

Andrew Neukirch, OD



### Financial Disclosures:

CooperVision Specialty Eyecare KOL

Topcon Healthcare KOL

\*All relevant relations mitigated





Carillon Vision Care
North Suburban Chicago

350+ kids presently enrolled in Myopia Management \$500k+ Annual Myopia Management Revenue Top prescribing MiSight OD in the USA



Myopia Management | Vision Therapy

### WHY MYOPIA MGMT?

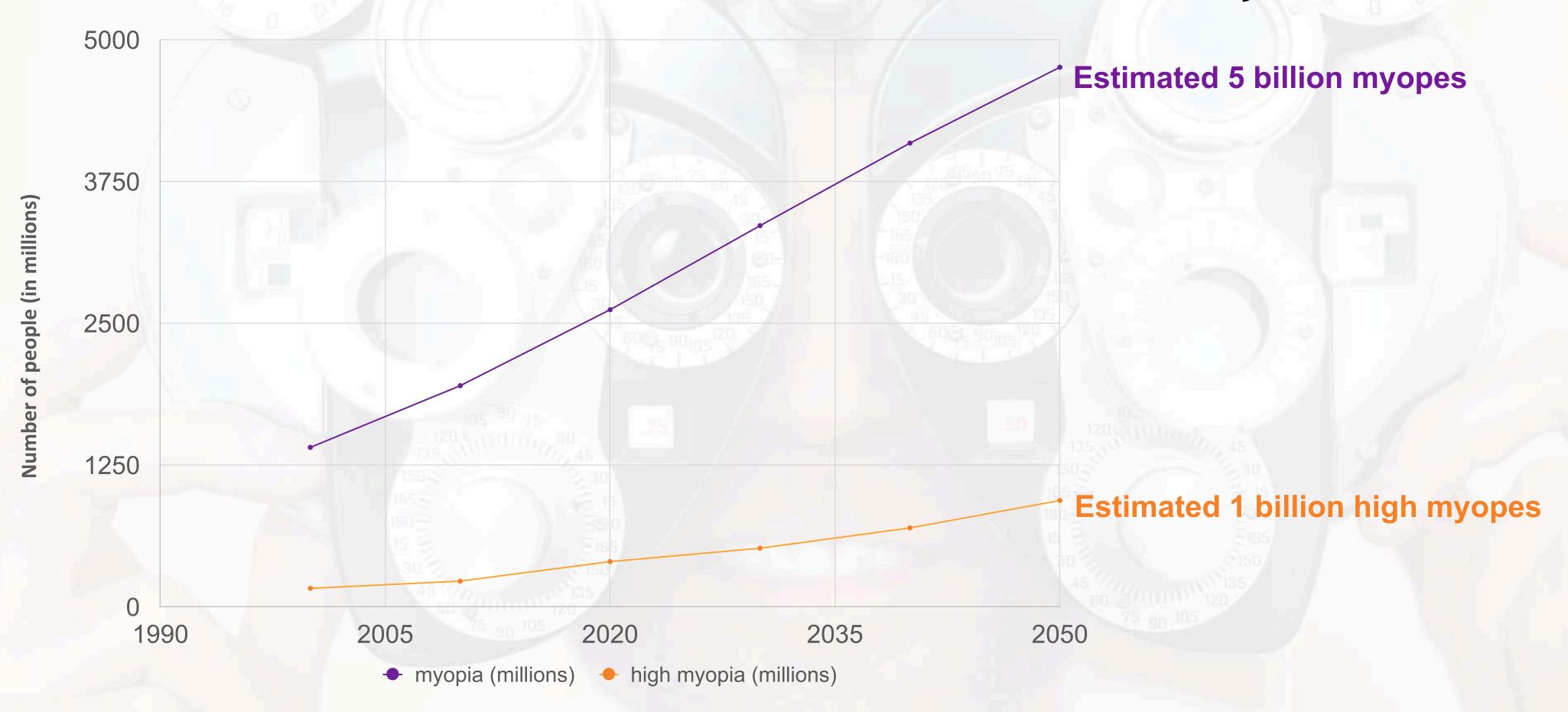
CARILLON

Myopia Management | Vision Therapy

KCN = 0.2% Glaucoma = 4% DES = 10% Myopia = 42%



#### It's about incidence and severity

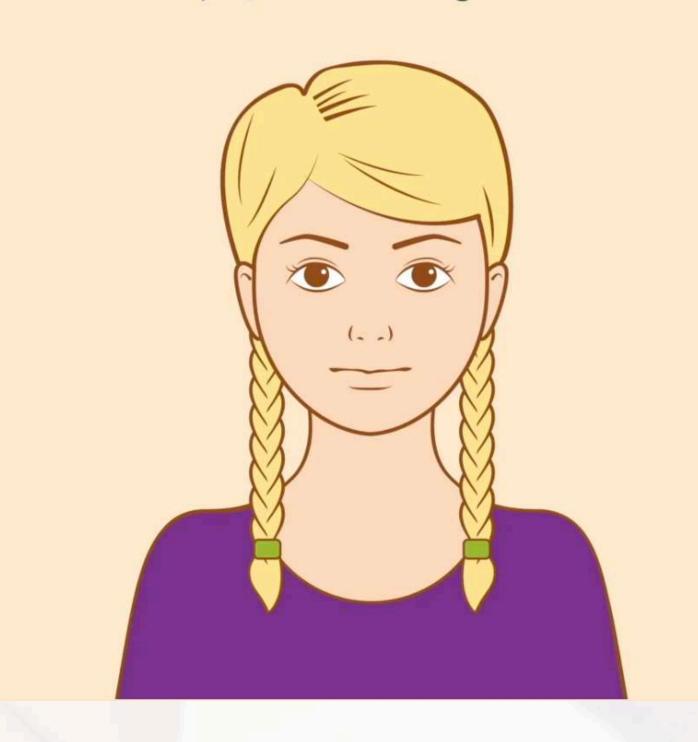


<sup>1.</sup> Holden BA, Fricke TR, Wilson DA, Jong M, Naidoo KS, Sankaridurg P, Wong TY, Naduvilath TJ, Resnikoff S, Global Prevalence of Myopia and High Myopia and Temporal Trends from 2000 through 2050, Ophthalmology, May 2016 Volume 123, Issue 5, Pages 1036–1042.

