatment options (Photocoagulation of extramacular leaking points by direct argon or micropulse laser, half-dose or half-fluence verteporfin photodynamic therapy (PDT), orally administered mineralocorticoid-receptor (MR) antagonists) available.

Thirty-one patients were included (26 men, 5 women, mean age:  $40.0 \pm 8.9$  years, range: 24–58), of which 26 (84%) had episode resolution by 6 months. In this study, the longer episode duration was independently associated with

- higher subfoveal choroidal thickness
- higher elevation of RPE lesions at leakage sites
- older age

Indocyanine green angiography pattern, corticosteroid intake, and blood pressure did not influence episode duration.

Alejandra Daruich et al, RETINA 37:1905–1915, 2017

### Topical treatment for keratoconus gains orphan status

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The U.S. Food and Drug Administration (FDA) has granted orphan drug designation for IVMED-80, for the treatment of keratoconus.

The drop is the first non-surgical, non-laser treatment for medical crosslinking of the cornea. Unlike corneal crosslinking (CXL), the drops biomechanically strengthen the cornea in a minimally invasive fashion. The FDA's Orphan Drug Act provides a bundle of benefits intended to spur the development of treatments for rare diseases. These benefits may include tax credits to offset clinical trial expenses and market exclusivity for 7 years after approval.

### The ISNT Rule: How Often Does It Apply to Disc Photographs and Retinal Nerve Fiber Layer Measurements in the Normal Population?

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By analysing the neuroretinal rim in disc photographs of normal subjects, Jonas and associates published 1988 that the rim width typically exhibited a specific pattern of the inferior (I) rim being the widest, followed by the superior (S) rim, then the nasal (N) rim, and then the temporal (T) rim being the thinnest. This specific neuroretinal rim pattern was later coined by Elliot Werner as the “ISNT rule.

This study sought to determine the percentage of normal eyes that followed the ISNT rule by disc photographs and RNFL thickness measurements, and, secondarily, whether alternative rules may be more applicable or easily generalized. Thirdly, in the context of the ISNT rule and its variants, this study assessed how much agreement there is between disc photograph neuroretinal rim assessments and RNFL thickness measurements.

A key finding of this paper (including 110 healthy subjects) was that the ISNT rule was valid for only a minority of eyes i.e., only 37% by disc photographs and 43.8% by RNFL thickness measurements. In particular, for disc photograph assessments, having only 37% of disc photographs obey the ISNT rule is lower than previously reported rates of 52%–79% in studies that also evaluated the neocortical rim width using disc photographs in the normal population.

Given that the ISNT rule is not valid most of the time owing to variations in the nasal neocortical rim, this would support the rationale for excluding the nasal rim from the ISNT rule to make this rule more widely applicable for the normal population.

When the nasal quadrant was not used in the ISNT rule, more than 70% of normal eyes followed the IST and IS rule for both disc photographs and OCT RNFL thickness measurements (i.e., disc photograph neuroretinal rim assessments: 70.9% obeyed the IST rule and 76.4% obeyed the IS rule; RNFL thickness assessments: 70.9% obeyed the IST rule and 71.8% obeyed the IS rule).

Therefore, this study concludes that the IST and IS rule should be used instead of the ISNT for clinical disc assessments and for OCT RNFL thickness interpretations.

Linda Yi-Chieh Poon et al, *Am J Ophthalmol* 2017;184:19–27.

## OPHTHALMOLOGY

### Comparison of Glaucoma Progression Detection by Optical Coherence Tomography and Visual Field

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Visual field (VF) testing is essential in tracking functional loss but is subjective and has poor reproducibility, requiring a series of many tests to establish progression. Optical coherence tomography (OCT) is objective and precise, but is according to recent studies thought to be less useful in advanced glaucoma owing to the “floor effect” of the nerve fiber layer (NFL).

