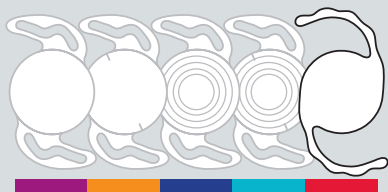


# Product Portfolio

Sulcoflex® Pseudophakic Supplementary IOLs



 **Rayner**  
Your skill. Our vision.

# For when compromise is not an option

As a cataract and refractive surgeon, achieving the best possible visual results for your patients is paramount. But sometimes, even the best patient selection and most accurate work can result in refractive surprises.

Wouldn't it be great to have a lens that offers you more than one shot? An option that is reversible?

Rayner Sulcoflex Pseudophakic Supplementary IOLs are designed to be implanted in the ciliary sulcus to correct any residual post-operative refractive errors following the implantation of a conventional IOL in the capsular bag.

## Sulcoflex Aspheric (653L)

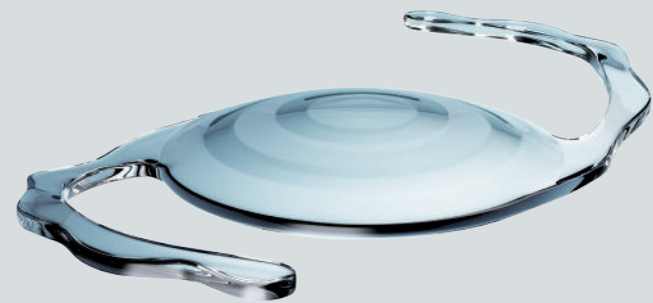
Sulcoflex Aspheric IOLs are indicated for the correction of any residual pseudophakic ametropia. With the Standard range from -5.0 D to +5.0 D and the Premium range extending from -10.0 D to +10.0 D, Sulcoflex Aspheric IOLs offer an effective option for the resolution of post-operative myopic or hypermetropic refractive surprises.



## Sulcoflex Multifocal (653F)

Sulcoflex Multifocal IOLs are indicated for the correction of pseudophakic presbyopia, thereby significantly reducing the need for additional near correction by the use of spectacles or contact lenses.

Based on Rayner's refractive aspheric optic technology, near vision is achieved by the addition of +3.5 D at the IOL plane in a far dominant format.



## Sulcoflex Toric (653T)

Sulcoflex Toric IOLs are indicated for the correction of any residual pseudophakic corneal astigmatism.

The implantation of a Sulcoflex Toric IOL offers a precise and reliable alternative to corneal surgery and is available in a range of sphere / cylinder combinations. The unique undulating haptic design improves rotational stability leading to optimal toric corrections.



