

## CATARACT COMANAGEMENT DECISIONS

There's More Than One Way to Skin a Cat(aract)  
Ronald N. Brown Jr., M.D.  
Specialty Eye Institute

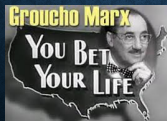
1

I HAVE NO FINANCIAL DISCLOSURES

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### WHICH GAME SHOW HOST HOLDS THE GUINNESS RECORD FOR LONGEST RUN?

- A) Monte Hall
- B) Pat Sajak
- C) Groucho Marx
- D) Alex Trebek



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### WHICH GAME SHOW HOST HOLDS THE GUINNESS RECORD FOR LONGEST RUN?

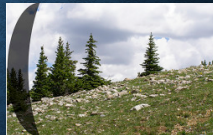
- D) Alex Trebek



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### #1 "I'VE GOT A SHADOW"

- At the 2 week postop appointment of a routine cataract your patient describes a dark, curved shadow temporally, denies flashes or floaters, vision is 20/30, slit-lamp and dilated fundus exam are unremarkable



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### #1 "I'VE GOT A SHADOW"

- A) Perform 30-2 visual field
- B) Refer for scleral depressed exam by retina specialist
- C) Order macula OCT
- D) Reassure patient
- E) Blame it on Coronavirus

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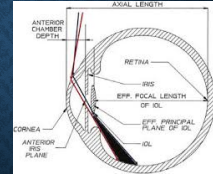
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### NEGATIVE DYSPHOTOPSIA

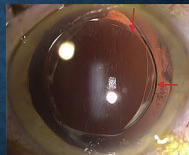
- Very common early postop period
- Described as a temporal, curved shadow or dark spot, like horse blinders
- Related to optical artifact as light hits the edge of the IOL



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### NEGATIVE DYSPHOTOPSIA

- Reassure patient, explain cause
- Usually disappears over weeks to months as capsule fibrosis over IOL
- Rarely requires surgical intervention, IOL exchange with larger sulcus IOL



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### #2 FUNKY CYLINDER

- 72 yo with cataracts doesn't like to wear glasses
- Refraction of -1.50-2.75x58 gives 20/60, old glasses Rx is -2.00-.75 x 15, Auto K readings are 43.25x44.50axis 30
- Patient asks what kind of IOL should they get, what should you do next?

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### #2 FUNKY CYLINDER

- A) Repeat refraction and K's after artificial tears
- B) Review corneal topography
- C) Start Muro 128 gits and ointment and refer to surgeon
- D) Place bandage CL for 2 weeks

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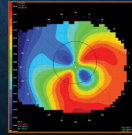
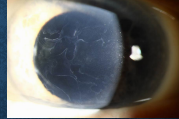
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### ANTERIOR MEMBRANE DYSTROPHY

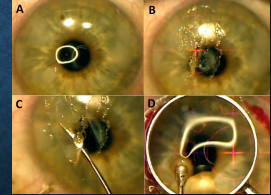
- Most common corneal dystrophy
- AKA "map-dot-fingerprint" dystrophy
- Diagnosed on slit-lamp exam, corneal topography shows irregular astigmatism



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### ANTERIOR MEMBRANE DYSTROPHY

- Poor candidates for toric or multifocal IOLs given irregular astigmatism
- Can consider superficial keratectomy, followed by repeat topography and IOL measurements in 6 weeks
- Important to discuss preop to manage expectations



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### #3 SMUDGE IN MY VISION

- 65 yo came in 1 month after routine cataract surgery c/o a smudge in her vision
- Acuity 20/60 uncorrected, no improvement in refraction, slit-lamp and dilated fundus exam unremarkable
- What would you do next?



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### #3 SMUDGE IN MY VISION

- A) Order macula OCT
- B) Refer back for early YAG capsulotomy
- C) Check fasting glucose/A1C
- D) Refer for fluorescein angiography
- E) Windex their glasses

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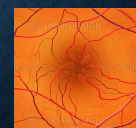
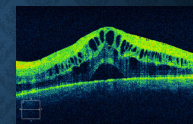
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- D) Start artificial tears/ointment QHS
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### POSTOP CYSTOID MACULA EDEMA

