

ARS Polling Instructions

Step 1 - Open the Vision West app and log in using your badge ID and zip code

Step 2 - Click on blue Education button to see All Education Sessions

Step 3 - Select the course you are attending from the list of sessions


Step 4 - Scroll to the bottom and select "Pre-course questions" prior to the session **AND** "Post-course questions" after the session

Step 5 - Complete the survey questions and Submit!

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.



Myopia Control

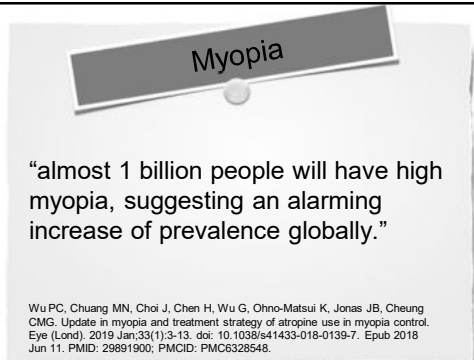
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brhue@drcontactlens.com
VEW 2024

Disclosures- Milton Hom

last 12 months	last 12 months	last 12 months
allergan/abbvie bausch health novartis sun pharma kala pharma tarsus pharma hovione scientia	silk-tech sydnexis topcon eyenovia bio laboratoires Thea aurinia pharma eyevance pharma	surface pharma nevakar, inc. visus therapeutics aperta biosciences astareal, inc. azura ophthalmics aldeyra therapeutics allysta

Disclosures- Brianna Rhue

- Co-Founder Dr. Contact Lens
- Medical Advisory Board- OSRX Pharmacy
- Principal Investigator- STAAR Study
- Sydnexis Advisory Board
- Medical Advisory Board- Visus
- PAC- Coopervision
- PAC- Johnson & Johnson



Myopia

“almost 1 billion people will have high myopia, suggesting an alarming increase of prevalence globally.”

Wu PC, Chuang MN, Choi J, Chen H, Wu G, Ohno-Matsui K, Jonas JB, Cheung CMG. Update in myopia and treatment strategy of atropine use in myopia control. Eye (Lond). 2019 Jan;33(1):3-13. doi: 10.1038/s41433-018-0139-7. Epub 2018 Jun 11. PMID: 29891900; PMCID: PMC6328548.

Myopia- Epidemic

2020

30% Myopic,
2% High Myopia

2050

50% Myopic,
10% High Myopia

In 2016 the WHO and the Brien Holden Vision Institute recognized myopia as a public health issue.³
This has all been accelerated post March 2020

Myopia is Booming and Historic Predictions Seem Modest

- The COVID-19 pandemic didn't just reshape how children learn, it reshaped their eyeballs.

MYOPIA IS BOOMING. WHAT CAN PREVENT IT?

1. Elm Dagen, Nature, Vol. 620, 30 May 2024, 107. <https://www.nature.com/articles/d41562-024-01174-2>

"The COVID-19 pandemic didn't just reshape how children learn and see the world. It transformed the shape of their eyeballs."

Reported a **near doubling** in the incidence of pathologically stretched eyes among six-year-olds compared with pre-pandemic levels.

"Widely cited projections in the mid-2010s *aimed* 2016, for example suggested that myopia would affect half of the world's population by mid-century, which would effectively double the incidence rate in less than four decades..."

Now, those alarming predictions seem much too modest, says Neelam Pawar, a pediatric ophthalmologist at the Aravind Eye Hospital in Tirunelveli, India. **"I don't think it will double," she says. "It will triple."**

COVID-19's Impact on Myopia Prevalence and Progression

There has been a dramatic break from long-time historical trends

Presented: American Academy of Ophthalmology Meeting, 2023 by Xi Zhang, The Chinese University of Hong Kong

Key Findings:

- Estimated Annual Incidence of Myopia, Estimated Annual Change in SER (D) and Estimated Annual Change in AL (mm) all significantly increased during COVID-19 to unprecedented levels.
- Prevalence of myopia jumped in 2020 and 2021 in each age group (6, 7 and 8 years old); 20,527 total subjects
- During COVID-19, outdoor time decreased approximately ~50%, and both near work and screen time increase approximately ~50% across age groups.
- SE and AL change broke with historic trends during COVID-19, dramatically accelerating.

Myopia Incidence and Progression During the COVID-19 Pandemic

SE and AL from 2015 to 2023

Myopia

"outdoor activities and decreasing the duration of near work have been reported to be effective in delaying myopia onset"

Wu PC, Chuang MN, Choi J, Chen H, Wu G, Ohno-Matsui K, Jonas JB, Cheung CMG. Update in myopia and treatment strategy of atropine use in myopia control. Eye (Lond). 2019 Jan;33(1):3-13. doi: 10.1038/s41433-018-0139-7. Epub 2018 Jun 11. PMID: 29891900; PMCID: PMC6328548.

Our Digital Era

Myopia

"studies have found that the lack of outdoor exposure to sunlight and limited physical activities can trigger [myopia]"

Kevin Chan

Chan K, Fischer A, Goldberg L, Lazar I. Today's Perspectives on Myopia Management. Modern Optometry. 2024 July/Aug. He X, Sankaridurg P, Wang J, et al. Time outdoors in reducing myopia. Ophthalmol. 2022;129(11):1245-1254.

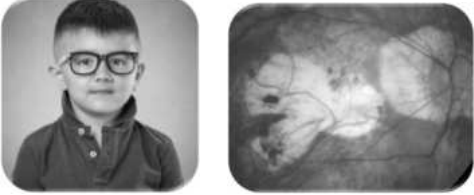
Myopia

“For better or worse, screen time is here to stay. I educate parents to encourage their children to spend as much time outdoors as possible, as this can delay the onset of myopia”

Andrew Fischer

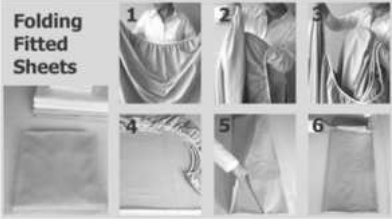
Chan K, Fischer A, Goldberg L, Lazar I. Today's Perspectives on Myopia Management. Modern Optometry. 2024 July/Aug.
He X, Sankaridurg P, Wang J, et al. Time outdoors in reducing myopia. Ophthalmol. 2022;129(11):1245-1254.

Myopia- So What?



Myopic Maculopathy

Folding Fitted Sheets



When to start?

