

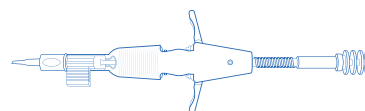
# SPLENDID VISION



## Hydrophobic Toric IOL

CE<sub>0344</sub>

Optional Preloaded Injector



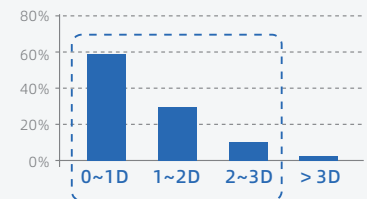
# 「Super-precise」

## Small-Step Cylinder diopter, More choices for Patients

| Simedice Toric Model | Cylinder(D) |                 |
|----------------------|-------------|-----------------|
| ST1                  | 0.75        | 0.75D Increment |
| ST2                  | 1.50        |                 |
| ST3                  | 2.25        |                 |
| ST4                  | 2.50        | 0.25D Increment |
| ST5                  | 2.75        |                 |
| ST6                  | 3.00        | 0.5D Increment  |
| ST7                  | 3.50        |                 |

- Common Cylinder ranges, set 0.25D small increment, Strive to meet patients' "full correction" demands.
- 0.75D & 2.75D are 'exclusive' cylinder diopters.

- The Cylinder Diopter range covers 96.5% of patients with Corneal astigmatism.



## Ultra-precision Cast Molding, more accurate Lens Power



Optical zone formed in One-step molding, no turning, no polishing, nanoscale optical surface.



DAVID J APPLE  
LABORATORY

### Precision Testing in Apple Lab

|                   | Simedice IOL               | ISO Standard | Accuracy  |
|-------------------|----------------------------|--------------|-----------|
| Spherical Diopter | $\pm 0.09D$                | $\pm 0.40D$  | 4 times   |
| Cylinder Diopter  | $\pm 0.01D$                | $\pm 0.40D$  | 40 times  |
| Cylinder Axis     | $2.1^\circ \pm 0.74^\circ$ | $< 5^\circ$  | 2~3 times |

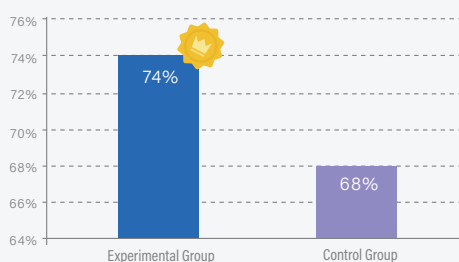
**Simedice IOL accuracy far exceeds international standards**

## Clinical Trial Results

### Cylinder correction rate outperforms control group products

In accordance with FDA requirements, cylinder correction rate should serve as the primary evaluation index for Toric IOLs.

$$\text{Cylinder Correction Rate} = \frac{\text{Post-op Cylinder Diopter} - \text{Pre-op Corneal Cylinder Diopter}}{\text{Target Cylinder Diopter} - \text{Pre-op Corneal Cylinder Diopter}}$$



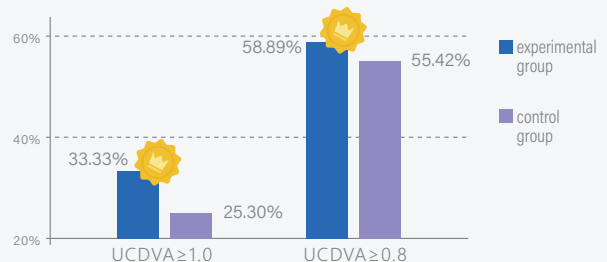
The rate of Excellent UCDVA is higher than that of the control product.

UCDVA  $\geq 1.0$  (6 months Post-op)

(experimental group): 30 cases (control group): 21 cases

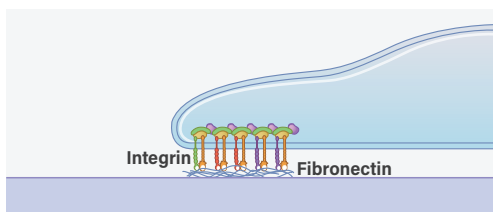
UCDVA  $\geq 0.8$  (6 months Post-op)

(experimental group): 53 cases (control group): 46 cases



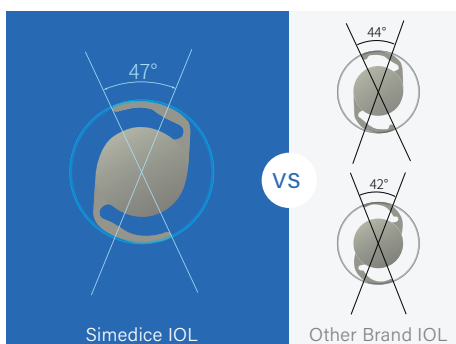
# 「Super-stable」

## Higher Bio-adhesion Property

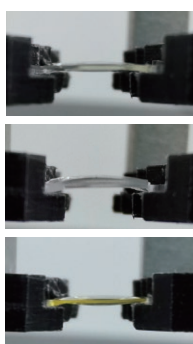


- Simedice IOL material has higher fibronectin bioadhesion property, enhances the attachment to the capsular bag.
- Higher Adhesion Capacity limit the space into which LEC can migrate, to prevent PCO.