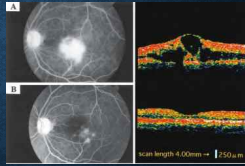
- Commonly presents 1 to 2 months postop
- Often normal slit-lamp exam
- Cystoid changes seen on fundus CL exam
- OCT best test to diagnose and follow
- Fluorescein angiography also diagnostic, but more invasive



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### POSTOP CYSTOID MACULAR EDEMA

- Treat with Durezol BID or Pred Forte QID and topical NSAID (Prolensa)
- Recheck in 1 month, follow acuity, symptoms, and OCT thickness
- If no improvement, either wait 1 more month (if mild), or refer to retina for possible sub-Tenon's steroid injection



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### #4 KERATOCONIC W/O GLASSES

- 59 yo with keratoconus, wears RGP contacts, refraction -9.75-3.25x39 and -10.25-4.75x12, doesn't own glasses, now found to have 3+ NS and PSC cataracts with 20/80 vision
- What do you do about contacts before referring for cataract surgery?



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### #4 KERATOCONIC W/O GLASSES

- A) Switch to soft lenses for 1 month, then no contacts for 2 weeks before referral
- B) Make up glasses, wait 6 weeks to stabilize, then refer
- C) Remove 1 RGP CL, wait 6 weeks, then refer
- D) Refer to cataract surgeon w/RGP CLs

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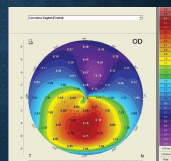
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### KERATOCONIC W/CATARACTS

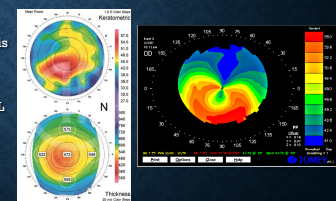
- May take 4 to 8 weeks for cornea to stabilize after long-term RGP wear
- Irregular astigmatism makes calculating corneal power difficult
- If significant irregular astigmatism will need RGP CLs after cataract surgery anyway



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### KERATOCONIC W/CATARACTS

- Mild degrees of keratoconus may be candidate for toric IOL if can judge axis and magnitude of cylinder
- May bring these patients back to recheck IOL measurements after no CL wear for few weeks
- Occasionally do one 1 at a time sequentially to allow better patient functioning



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## #5 MY EYE HURTS

- 51 yo woman comes in as an emergency 2 weeks after routine cataract surgery
- Vision is 20/40, mild injection, mild AC reaction, IOP 19
- What should you do?



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## #5 MY EYE HURTS

- A) Refer back for AC tap and intravitreal antibiotics
- B) Start topical steroids Durezol QID
- C) Start Nevanac and Motrin 800mg for pain
- D) Recheck in 2 weeks

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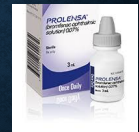
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## REBOUND INFLAMMATION

- Intraocular injection is mixture of dexamethasone, triamcinolone, and moxifloxacin
- Steroids wear off in 2 to 4 weeks
- Redness, pain, photophobia, blurred vision
- Corneal edema, AC cells/flare
- Treat with Durezol QID for 1 to 2 weeks



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## #6) MY EYE HURTS

- 74 yo man presents day 1 after routine cataract surgery, c/o severe aching eye pain, started night of surgery
- Vision 20/400, no injection, diffuse microcystic edema, IOP 58
- What would you do next?



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## #6 MY EYE HURTS

- A) Start Combigan & Xalatan, recheck in 2 hours
- B) Start Combigan and Diamox 250mg QID, recheck in 1 day
- C) Start Combigan and Durezol Q2 hours, recheck in 1 week
- D) "Burp" cataract incision

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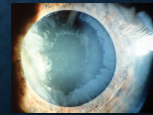
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## IOP SPIKE DAY 1

- Not a steroid response, but a clogging of meshwork (like a hyphema)
- Retained viscoelastic also a culprit
- More common with small pupils, Flomax, high myopes, pseudoexfoliation,



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## IOP SPIKE DAY 1

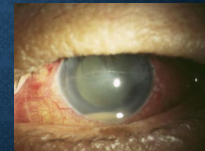
- Burp incision steps
  - Topical anesthesia
  - Have patient look down, hold upper lid up with finger
  - Gently and slowly push on sclera just posterior to incision with Q tip soaked in proparacaine until drop of fluid burps
  - Recheck IOP, repeat if necessary



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## #7 MY EYE HURTS

- 81 yo woman presents on day 1 after routine cataract surgery
- Vision CF at 1 foot, no pain, no injection, diffuse corneal edema, small hypopyon, fibrin strands on IOL, no clear fundus view
- What would you do?



