Light Adjustable Lens (LAL)

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First IOL That Can Be Customized after Surgery

Simplifies pre-operative messaging and decision making

Delivers better vision

Provides flexible “single lens” solution for astigmatism & multiple presbyopia approaches
LAL Procedure

**Conventional Cataract Surgery**
- Simple Biometry
- Cataract Removal
- Light Adjustable Lens (LAL)

**Post-Operative Refraction**

<table>
<thead>
<tr>
<th>Eye</th>
<th>Sphere Power</th>
<th>Astigmatism Power</th>
<th>Astigmatism Axis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right</td>
<td>-1.50</td>
<td>-1.00</td>
<td>085</td>
</tr>
<tr>
<td>Left</td>
<td>+0.50</td>
<td>-0.75</td>
<td>110</td>
</tr>
</tbody>
</table>

**Prescribe Glasses**

**Modify LAL Optic**

**Light Delivery Device (LDD)**
LAL Technology

Adjustment Beam:
- Light from the RxSight LDD is directed by the surgeon to the RxLAL

Photopolymerization:
- Macromers in the path of the light are photopolymerized

Diffusion and Power Change:
- Unpolymerized macromers move into the exposed area, causing precise shape and power change

Lock-In Beam:
- The entire lens is exposed to light to polymerize all the remaining macromers

Final Result:
- The outcome is a precise change in the RxLAL power to match the patient's individual prescription
Improved Premium IOL Process

**Static Premium IOL**

Lifestyle Assessment & Visual Requirements

Procedure Selection

Vision with Glasses

Distance Vision without Glasses

Distance & Near Vision without Glasses

Surgical Planning & Execution

**Light Adjustable Lens**

Simplified Pre-Op Discussion and Procedure Selection

Lower Stress Surgical Planning and Execution
Improved Premium IOL Process

Static Premium IOL

Post-Operative Issues

Light Adjustable Lens

Lifestyle Verification and Post-Operative Enhancement
Improved Astigmatism Correction Process

- Predicting both the amount and axis of post-operative for a particular eye from its pre-operative corneal astigmatism is unreliable, particularly with <1.5 diopters (low) pre-operative cylinder

- Only 1 in 10 low astigmatism eyes receives a toric IOL, versus 1 in 4 for eyes with 1.5 diopters or more

- Low astigmatism makes up 2/3 of astigmatic population – Significant clinical & market opportunity

Adapted from Phase 3 PMA Clinical Data
Multi-Center Study*: Distance Vision Target

- 77 eyes
- 1.3 D Mean Pre-op Corneal Astigmatism
- Standard Cataract Surgery with LAL implantation
- 0.06 D Mean MRSE Three Weeks Post-Op

- Mean improvement of nearly 2 lines of vision
- Only 4% of eyes < 20/25 UCVA after adjustment vs 50% before
- 10 fold reduction in refractive outliers after adjustment
- Final refraction independent of pre-op astigmatism

Single Center Study*: Distance, Intermediate & Near

Adjustable Monovision

- 25 subjects bilaterally implanted with LAL
- Post-operative confirmation of dominant and near eye
- Precise sphere and astigmatism adjustment allows customization of each eye (and reversibility)
  - LDD treatments targeting 1 D anisometropia to maintain stereopsis and visual comfort

*A. Chayet. A Single Center Exploratory Study To Evaluate The Use Of The RxSight Light Adjustable Lens (LAL) and the Light Delivery Device (LDD) to Improve Visual Outcomes (unpublished data)
Single Center Study*: Distance, Intermediate & Near

**Adjustable Monovision**

- No reduction in BCVA due to utilizing 100% of light
- Dysphotopsias and contrast sensitivity similar to monofocal
- Rates of excellent visual acuity at all distances compare favorably to trifocal multi-center data

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Multifocal from PanOptix Summary of Safety and Effectiveness Data

![Percentage of LAL Subjects with > 20/20 Binocular Uncorrected Visual Acuity](image)
Single Center Study*: Distance, Intermediate & Near

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Multifocal from PanOptix Summary of Safety and Effectiveness Data

**Percentage of LAL Subjects with > 20/20 Binocular Uncorrected Visual Acuity**
Single Center Study*: Distance, Intermediate & Near

Adjustable Extended Depth of Focus
• 25 subjects bilaterally implanted with LAL
• Sphero-cylindrical LDD treatment for emmetropia
• EDF light treatment
  • Excellent defocus curve broadening
  • Centered on un-dilated pupil and visual axis
  • No splitting of light
• U.S. IDE initiated

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120 Day Commercial Experience

- Designated as premium IOL by CMS
- Adjustability messaging
- Excellent patient acceptance
- Premium pricing to patient
- Rapid Adoption, approaching 50% of premium procedures
RxSight LAL Summary

• Simplified decision making
• Refractive accuracy & quality of vision
• Versatile astigmatic & presbyopia correction approaches with single lens
• Exciting initial commercial results