Myopia

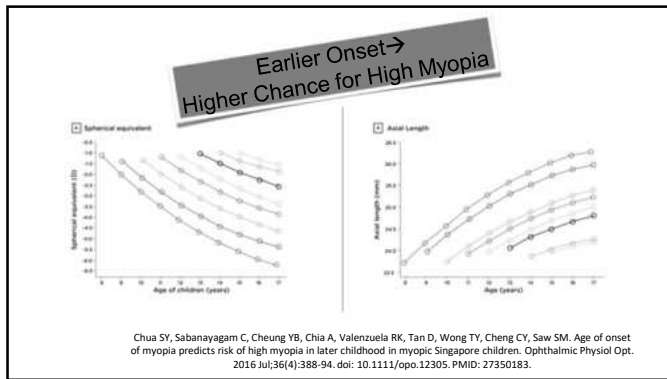
“delaying myopia onset and retarding myopia progression in school-aged children is potentially the key to reduce high myopia later in life.”

Wu PC, Chuang MN, Choi J, Chen H, Wu G, Ohno-Matsui K, Jonas JB, Cheung CMG. Update in myopia and treatment strategy of atropine use in myopia control. Eye (Lond). 2019 Jan;33(1):3-13. doi: 10.1038/s41433-018-0139-7. Epub 2018 Jun 11. PMID: 29891900; PMCID: PMC6328548.

Risk of Visual Impairment by Age 75

AL < 24 mm	24 ≤ AL < 26 mm	26 ≤ AL < 28 mm	28 ≤ AL < 30 mm	AL ≥ 30 mm
6.9%	3.8%	25.4%	26.6%	90.6%

Tideman JW, Snabel MC, Tedja MS et al. Association of Axial Length With Risk of Uncorrectable Visual Impairment for Europeans With Myopia. JAMA Ophthalmology. 2016;134:1355-63.



Age of Onset

Children that develop myopia by age 7 to 9 have a 54% to 80% chance of progressing past -5.00

Hu Y, Ding X, Guo X, Chen Y, Zhang J, He M. Association of Age at Myopia Onset With Risk of High Myopia in Adulthood in a 12-Year Follow-up of a Chinese Cohort. *JAMA Ophthalmol.* 2020;138(11):1129-1134. doi:10.1001/jamaophthalmol.2020.3451

International Myopia Institute (IMI)

Age (years)	Refraction
6	+0.75 D or less
7 to 8	+0.50 or less
9 to 10	+0.25 D or less
11	emmetropia

Gifford KL, Richdale K, Kang P, Aller TA, Lam CS, Liu YM, Michaud L, Mulder J, Orr JB, Rose KA, Saunders KJ, Seidel D, Tideman JW, Sankaridurg P. IMI - Clinical Management Guidelines Report. *Invest Ophthalmol Vis Sci.* 2019 Feb 28;60(3):M184-M203. doi: 10.1167/iov.18-25977. PMID: 30817832.

Pre-Myopes

≡ < +0.75 @ 6-7yo is high risk

- Independent of family history, ethnicity and other optical and environmental factors.⁷
- Fastest change in refraction is year before onset.
- Watch for eso and lag of accommodation

Jones-Jordan LA, Sinnott LT, Manny RE, Cotter SA, Kleinstein RN, Mutti DO, Twelker JD, Zadnik K. Ethnicity (CLE), Refractive Error Study Group. Early Childhood Refractive Error and Parental History of Myopia as Predictors of Myopia. *Invest Ophthalmol Vis Sci.* 2010;51(1):115-21

Myopia

“The decision to initiate myopia management is therefore very simple—initiate treatment when myopia is first diagnosed.”

Daniel Tillia

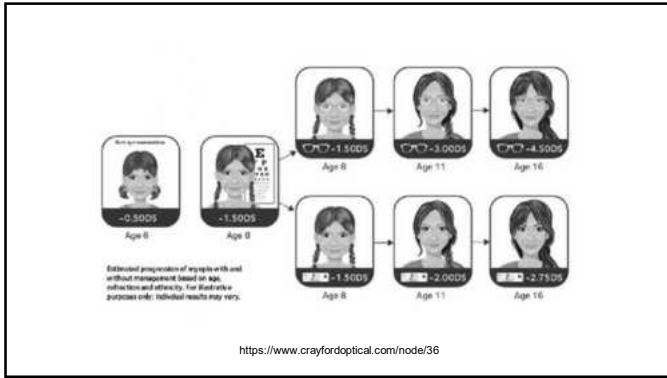
Tillia D. When to Initiate Myopia Management Intervention and When to Stop. *Review of Myopia Management.* <https://reviewofmm.com/when-to-initiate-myopia-management-intervention-and-when-to-stop/>

Myopia

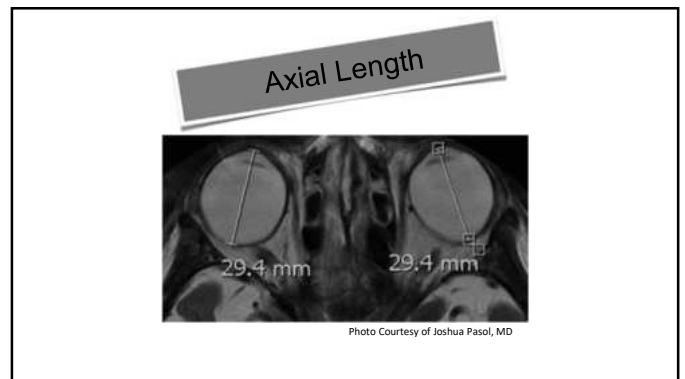
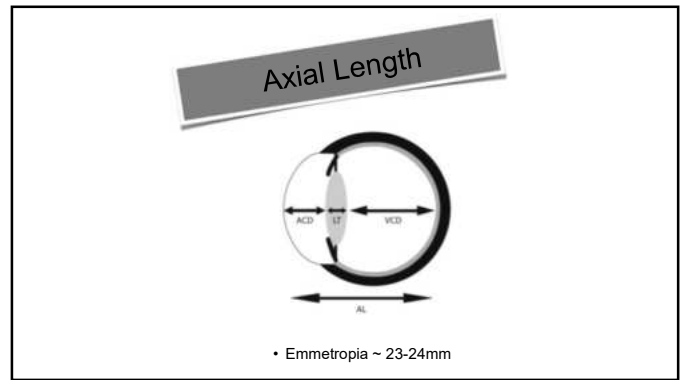
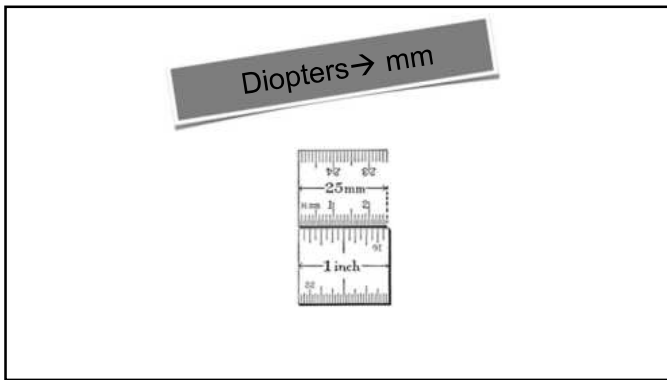
“We have to stress that their 5-year-old child who is -0.50 D has a high risk of becoming -4.00 D to -6.00 D”