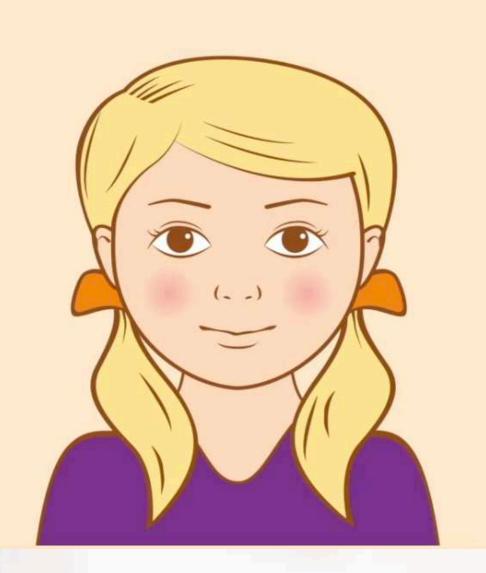


### Myopia Onset

In 1983, the average onset age of myopia was 11 years old

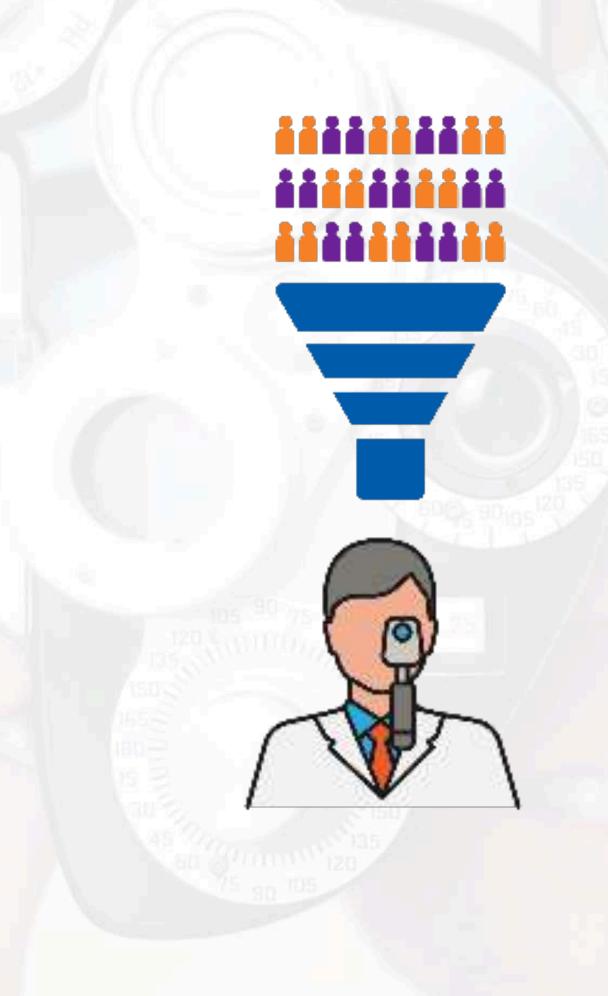


In 2000, the average onset age of myopia was just 8 years old



Wolffsohn JS, Calossi A, Cho P, et al. Global Trends in Myopia Management Attitudes and Strategies in Clinical Practice. Cont Lens Anterior Eye. 2016; 39:106–16.





278
CHILDREN
WITH MYOPIA

FOR EVERY

1

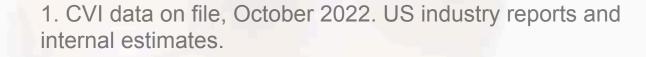
EYE CARE PROVIDER

Fortin P, Kwan J. The Myopia Management Opportunity in the United States Using the 2020 Census. ARVO 2022, Denver, CO.



# 

Age 8 to 12 wearing single vision contact lenses<sup>1</sup>

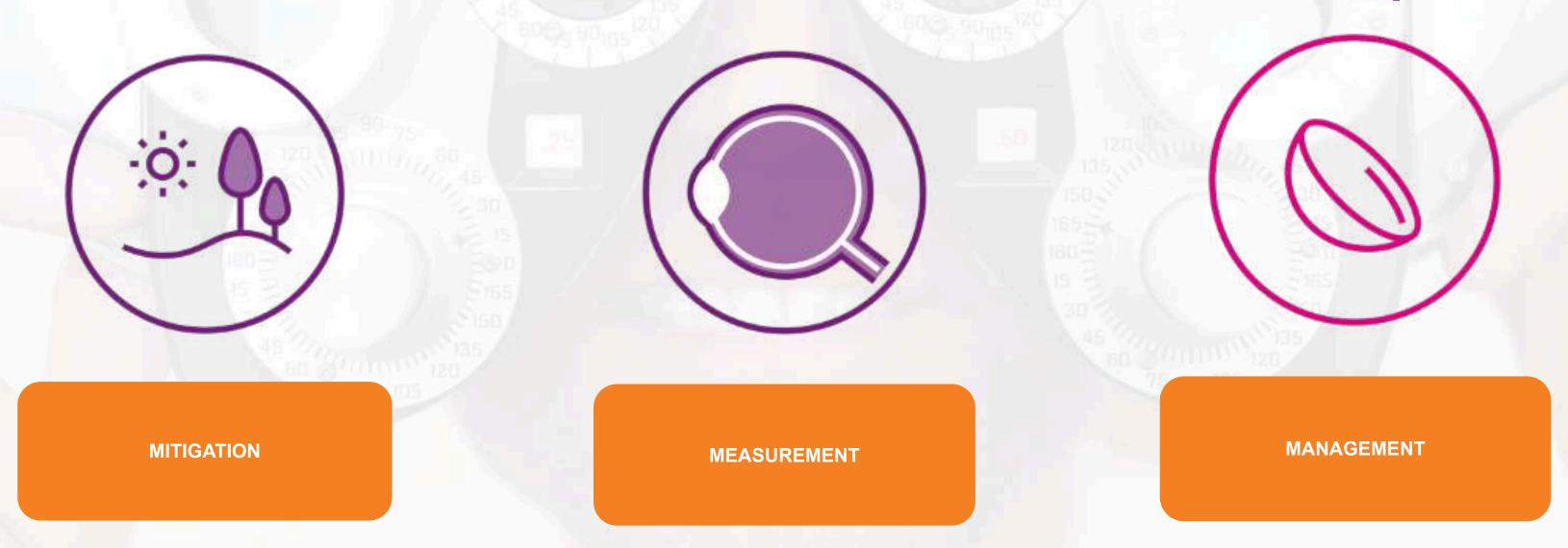




# In April 2021, the World Council of Optometry passed a resolution that declares support for myopia management as standard of care<sup>1</sup>



Evidence-based standard of care combines three main components:

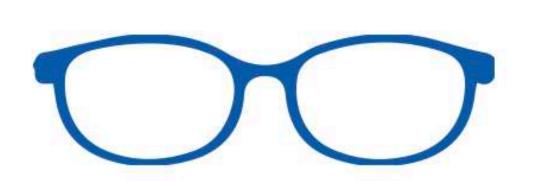


<sup>1.</sup> World Council of Optometry. Resolution: The standard of care for Myopia Management by Optometrists. https://worldcouncilofoptometry.info/resolution-the-standard-of-care-for-myopia-management-by-optometrists. Accessed 2nd March 2022.



