# Stellest<sub>®</sub>

# Prescribing Essilor® Stellest® lenses



This material is for eye care professionals only, and should not be disclosed to the general public. ©Essilor® International - All Rights reserved - Do not copy or distribute - September 2024 Essilor® Stellest® lenses are currently not available in all countries

# IDENTIFICATION OF MYOPIA RISK FACTORS

Myopia risk factor categorization is utilized under license from Myopia Profile Pty Ltd

1	LOW RISK		HIGH RISK
Current age of child <sup>1-4</sup>	16 years or older	10 to 16 years	9 years old or younger
Family history of myopia <sup>1,5</sup>	No myopic parents	One myopic parent	Both parents myopic
Time spent outdoors <sup>1,5-7</sup>	2.5+ hours / day	1.5 to 2.5+ hours / day	0 to 1.5 hours / day
Time spent on near work (outside of school hours) <sup>1,6,8</sup>	0 to 2 hours / day	2 to 3 hours / day	3+ hours / day
Refractive error (for risk of myopia onset)°			<+0.75 at 6-7 years

# ESSILOR® STELLEST® LENS

Essilor®'s latest generation of spectacle lenses, designed to control myopia progression and axial elongation while correcting refractive error in myopic children.

The Essilor<sup>®</sup> Stellest<sup>®</sup> lens comprises of a single vision zone and a myopia control zone made with Highly Aspherical Lenslet Target (H.A.L.T.) technology.

# ESSILOR® STELLEST® LENSES MECHANISM OF ACTION

H.A.L.T. technology comprises of 1021 contiguous highly aspherical lenslets, arranged over 11 rings.

Light rays passing through the aspherical lenslets create a volume of non focused light in front of the retina and which follows the shape of a child's theoretical myopic retina.





# LENSLET DISTRIBUTION & FEATURES

The Essilor<sup>®</sup> Stellest<sup>®</sup> lens comprises of a single vision zone and a myopia control zone made with H.A.L.T. technology.

The single vision zone ensures the correction of refractive error in all gaze directions.

The 1021 lenslets, which cover 40% of the lens front surface, provide a large myopia control zone that fits a large frame choice and offers the H.A.L.T. technology effect in all gaze directions from edge to edge of the lens.

# THE ESSILOR® STELLEST® LENS CLINICAL TRIAL

- Prospective, randomized, double-masked 2-year clinical trial in Essilor<sup>®</sup>'s joint research lab with the Wenzhou Medical University in China
- 104 myopic children in single vision lenses (50) or Essilor® Stellest® lenses (54)

# ESSILOR<sup>®</sup> STELLEST<sup>®</sup> LENS EFFICACY

#### YEAR 1 AND YEAR 2

Results demonstrate that there was a greater efficacy when Essilor<sup>®</sup> Stellest<sup>®</sup> lenses were worn more than 12 hrs/day, than when worn less than 12 hrs/day

#### AFTER THE FIRST AND SECOND YEAR

 The eye growth of 9 out of 10 children wearing Essilor<sup>®</sup> Stellest<sup>®</sup> lenses full time was similar or slower than non-myopic children.<sup>10</sup>

## YEAR 2

#### ESSILOR® STELLEST® LENSES SLOW DOWN MYOPIA PROGRESSION BY 67% ON AVERAGE\*<sup>11</sup>

Essilor<sup>®</sup> Stellest<sup>®</sup> lenses slowed down myopia progression by **0.80D (55%)** on average for all subjects<sup>11</sup>

Wearing Essilor® Stellest® lenses ≥12h/ day every day, increased efficacy to **0.99D (67%)**\*<sup>11</sup>



Change in unadjusted SER of OD. Error bars represent SEM.

#### ESSILOR<sup>®</sup> STELLEST<sup>®</sup> LENSES SLOW DOWN AXIAL ELONGATION BY 60% ON AVERAGE\*<sup>11</sup>

Essilor<sup>®</sup> Stellest<sup>®</sup> lenses slowed down axial elongation by **0.35mm (51%)** on average for all subjects<sup>11</sup>

Wearing Essilor® Stellest® lenses ≥12h/ day every day, increased efficacy to **0.41mm (60%)**\*<sup>11</sup>



Change in unadjusted AL of OD. Error bars represent SEM.

#### YEAR 3 TO 5

- Essilor<sup>®</sup> Stellest<sup>®</sup> lenses remained effective in slowing myopia progression during the third<sup>12</sup>, fourth and fifth year<sup>13,14</sup>
- Essilor<sup>®</sup> Stellest<sup>®</sup> lenses were effective in slowing myopia progression & axial elongation in older children (10-18 years old)<sup>12,14</sup>
- Over five years, Essilor<sup>®</sup> Stellest<sup>®</sup> lenses slowed myopia progression by 1.75D and axial elongation by 0.72mm on average for all subjects<sup>114</sup>

# VISUAL PERFORMANCE

All children wearing Essilor<sup>®</sup> Stellest<sup>®</sup> lenses had vision as clear as those children wearing single vision lenses.<sup>15</sup>

Essilor<sup>®</sup> Stellest<sup>®</sup> lenses offer clear vision at all viewing distances, including far vision and near vision.