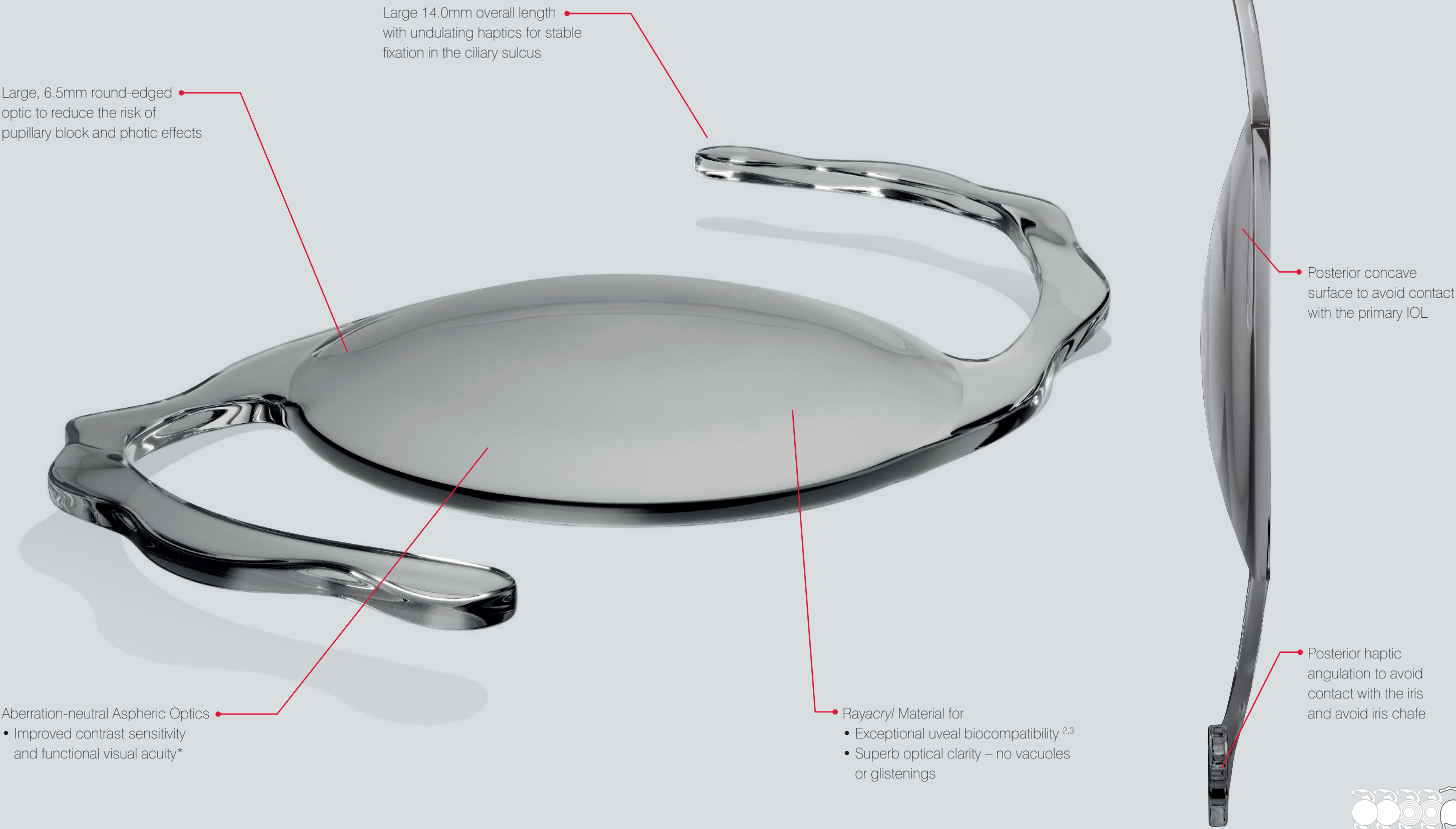
## Sulcoflex Multifocal Toric (653Z)

Sulcoflex Multifocal Toric IOLs are indicated for the correction of pseudophakic presbyopia in combination with residual corneal astigmatism.

The refractive aspheric optic offers a near addition of +3.5 D at the IOL plane in a far dominant format and a toric correction of +1.0 D, +2.0 D and +3.0 D cylinders. The undulating haptic design improves rotational stability for precise optimal corrections.



Sulcoflex Pseudophakic Supplementary IOLs



\* when compared to spherical optics

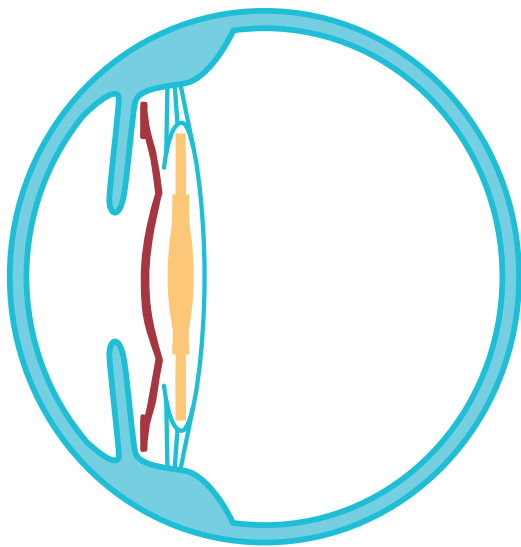


# Innovative Design

## Hydrophilic acrylic injectable IOLs with undulating haptics and posterior haptic angulation

Rayner Sulcoflex Pseudophakic Supplementary IOLs are designed to be implanted in the ciliary sulcus to correct any residual post-operative refractive errors following the primary implantation of a conventional IOL in the capsular bag\*.