## One size does not fit all in a myopia management practice

Multiple treatment options are critical to meet the needs of patients (and parents) to ensure compliance and clinical outcome success



Bifocal/Progressive Addition Spectacles



Dual Focus
Contact Lens



Orthokeratology



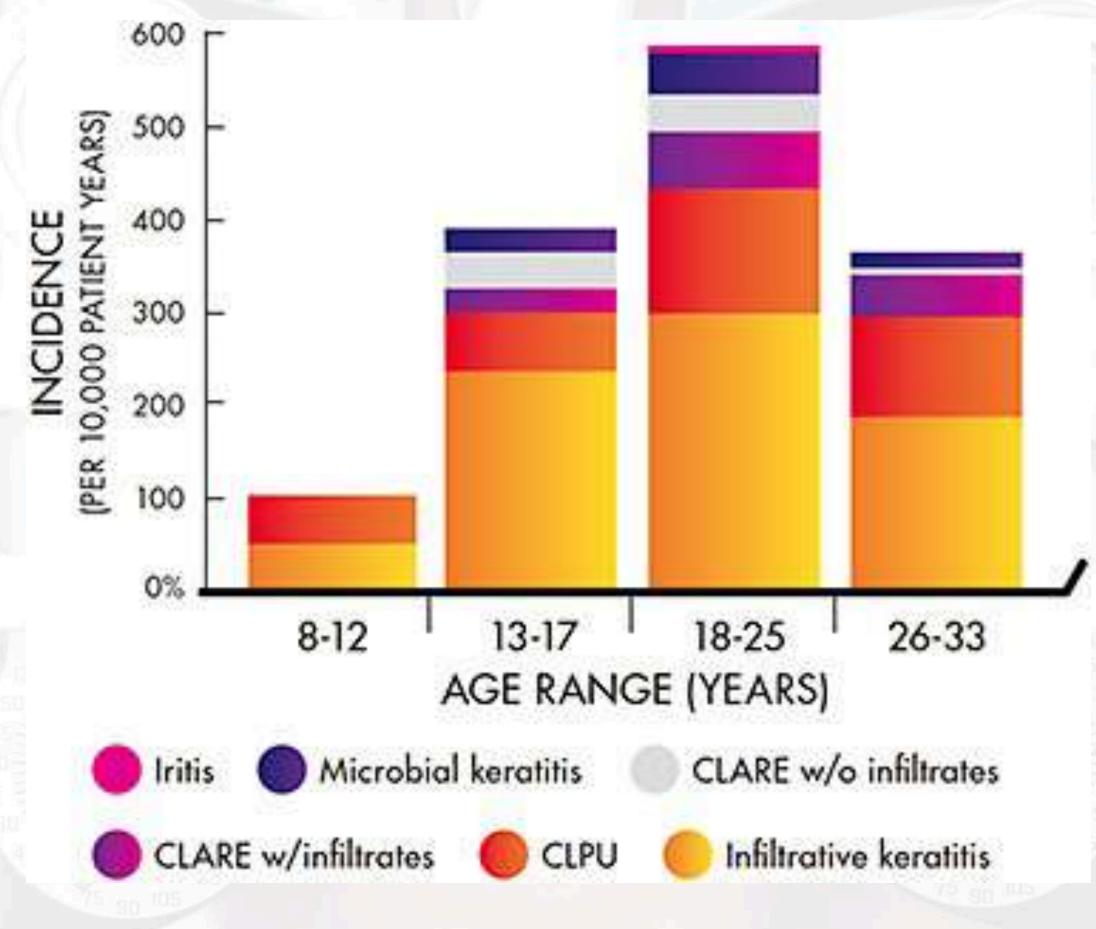
**Pharmaceuticals** 



"So this is more of cultural question. I was kind surprised/impressed that you had such a high myopic control demand in a predominately non-asian patient population? Do you approach the talk differently? I feel like it is always such an 'easier' talk with Asian parents vs non-asian parents." - Dat



#### Contact Lens Safety in Children



Microbial Keratitis: 18 per 10,000 patient-years

Bullimore MA. The Safety of Soft Contact Lenses in Children. Optom Vis Sci. 2017 Jun;94(6):638-646. Figure from Contact Lens Spectrum



#### UPDATED - Contact Lens Safety in Children

Authors	Country	Age Range	Duration	Replacement	Material	N	Patient	All CIEs		Symptomatic CIEs	3	ı	Microbial Keratiti	s
(year)	country	(years)	(years)	Schedule	materiat		years	All CIES	Cases	Incidence	95% CI	Cases	Incidence	95% CI
Prospective stud	ıdies													
Walline (2004) <sup>34</sup>	US	8–11	3	2W	Н	57	159	0	0	0	0, 233	0	0	0, 233
Sankaridurg (2013) <sup>40</sup>	PRC	7–14	2	M	SiHy	240	369	25	5	136	50, 300	0	0	0, 103
Walline (2008) <sup>42</sup>	US	8–11	3	DD	Н	247	723	6	6	83	38, 180	0	0	0, 51
Chalmers (2015) <sup>21</sup>	US	8–17	1	DD	Both	202	171	0	0	0	0, 220	0	0	0, 220
Cheng (2020) <sup>27</sup>	Various	8–15	2–3.5	DD	Н	581	816	2	0	0	0, 47	0	0	0, 47
Woods (2021) <sup>28</sup>	Various	8–12	6	DD	Н	135	653	4	0	0	0, 58	0	0	0, 58
Gaume Giannoni (2022) <sup>31</sup>	US	7–12	3	М	SiHy	294	861	16	5	58	25, 135	<sup>8</sup> 1	11.6	2, 65
Total						1,756	3,752	53	16	43	26, 69	1	2.7	0.5, 15
Retrospective st	studies													
Chalmers (2011) <sup>23</sup>	US	8–12	1.7	Vario	ous	243	411	4	4	97	31, 235	0	0	0, 93
Chalmers (2021) <sup>29</sup>	US	8–12	2.7	Vario	ous	782	2,134	16	16	75	46, 121	2	9.4	3, 34

Bold entries are based on the sum of the values above.

Where possible, the incidence of symptomatic corneal infiltrative events and microbial keratitis (per 10,000 patient years) is estimated based on the number of events, the number of patients, and the study duration.

Patient years based on study follow-up at each time point, not enrollment. CIEs, corneal infiltrative events; PRC, People republic of China; US, United States; 2W, 2-weekly replacement, daily wear; M, monthly replacement, daily wear, DD, daily disposable; H, hydrogel; SiHy, silicone hydrogel.





#### CONCLUSION - Contact Lens Safety in Children

Incidence of microbial Keratitis in Children is no higher than adults:

4.8 per 10,000 patient years

Incidence of corneal infiltrative events seems to be markedly lower vs. adults



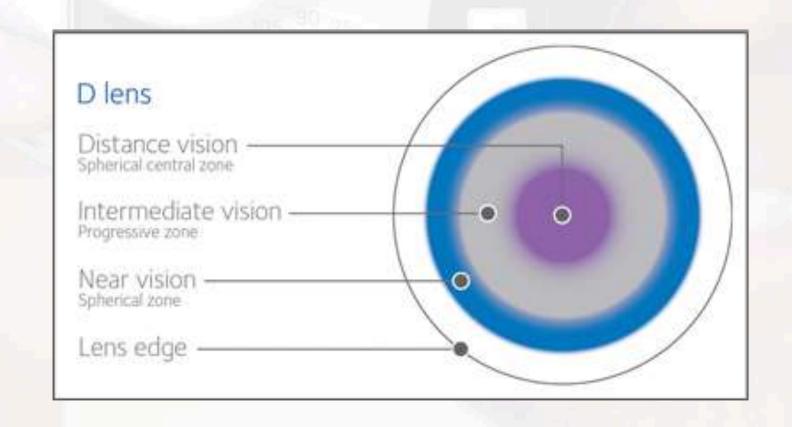
> Ophthalmic Physiol Opt. 2017 Jan;37(1):51-59. doi: 10.1111/opo.12332.

Epub 2016 Nov 23.

