

# FOCUS ON VALUE



Approximately 10,000 people in the U.S. turn 65 years every day<sup>1</sup>



**4.3 million** cataract surgeries were performed in the U.S. in 2019<sup>2</sup>

Older adults lead active lifestyles, necessitating a variety of visual needs:<sup>3</sup>

**Wide range  
of vision**



**Low level of  
disturbing  
visual symptoms**



**Excellent vision  
in dim light**



Despite the need for good vision at a range of distances,  
presbyopia is corrected **in only 9% of cataract** surgeries<sup>4</sup>

Dysphotopsia and contrast sensitivity are visual concerns of older adults

**Glare and halos** (dysphotopsia) not only disrupt vision, but can **reduce visual contrast** and **interfere** with **activities**<sup>5</sup>



**Contrast sensitivity** can be more **important** than visual acuity for patients during certain **activities**<sup>6</sup>



# TECNIS® IOLs powered by InteliLight™

InteliLight™ is an innovative combination of three proprietary technologies<sup>7</sup>



## High-resolution Echelette

Extends the depth of focus for uninterrupted vision far through near<sup>7</sup>

Advanced lathing reduces light scatter and halo intensity<sup>8,9</sup>



## Violet Light Filter

Designed to mitigate dysphotopsia including halo, glare, and starburst<sup>8,9,11</sup>

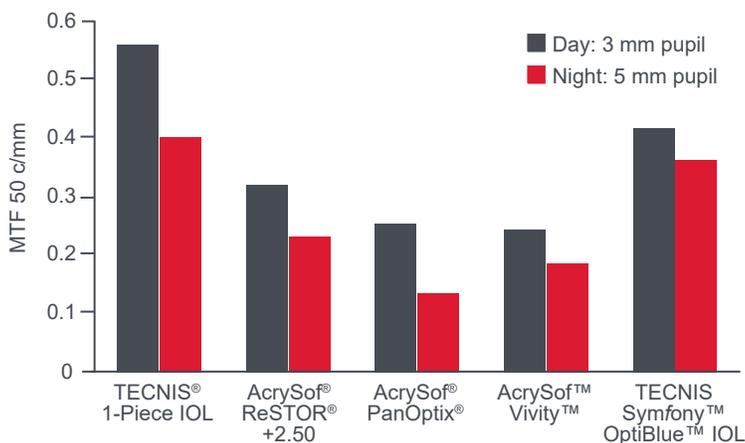


## Achromatic Technology

Corrects chromatic aberration for enhanced image contrast day and night<sup>10</sup>

With increasing age, contrast sensitivity may significantly impact activities

TECNIS® presbyopia correcting IOLs powered by InteliLight™ deliver better image contrast day and night when compared to competitor IOLs<sup>10-13</sup>



Modulation transfer (MTF) has been measured for a set of lens models, in a similar manner, using the Average Cornea functionEye (ACE) model in white light. The ACE model is designed to simulate the spherical and chromatic aberration of the average natural human cornea.



Reduced ability to perceive contrast has been reported to increase the risk of falls<sup>14</sup>

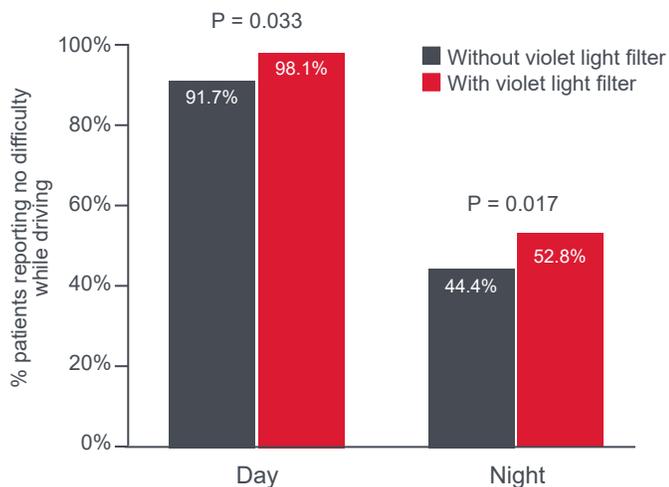
Decreased contrast sensitivity can reduce mobility, cause a fear of falling, and may affect navigating steps<sup>6,15</sup>