# RELATIONSHIP BETWEEN EFFICACY AND OTHER PARAMETERS

Efficacy results are not influenced by other parameters such as age, gender, initial myopia or axial length, myopic parents, lag of accommodation or near phoria.<sup>15</sup>

# **ADAPTATION TO THE ESSILOR® STELLEST® LENS**



of children adapted within 3 days after first dispensing<sup>§15</sup>

of children adapted within 1 week after first dispensing§15

# ESSILOR<sup>®</sup> STELLEST<sup>®</sup> LENS RANGE **AVAILABILITY**

TECHNOLOGY	H.A.LT.
SPHERE / CYLINDER POWER	SPH [0.00; -10.00]; CYL [0.00; +4.00]
EXTENDED RANGE <sup>¶</sup>	SPH [+2.00; -12.00]; CYL [0.00; -4.00] depending on sphere (SER must be ≤0 for sphere [0.00; +2.00])
PRISM	up to 2 ∆/lens
DIAMETER	ø65 MM, ø70 MM
COATING	Crizal <sup>®</sup> Rock™
MATERIAL	Airwear® 1.59
UV CUT OFF	100% UV Protection*

Essilor<sup>®</sup> Stellest<sup>®</sup> lenses are now available with sun tints, to continue to wear Essilor® Stellest® lenses for outdoor activities with UV protection, glare reduction and comfortable vision.<sup>4</sup>

# **RECOMMENDED WEARING TIME**

The more a child wears Essilor® Stellest® lenses the better the efficacy." Hence, children should wear Essilor® Stellest® lenses during waking hours:



at least per day, every day

### ESSILOR<sup>®</sup> STELLEST<sup>®</sup> LENS RECOMMENDATION

#### **CENTRATION & FITTING**

The position of the reference point is the centre of the rings of the lenslets. It is the point where the prescription is measured and controlled.

#### This marking (dot) is the reference point for the centering of the lens.

HORIZONTALLY Monocular pupillary distances OD and OS VERTICALLY Monocular heights

OD and OS





HALT, Highly Aspherical Lenslet Target
Two-year prospective, controlled, randomized, double-masked clinical trial results on 54 myopic children wearing Essilor<sup>®</sup> Stellest<sup>®</sup> lenses compared to 50 myopic children wearing single vision lenses in Wenzhou China.
Results based on 32 children from the Test Group wearing Essilor<sup>®</sup> Stellest<sup>®</sup> lenses at least 12 hours per day every day for two consecutive years
Compared to combined single vision lens groups SVL(M)-24/M)-SVL2(24M)-SSAM
Compared to combined single vision lenses support the test at least 12 hours per day every day for two consecutive years
Compared to combined single vision lens groups SVL(M)-24/M)-SVL2(24M)-SSAM
Compared to combined single vision lenses on the extrapolated control group (predicted average annual decrease in SER by 97%, Smotherman C, et al. IOVS 2023;64:ARVO E-Abstract 811 and predicted average annual decrease in AL by 15%.
Shamp W, et al. IOVS 2022;64:ARVO E-Abstract A011)

Subject to availability and lounch timelines By absorption. Additional UV back side reflection reduction when combined with Crizal<sup>®</sup> coating Parsisner 0, Kauppinen M, Wignen A. The progression of myopia for m

2015;UE:013614 Zadnik K, Sinnott IJ, Cotter SA, Jones-Jordan LA, Kleinstein RN, Manny RE, Twelker JD, Mutti DO, Collaborative Longitudinal Evaluation of E, Refractive Error Study G. Prediction of Juvenile-Onset Myopia. JAMA Ophthalmol. 2015;133:683-689; Wong YL, Li X, Huang Y, Yuan Y, Ye Y, Lim EW, Yang A, Spiegel DP, Drobe B, Bao J, Chen H. Eye growth pattern of myopic children wearing spectacle lenses with aspherical lenslets compared with non-myopic children. Ophthalmic Physio 04:2024:44(JJ):2026-213

uang Y, Yin Z, Liu C, Zhang S, Yang A, Drobe B, Chen H, Bao J. Myopia Control Ecacy of Spectacle Lenses with Aspherical Lenslets: Results of a 3-year Follow-up Study. Am J Ophthalmol. 2023;253:160-168. B, Xue L, Huang Y, Lim EW, Bao J. Spectacle lenses with highly aspherical lenslets for myopia control: 4-year clinical trial results, Investigative Ophthalmology & Visual Science. 2023;64(8):4162. Presented at the 2023 ARVO Annual Meeting, 13

SEssilor International - All Rights reserved - Do not copy or distribute - September 2024 Tris material is meant for the training of eye care professionals only, and is not to be reproduced or disclosed, whether with modifications or not, to any third parties or to the general public, without EssilorLuxattica's prior written consent.

<sup>12/22/14/05/27/28</sup> Control vs. Single-vision spectacle lenses: a randomized clinical trial. JAMA ophthalmology 22/40(5):472-8 11

The original is the second 14. 7.65(7).131

n, 2007 2011