Studies using concentric ring bifocal and peripheral add multifocal contact lenses to slow myopia progression in school-aged children: a meta-analysis

Shi-Ming Li <sup>1</sup>, Meng-Tian Kang <sup>1</sup>, Shan-Shan Wu <sup>2</sup>, Bo Meng <sup>2</sup>, Yun-Yun Sun <sup>1</sup>, Shi-Fei Wei <sup>1</sup>, Luoru Liu <sup>3</sup>, Xiaoxia Peng <sup>4</sup>, Zhuo Chen <sup>1 5</sup>, Fengju Zhang <sup>1</sup>, Ningli Wang <sup>1</sup>

#### 31 to 51% less axial length elongation over 2 years













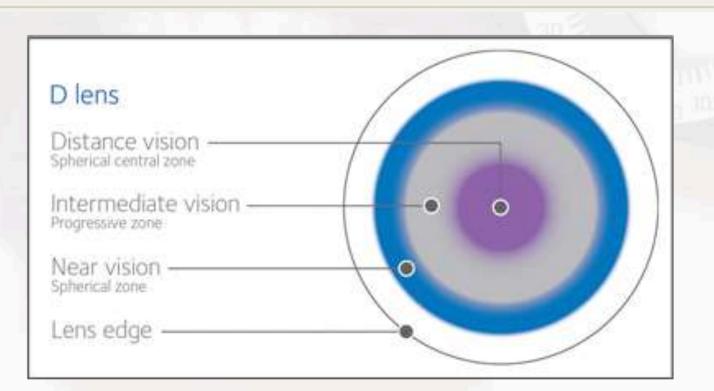


	+2.50/D	+1.50/D	single vision		
ye length, mm					
Baseline, mean (SD) <sup>a</sup>	24.42 (0.75)	24.55 (0.84)	24.43 (0.83)		
Year 3, mean (SD) <sup>a</sup>	24.81 (0.83)	25.12 (0.97)	25.08 (0.85)		
3-y absolute change (95% CI) <sup>b</sup>	0.39 (0.32 to 0.46) (n = 95) <sup>c</sup>	0.55 (0.49 to 0.62) (n = 95) <sup>c</sup>	0.62 (0.56 to 0.69) (n = 96) <sup>c</sup>		
High add vs single vision				-0.23 (-0.33 to -0.14)	<.001
Medium add vs single vision				-0.07 (-0.16 to 0.03)	.15
High add vs medium add				-0.16 (-0.26 to -0.07)	.002





COLLEGE OF OPTOMETRY Jeffrey Walline, Maria Walker, Donald Mutti, Lisa Jones-Jordan,, Loraine Sinnott, Amber Gaume Giannoni, Katherine Bickle, Krystal Schulle, Alex Nixon, Gilbert Pierce, David Berntsen, for the Blink Study Group. JAMA. August 2020





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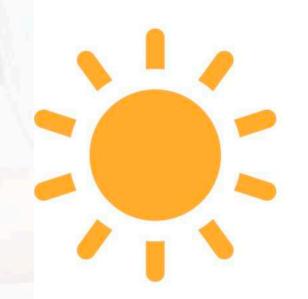
#### NaturalVue 1 Day Multifocal



Available up to -12.25 DS







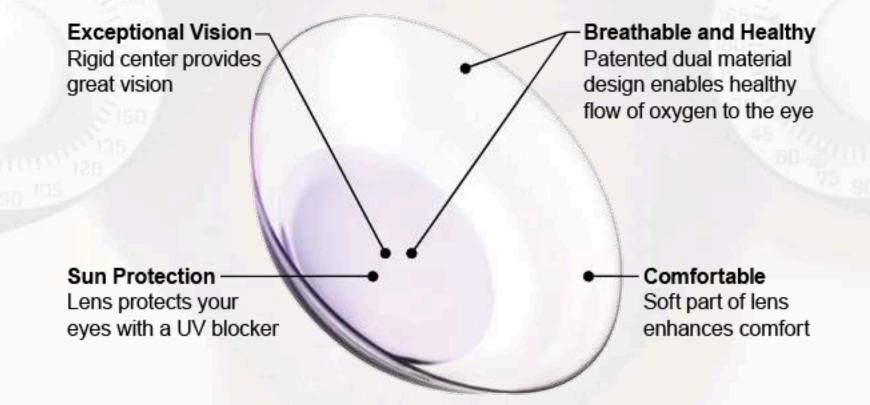
1-DAY SOFT THERAPEUTIC LENSES FOR MYOPIA MANAGEMENT

\*Not yet available in the USA





#### **Exceptional Vision and Comfort**





MetroSoft II & MetroSoft Toric

Other Options include:

ABB's CL Lab
Bausch & Lomb
SpecialEyes Custom CLs



#### MiSight® 1 day myopia control contact lenses





## The MiSight® 1 day 7-year clinical is the longest continuous soft contact lens study for myopia management

A 7-year clinical trial separated into three parts:1,2

- Over 653 patient wearing years
- Over 4000 clinical measurements collected and reviewed

Part 1 (Years 1-3)1

Assess the difference in myopia progression over a 3-year period between children wearing MiSight® 1 day and children wearing a single-vision 1-day lens.

Part 2 (Years 4-6)2

Compare the rate of myopia progression between children new to MiSight® 1 day and those who had worn MiSight® 1 day for the previous 3 years.

Part 3 (Years 7)

Phase 3 of the clinical trial followed the children for one additional year to evaluate for post-treatment effect.

- 1. Chamberlain P, et al. A 3-year randomized clinical trial of MiSight lenses for myopia control. Optom Vis Sci. 2019;96:556–567.
- 2. Chamberlain P, Arumugam B, Jones D et al. Myopia Progression in Children wearing Dual-Focus Contact Lenses: 6-year findings. Optom Vis Sci 2020;97(E-abstract): 200038.