Laura Goldberg

Chan K, Fischer A, Goldberg L, Lazar I. Today's Perspectives on Myopia Management. *Modern Optometry.* 2024 July/Aug.

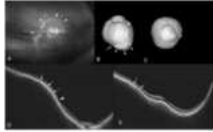
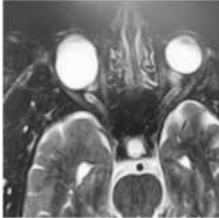


Axial Length



Axial Length

- Heavy Eye Syndrome
- Kinked Optic Nerves

Shinohara, K. et al. "Retina Posterior Staphylomas in Pathologic Myopia Imaged by Widefield Optical Coherence Tomography" (2017)

Image Courtesy Joshua Pissol, MD

Axial Length Norms*

Age	Girls	Boys	European	Chinese
6-7 yo	22.75 mm	23.05 mm	22.33 mm	22.77 mm
8-9 yo	23.29 mm	23.65 mm	23.05 mm	24.02 mm
10-11 yo	23.76 mm	24.09 mm	-	-
12-14 yo	23.80 mm	24.25 mm	23.40 mm	24.69 mm

*Caution must be taken when applying this data clinically, as many confounding factors affect these norms, including but not limited to, gender and racial background.

Fuensanta A. Vera-Diaz, OD, PhD, FAAO. The Importance of Measuring Axial Length. Review of Myopia Management. August 9, 2020 <https://reviewofmm.com/the-importance-of-measuring-axial-length-when-managing-childhood-myopia/>

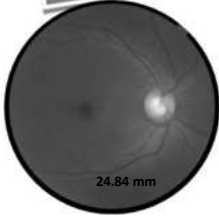
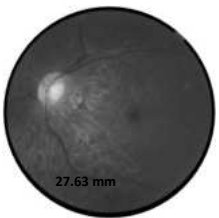
Axial Length & Refractive Error

	Refractive Error	Axial Length
OD	-4.75-0.75x010	23.91
OS	-5.00-0.75x180	24.11

	Refractive Error	Axial Length
OD	-5.50-0.50x180	27.28
OS	-5.50-0.50x165	27.24

*Refractive error does not correlate with axial length

Axial Length & Myopic Disease

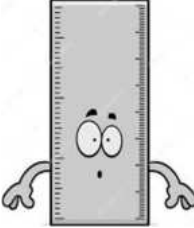



Diopters are easy to measure, but myopia management is about axial length control

Axial Length vs Refraction

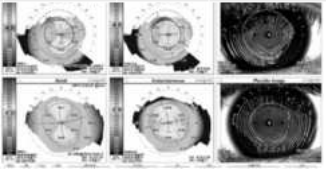
- 5 Year old- Parents worried about retina and wanted second opinion on what to do

- Current Spectacle:
 - OD: -8.00-0.75x164 20/100
 - OS: -5.00-1.75x178 20/60
- Refraction:
 - OD: -10.00-2.00x180 20/60-
 - OS: -5.50-2.00x010 20/50
- Cyclo:
 - OD: -10.00-2.00x180
 - OS: -5.50-2.25x010



5 Year Old

	Refractive Error	Axial Length	K's
OD	-10.00-2.00x180	25.30	49.93@089/47.74@179
OS	-5.50-2.00x010	24.73	48.28@097/45.73@007



Calculating Axial Length

Axial Length Estimator

Right Eye	Left Eye
25.30	24.73

<https://coopervision.co.uk/practitioner/clinical-resources/myopia-in-children/axial-length-estimator/calculator>

5 Year Old

TX: Update RX parents education full time wear
 Start Atropine 0.025% 1 drop QHS
 RTC 4 weeks atropine follow up then every 3 months

9 Year Old- Can't See the Board

OD: 20/40 OD: -1.00
 OS: 20/40- OS: -1.25

OD: 43.83@086/42.40@176
 OS: 44.00@079/42.99@169

Refraction & Axial Length

OD: 25.01 OD: 24.83

Refraction & Axial Length

Myopia.care

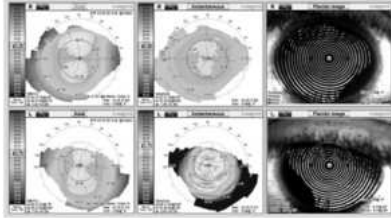
Treatment

Parents opted for dual-focus contact lenses and began treatment that day

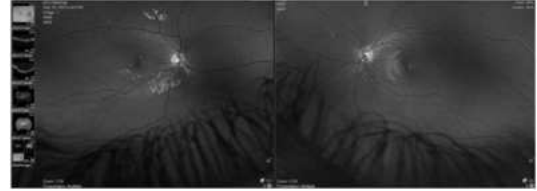
11 YO Second Opinion

OD: 20/50- OD: -1.00
OS: 20/400- OS: -4.50

OD: 43.87@086/42.40@176
OS: 44.00@079/42.99@169



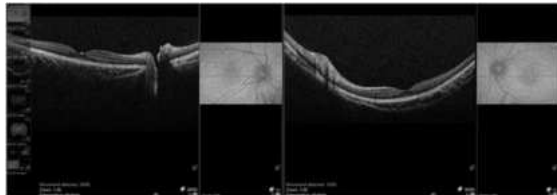
11 YO



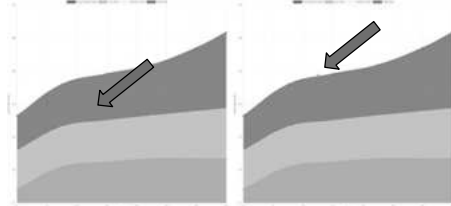
OD: 23.89

OS: 24.89

11 YO



11 YO



11 YO

Parents wanted to discuss with her ophthalmologist again on what to do


Refraction & Axial Length



Treatment Goals

Goals

Keep myopia below -3.00
and
Axial length below 26mm




- ## Goals
- Present the options to the parent and child and decide together what is best
 - Set realistic expectations for treatment
 - Atropine, MF contacts, Ortho-k all have around 50%-70% efficacy *depending on studies
 - Children will still likely progress depending on age of onset
 - Which ever method you choose you are providing evidence based myopia treatment
 - Atropine should be reserved for younger children and contacts lenses should be fit as soon as patient and parent are ready to help slow progression even more
 - Dual treatments are becoming more common