\* An iridotomy/iridectomy may be necessary.



## Indications<sup>1, 4</sup>

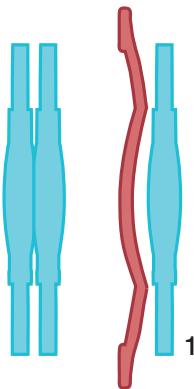
- Post-surgical ametropia
- Enhancement of the refractive result after RLE or PRELEX
- Enhancement of near / far vision
- Correction of pseudophakic presbyopia
- Correction of residual pseudophakic astigmatism
- Extreme myopia or hyperopia
- Patients experiencing a dynamic change of refraction
- For the refractive correction of patients without biometry readings.

## Reduced surgical risk associated with IOL exchange<sup>1, 4</sup>

- Less surgical trauma than primary IOL exchange
- Avoids sometimes difficult removal of fibrosed, fixated primary implant.

## Avoids the potential problems of conventional “piggy-back” IOLs<sup>1, 4</sup>

- Unique posterior concave surface, minimises the possibility of interaction with the primary IOL
- Reduced likelihood of unwanted photopic effects
- Reduced refractive error with hyperopic defocus.



1 Physical contact between the two IOLs minimised.

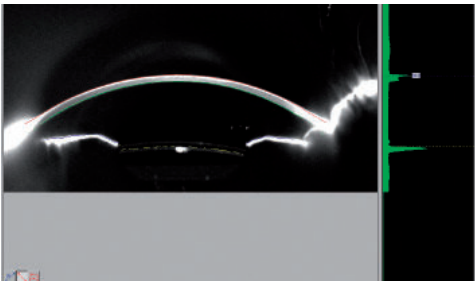
## The Rayner Single Use Soft-Tipped Injector

- Convenience
- Safety
- Cost effectiveness
- Controlled and safe unfolding of the IOL within the eye.



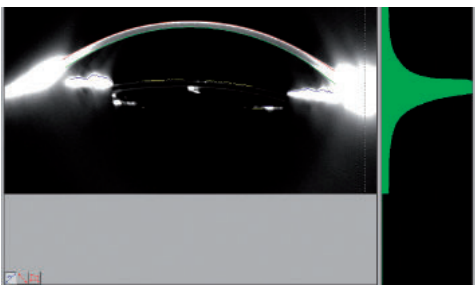
## Large 6.5mm round-edged optic

- Optimal visual outcomes
- Reduced risk of optic-iris capture
- Minimal edge glare and associated dysphotopsia.



## Large 14.0mm Overall Length with Undulating Haptics

- Unique undulating round edge haptic design with 10° angulation
- Excellent centration and rotational stability\*\*
- Reduced risk of uveal contact and abrasion
- Reduced Pigment Dispersion Syndrome
- Smooth undulating haptics to minimise the risk of adverse tissue reaction in the sulcus.



2 Adequate iris-IOL and IOL-IOL distance. \*\* Unusual or irregular anatomy of the ciliary sulcus may cause a post-operative rotational displacement of the IOL.

