

## Types of intraocular lenses (IOL)

**Premium lens technology** is an important part of our refractive cataract practice at the Sydney Eye Clinic. The surgeons at our clinic takes pride in the fact that we spend a lot of time measuring and calculating and selecting the right IOL implant for every patient. This process of IOL selection is the key that enabled us to deliver the best outcome following their lensectomy and cataract surgery.

At the Sydney Eye Clinic, we do not believe in "one size fits all". There are great benefits in having all the options available to all the types of IOL lenses on the market. This range of choices will allow us to achieve the successful outcome we wanted for our patient. Hence, we do not just use one company, we tap into all their premium lens technology and select the best for each individual patient.

List of common lenses used at the Sydney Eye Clinic includes: ZEISS - Lisa Trifocals, ZEISS - Torbi, Oculentis, AMO ZB00, AM0 Synergy & Toric & Sensar & Tecnis ZCT & ZA9003, ALCON MTA4U0, AcuFocus IC-8, ALCON Vivity, Glukos iStent and many more.

## What are the types of IOLs and who will benefit from its design and technology?

**Monofocal IOLs** provide patients with a set focal point, usually for distance vision. The most common type of lens used with cataract and lens surgery is called a monofocal IOL. It has one focusing distance. Most people have them set for clear distance vision. Then they wear eyeglasses for reading or close work.

**Trifocal/Multifocal IOLs** provide patients with multiple focal points by dividing the light and focusing it on more than one point, providing a greater range of sight. Multifocal lenses can further reduce the need for glasses or contact lenses after surgery in some cases because they provide both distance and near focus at the same time. The lens has different zones set at different powers within the same lens.

**EDOFs IOLs** (Extended Depth-Of-Focus) are a new lens technology in the treatment of presbyopia (aging lens). In contrast to multifocal (MF) IOLs, EDOF lenses create a single elongated focal point, rather than several foci, to enhance depth of focus.

**Toric IOLs** is suitable for people with <u>astigmatism</u>. Astigmatism is a refractive error caused by an uneven curve in your cornea or lens. The Toric lens is designed to correct that that unevenness and is inserted in the same axis to that of the eye.

**Piggyback lenses** are used when a patient is considered to have very high prescription error. Every patient's eyes are different, and every eye will heal differently. In some rare cases, minor adjustments are required after an intraocular lens implant. The Piggyback lenses are enhancement lenses which work with other intraocular lenses. They can be safely and effectively added to your original lens implant, which means patients avoid the unnecessary discomfort and inconvenience of having the original intraocular lens removed. Piggyback lenses are exceptionally thin and are custom matched for your eyes.

**Small Aperture Lens - IC-8 IOL.** The <u>IC-8</u> lens takes a clear artificial lens and adds a small mini-ring in the centre. This mini ring creates a pinhole effect, which extends your natural range of vision (near to far) by funnelling light through the centre of the ring so that only focused light rays enter your eye. This advanced technology is designed to

- Bring back your everyday vision
- Provide excellent far vision + computer and reading vision