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## #7 MY EYE HURTS

- A) Refer back to surgeon
- B) Start Durezol Q2 hours, recheck in 2 to 3 days
- C) Start Durezol Q2 hours and Medrol dose pack, recheck in 2 to 3 days
- D) Start Muro 128 gtts Q2 hours and ointment QHS, recheck in 2 to 3 days

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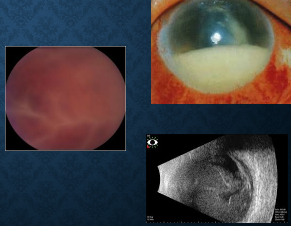
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### POSTOP ENDOPHTHALMITIS

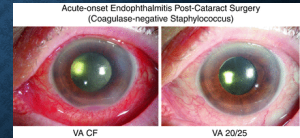
- Typically day 1 to 5, but can be as late as 2 weeks
- Pain not always present, especially early on
- Severe AC reaction, hypopyon, and fibrin in AC or on IOL
- Vitritis with hazy fundus view



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### POSTOP ENDOPHTHALMITIS

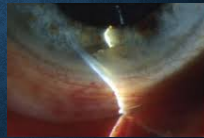
- Immediate referral for treatment
- AC tap, culture injection of intravitreal antibiotics
- Less inflammation, clearer vitreous good signs
- May take months for best vision, sometimes vitrectomy needed to clear vitreous debris



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### #8 WHAT IS THIS?

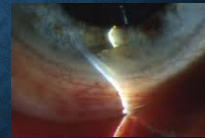
- A) Triamcinolone deposit
- B) Retained lens fragment
- C) Iris nevus
- D) Metallic foreign body
- E) Mike Lyndell's newest product, the tiny My Eye Pillow



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### #8 WHAT IS THIS?

- B) Retained lens fragment



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### #9 WHAT CONDITION DID THIS PATIENT LIKELY HAVE DURING SURGERY?

- A) Floppy Iris Syndrome
- B) Down Syndrome (Trisomy 21)
- C) Steroid induced PSC
- D) Pseudoexfoliation
- E) Bad breath



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### #9 WHAT CONDITION DID THIS PATIENT LIKELY HAVE DURING SURGERY?

- D) Pseudoexfoliation



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### #10) WHAT MEDICINE WAS THIS PATIENT LIKELY TAKING?

- A) Coumadin
- B) Insulin
- C) Flomax
- D) Prednisone
- E) Don't know, but I don't want any...



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### #10) WHAT MEDICINE WAS THIS PATIENT LIKELY TAKING?

- C) Flomax



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### #11) WHICH OF THESE PATIENTS IS THE BEST CANDIDATE FOR MIGS?

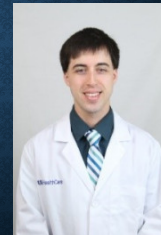
- A) 58 yo glaucoma suspect with normal fields, no cupping, IOP 24 OU
- B) 76 yo off Xalatan since SLT 1 year ago, normal IOP but C/D ratio 0.7 and 0.8
- C) 81 yo with IOP 19 OU on Combigan, mild nasal step in 1 eye
- D) 74 yo with shallow chambers, dense nuclear sclerosis, IOP 29 last 6 months



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- D) 74 yo with shallow chambers, dense nuclear sclerosis, IOP 29 last 6 months
- E) Ask Dr. Cherry, he knows more about glaucoma than Dr. Brown



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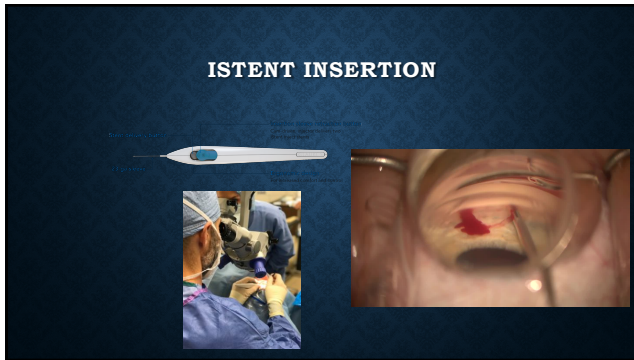
### ISTENT INJECT