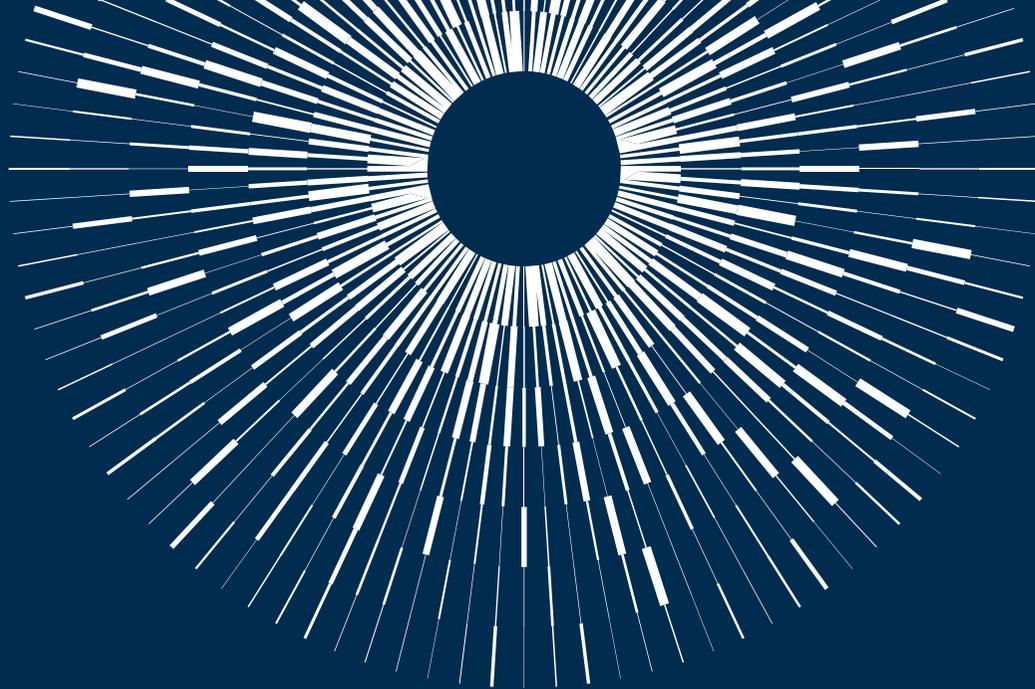
It was the purpose of this study to compare longitudinal glaucoma progression detection using optical coherence tomography (OCT) and visual field (VF).

The analysis included 356 glaucoma suspect/preperimetric glaucoma (GS/PPG) eyes and 153 perimetric glaucoma (PG) eyes. Follow-up length was in both groups around 55 months.

In summary, according to the results of this study OCT has higher sensitivity for progression detection than VF, both in perimetric glaucoma eyes and in preperimetric glaucoma and early perimetric glaucoma eyes. OCT is able to detect progression within a shorter follow-up time in early glau-

coma. Therefore, clinicians could rely more heavily on OCT to monitor progression in the early stages of the disease. However, a number of patients seem to progress by either functional or structural tests, or some by both, in all glaucoma stages. Using OCT and VF together for disease monitoring is advisable, as this can track disease progression more frequently than using either method alone. Interestingly, in moderate and advanced glaucoma (with good evidence down to MD of 15 dB), OCT continues to be useful in progression monitoring, with GCC trend analysis being more useful than NFL trend analysis. This can also be especially useful in clinical practice, to overcome difficulties that some advanced glaucoma patients encounter when undertaking VF, since OCT is an objective test and does not depend on patient response. Conclusion: OCT is more sensitive than VF for the detection of progression in early glaucoma. While the utility of NFL declines in advanced glaucoma, GCC remains a sensitive progression detector from early to advanced stages.

Xinbo Zhang, Anna Dastiridou, Brian A. Francis, Ou Tan, Rohit Varma, David S. Greenfield, Joel S. Schuman, And David Huang, On Behalf of The Advanced Imaging for Glaucoma Study Group, *Am J Ophthalmol* 2017;184: 63–74.



# Swiss Academy of Ophthalmology

CONGRESS

28.2. – 2.3. 2018

MESSE LUZERN

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EARLY BOOKING DISCOUNT

running until 15. 1. 2018

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24 CONTINUING EDUCATION POINTS

[www.SAoO.ch](http://www.SAoO.ch)