LENTIS® MplusFamily

Choose the Mplus model most effective for you and your patients
**LENTIS® Mplus Family**

Extend your Vision!

The totally unique optical design of the first rotationally asymmetric LENTIS® Mplus has revolutionised the multifocal IOL market worldwide. Well over **400,000 Mplus implantations** over 6 years and a high number of clinical trials are evidence of the superiority of this patented technology over conventional diffractive multifocal lenses. In 2013, Oculentis presented the LENTIS® Mplus®, an even more advanced version of the Mplus success model that offers increased visual performance, particularly in the near range.

**A new family member: LENTIS® Mplus MF20**

With the introduction of the lower near addition of 2 diopters, the Mplus family is complete. The LENTIS® Mplus MF20 represents the new standard in refractive lens surgery for modern vision from distance to the extended near range, without compromises. The softer transition between the two optical zones results in maximum light usage for the day-to-day intermediate range and thus leads to a brilliant vision.

The **LENTIS® Mplus Family** – Which lens for which patient?

All three Mplus options are multifocal lenses designed to correct presbyopia for optimised spectacle independence. They cover all three visual ranges (distance, intermediate and near) at varying dominances from good (★★★★) and very good (★★★★★) to excellent (★★★★★★★).

**Why?** A patient’s everyday visual demands are more individual and different than ever before. Our everyday lifes, lifestyles and professional lives determine our visual habits and every individual uses and assesses the various visual ranges differently. In addition, technical innovations in media communications further differentiate our vision: near vision is no longer simply limited to reading a newspaper or a package leaflet, but now also includes handling, reading and writing on tablets, smartphones, laptops, e-books or desktops. These everyday tasks can involve distances ranging from 25 to 75 cm and are all assigned to near or so-called intermediate vision. The LENTIS® Mplus Family meets the challenge of these individually varying visual requirements. Choose the right MIOL for each of your patients and achieve the best possible patient satisfaction!

<table>
<thead>
<tr>
<th>Description</th>
<th>LENTIS® Mplus®</th>
<th>LENTIS® Mplus MF30</th>
<th>LENTIS® Mplus MF20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient type</strong></td>
<td>NDL: &quot;near-dominated lifestyle&quot;</td>
<td>DDL: &quot;distance-dominated lifestyle&quot;</td>
<td>IDL: &quot;intermediate-dominated lifestyle&quot;</td>
</tr>
<tr>
<td><strong>IOL performance</strong></td>
<td>Very good distance vision</td>
<td>Excellent distance vision</td>
<td>Excellent distance vision</td>
</tr>
<tr>
<td></td>
<td>Very good intermediate vision</td>
<td>Good intermediate vision</td>
<td>Very good intermediate vision</td>
</tr>
<tr>
<td></td>
<td>Excellent near vision up to 30 cm</td>
<td>Very good near vision up to 35 cm</td>
<td>Good near vision up to 45 cm</td>
</tr>
<tr>
<td><strong>D (distance vision)</strong></td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
</tr>
<tr>
<td><strong>I (intermediate vision)</strong></td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
</tr>
<tr>
<td><strong>N (near vision)</strong></td>
<td>★★★★</td>
<td>★★★</td>
<td>★★★</td>
</tr>
<tr>
<td><strong>Features</strong></td>
<td>Addition of 3 diopters and additional depth of field APA</td>
<td>Addition of 3 diopters</td>
<td>Addition of 2 diopters</td>
</tr>
<tr>
<td></td>
<td>For LENTIS® Blended Vision strategies with LENTIS® Mplus MF20 and optional the LENTIS® Comfort IOL</td>
<td>Fast neuro-adaption</td>
<td>Very good low-light vision</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minimal halos and glare phenomena</td>
<td>Patients with zero tolerance for halos and glare phenomena</td>
</tr>
</tbody>
</table>

**Rating:** good (★★), very good (★★★★) and excellent (★★★★★★)
LENITIS® Mplus | LENTIS® Mplus

Vision individually adapted to the daily requirements and viewing habits of the patient!
What makes the $\text{M}_{\text{plus}}^\times$-technology unique?

