


On behalf of Vision Expo, we sincerely thank you for being with us this year.

Vision Expo Has Gone Green!

We have eliminated all paper session evaluation forms. Please be sure to complete your electronic session evaluations online when you login to request your CE Letter for each course you attended! Your feedback is important to us as our Education Planning Committee considers content and speakers for future meetings to provide you with the best education possible.



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Financial Disclosure – Justin Schweitzer, OD, FAAO

- Aerie – C/I
- Alcon – C/I
- Allergan – C/I
- Bausch + Lomb – C/I
- Ocular Therapeutix – C
- EyePoint – C
- Sight Sciences – C/I
- Dompé – C
- Zeiss – C/I
- Visus – C
- Science Based Health – C
- Kala – C
- Rely – C

- Sun – C/I
- Equinox – I
- Reckitt – C
- J&J – C/I
- Glaukos – C/I
- Horizon – C
- Guiden – C
- MedPrint – C
- LKC – C/I
- Avellino – C
- Novartis – C
- Ivenc bio – C
- Ocugen – C

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MIGS in Glaucoma



Justin Schweitzer, OD, FAAO  
Vance Thompson Vision, Sioux Falls, South Dakota  
Optometric Externship Director  
Associate Director Residency Program

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Minimally or Micro Invasive Glaucoma Surgery  
(MIGS)

Procedures that have an ab-interno approach, are minimally traumatic, with at least modest efficacy, extremely high safety and rapid recovery .

Sahab H, Ahmed, IIC. Micro-invasive glaucoma surgery: current perspectives and future directions. Curr Opin Ophthalmol. 2012;23(9): 36-504.

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Interventional Glaucoma

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WHY  
MIGS

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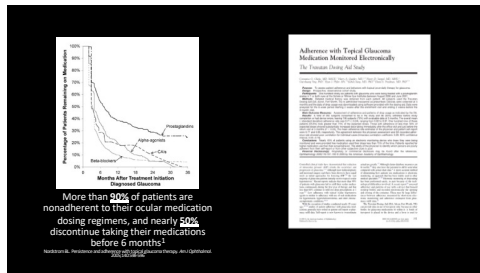
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### OSD IMPROVEMENT IN IMPLANTED EYES<sup>1</sup>



<sup>1</sup> Prospective, multicenter trial evaluating four ocular surface metrics 3 months post-implantation.

- **n=47 eyes**
- Other ocular health metrics improved as well:
  - 49% longer time to tear breakup (FTBUT) ( $p<0.0001$ )
  - Significantly reduced conjunctival staining (Oxford Scheme) ( $p<0.001$ )
  - Trend toward less hyperemia (Eilon Score)

Mean OSD Score



Time Point	Mean OSD Score	n
Pre	86.5	47
Month 3	17.8	42

Mean OSD Improvement Rate: 79.3% (p<0.0001)

1. Chen Y, Wang Y, Chen W, Kuriyama T, Gotoh T, et al. Prospective Multicenter Study of Ocular Surface Metrics Changes 3 Months After Implantation of a New Ocular Surface Device in Patients with Dry Eye Disease. Ophthalmology. 2021;128(10):1545-1552.

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### Collaborative Care in Glaucoma



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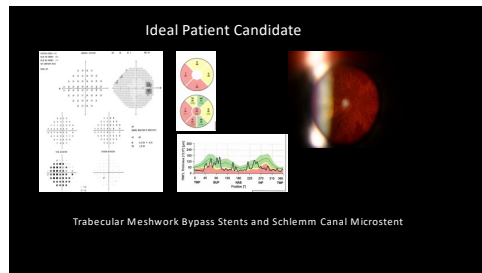
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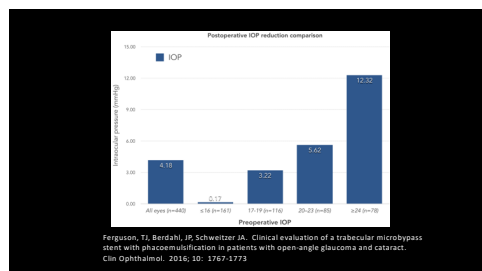
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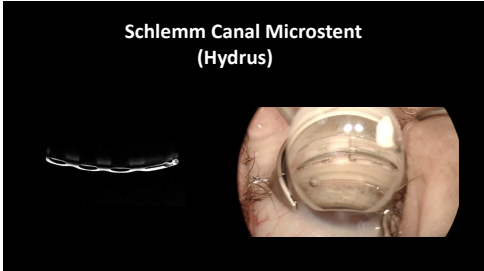
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HORIZON Trial – 4 Year Update