- 2<sup>nd</sup> generation iStent
- Titanium, smallest stent inserted into human body
- Injected into trabecular meshwork under direct gonioscopic visualization
- Two iStents injected about 2 clock-hours apart

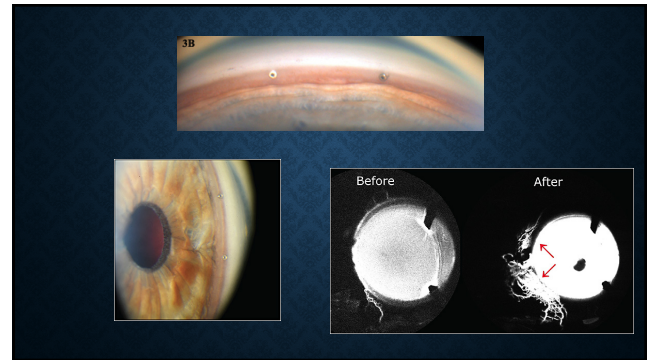


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## ISTENT INSERTION



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## ISTENT INJECT SAFETY PROFILE

NO REPORTS OF:	Post-Op Adverse Events		
		IStent Inject + Phaco N = 309	Phaco Only N = 119
<ul style="list-style-type: none"> <li>Myopic shift</li> <li>Flat AC</li> <li>Choroidal hemorrhage or effusion</li> <li>Cyclodialysis</li> <li>Hypotony <math>\geq 1</math> month</li> <li>Hypotony maculopathy</li> <li>Stent dislocation</li> <li>Significant hyphema</li> <li>Corneal decompensation</li> </ul>	Stent obstruction	6.2%	NA
	Intraocular inflammation	5.7%	4.2%
	BSCVA loss $\geq 2$ lines at or after 3 months postoperative	2.6%	4.2%
	IOP increase $\geq 10$ mmHg $\geq M1$	2.1%	0.8%
	Corneal abrasion	2.1%	3.4%
	Goniosynechiae	1.8%	0.0%
	IOP increase requiring oral meds or SS1 onset $\geq M1$	0.3%	2.5%
	Secondary glaucoma surgery	0.5%	2.5%
	SLT	1.0%	0.8%
	Trabeculectomy/Express shunt	1.0%	0.8%

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## #12) WHICH IOL PLAN GUARANTEES GLASSES FREE VISION?

- A) Panoptix trifocal IOLs OU
- B) Monovision with toric IOLs
- C) Crystalens accommodating IOLs
- D) Symphony extended depth focus IOLs
- E) None of the above

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## #12) WHICH IOL PLAN GUARANTEES GLASSES FREE VISION?

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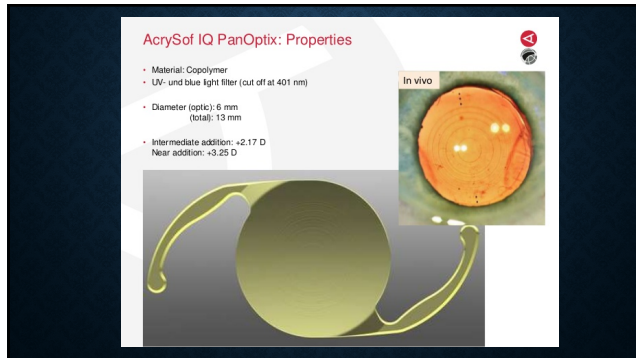
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## PANOPTIX TRIFOCAL IOL

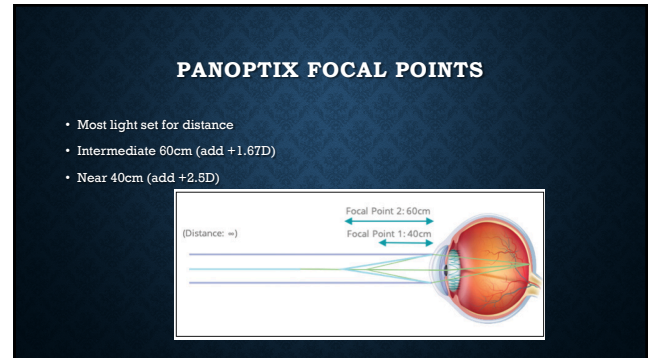
- FDA approved 2019
- 1<sup>st</sup> trifocal IOL in U.S.
- Predominant multifocal IOL in Europe