Treatment Options


Single Vision Lenses

- Single vision glasses & contacts have **NO** effect on slowing progression
 - 80% of practitioners acknowledged this
- 64% of myopic children around the world are treated with a single vision option





James Wolffsohn: Global trends in myopia management attitudes and strategies in clinical practice – 2019 Update

Get Outside & Play



40- 80 minutes

↓23% to 50%

Dharani, R et al. "Comparison of Measurements of Time Outdoors and Light Levels as Risk Factors for Myopia in Young Singapore Children." Eye 26.7 (2012): 911-918.

Screen Time Recommendations

American Academy of Pediatrics

Age Group	Recommendation
18 months or younger	No screens are still best. The exception is live video chat with family and friends.
18 months to 2 years	Limit screen time and avoid solo use. Choose high-quality educational programming, and watch with kids to ensure understanding.
2 to 5 years	Limit screen time to an hour a day. Parents should watch, understand, and participate in their world. Do not let screen time affect sleep, exercise or other behaviors.
6 or older	Place consistent limits on the time spent and types of media.

TOUCH GRASS

Send grass anywhere!

- 1. Write a note**
We ship all of our grass with a custom note. You get to write whatever you'd like to say to the recipient.
- 2. Give us an address**
Send people your grass to a friend or foe who always needs to get outside. But you may also make some for yourself!
- 3. Send anonymously**
If you're sending grass to a friend who is an especially hard-to-please grass person, you can do so anonymously.

Spectacles

Optical Correction

Spectacle Myopia Control

	Tech	Duration	% Reduction
MiyoSight (Hoya)	Defocus incorporated multiple segments (DIMS)	2y	Diopters: 52% Axial: 62%
Stellest (Essilor)	Highly aspherical lenslet target (HALT)	2y	Diopters: 67% Axial: 60%
SightGlass	Diffusion optics technology (DOT)	1y (36m)	Diopters: 74%/59% Axial: 50%/33%

Lam C.S.Y., Tang WC, Tse DY, Lee R.P.K., Chun R.K.M., Hasegawa K, et al. Defocus Incorporated Multiple Segments (DIMS) spectacle lenses slow myopia progression: a 2-year randomised clinical trial. Br J Ophthalmol. 2019.
Black K. Essilor's Reveals Results of "Game-changing" Stellest Lens for Myopia. <https://www.mivision.com.au/2020/09/essilor-reveals-results-of-game-changing-stellest-lens-for-myopia/>. mivision. 2020.
Rappon J, Chung C, Young G, et al Control of myopia using diffusion optics spectacle lenses: 12-month results of a randomised controlled, efficacy and safety study (CYPRESS) British Journal of Ophthalmology Published Online First: 01 September 2022.

Hoya MiyoSight

Defocus Incorporated Multiple Segments (DIMS)

Central zone (9 mm in diameter) for distance refractive correction

1.0mm

3.0mm

About 400 multiple defocus segments (13 mm in diameter) surrounding the central zone


Lam C.S.Y., Tang WC, Tse DY, Lee R.P.K., Chun R.K.M., Hasegawa K, et al. Defocus Incorporated Multiple Segments (DIMS) spectacle lenses slow myopia progression: a 2-year randomised clinical trial. Br J Ophthalmol. 2019.

Spectacles

160 children
 DIMS vs Single vision
 2 years
 -0.41 D DIMS vs. -0.85 D SV 52%
 Axial: 0.21mm DIMS vs. 0.55mm SV 62%

Lam C.S.Y., Tang W.C., Tse D.Y., Lee R.P.K., Chun R.K.M., Hasegawa K. et al. Defocus Incorporated Multiple Segments (DIMS) spectacle lenses slow myopia progression: a 2-year randomised clinical trial. Br J Ophthalmol. 2019.

Essilor Stellest
 Highly aspherical lenslet (HAL)



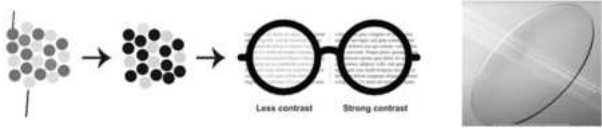
Compared to single vision lenses, when worn by children at least 12 hours per day every day. Bao, J., Huang, Y., Li, X., Yang, A., Zhou, F., Wu, J., Wang, C., Li, Y., Lim, E.W., Spiegel, D.P., Drobe, B., Chen, H., 2022. Spectacle Lenses With Aspherical Lenslets for Myopia Control vs Single-Vision Spectacle Lenses: A Randomized Clinical Trial. JAMA Ophthalmol. 140(5), 472-478. <https://doi.org/10.1001/jamaophthalmol.2022.0401>.

SightGlass



<https://www.sightglassvision.com/>

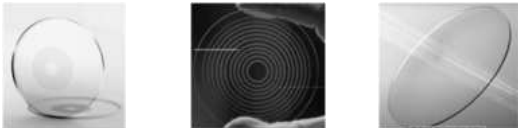
SightGlass
 Diffusion optics technology (DOT)



Different types of cones: L (OPN1LW), M (OPN1MW) and S (MVVVA)
 High contrast stimulates axial elongation in M and S cones
 DOT reduces contrast

Rappon J, Chung C, Young G, et al Control of myopia using diffusion optics spectacle lenses: 12-month results of a randomised controlled, efficacy and safety study (CYPRESS) British Journal of Ophthalmology Published Online First: 01 September 2022.

“ would younger children adhere well to wearing spectacles with glare from the edges of the lenslets and degraded vision...when the child’s gaze wanders away...?”