	Stent + Cataract (n=300)	Cataract Only (n=187)
Baseline IOP (mm Hg) after washout	25.5 (± 3.0)	25.4 (± 2.9)
48 months medication free	65%	41%
48 months mean IOP (mm Hg)	16.9 (± 3.3)	17.3 (± 3.4)
3 preoperative med	52.6%	54%
2 to 4 preoperative med	47.4%	46%

5 Year Update – 66% patient's remain medication-free and 61% reduction in risk to need further surgery

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HORIZON Trial – AAO 2021

Microstent lowers the rate of visual field loss by:

47%

vs cataract surgery alone

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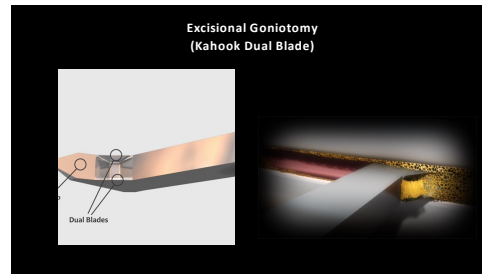
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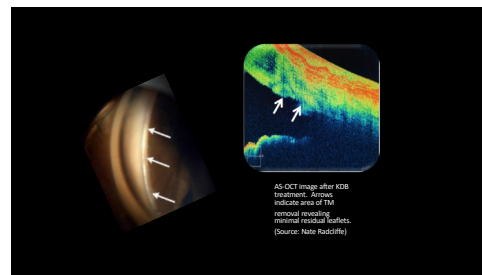
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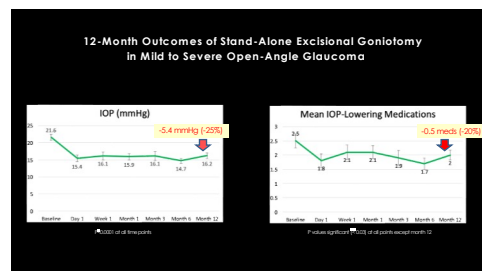
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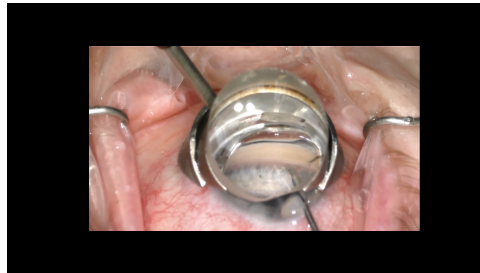
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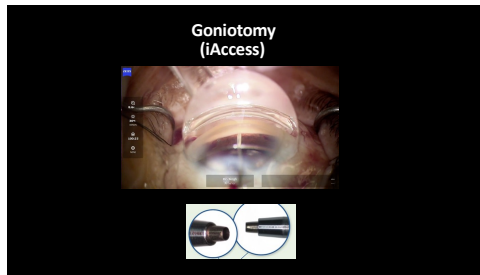
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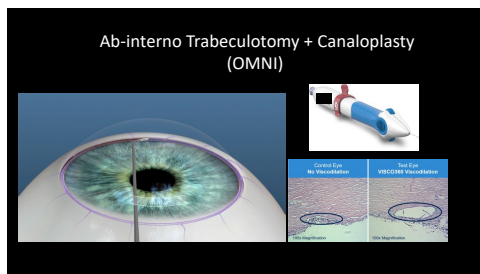
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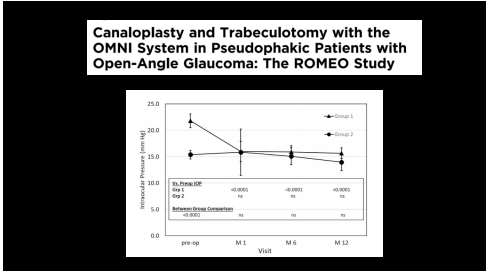
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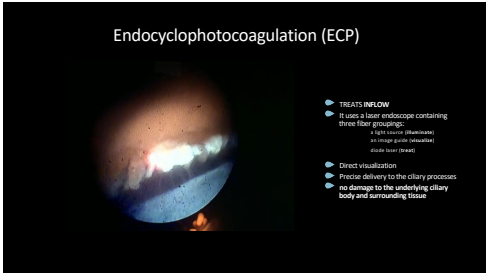
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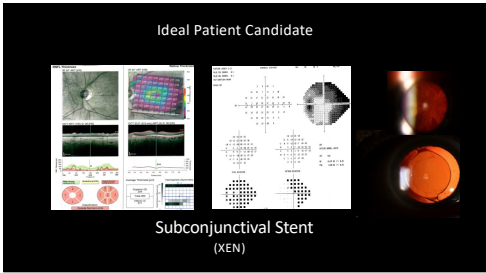
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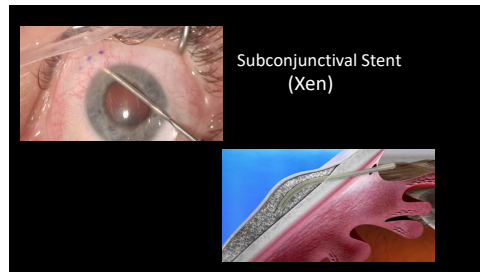
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Xen 45 Gel Stent: US Pivotal Clinical Trial