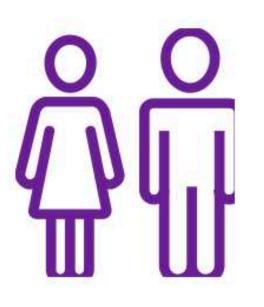


## The MiSight® 1 day clinical study yielded significant results

59%

Slows Myopia Progression on average<sup>1†</sup> 52%

Axial Length Elongation Reduction on average<sup>1†</sup>



Child Friendly<sup>1</sup>
1 day lens

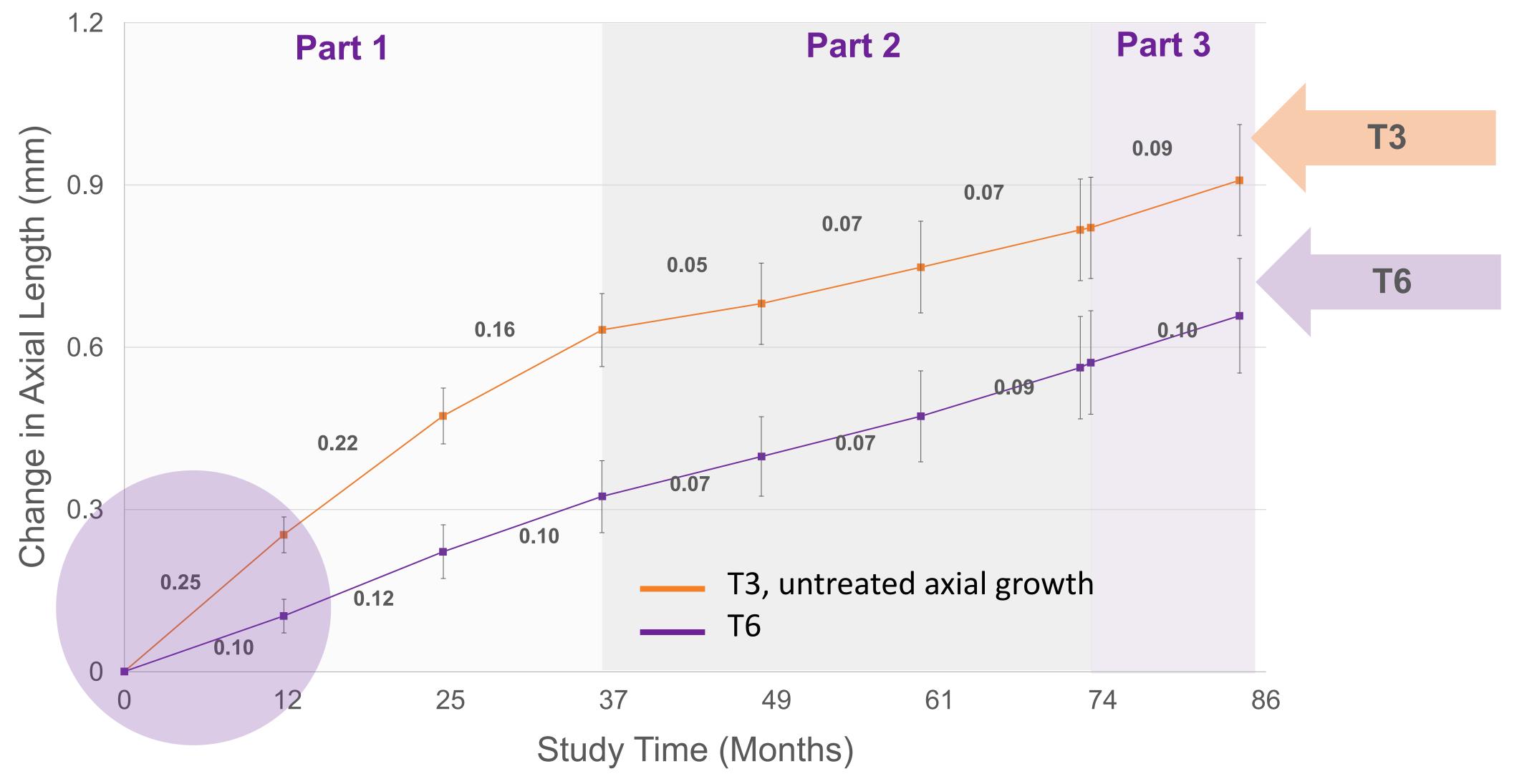
as easy to fit as a single vision daily disposable contact lens<sup>2</sup>, no special instructions

\*Indications for use: MiSight® 1 day (omafilcon A) soft (hydrophilic) contact lenses for daily wear are indicated for the correction of myopic ametropia and for

slowing the progression of myopia in children with non-diseased eyes, who at the initiation of treatment are 8-12 years of age and have a refraction of -0.75 to -4.00 diopters(spherical equivalent) with ≤ 0.75 diopters of astigmatism. The lens is to be discarded after each removal. †Compared to a single vision 1 day lens over a 3 year period.1Chamberlain P, et al. A 3-year randomized clinical trial of MiSight® lenses for myopia control. Optom Vis Sci. 2019; 96(8):556-567. 2. Initial CL BVP selection and observation of fit follows same fitting protocol for single vision CLs; fit success rate same with MiSight® 1 day and Proclear® 1 day CVI data on file 2018; Chamberlain P et al A 3-year Randomized Clinical Trial of MiSight® Lenses for Myopia Control. Optom Vis Sci 2019;96:556-567.

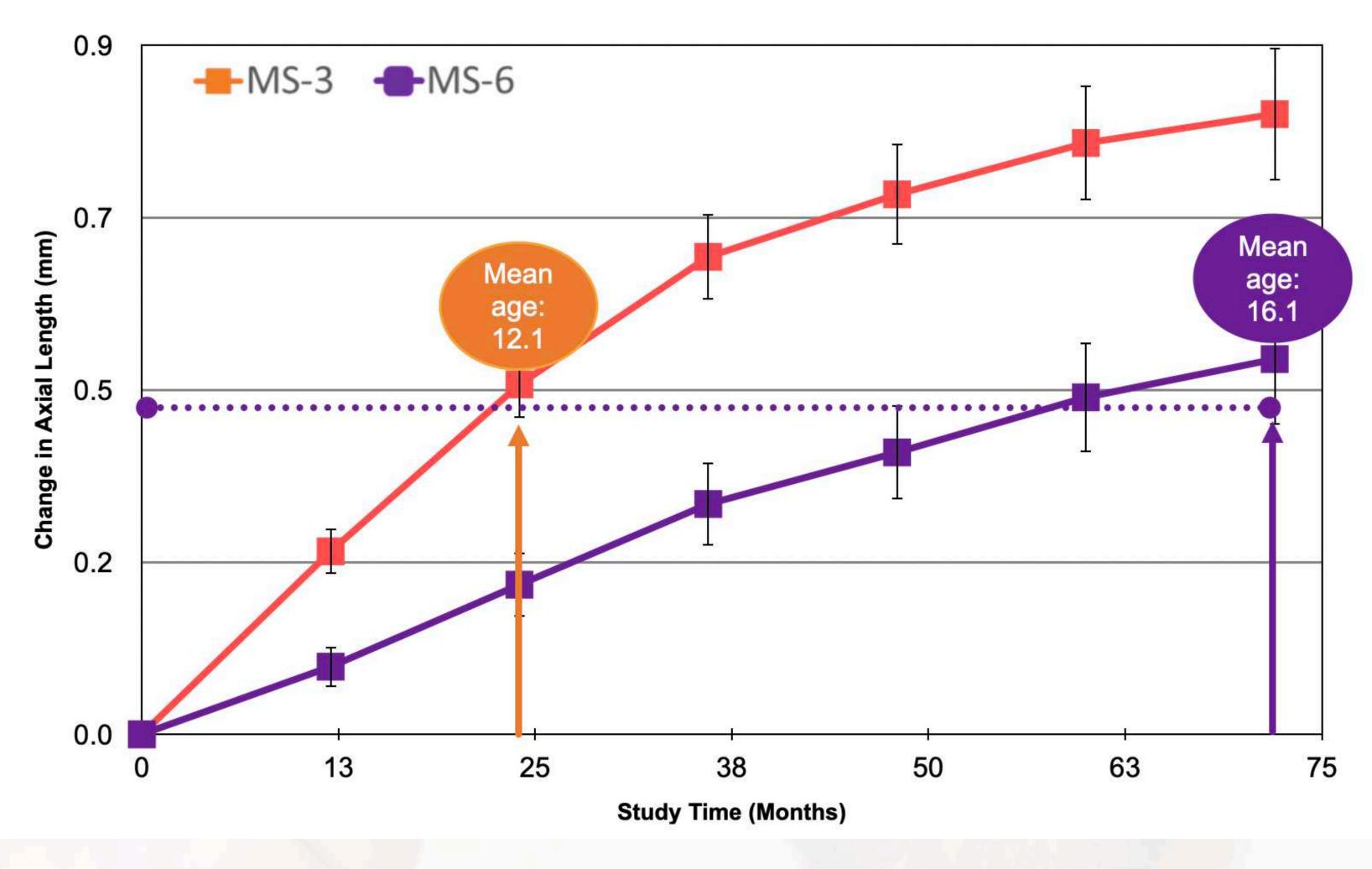


## Annualized change in axial length growth 0 to 84 months (Part 1, 2 & 3)



Includes all subjects who enrolled and completed a 6 or 12 month follow up in Part 3
Chamberlain P et al. Myopia Progression in Children on Cessation of Dual-Focus Contact Lens Wear: MiSight 1-day 7-year fir

### Six-year change in context - Eye Growth



- 6-year progression (AL) in MS-6 matches 2-year progression for Original Control<sup>1</sup>
- A 4-year gain in a key period for eye growth
- Similar finding observed with SERE

<sup>1</sup>Chamberlain P, Arumugam B, Jones D et al. Myopia Progression in Children wearing Dual-Focus Contact Lenses: 6-year findings. Optom Vi Sci 2020; 97(E-abstract): 200038.