## Modified C Loop, excellent Rotation Stability



Contact angle  
( $\Phi 10$  mm capsular bag)

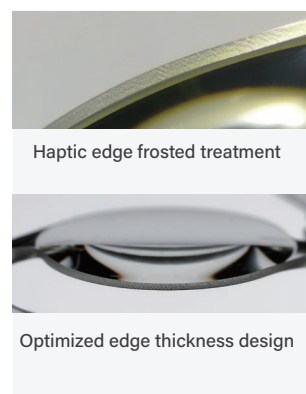


Simedice IOL

Competitor 1

Competitor 2

Simulation Experiment  
( $\Phi 10$  mm capsular bag)

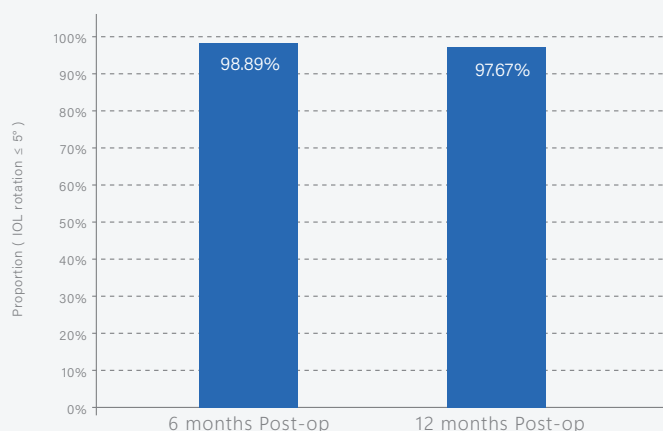


Haptic edge frosted treatment

Optimized edge thickness design

Increasing haptic-capsule contact ensure stable effective lens position.

## Clinical Trial Results

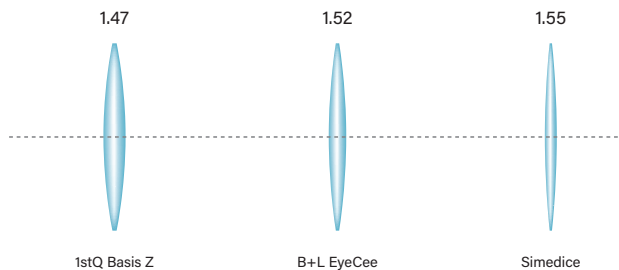


Increasing haptic-capsule contact ensure stable effective lens position.

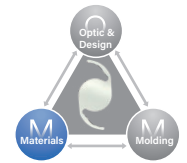
- 1 month after surgery, No rotation proportion: Simedice 95.5% VS 93.2% Control Group
- 12 months after surgery, Simedice IOL Proportion > 97.6% ( Rotation  $\leq 5^\circ$  )

# MOM Smart Innovation Platform

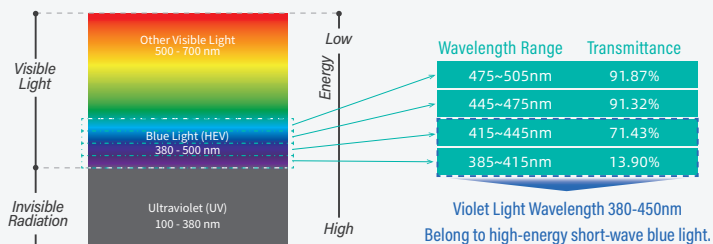
## Higher Refractive Index



- The RI and thickness of the IOL are inversely proportional.
- Simedice IOL is thinner than competitors, can be injected through micro-incision, to prevent surgically-induced astigmatism.