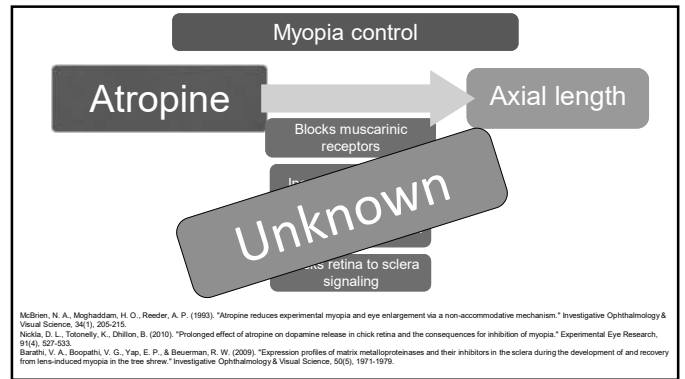
Musch DC, Archer SM. Clinical Relevance of Myopia Control With Specialized Spectacles. JAMA Ophthalmol. 2022 May 1;140(5):478-479. doi: 10.1001/jamaophthalmol.2022.0533. PMID: 35357397.

Atropine

Myopia

“Excessive expansion of Bruch’s membrane...in response to peripheral hyperopic defocus...may be one of the mechanisms leading to the uncontrolled axial elongation”

Wu PC, Chuang MN, Choi J, Chen H, Wu G, Ohno-Matsui K, Jonas JB, Cheung CMG. Update in myopia and treatment strategy of atropine use in myopia control. Eye (Lond). 2019 Jan;33(1):3-13. doi: 10.1038/s41433-018-0139-7. Epub 2018 Jun 11. PMID: 29891900; PMCID: PMC6328548.



Motor control

“When the retina detects defocus, it can direct the choroid...to inflate or deflate, thereby moving the retina forward or back toward the image plane.”

Wallman J, Winawer J. Homeostasis of eye growth and the question of myopia. Neuron. 2004 Aug 19;43(4):447-68. doi: 10.1016/j.neuron.2004.08.008.

Selected Clinical trials				
	Route	Ages	Length	% atropine
Vyluma (Nevakar) Preservative free low pH formulation	Drop	3-17y	3y	0.01% 0.02%
Eyenovia	Optejet	3-12y	3y	0.1% 0.01%
Sydnexis Preserved, physiologically neutral pH	Drop	3-14y	3y+1y	0.01% 0.03%

Atropine

1% 0.5% 0.1% 0.05% 0.03% 0.02% 0.01%

Vyluma

eyenovia SYDNEKIS eyenovia

Most effective Diopters/Axial length

Most side effects

Least effective Diopters/Axial length

Least side effects

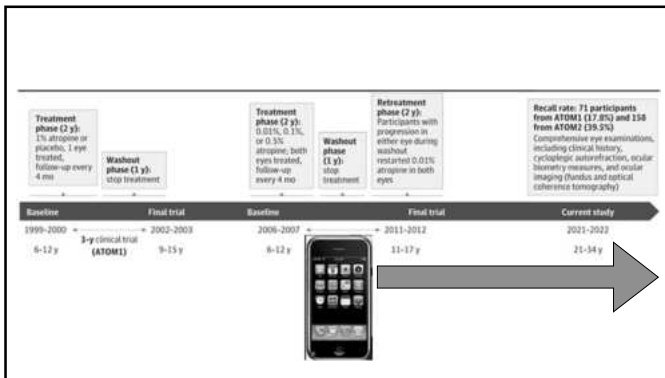
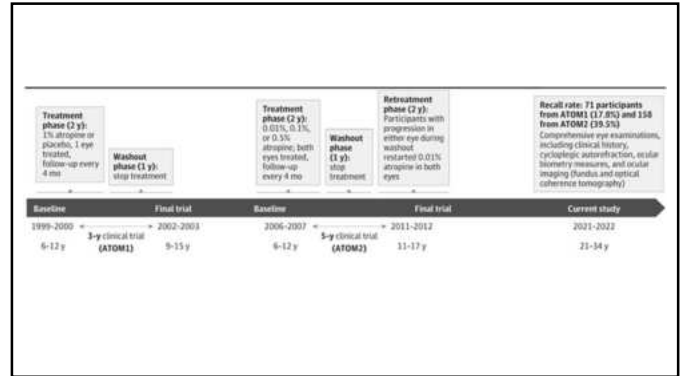
Atropine Treatment Protocol

- 1 drop 0.025% or 0.05%(QHS) daily
- Can start as young as 3 years old
- Slows rate of progression by 30% - 70% concentration dependent
- In the first 6 months, may still see progression

Look for a 2mm dilation in pupil

Atropine Evaluation Schedule

- 4 week follow up (make sure they got their drops and are using them)
- 3 month after starting to ensure no side effects/compliance
- Start assessing treatment efficacy at 6 months
- Assess for progression every 6 months
 - VA
 - Binocular vision
 - A-scan
 - Refraction/Topography
 - If >0.25-0.50 D of change at 1year consider changing dosage
- If stable for 2 years or past the age of 16 → Taper



Atropine 0.01% is Effective in Preventing Myopia

- Using Atropine 0.01% after only 6 months of treatment showed benefits in preventing myopic shift, axial elongation and myopia onset in pre-myopic children.



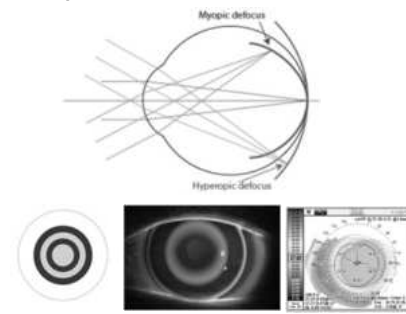
Conclusion: Within the limits of only two consecutive 6-month observation periods, 0.01% atropine eye drops effectively prevented myopic shift, axial elongation, and myopia onset in pre-myopic children.