## Power Availability

	Model Name	Model Number	Power Range	Increments	Addition	Optic Diameter	Overall Length	Haptic Angulation	Optic configuration
	Sulcoflex Aspheric	653L Standard Power Range	-5.0 to -0.5 D +0.5 to +5.0 D	0.5 D 0.5 D		6.50mm	14.00mm	10°	Anterior convex, posterior concave
		653L Made to Order Power Range	-10.0 to -5.5 D +5.5 to +10.0 D	0.5 D 0.5 D		6.50mm	14.00mm	10°	Anterior convex, posterior concave
	Sulcoflex Multifocal	653F Standard Power Range	-3.0 to +3.0 D	0.5 D	+3.5 D add far dominant	6.50mm	14.00mm	10°	Anterior convex, posterior concave
		653F Made to Order Power Range	-7.0 to -3.5 D +3.5 to +7.0 D	0.5 D 0.5 D	+3.5 D add far dominant	6.50mm	14.00mm	10°	Anterior convex, posterior concave

	Model Name	Model Number	Power Range	Increments	Addition	Optic Diameter	Overall Length	Haptic Angulation	Optic configuration
	Sulcoflex Toric	653T Standard Power Range	Spherical Equivalent -3.0 to +3.0 D  Cylinders +1.0 D, +2.0 D, +3.0 D	0.5 D		6.50mm	14.00mm	10°	Anterior convex, posterior concave
		653T Made to Order Power Range	Spherical Equivalent -7.0 to +7.0 D  Cylinders +1.0 to +6.0 D	0.5 D 0.5 D		6.50mm	14.00mm	10°	Anterior convex, posterior concave
	Sulcoflex Multifocal Toric	653Z Standard Power Range	Spherical Equivalent -3.0 to +3.0 D  Cylinders +1.0 D, +2.0 D, +3.0 D	0.5 D	+3.5 D add far dominant	6.50mm	14.00mm	10°	Anterior convex, posterior concave
		653Z Made to Order Power Range	Spherical Equivalent -7.0 to +7.0 D  Cylinders +1.0 to +6.0 D	0.5 D 0.5 D	+3.5 D add far dominant	6.50mm	14.00mm	10°	Anterior convex, posterior concave



## Ordering

### Sulcoflex Aspheric (653L)



### Sulcoflex Multifocal (653F)



### Sulcoflex Toric (653T)



### Sulcoflex Multifocal Toric (653Z)



## References

**1. Sulcoflex® (Rayner 653L) a new IOL for implantation in the pseudophakic eye: Indications and first results.**  
Amon et al., Vienna, Austria.  
Presented at ESCRS, Stockholm, Sweden, 2007.

**2. Capsular and uveal biocompatibility at three years following hydrophilic lens implantation in eyes with uveitis history – photographic assessment.**  
A. Vyas, D. Spokes, R. Narendran, P. Bacon  
Scarborough Hospital, UK.  
Presented at ESCRS, Stockholm, 2007.

**3. Comparison of the uveal and capsular biocompatibility of the Rayner Centerflex (570H) vs Rayner C-flex® (570C) – three year results.**  
Amon et al., Vienna, Austria.  
Presented at ESCRS, Stockholm, 2007.

**4. New Supplementary intraocular lens for refractive enhancement in pseudophakic patients.**  
Kahraman G, Amon M,  
Vienna, Austria.  
J Cataract Refract Surg.  
2010 Jul;36(7):1090-4.

**5. Assessment of a single-piece hydrophilic acrylic IOL for piggyback sulcus fixation in pseudophakic cadaver eyes.**  
Steele McIntyre J, Werner L, et al.  
J Cataract Refract Surg.  
2012 Jan; 38: 155-162

 **Rayner**  
Your skill. Our vision.

Rayner Intraocular Lenses Limited  
1-2 Sackville Trading Estate  
Sackville Road, Hove, East Sussex  
BN3 7AN, United Kingdom

Tel: +44 (0) 1273 205401  
Email: [iol\\_enquiries@rayner.com](mailto:iol_enquiries@rayner.com)  
Web: [www.rayner.com](http://www.rayner.com)

Note: Sulcoflex® IOLs are not available for sale in the US.  
Professor Michael Amon (Vienna, Austria) is the inventor of Sulcoflex  
Pseudophakic Supplementary IOLs. Sulcoflex® patent pending.  
10/13 Copyright Rayner Intraocular Lenses Limited. Unauthorised reproduction prohibited. EC201362.