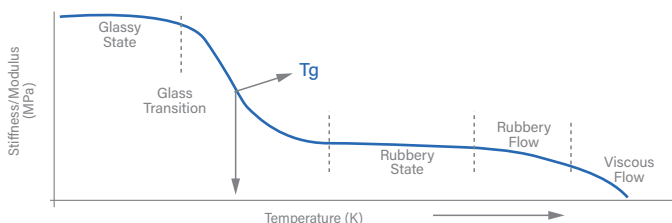


## Precisely filter harmful Violet Light V-Free Precision Filtering Technology



- **Precisely filter harmful Violet Light:** Protect the Retina from Violet light damage, to prevent the development of AMD.
- **Pass beneficial blue light:** The long-wave blue light contribute significantly to the body's sense of diurnal rhythm, colour perception, scotopic and mesopic contrast sensitivity.

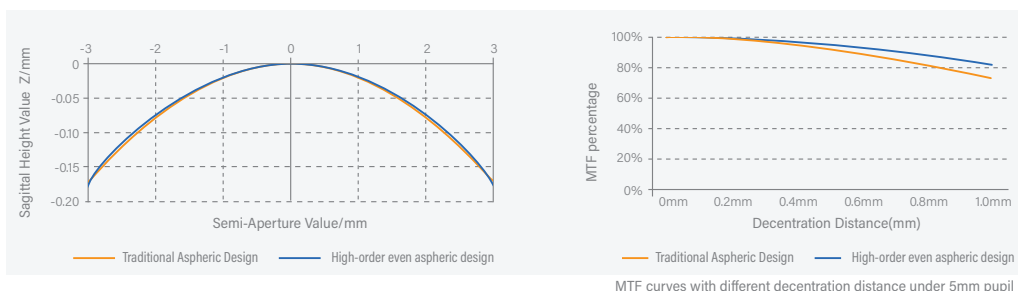
## Unique Low Glass Transition Temperature (T<sub>g</sub>):7°C



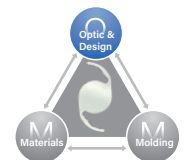
The T<sub>g</sub> for the Common hydrophobic acrylic IOLs is between 12.0°C and 15.0 °C.  
The lower the material T<sub>g</sub>, the more foldable the IOL.

- Reduce implantation resistance.
- Keeps the IOL flexible at lower temperature.
- IOL can be inserted through very small incisions
- Excellent Shape Memory properties.

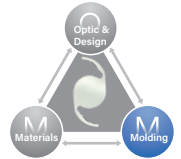
## High-order even aspheric design to prevent decentration



- When an IOL is decentered, compared to traditional aspheric design, high-order aspheric design results in less MTF degradation.

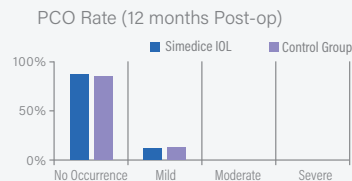
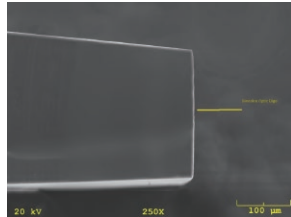


# MOM Smart Innovation Platform



Sharp Square Edge

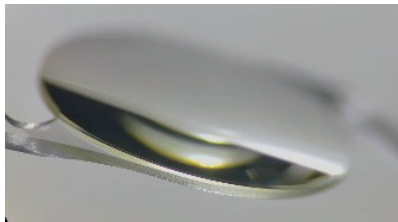
## Low PCO Rate



- Ultra-precision Cast Molding, one-step forming, no polishing, Sharp Square Edge, reduce the PCO rate effectively.

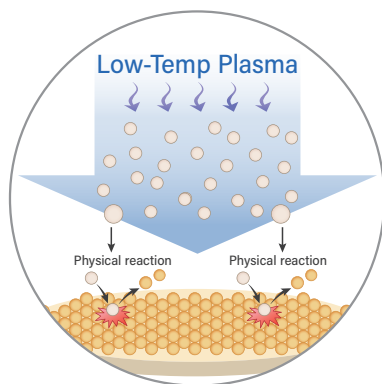
Frosted treatment on the edge

## Reduce optical interference

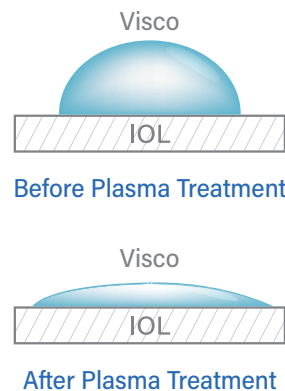


Frosted treatment on the edge of IOL reduces positive and negative optical interferences.

## Low-Temp Plasma Treatment



- Low Temperature plasma to hit the IOL optic surface to cause IOL surface modification.



- This surface modification can enhance the Visco adhesive performance on IOL surface.

### This process can

- Reduce implantation resistance.
- Prevent haptic adhere to optical zone.
- Ensure IOL unfold smoothly.