	Baseline	12 month
Medicated IOP	25.1 (3.7)	15.9 (5.2)
Glaucoma Meds	3.5 (1.0)	1.7 (1.5)

76.3% of patients reported a mean diurnal IOP reduction of  $\geq 20\%$  from medicated baseline at 12 months

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Postoperative Adverse Events

Hypotony (IOP < 6 mmHg at any time)	16 (24.6%)
Anterior chamber shallow with peripheral irido corneal touch	1 (1.5%)
Anterior chamber fill	1 (1.5%)
Bleb Needling	21 (32.3%)

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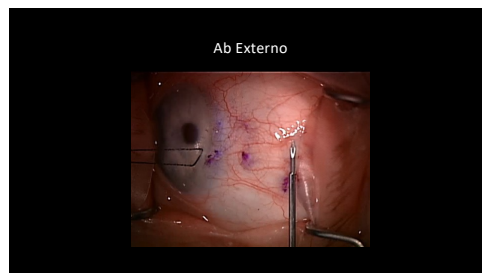
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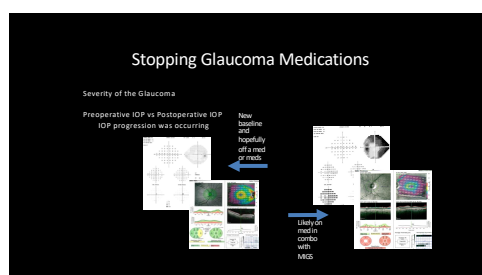
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### PAS to Stents



US Pivotal iStent Inject Trial  
**1.8% @ 24 months**

HORIZON Trial  
**13% @ 48 months**

VAG laser considered to open stent

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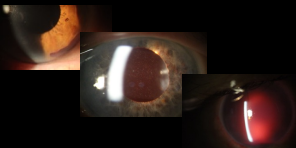
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### Hyphema



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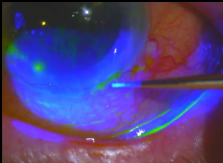
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### IOP Spikes



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### Ocular Hypotony – Is it a Concern with MIGS?

Hypotony – An IOP below which the eye does not maintain its normal shape and may subsequently lose vision.

Definitions vary slightly – IOP < 5 or 6

Episcleral Venous Pressure and its role

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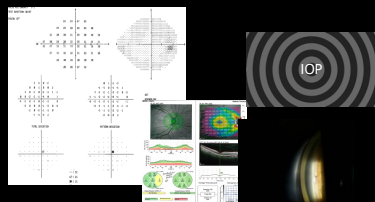
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### Establish New Baselines



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### In Conclusion...

- Glaucoma is both a medical and surgical disease  
– Key to success is collaboration
- Trends in treatment aim to balance effectiveness and safety
- MIGS procedures allow for interventional glaucoma

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