A patient's fall could cost the patient and caregiver between \$2,044 and \$25,955 US dollars<sup>16</sup>

Evidence shows that TECNIS® IOLs powered by InteliLight™ may deliver outcomes valued by patients

# TECNIS® IOLs powered by InteliLight™ are designed for visual needs when it matters most

More patients with the **violet light filter** reported **no difficulty with their vision while driving day and night** compared to those without violet light filter<sup>17</sup>



Clinical: With violet light filter study n = 120, Without violet light-filter study n = 120



Driving helps older adults stay mobile and independent, yet there are reported risks

Each day, ~700 older adults are injured in motor vehicle crashes<sup>18</sup>

The National Highway Transportation Safety Administration reported that the **economic cost** of motor vehicle crashes was equivalent to **~\$784 for every person living in the U.S.**<sup>19</sup>

## Presbyopia-correcting IOLs powered by InteliLight™ deliver high-quality vision for life

**Older individuals** have an **increased risk** of developing age-related eye conditions that affect **dysphotopsia and contrast sensitivity**, which may:<sup>6</sup>



Increase **cost** of healthcare



Increase **need** for caregivers

Consider a patient's vision for the remainder of their life when choosing an IOL

# References and Important Safety Information

## REFERENCES:

1. US Census Bureau 2019. By 2030, all baby boomers will be age 65 or older. Available at: <https://www.census.gov/library/stories/2019/12/by-2030-all-baby-boomers-will-be-age-65-or-older.html>. 2. Market Scope 2019. 2019 Cataract Surgical Equipment Market Report. 3. Szanton SL, Walker RK, Roberts L, Thorpe RJ, Jr., Wolff J et al. 2015. Older adults' favorite activities are resoundingly active: findings from the NHATS study. *Geriatr Nurs* 36 (2): 131-135. 4. ASCRS. 2018. Sixth annual ASCRS Clinical Survey. 5. Fisis AD, Madaras Z, Horbath KU. The prevalence of dysphotopsia in patients with recent cataract surgery. *Acta Medica Marisiensis* 2017;63:15-18. 6. Rosenthal B, Fischer M. (2014) Functional vision changes in the normal and aging eye. In TL Kauffman (Ed.) *Geriatric Rehabilitation Manual* (2nd Ed, Chpt 51, pg 381-391). China: Elsevier Ltd. 7. Johnson & Johnson Vision Data on File, PP2020CT4791. 8. Canovas C, Weeber H, Trentacost D, Janakiraman P, Tarantino N, Piers P, Raheja MK. Optical and Visual Performance of Violet Blocking Intraocular Lenses. ARVO 2019, SC2019CT4025. 9. Faria-Ribeiro M, Jenkins M, Rosen R, van der Mooren M, Canovas C, Piers P. Effect of blocking violet light in extended depth of focus intraocular lenses. ARVO 2020, SC2019CT4056. 10. Johnson & Johnson Vision Data on File, DOF2020OTH4010. 11. Johnson & Johnson Vision Data on File, DOF2020OTH4011. 12. Johnson & Johnson Vision Data on File, DOF2015CT0020. 13. Johnson & Johnson Vision Data on File, DOF2019OTH4002. 14. Marks R. Falls among the elderly and vision: A Narrative Review. *Open Med J* 2014;1:54-65. 15. Li Q, Mpofo E, Yin C, Turner K. Perception of falls and confidence in self-management of falls among older adults. *Int J. environ. Res. Public Health* 2019;16:1-13. 16. Peel NM. Epidemiology of falls in older age. *Can J Aging* 2011; 30: 7-19. 17. Canovas C, Weeber H, Trentacost D, Janakiraman P, Tarantino N, Piers P, Raheja MK. Optical and Visual performance of violet blocking intraocular lenses. *Invest Ophth Vis Sci* 2019; 60:3717. 18. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics and Reporting System (WISQARS). Atlanta, GA: CDC; 2017. Available at: [https://www.cdc.gov/motorvehiclesafety/older\\_adult\\_drivers/index.html](https://www.cdc.gov/motorvehiclesafety/older_adult_drivers/index.html). Accessed 16 October 2020. 19. National Highway Traffic Safety administration. The economic and societal impact of motor vehicle crashes, 2010 (revised). DOT HS 812 013. 2015: 1-304.