- $\text{M}_{\text{plus}}^\times$ with „Additive Paraxial Asphericity“ (APA):
  - Enhanced far and near focus zones for better depth of focus and a balanced vision at all viewing distances
  - Outstanding visual performance in the entire intermediate vision field by adapted zone focusing
  - Easier neuronal image interpretation due to intelligent focal modulation for all light conditions

- $\text{M}_{\text{plus}}^\times$ with „Surface Design Optimisation“ (SDO):
  - Higher pupil independence and better reading through a new surface design of the near vision segment
  - Light efficiency $> 95\%$ by improved SMI production technology
  - Significantly reduced photic phenomena by homogeneous peripheral transition zone

Get off the Peaks, get into the Zone!
The ambition behind the Mplus modification and the objective of the new $\text{M}_{\text{plus}}^\times$ is to achieve a general enhancement and extension of the depth of focus, not just an improvement of individual focal points. The unique and unmistakable defocus curve of the Mplus$^\times$ visualises the following: instead of being limited to the maximisation of so-called „peaks“ in the near, intermediate and far vision, the $\text{M}_{\text{plus}}^\times$ maximises the total area under the defocus curve, which corresponds to the entire viewing zone.
The result: genuine extension of the depth of focus at all distances!

Advantages of the new $\text{M}_{\text{plus}}^\times$-technology:

- Excellent visual acuity results for the complete near range
- Very good visual acuity results for the complete intermediate range due to the extended depth of focus
- Maximised light efficiency of $>95\%$
- Natural contrast and colour perception
- True 360° sharp optic edge
- Proven HydroSmart®-Acrylate
Clinical results* LENTIS® MplusX

Prof. Dr. Sunil Shah, Midland Eye, Solihull West Midlands, UK

The binocular defocus graph of the LENTIS® MplusX confirms the outstanding visual acuity performance of this multifocal lens for all distances. In addition to the strong visual performance for the distance vision the chart shows, in particular the balanced visual results for the intermediate and near vision. No significant slopes in visual acuity between the individual visual distances exist. Furthermore, the area-of-focus metric is maximised and thus creating a balanced and natural vision.

The LENTIS MplusX with 3.0 Addition is a complete solution guaranteeing balanced vision at any distance, but particularly at near range, without glasses. It offers patients the highest quality of life with best near vision.  See also Shah S., Buckhurst PJ et al.

LENTIS® MplusX - Excellent contrast sensitivity results

The question raised by Prof. Sunil Shah’s presented graphics focuses on contrast sensitivity. The charts compare the contrast sensitivity of monofocal IOLs with those of the rotationally asymmetric LENTIS® Mplus MIOLs. Conventional, rotationally symmetric multifocal IOLs are known for their problems with contrast sensitivity due to the technically induced high loss of light. In comparison, the sector shaped Mplus-MIOL, with its very good light efficiency, shows a naturally high contrast sensitivity equal to those of monofocal IOLs.

* Bibliography as reference of all in this brochure presented clinical studies can be found on page 12 and 13 of this brochure.
Comparative study LENTIS\textsuperscript{$\text{Mplus}$} and LENTIS\textsuperscript{$\text{Mplus}$ MF30}

Dr. Aloysius Joseph Low, VISTA Eye Specialist, Malaysia

**Comparison of UCDVA (6 months post-op)**

- 20/20 or better
  - Mplus (N=50): 68%
  - Mplus\textsuperscript{X} (N=50): 90%

- 20/25 or better
  - Mplus (N=50): 58%
  - Mplus\textsuperscript{X} (N=50): 88%

- 20/32 or better
  - Mplus (N=50): 12%
  - Mplus\textsuperscript{X} (N=50): 92%

**Comparison of UCIVA (6 months post-op)**

- 20/20 or better
  - Mplus (N=50): 56%
  - Mplus\textsuperscript{X} (N=50): 90%

- 20/25 or better
  - Mplus (N=50): 58%
  - Mplus\textsuperscript{X} (N=50): 88%

- 20/32 or better
  - Mplus (N=50): 100%
  - Mplus\textsuperscript{X} (N=50): 92%