Key Take Aways:

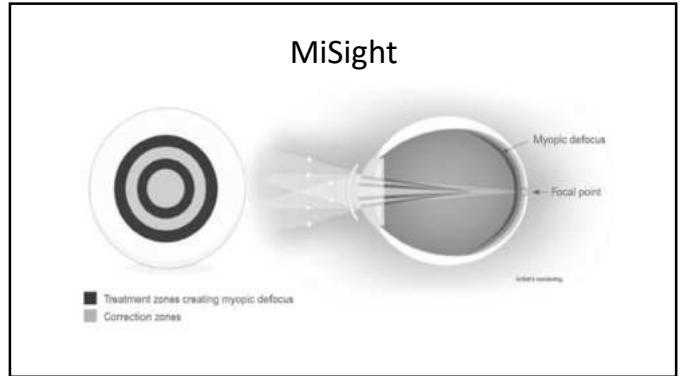
The proportion of myopia onset was 12% vs. 36% and 13% vs. 41% in periods 1 and 2, respectively, and the corresponding results of the fast myopic shift of 40% vs. 76% and 40% vs. 72% (p < .001). "Using a prospective, randomized, double-masked, placebo controlled, and crossover trial design, this clinical study demonstrated that once-nightly administration of 0.01% atropine eye drops could prevent myopic shift and axial elongation and reduce the proportion of myopia onset and fast myopic shift in pre-myopic Chinese schoolchildren compared with placebo treatment over two consecutive 6-month visits."

Controlling Peripheral Defocus

Controlling Peripheral Focus



Dual Focus CL



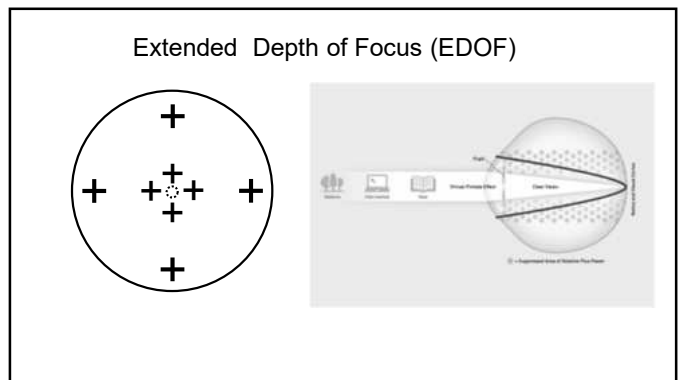
MiSight Study

- Three-year randomized, controlled clinical trial (4 study sites)
- 135 children ages 8 to 12 at the start of treatment
- MiSight vs. conventional soft contact lens
- Results – (for the full three-year period) progression in myopia of those wearing MiSight lenses was less than those wearing conventional soft contact lenses
- In addition, subjects who used MiSight had less change in the axial length of the eyeball at each annual checkup.
- There were no serious ocular adverse events in either arm of the study

Slowed progression by:

59% cycloplegic spherical equivalent (SE) and **52%** mean axial elongation of the eye

<https://www.fda.gov/news-events/press-announcements/fda-approves-first-contact-lens-indicated-slow-progression-nearsightedness-children>



NaturalVue

NaturalVue® Enhanced Multifocal™ Lens Specifications	
Power Range	Full Power Range: +4.00 to -12.00 in 0.25D steps
ADD	Single Extended Depth of Focus (E-DOF) design, incorporating ADD power increments of 0.5 to 3.00
Design	Extended Depth of Focus (Center Distance)
Base Curve	A.3
Material	14.5
Pack Size	30 pack (18h, 30 and 60 pack) format
Visibility Test	Light blue
UV Protection	Class 2 UV Blocker: The UV blocking material (BFL) in the UVB range of 290nm to 315nm and UVA in the UVA range of 315nm to 400nm.
Wearability	Single-use daily wear
Replacement Schedule	Daily disposable
Material	Hydromax A (38% water)

The diagram illustrates the NaturalVue lens design. It shows a lens with a central zone and an outer zone. Light rays from a distant object pass through the lens and are focused over an extended range of distances on the retina, labeled 'Near Vision' and 'Far Vision'. A legend below the diagram identifies 'DESIGNED: Multifocal lens', 'INDUCED: Initial Blur', 'PERCEIVED: In the Brain', and 'CREATED: Edge in the Eye'.

Dual Focus Soft Contact Lens Evaluation Schedule

- Year 1 evaluation schedule
 - 1 week
 - Enroll in the program
 - 1 month
 - Can be done in the office (highly preferred) or via telemedicine)
 - Then every 3 months for the first year
- Year 2 Follow up schedule
 - Annual exam
 - Every 6 months if progression has slowed <-0.50D

The Future of Soft Contact lenses for Myopia Management

September 8, 2021

Johnson & Johnson Vision Receives Approval in Canada for ACUVUE® Abiliti™ 1-Day Soft Therapeutic Lenses for Myopia Management



Menicon Bloom Day™ Menicon BLOOM™



Myoptechs™



Benefits

- Soft daily contact lens (DCL) approval for myopia control in Europe
- Myopia control and myopia correction combined
- Lens fitting and progress monitoring via optimized, easy-to-use Easyfit module
- Direct contact and monitoring of asthenia through the Menicon Bloom eye and Menicon Bloom Easyfit
- Clear alignment between eye care specialist and patient through informed consent
- Very hygienic, a new set of lenses every day



Astigmatism >1.25

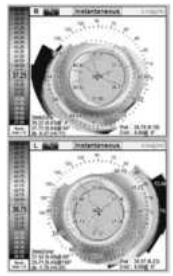
- Extended depth of focus
- Center distance
- Can fit empirically with K's and refraction
- Hybrid Lenses
- Ortho-k



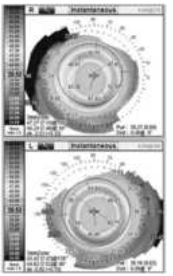

Ortho-K

Which is which?