**IMPORTANT SAFETY INFORMATION:** The TECNIS Symphony™ OptiBlue™ Extended Range of Vision IOL, Model ZHR00V, is indicated for primary implantation for the visual correction of aphakia in adult patients, with less than 1 diopter of pre-existing corneal astigmatism, in whom a cataractous lens has been removed. The lenses mitigate the effects of presbyopia by providing an extended depth of focus. Compared to an aspheric monofocal IOL, the lens provides improved intermediate and near visual acuity while maintaining comparable distance visual acuity, resulting in reduced eyeglass wear. The lens is intended for capsular bag placement only. The TECNIS Symphony™ Toric II OptiBlue™ Extended Range of Vision IOL, Models ZHW150, ZHW225, ZHW300, ZHW375, are indicated for primary implantation for the visual correction of aphakia and for reduction of residual refractive astigmatism in adult patients with greater than or equal to 1 diopter of preoperative corneal astigmatism, in whom a cataractous lens has been removed. The lenses mitigate the effects of presbyopia by providing an extended depth of focus. Compared to an aspheric monofocal IOL, the lenses provide improved intermediate and near visual acuity while maintaining comparable distance visual acuity, resulting in reduced eyeglass wear. The lenses are intended for capsular bag placement only. **WARNINGS:** Patients with any of the conditions described in the Directions for Use may not be suitable candidates for an intraocular lens because the lens may exacerbate an existing condition, may interfere with diagnosis or treatment of a condition or may pose an unreasonable risk to the patient's eyesight. The lenses should be placed entirely in the capsular bag and should not be placed in the ciliary sulcus. The lenses may cause a reduction in contrast sensitivity under certain conditions, especially with increased glare, compared to aspheric monofocal IOLs. The physician should carefully weigh the potential risks and benefits for each patient and fully inform the patient of the potential for reduced contrast sensitivity before implanting the lens. Special consideration of potential visual problems should be made before implanting the lens in patients with macular disease, amblyopia, corneal irregularities, or other ocular disease, which may cause present or future reduction in acuity or contrast sensitivity, and patients implanted with the lens should be informed to exercise special caution when driving at night or in poor visibility conditions. Some visual effects associated with the IOLs may be expected due to the lens design that delivers elongation of focus, including a perception of halos, glare, or starbursts around lights under nighttime conditions. These will be bothersome to some people, particularly in low-illumination conditions, and on rare occasions, may be significant enough that the patient may request removal of the IOL. Rotation of TECNIS Symphony™ Toric II OptiBlue™ IOLs away from their intended axis can reduce their astigmatic correction and misalignment greater than 30° may increase postoperative refractive cylinder. If necessary, lens repositioning should occur as early as possible prior to lens encapsulation. **PRECAUTIONS:** Interpret results with caution when using autorefractors or wavefront aberrometers that utilize infrared light, or when performing a duochrome test. Confirmation of refraction with maximum plus manifest refraction technique is recommended. The ability to perform some eye treatments (e.g., retinal photocoagulation) may be affected by the optical design. In recent contact lens users, corneal stability should be established before lens power determination. Under very bright light conditions, patients with small pupil sizes (<2 mm) may experience some reduction in contrast. Target emmetropia, as the lens is designed for optimum visual performance when emmetropia is achieved. Care should be taken to achieve IOL centration, as lens decentration may result in a patient experiencing visual disturbances under certain lighting conditions. The safety and effectiveness of the lenses have not been substantiated in patients with preexisting ocular conditions and intraoperative complications. For the TECNIS Symphony™ Toric II OptiBlue™ IOL, variability in any preoperative surgical parameter (e.g. keratometric cylinder, incision location, surgeon's estimated surgically induced astigmatism and biometry) can influence patient outcomes. Carefully remove all viscoelastic and do not over-inflate the capsular bag at the end of the case. Residual viscoelastic and/or over-inflation of the capsular bag may allow the lens to rotate, causing misalignment with the intended axis of placement. **ATTENTION:** Reference the Directions for Use for a complete listing of Indications and Important Safety Information.