**Comparison of UCNVA (6 months post-op)**

- N3 or better
  - Mplus (N=50): 22%
  - Mplus\textsuperscript{X} (N=50): 46%

- N4 or better
  - Mplus (N=50): 70%
  - Mplus\textsuperscript{X} (N=50): 86%

- N5 or better
  - Mplus (N=50): 80%
  - Mplus\textsuperscript{X} (N=50): 96%

- N6 or better
  - Mplus (N=50): 100%
  - Mplus\textsuperscript{X} (N=50): 92%

Further results of the comparative study:

- Less halos and glare phenomena
- Fewer problems reading, even in low light
- Easy to implant, no refractive error
- Also suitable for LASIK patients, no HOA
- Better contrast viewing as a result of less than 5% light loss
- High patient satisfaction

**6 months post-Op Mean**

<table>
<thead>
<tr>
<th></th>
<th>UCDVA (LogMar)</th>
<th>UCIVA (LogMar)</th>
<th>UCNVA (LogMar)</th>
<th>MRSE (D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mplus (N=50)</td>
<td>0.05 ± 0.08</td>
<td>0.12 ± 0.09</td>
<td>0.15 ± 0.10</td>
<td>-0.06 ± 0.27</td>
</tr>
<tr>
<td>Mplus\textsuperscript{X} (N=50)</td>
<td>0.07 ± 0.08</td>
<td>0.08 ± 0.07</td>
<td>0.06 ± 0.08</td>
<td>-0.05 ± 0.17</td>
</tr>
<tr>
<td>T-Test</td>
<td>p &gt; 0.05</td>
<td>p &lt; 0.05</td>
<td>p &lt; 0.05</td>
<td>p &gt; 0.05</td>
</tr>
</tbody>
</table>

Comparative optical bench and defocus curves of LENTIS\textsuperscript{$\text{Mplus}$} and trifocal IOLs

Prof. Dr. Jorge Alio. University Miguel Hernandez de Elche, Alicante, Spain

Comparative analysis shows the superior visual acuity and image quality of the Mplus-technology.
Clinical results LENTIS® Mplus LS-313 MF30

Prof. Dr. Jan Venter, Medical Director Optical Express, London, UK

Visual acuity results of almost 10,000 LENTIS® Mplus IOLs clinical evaluated: in a large comparative study, carried out by Professor Jan Venter between November 2009 and September 2011, 9,366 eyes of 4,683 patients were treated with LENTIS® Mplus intraocular lenses. During a 6-month follow-up study, the near, intermediate and distance visual acuity results of 4,240 LENTIS® LS-312 MF30 IOL models (C-loop design) and 5,126 LENTIS® LS-313 MF30 IOL models (plate haptic design) were compared with each other, before and after surgery, and evaluated. The visual acuity of the patients was excellent for all distances for both lens models.

In addition, a patient survey was carried out. 98% of the patients were happy with the results after surgery and 86% had no problems reading very small print. Almost all patients would therefore unreservedly recommend the LENTIS® Mplus!

Patient Questionnaire [3 month follow-up appointment at the clinic] N = 1244

How satisfied are you with the result of the procedure?

- Very satisfied: 68%
- Satisfied: 26%
- Unaffected: 4%
- Dissatisfied: 1%
- Very dissatisfied: 1%

How did the procedure affect your ability to read small print (telephone directory, newspaper)?