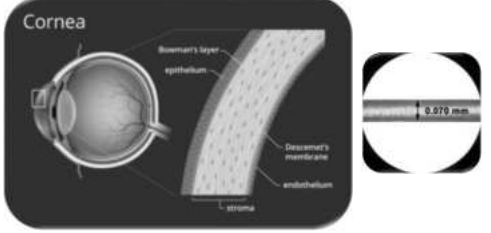
LASIK



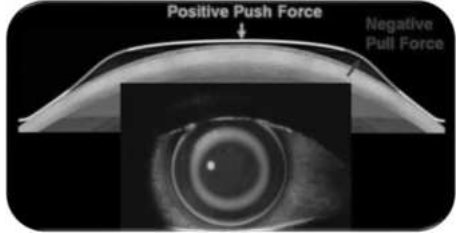
ORTHO-K



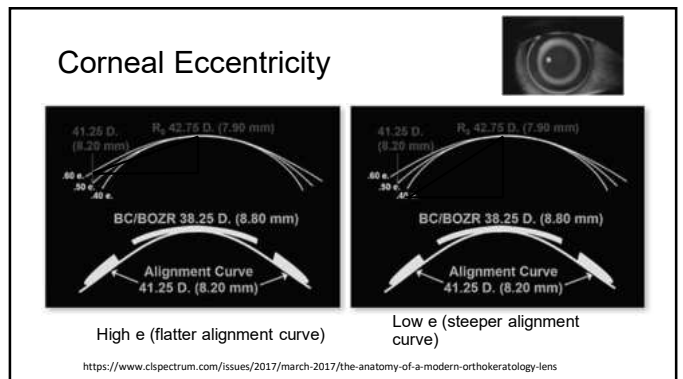
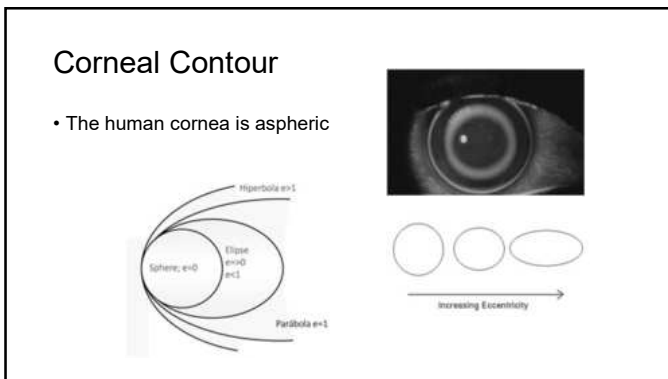
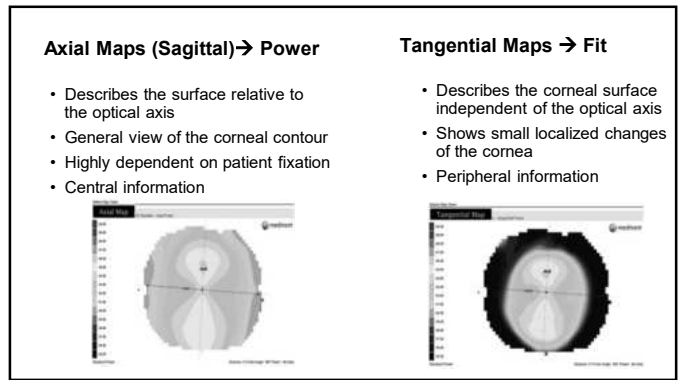
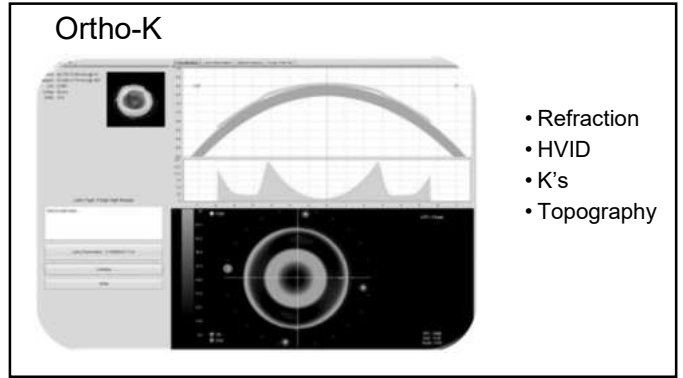
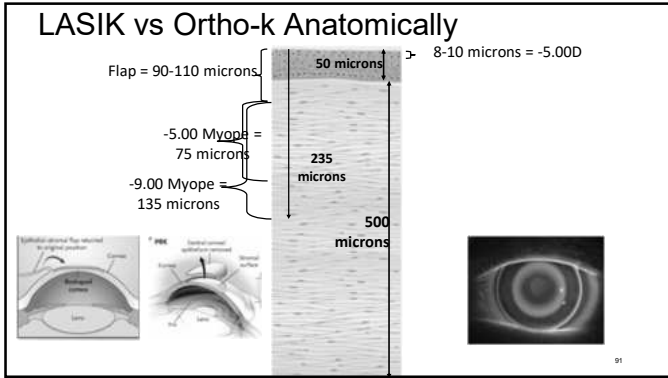
Ortho-k and the Cornea



Ortho-K

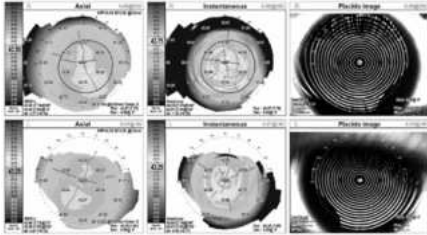


- NaFL not visible if tear lens is <20 microns

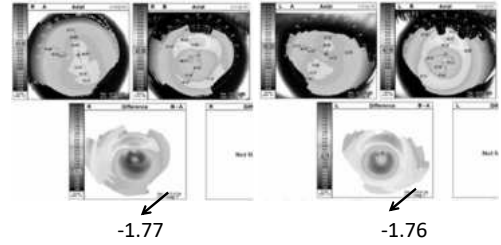


10 Year Old- Mother is a -6.00

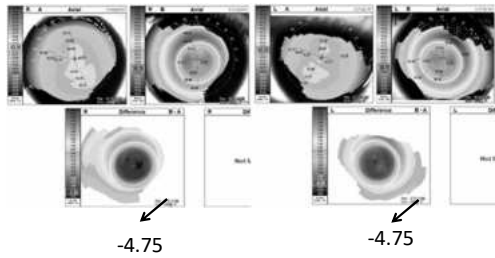
- OD: -4.75 AL: 25.15
- OS: -4.50 AL: 25.46



1 Day
Difference Maps

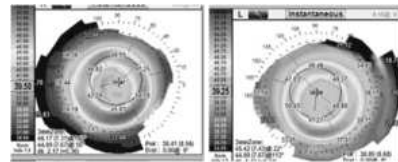


1 Week
Difference Maps



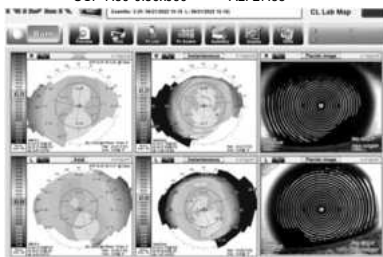
1 year, 2 year, 3 year follow up

	Enterin g Rx	1 st AL	Year 1	AL	Year 2	AL	Year 3	AL
OD	-4.75	25.19	pl	25.25	pl	25.73	pl	25.62
OS	-4.50	25.46	pl	25.49	pl	25.88	pl	26.10