Recommendation

EVO Toric IOL Calculator

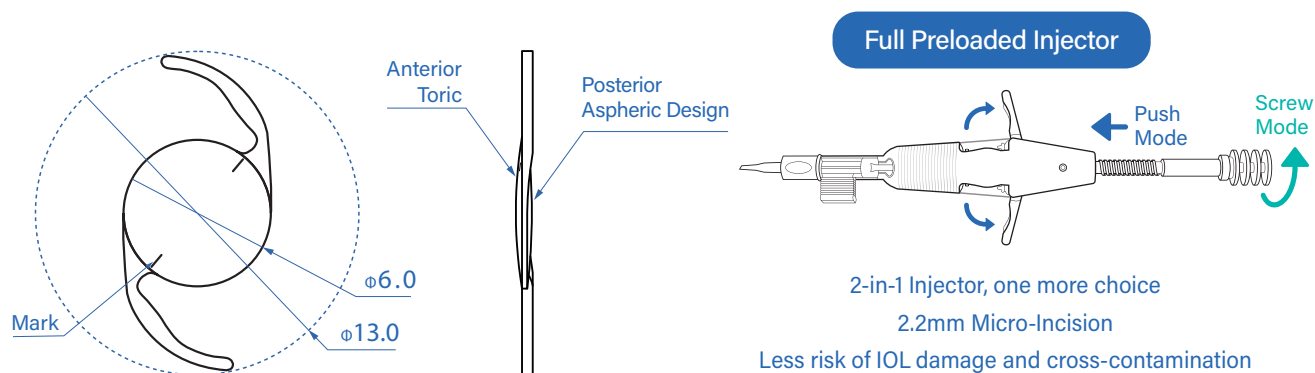
<https://www.evoiolcalculator.com/toric.aspx>



## Simedice Hydrophobic Toric IOL

| Model                         | ST1                                                                                                        | ST2     | ST3     | ST4     | ST5     | ST6     | ST7     | ST8     | ST9     | ST10     |
|-------------------------------|------------------------------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| Preloaded Version             | ST1-P22                                                                                                    | ST2-P22 | ST3-P22 | ST4-P22 | ST5-P22 | ST6-P22 | ST7-P22 | ST8-P22 | ST9-P22 | ST10-P22 |
| Cylinder Power                | 0.75                                                                                                       | 1.50    | 2.25    | 2.50    | 2.75    | 3.00    | 3.50    | 4.25    | 5.00    | 5.75     |
| Optic Design                  | Monofocal, Aspherical Posterior Surface, Biconvex, Toric                                                   |         |         |         |         |         |         |         |         |          |
| Lens Type                     | Single-piece Posterior Chamber IOL                                                                         |         |         |         |         |         |         |         |         |          |
| Material                      | Biocompatible Hydrophobic Acrylate Copolymer,<br>Blocking UV and Partial Blue Light<br>Water content:<0.5% |         |         |         |         |         |         |         |         |          |
| Color                         | Slightly Yellow                                                                                            |         |         |         |         |         |         |         |         |          |
| Refractive Index              | 1.55 at 35°C                                                                                               |         |         |         |         |         |         |         |         |          |
| Manufacturing                 | Cast Molding                                                                                               |         |         |         |         |         |         |         |         |          |
| Diopter Range                 | +10.0D ~ +30.0D ( 0.5D increment )                                                                         |         |         |         |         |         |         |         |         |          |
| Haptic Configuration          | Modified C-Loop, 0° angulation                                                                             |         |         |         |         |         |         |         |         |          |
| Diameters                     | 6.0 mm ( Effective Optical Diameter ) / 13.0 mm ( Overall length )                                         |         |         |         |         |         |         |         |         |          |
| Edge Design                   | Sharp Square Edge                                                                                          |         |         |         |         |         |         |         |         |          |
| A Constant                    | 119.05 (Optical); 118.75(Ultrasound)                                                                       |         |         |         |         |         |         |         |         |          |
| Optimized Constants           | Haigis: a0=1.933, a1=0.4, a2=0.1<br>Hoffer Q: pACD=5.58; Holladay I: SF=1.82;<br>Barrett LF:1.91           |         |         |         |         |         |         |         |         |          |
| Sterilization                 | Ethylene Oxide                                                                                             |         |         |         |         |         |         |         |         |          |
| Incision Size                 | 2.2mm                                                                                                      |         |         |         |         |         |         |         |         |          |
| Preloaded Injector (Optional) | Medicel ACCUJECT Dual Pro                                                                                  |         |         |         |         |         |         |         |         |          |

Constants are estimates only. It is recommended that each surgeon develops their own.



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