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Home » FDA Approves Contact Lens for Myopia in Children

FDAnews Device Daily Bulletin
Medical Devices / Submissions and Approvals

### FDA Approves Contact Lens for Myopia in Children

Nov. 19, 2019



The FDA has granted approval to CooperVision's MiSight single-use contacts for slowing the progression of myopia in children.

The device, approved using the premarket approval pathway, is a disposable, soft contact lens that is indicated for slowing progression of nearsightedness in children aged 8 to 12.

The lens corrects the refractive error that impacts distance vision, similar to a standard corrective lens, and using peripheral rings in the lens to focus light on the back of the eye, which is believed to reduce progression of the condition.



## Paul Gifford's Summary BLINK vs. MiSight

(NS = not significant)	Diffrence in change to refraction (D) over 3 years Single Vision +1.50 CD MF	Difference in change to axial length (mm) over 3 years Single Vision +1.50 CD MF
Single Vision		
+1.50 CD MF	0.16 (NS) -	-0.07 (NS) -
+2.50 CD MF	0.46 (45%) 0.30 (37%)	-0.23 (37%) -0.16 (29%)
MiSight (Chamberlain et al 2019) <sup>3</sup>	0.67 (59%)	-0.28 (52%)



#### International Myopia Institute (IMI)

Industry Guidelines and Ethical Considerations for Myopia Control Report†



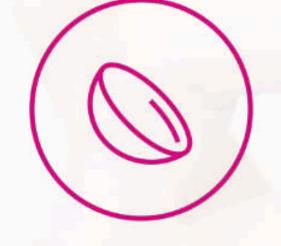
Patient has progressing myopia

Are there FDA-approved options available?

Prescribe
myopia control with
MiSight® 1 day\*



The child is 8 to 12 years old and -0.75 to -4.00 sphere with ≤ 0.75 D of cylinder at the initiation of treatment.



**MANAGEMENT** 

No

Yes

Does the off label† treatment have known and clinically significant treatment efficacy in a randomized controlled trial study design?

Has the patient's parent been informed and agreed to the off label† treatment?

Myopia
Management

No





**Soft Contact Lenses** 

rthokeratology

Atronino

Re-evaluate options

< 8 years old or > 12 years old and -0.50 or -4.25 or worse and/or > 0.75 D of cylinder at the initiation of treatment.

†Jones L et al. *Invest Ophthalmol Vis Sci.* 2019 Feb 28;60(3):M161-M183.

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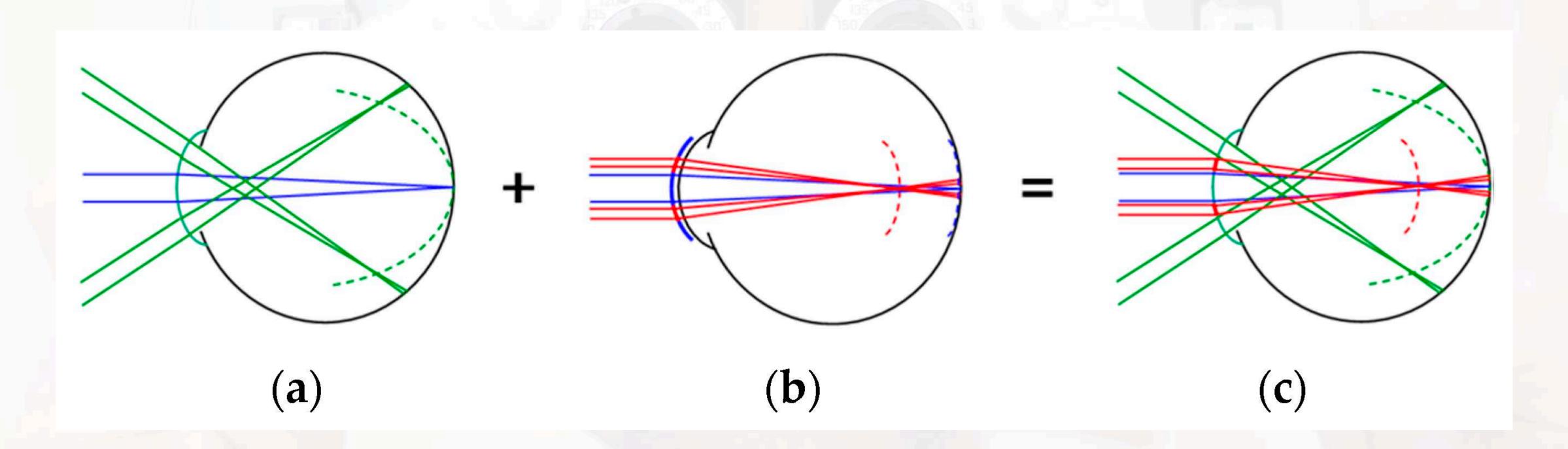
## GHOSTING