- Highly enhanced: 59.2%
- Enhanced: 26.5%
- Unaffected: 6.7%
- Declined: 6.6%
- Highly declined: 1.0%
Clinical results LENTIS® Mplus LS-313 MF20

With the LS-313 MF20, Oculentis offers a Low-Add MIOL variant of LENTIS® Mplus, a lifestyle multifocal lens without side effects that focuses performance on the intermediate and far ranges. Whereas the MF30 covers the complete spectrum, the MF20 focuses on the important intermediate range while still offering good performance for reading. The best feature is that the lenses do all this without compromises, so that the 2.0 Addition (normally) gets along almost entirely without side effects such as glare, halos or double images.

Dr. Josef Reiter, Augen MVZ Landshut, Germany

Dr. Robert J. Morris, Southampton University Hospitals, UK

### Subjective defocus LS-313 MF20

**Results:**
- Defocus curve with very flat slope, max. area under the curve
- Very good results, particularly in the intermediate range
- Good near range

### Binocular uncorrected NVA (N=20 patients)

<table>
<thead>
<tr>
<th>UNVA (Nieden)</th>
<th>N (patients)</th>
<th>Cumulated in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>N3.2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>N4</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>N5</td>
<td>12</td>
<td>85</td>
</tr>
<tr>
<td>N6</td>
<td>2</td>
<td>95</td>
</tr>
<tr>
<td>N8</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>N10</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

### Monocular distance-corrected NVA (N=38 eyes)

<table>
<thead>
<tr>
<th>CDNVA (Nieden)</th>
<th>N (eyes)</th>
<th>Cumulated in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>N3.2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>N4</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>N5</td>
<td>17</td>
<td>71</td>
</tr>
<tr>
<td>N6</td>
<td>5</td>
<td>84</td>
</tr>
<tr>
<td>N8</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>N10</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>N12</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>N14</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

**Further results:**
- 100% of patients > 6/7.5 & N6 binocular
- 81% of patients = 6/6 & N5 binocular
LENTIS® MplusX toric | Mplus toric

Extend your Vision!

The best combination of two high-tech solutions: with the multifocal-toric LENTIS® MplusXtoric and MplusXtoric, the innovative presbyopia correction of the advanced LENTIS® Mplus Family and the optimal astigmatism treatment of the new LENTIS® TplusX were combined. The result: optimal vision for your patients!

Toric functionality with simplified implantation characteristics

With the toric Mplus-IOLs we offer a personalised solution for patients suffering from presbyopia in combination with regular corneal astigmatism. Due to its specially-designed optics, the toric MIOl compensates for all forms of corneal irregularities, thus providing sharp and clear vision.

In addition, the preset inferior placement of the multifocal near segment and the accordingly adjusted torus facilitate the orientation and thus the implantation. The proven plate-haptic design guarantees optimum rotational stability.

Example
Incision: 110°
Cylinder axis: 60°
Rotation: Toward 12 o’clock till IOL-cylinder markings are in line at 60° (i.e. Incision at 90° means no rotation)

Simplified operation: The preset inferior placement of the multifocal near segment and the individually adjusted torus simplify orientation and implantation.

The toric IOL of the LENTIS® MplusFamily offer many advantages compared with common rotationally symmetric multifocal-toric IOL

LENTIS® MplusFamily - attributes
- Excellent visual acuity results for the near, intermediate and distance ranges
- Extended depth of focus and optimised image quality for all ranges of vision
- Increased pupil independence, now suitable for very small pupils (>2.0 mm)
- Minimal halo and glare effects

LENTIS® TplusX - attributes
- Individual and highly accurate astigmatism correction to precisely 0.01D
- Natural high contrast and colour perception
- True 360° sharp optic edge for best-possible PCO prevention
- Maximised light efficiency of > 95%
- +2.0D and +3.0D near addition available
- Very high rotational stability thanks to its haptic design
- Optional: Violet light filter for improved retinal protection
Toric LENTIS® IOL for an eXact astigmatic correction!