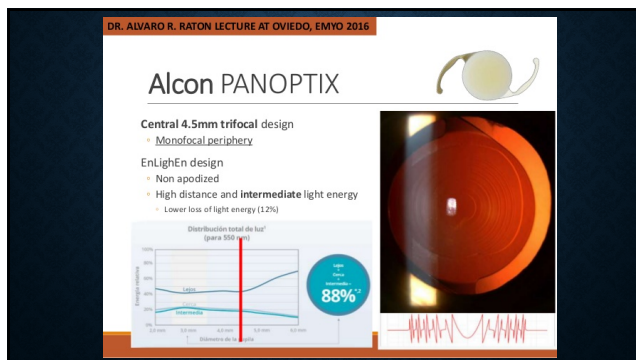
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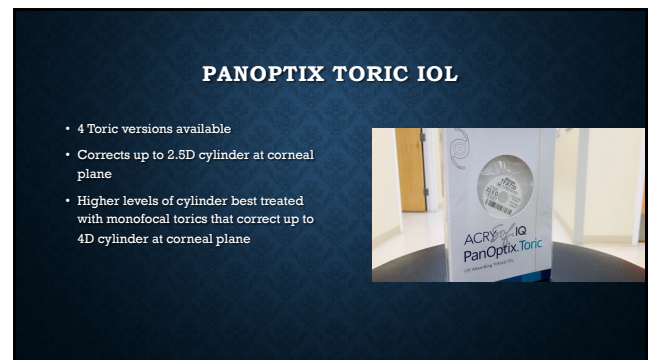
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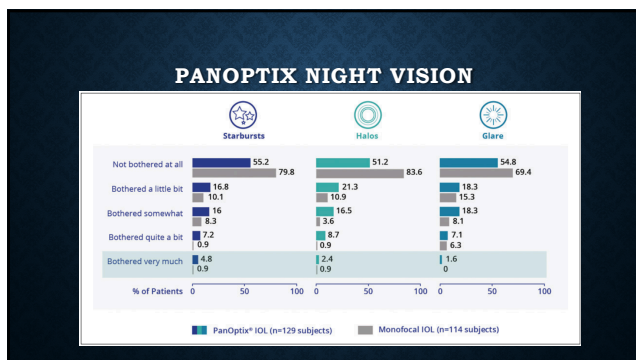
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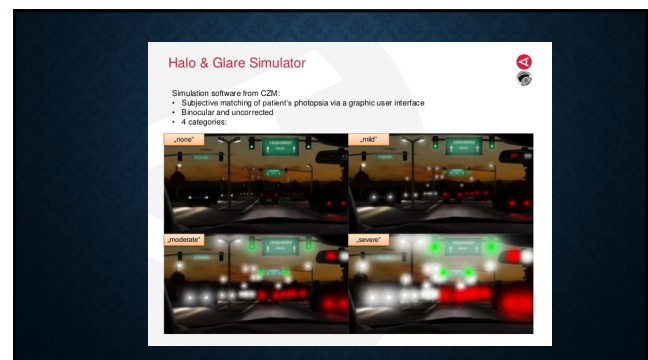
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58



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### PANOPTIX CONTRAINDICATIONS

- Macular disease (baseline OCT)
- Pseudoexfoliation
- Amblyopia
- Map-dot-fingerprint dystrophy
- Significant dry eye
- Pilot or truck driver



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### Clinically-Proven Benefits

The FDA approval of PanOptix was based on a pivotal study at 12 investigational sites in the U.S. With this single trifocal lens design, PanOptix patients demonstrated exceptional, uninterrupted vision.

Results from the 129 subjects implanted with PanOptix in the prospective and parallel-group clinical study revealed that:



More than 99 percent of PanOptix patients in the FDA clinical study said they would choose the same lens again



98 percent of PanOptix patients would recommend the PanOptix IOL to their friends and family



80.5 percent of PanOptix patients reported in a survey that they never needed to wear glasses after surgery\*

\*Survey question asked, "How often have you needed glasses within the past 7 days?"

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### #13) WHAT WAS MY FIRST JOB?

- A) McDonald's
- B) Dishwasher
- C) Automotive engineer
- D) Lab assistant

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### #13) WHAT WAS MY FIRST JOB?

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### THANK YOU FOR ZOOMING!



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