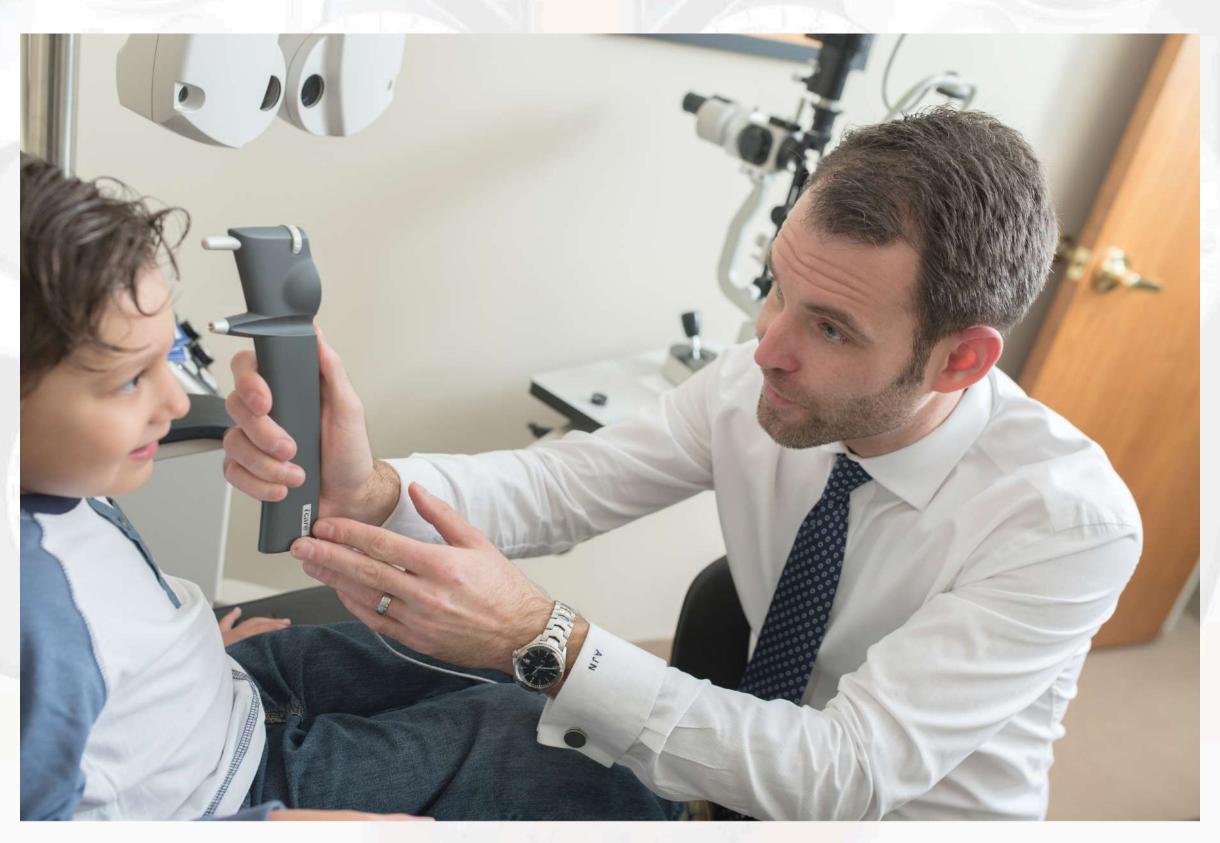
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### Explaining "How It Works" to the Parent





## PRESCRIBE - don't recommend









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### Profitability

\$\$\$\$

MM allowed us to drop EyeMed in 2019
1 MM patient = 10x VSP Patients
8% of my patients are in MM = 26% of the Revenue



## Fee Structure

KISS = Keep It Simple Stupid



# A parent/practice Informed Consent agreement strengthens the doctor and parent connection

- Ensures informed consent as recommended by International Myopia Institute
- Sets parent expectations and understanding.
- Standardizes messaging
- Functions as establishing a treatment protocol

#### <sup>1</sup>Brilliant Futures ™ Myopia Management Program Agreement Welcome to the Brilliant Futures Myopia Management Program

Offered By [practice name]!

#### 1. Introduction:

\*MiSight 1 day® contact lens is the only FDA approved² soft contact lens indicated to slow the progression of myopia (nearsightedness) in children, aged 8-12 at the initiation of treatment. Slowing of myopia progression is expected but not guaranteed. We are excited to journey together with your family in this program now and into the future. We are committed to be available along this journey and we ask for your commitment to the visit schedule and lens wear expectations.

#### 2. Wear Time

The children in the clinical trial were asked to wear their lenses ≥ 10 hours per day and ≥ 6 days per week. Most enjoyed wearing their lenses 11 to 14 hours per day.<sup>12</sup>

#### 3. Lens Wear - Application and Removal

To optimize a successful wearing experience, please review and follow the application and removal instructions provided separately.

If at any time during the program your child experiences eye pain, discomfort, and/or redness, your child should remove the lenses immediately and you should contact our practice to speak with your doctor (or if the office is closed, contact our after-hours phone number at [insert after hours phone number or telehealth if applicable or alternate means of emergency eye care]).

#### 4. Follow-Up Visits

This is an expected visit schedule to monitor your child's progression. Your doctor will determine the most appropriate interval and number of visits, all included in the program.

Year 1	Year 2 and onwards
Comprehensive Eye Exam	Comprehensive Eye Exam
Myopia Consultation Contact Lens Training	-
1 week	
1 month	,-
6 months	6 months

#### 5. Costs

1 The Brilliant Futures™

Doctor signature:

Brilliant Futures Myopia Mana
Certified Eye Care Profession.
[insert full name of ECP and p

Parent or legal guardian signa

monthly installments over 9 n

MiSight App. If your child shou

be refunded to you. After 60 d

month supply of lenses, free s

changes whether boxes are of

Diagnosis and treatment of ar

than myopia are not part of the

subject to additional expenses

I have read all the above info

maximize my child's success. abnormal were to arise. I hereby authorize Dr(s). [inse Management Program with M

Program fee (each year): \$\_\_\_\_.

¹ The Brilliant Futures™ trademark and MiSight® 1 day copyright are owned by CooperVision, Inc.
² Indications for use: MiSight® 1 day (omafilcon A) soft (hydrophilic) contact lenses for daily wear are indicated for the correction of myopic ametropia and for slowing the progression of myopia in children with non-diseased eyes, who at the initiation of treatment are 8-12 years of age and have a refraction of -0.75 to -4.00 diopters (spherical equivalent) with ≤ 0.75 diopters of astigmatism. The lens is to be discarded after each removal.

Date: \_\_\_ / \_\_\_ / \_\_\_\_

Chamberlain P, et al. A 3-year randomized clinical trial of MiSight® lenses for myopia control. Optom Vis Sci. 2019; 96(8):556-567.

<sup>3</sup>Chamberlain P et al. Further comparison of myopia progression in new and established myopia control treatment (MiSight® 1 day) groups. BCLA paper presentation 2019.







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PAYSIMPLE



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# Do you have the same or different fees for OrthoK/ MiSight/Atropine?



What do you say to parents that "push back" on prices?



What do you find more effect?
Consult the same day as the routine exam?
-orBringing them back?

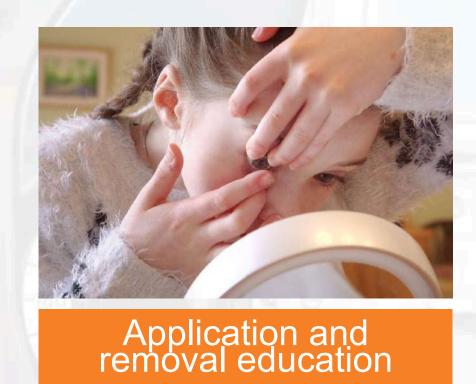
If you bring them back, is there a consultation fee?