In a large-scale clinical trial, conducted by Professor Jan Venter (MD, Optical Express, London), multifocal toric intraocular lenses of the LENTIS® Mplus® type were implanted in 1,030 eyes. The lenses are tailored to each patient's parameters with an accuracy of 0.01 diopters and the outcomes proved convincing owing to their excellent refractive results, the precise correction of astigmatism and presbyopia, and above-average patient satisfaction.

**Figure:** Refractive cylinder pre-op (a) compared to the rest of cylinders post-OP (b)

- N = 1030
- Sphere pre-OP: +3.12D +/- 5.18 SD (-11.0D to +12.25D)
- Cylinder pre-OP: -3.81D +/- 1.43 (-1.50D to -6.75D)

- 84.3% of all eyes had a refractive cylinder post-OP < -0.5D
- 97.7% of all eyes had a refractive cylinder post-OP < -1.0D

**High rotational stability:** The average rotation after 3 months post-surgery was minimal 2.53° +/- 2.27°.

**Source:**

Jan Venter, MD, PhD, Toric Multifocal Mplus, study results presented at the 1st International Oculeinis User Meeting, Majorca, October 2012.

Siehe auch: Jan Venter, MD, PhD, Outcomes and complications of a multifocal toric intraocular lens with a surface-embedded near section, Journal of Cataract & Refractive Surgery, Volume 39, Issue 6, June 2013
Clinical study

Prof. Dr. Magda Rau, Oci Centre Prag, Privat Clinic Dr. Rau, Augenklinik Cham

In a recent clinical study, led by Prof. Dr. Magda Rau, 10 multifocal toric LENTIS® MplusXtoric intraocular lenses were examined with respect to their optical performance. The study confirms very good functional results with a very high patient satisfaction and a maximum spectacle independence post-OP for this advanced IOL. The toric MIOL was bilaterally implanted without complications and distinguished itself by the prescribed inferior placement of the multifocal near segment and the correspondingly adjusted torus. These factors simplify the alignment and therefore lead to a simplified implantation behavior.
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Professional literature with a single click:
www.oculentis.com/bibliography
LENTIS® MplusX Family

Vision performance exclusively adapted to the daily requirements and viewing habits of the modern individual patient! Choose the Mplus lens model most effective for you and them:

- +2.0D and +3.0D addition
- Excellent visual acuity results for the near, intermediate and distance ranges
- Extended depth of focus and optimised image quality for all ranges of vision
- Maximised light efficiency of >95%
- Increased pupil independence, suitable for very small pupils
- Minimal to no halo and glare effects
- Natural contrast and colour perception
- True sharp 360° continuous barrier effect

LENTIS® MplusX Tonic Family

The best combination of two high-tech solutions: with the toric LENTIS® Mplus X IOLs, the innovative presbyopia correction of the advanced LENTIS® Mplus Family and the individual and highly accurate astigmatism correction to precisely 0.01D of the LENTIS® TplusX were exceptionally combined. The result: optimal vision for your patients!

MplusX attributes:
- +2.0D and +3.0D near addition selectable
- Excellent visual acuity results for the near, intermediate and distance ranges
- Extended depth of focus and optimised image quality for all ranges of vision
- Maximised light efficiency of >95%
- Increased pupil independence, suitable for very small pupils (>2.0 mm)
- Minimal to no halo and glare effects

TplusX attributes:
- Individual and highly accurate astigmatism correction to precisely 0.01D
- Very high rotational stability thanks to its haptic design
- Natural high contrast and colour perception
- True 360° sharp optic edge for best-possible PCO prevention
- Optional: Violet light filter technology for improved retinal protection
**LENTIS® mplusFamily**

<table>
<thead>
<tr>
<th>Type</th>
<th>Optic Size</th>
<th>Overall Length</th>
<th>Haptic Angulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foldable one-piece acrylic IOL</td>
<td>6.0 mm</td>
<td>11.0 mm</td>
<td>0°</td>
</tr>
</tbody>
</table>