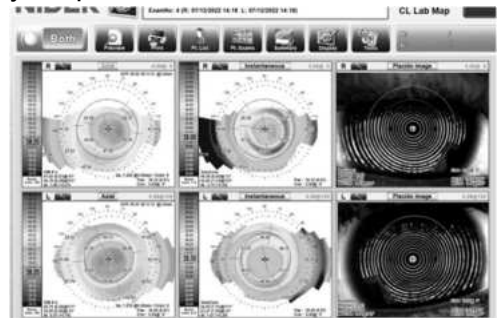


11 year old

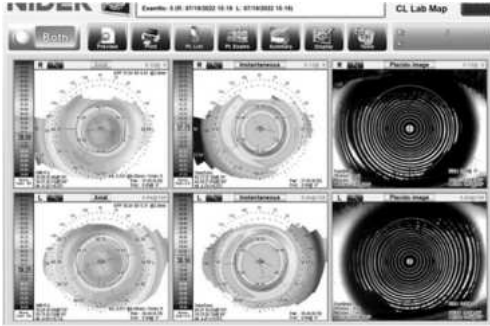
- OD: -7.50 AL: 27.20
- OS: -7.50-0.50x060 AL: 27.35



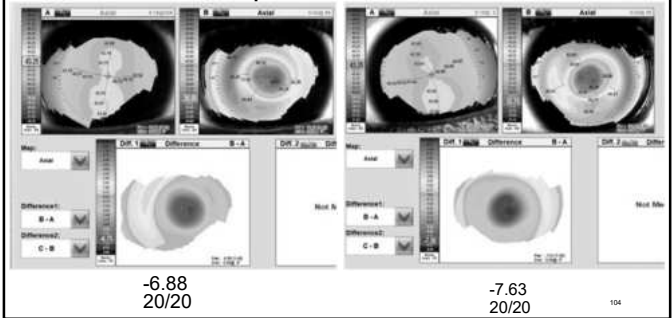
1 Day Map



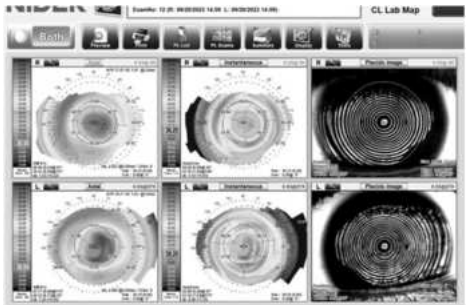
1 Week Map



Difference Maps



1 year map



Ortho K Evaluation Schedule

- Year 1 follow up/evaluation schedule
 - 1 day
 - 1 week
 - 1 month
 - Every 3 months
- Year 2 follow up/evaluation schedule
 - Annual visit (we replace lenses every year no questions asked)
 - Every 6 months if progression has slowed to $-0.50D$



When is my child done with treatment?

- When they reach ocular maturity or are ready for Refractive Stability
 - No change in MRX of more than -0.50 in approx. 1 year

Developing Your Program

- Develop your program before you start treating your first patient
 - How will you present the options
 - Different visit- Myopia Consultation
 - This is a non-covered service billed outside of any managed care insurance or vision program
 - Evaluate Chair Cost- what you charge maybe different from what your neighbor charges
 - Global fee
 - Per visit fee
 - Missed follow up visits?
 - Handouts
 - Contracts
 - Compounding pharmacy
 - Ortho-k training/ in office fitting vs empirical fitting


Who is going to be your main referral source?

YOU!

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Other Referral Sources


- Pediatricians
- Pediatric OMD's
- Lasik Surgeons
- Cataract Surgeons
- Retinal Specialists
- Other OD's
- VT Clinics
- Moms (PTO)
- School Nurses



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Letters Back To Their Pediatrician


- Once you do have a patient referral ensure you send a nice treatment plan letter back.
- Patient feedback loop



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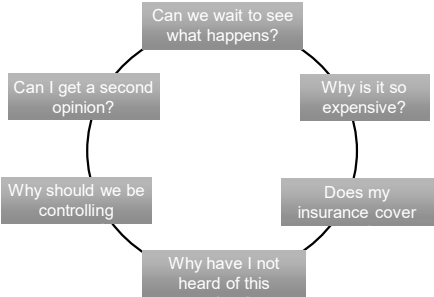
Your Pitch

- You have a myopia clinic already ... Take the time and go after it
- Discuss pros and cons of treatment
- Don't get discouraged by a no
- Have both parents present at consult



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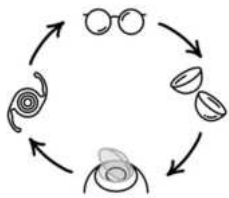
Be Ready for Parent Questions!



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Completing the Circle of Myopia Management

- Pediatrician
- First pair of glasses
- Fitted with contacts (if right for the child)
- Interested in Refractive Surgery
 - LASIK (SMILE)
 - PRK
 - ICL
- Refractive Cataract Surgery
- Retinal specialist



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Slide 111

WM[NJO] Mention of slowing progression not allowed in US. Can we get a version that removes "designed to slow progression myopia (nearsightedness). The rest of the letter will be fine!

Waugh, Michelle [VISAU Non-J&J], 2023-08-01T04:09:14.423

Where to Start... Your Team

- Challenge yourself to be 1% better than you were coming to this meeting
- Staff Meeting- they want to know where you were and what you learned
- 1 year plan broken into 90 day focused sessions
 - Education-
 - Fee structure, staff training
 - Website, brochures, welcome kits
 - Find your tribe



Summary



- Do something!
 - Educate
 - Refer them out
 - Manage it
- Assess risk factors
- Discuss options
 - No cookbook approach (yet)
 - Decide treatment on patients wants and needs
 - Actively manage progression
- Don't dabble in Myopia Management!



Thank You!

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 brhue@drcontactlens.com

VEE 2025

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.



ARS Polling Instructions

- Step 1 - Open the Vision West app and log in using your badge ID and zip code
- Step 2 - Click on blue Education button to see All Education Sessions
- Step 3 - Select the course you are attending from the list of sessions
- Step 4 - Scroll to the bottom and select "Pre-course questions" prior to the session **AND** "Post-course questions" after the session
- Step 5 - Complete the survey questions and Submit!