

PATIENT INFORMATION LEAFLET

Refractive Lens Exchange (RLE)

What is Refractive Lens Exchange?

Refractive Lens Exchange (RLE) is a procedure where the eye's natural lens is replaced with an artificial intraocular lens (IOL). It's used to correct near-sightedness (myopia), far-sightedness (hyperopia), astigmatism, and presbyopia (age-related near-vision loss). Unlike LASIK, RLE removes the natural lens and is often recommended for patients over 40 or with high prescriptions.

How is the Surgery Performed?

- **Time:** ~20–30 minutes per eye
- **Anaesthesia:** Local, sedation, or general
- **Steps:**
 - Small incision in the cornea
 - Natural lens broken up using ultrasound and removed
 - Artificial IOL implanted
- **Aftercare:**
 - Antibiotic and anti-inflammatory eye drops
 - Protective eye shield worn at night for the first week

Benefits

- **Permanent correction** of vision errors and prevention of cataracts
- **Reduced reliance** on glasses/contact lenses
- **High success rate** — many achieve 20/25 vision or better

Risks and Complications

RLE is safe and the risk of complications is minimal. These may include:

- **Infection** (rare; needs strict hygiene)
- **Posterior Capsule Opacification (PCO):** Treatable with laser
- **Retinal Detachment:** Higher risk in high myopia
- **IOL Dislocation:** May need adjustment
- **Visual disturbances:** Glare or halos, often at night

Recovery Timeline

- **Immediately after:** Mild discomfort, blurred vision
- **First few days:** Gradual improvement, follow-ups
- **Full recovery:** 1–2 weeks; normal activities resume shortly

Intraocular Lens (IOL) Options

1. Monofocal IOLs

- **Focus:** One distance (usually far)
- **Glasses:** Needed for near/intermediate
- **Best for:** Clear distance vision + okay with reading glasses

2. Multifocal IOLs

- **Focus:** Near, intermediate, and far
- **Glasses:** Rarely needed
- **Side Effects:** More glare/halos possible
- **Best for:** Maximum glasses independence

3. Extended Depth of Focus (EDOF) IOLs

- **Focus:** Distance to intermediate, some near
- **Glasses:** May be needed for fine near tasks
- **Side Effects:** Fewer than multifocals
- **Best for:** Balanced vision with minimal side effects

4. Toric IOLs

- **Focus:** Corrects astigmatism + one of the above types
- **Glasses:** Often unnecessary for astigmatism correction
- **Best for:** Patients with moderate to high astigmatism