

Novel spectacle lens designs for myopia management: High efficacy with ZEISS MyoActive lenses

In an ongoing, double-masked, multi-center clinical trial in Asia (NCT06563700) five novel spectacle lens designs employing optical defocus are compared to single vision lenses (SV). After 6 months, all test lenses slowed myopia progression compared to SV lenses ($p < 0.01$), with **ZEISS MyoActive (lens III) demonstrating the greatest reduction¹**.

OVERVIEW OF TRIAL

342 Chinese children aged 7 to 13 years, spherical equivalent refractive error (SE) -0.75D to -5.00D, were enrolled and randomly assigned to one of 6 groups, either wearing single vision lenses (SV, N=56) or one of five test spectacle lenses (N=55 to 63 each). The test spectacle lenses were multiple spectacle lens designs that incorporate distinct features with relative positive power and rotational asymmetry, or contrast modulation, with variations in spatial variance, fill factor, and defocus power. They were designed to provide dynamic, active stimulation taking gaze movements of the eye into account.



All test lenses significantly slowed myopia progression over the first 6-months with **particularly promising results** for ZEISS MyoActive lenses (lens III). These first results indicate that ZEISS MyoActive lenses are **highly effective** at slowing myopia progression.

Clinical Context

Myopia is fast rising in prevalence globally with substantial health, financial, productivity and quality of life implications. Higher levels of myopia increase the burden substantially and hence it is critical that in eyes that are already myopic, progression is

slowed or halted. Spectacle lenses offer an easy to use, convenient and safe platform to deliver myopia control options. At the annual meeting of the world's largest eye and vision research organization – the **Association for Research in Vision and Ophthalmology**

(ARVO), held May 3rd to 7th in Denver, Colorado, USA – ZEISS Vision Care presented its first clinical data on ZEISS MyoActive – a breakthrough lens solution for myopia management.

Key Results

CLINICAL TRIAL (NCT06563700)

After 6 months of lens wear, compared to single vision (SV) lenses, **progression of myopia was significantly slower** with ZEISS MyoActive lenses. Children wearing ZEISS MyoActive lenses only progressed on average by 0.13D and 0.02mm over 6 months. The difference in progression between ZEISS MyoActive lenses for spherical equivalent refractive error (SE) and axial length (AL) were¹

ZEISS MyoActive Over 6 months:

0.38D

average reduction of refractive error

0.15mm

average reduction of axial length progression

RESEARCH INSIGHTS ON GAZE BEHAVIOR WITH MYOPIA MANAGEMENT LENSES

A research study was conducted to broaden our understanding how myopia management spectacle lenses influence wearers' gaze behavior². Insights from this research informed the development of clinical trial lenses designed to generate non-repetitive, spatially structured retinal signals that vary with gaze, thereby aiming to limit neural adaptation and more effectively slow myopia progression. Clinical trial results confirmed that these advanced lens designs, particularly those with highly variable defocus patterns like ZEISS MyoActive – as confirmed by eye-tracking based modelling of defocus signal patterns¹, deliver superior efficacy in reducing myopia progression compared to single vision lenses.

References

1. Sankaridurg, P., et al. (2026, May 3–7). 6-month myopia control efficacy of five novel spatially variant, defocus spectacles. [Conference presentation abstract]. The Association for Research in Vision and Ophthalmology (ARVO) Annual Meeting, Denver, CO, United States.
2. Rifai, K., et al. (2026, May 3–7). Gaze behaviour with myopia management spectacle lenses. [Conference presentation abstract]. The Association for Research in Vision and Ophthalmology (ARVO) Annual Meeting, Denver, CO, United States.