Follow-up schedule

Offer myopia management as a program of care through the treatment period:

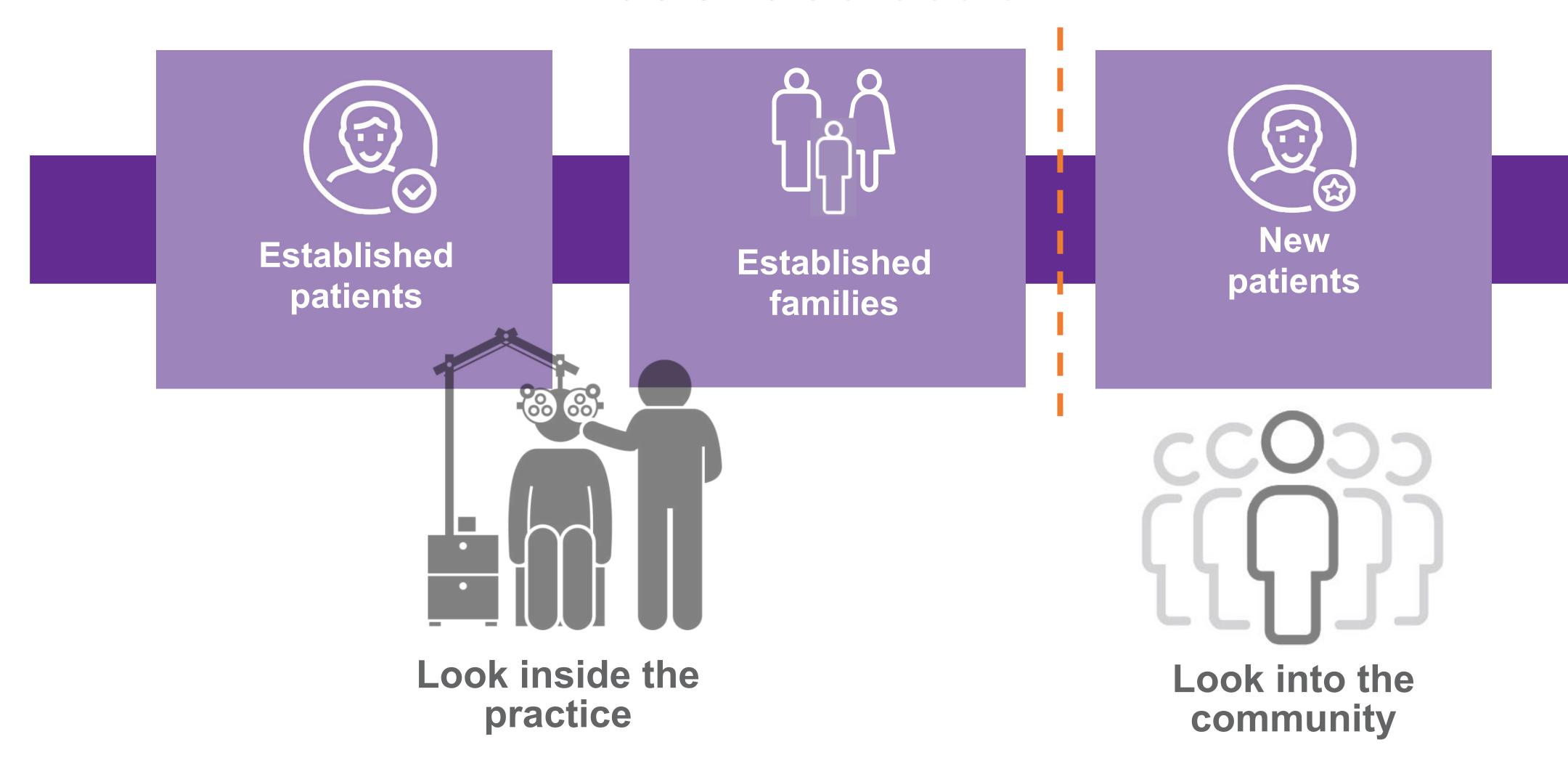
- Enable great outcomes through a transparent treatment protocol
- Build compliance through up front communication and appropriate follow up



What has been your best form of marketing (aside from word of mouth?)



#### Patient selection

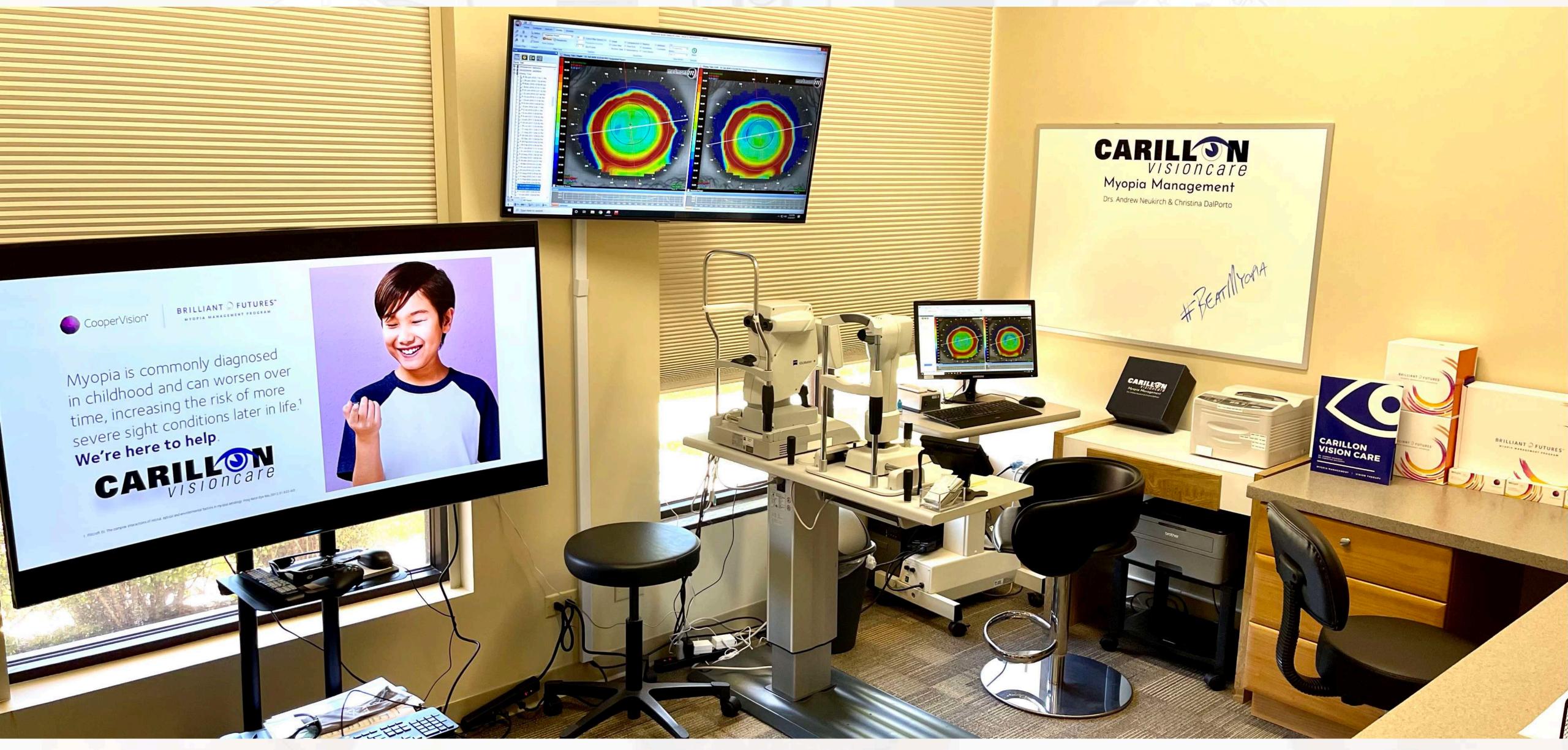














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#### THANK YOU!



NEUKIRCH MYOPIA MANAGEMENT

eyedocdrummer@gmail.com



### Move from just

## Correcting myopia → Treating myopia

THANK YOU!!!!

Andrew Neukirch, OD
Carillon Vision Care
Glenview, IL

eyedocdrummer@gmail.com