**Multifocal**

PREMIUM: LENTIS® mplus® - Get off the peaks, get into the zone! - aspheric

**Optic Design**
- Dioptres: Convex-concave
- Dioptres: Biconvex
- Aspherical surface - posterior,
- sectorshaped nearvision segment - anterior

**Available Diopeters**
- -10.0 to -1.0D (1.0D)
- ±0.0 to +36.0D (0.5D)

**Recom. Incision Size**
- 2.0 mm (for 1.8 injector**); 2.4 mm (for 2.2 injector) **max. 30.00**

**Recom. Injector [reusable]**
- **Injector:** Viscoject-1-hand: LI604205
- Viscoject-2-hand: LI604215
- **Cartridges:** Viscoject BIO 1.8 Cartridge-Set: LP604250C
- Viscoject BIO 2.2 Cartridge-Set: LP604240C

**Recom. Injector-Set [disposable]**
- Viscoject BIO 1.8 Injector-Set: LP604350C*
- Viscoject BIO 2.2 Injector-Set: LP604340C* **max. 25.00**

**IOL-Constants (ULIB*)**

<table>
<thead>
<tr>
<th>ACD</th>
<th>nominal</th>
<th>Haigis</th>
<th>HofferQ</th>
<th>Holl.1</th>
<th>SRK/T</th>
<th>SRK II</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.97</td>
<td>118.0</td>
<td>a0 = 0.95</td>
<td>a1 = 0.40</td>
<td>a2 = 0.10</td>
<td>pACD = 5.21</td>
<td>sf = 1.47</td>
</tr>
</tbody>
</table>

**Rating:**
- **D** = distance vision
- **I** = intermediate vision
- **N** = near vision

**Legend:**
- Good (★★★), very good (★★★★) and excellent (★★★★★)
- D = distance vision, I = intermediate vision, N = near vision
### LENTIS® mplusFamily

#### Design
Optic and haptics with square edges, posterior 360° continuous barrier effect

#### Material
HydroSmart® - a copolymer, consisting of acrylates with hydrophobic surface, UV absorbing

#### Refractive Index
1.46

### Multifocal-toric

#### Optic Design
Biconvex
- Aspherical and toric surface - posterior, sectorshaped nearvision segment - anterior
- Additionally available with violet light filter

#### Available Diopters
\[ \pm 0.0 \text{ to } +36.00 \text{D} | \text{cyl.} +0.25 \text{ to } +12.00 \text{D} (0.01 \text{D}) \]
Axis (1°-scaling)

#### Recom. Incision Size
2.0 mm (for 1.8 injector**); 2.4 mm (for 2.2 injector) \[** \text{max. } 3.0 \text{D} \]

#### Recom. Injector
- Viscoject-1-hand: LI604205
- Viscoject-2-hand: LI604215

#### Cartridge
- Viscoject BIO 2.2 Cartridge-Set: LP604240C
- Viscoject BIO 2.2 Injector-Set: LP604340C

#### IOL-Constants (ULIB*)

<table>
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<tr>
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<th>SRK II</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.97</td>
<td>118.0</td>
<td>a0 = 0.87</td>
<td>a1 = 0.40</td>
<td>a2 = 0.10</td>
<td>pACD = 5.11</td>
<td>sf = 1.33</td>
</tr>
</tbody>
</table>

### Rating:
- Good (★☆☆☆☆), very good (★★☆☆☆) and excellent (★★★★☆)

DIN: D = distance vision, I = intermediate vision, N = near vision
What do the professionals say about the LENTIS® MplusXC?

“Just like the LENTIS® Mplus, the LENTIS® MplusXC IOL has excellent contrast sensitivity. Additionally, this new lens provides patients with significantly better intermediate vision and, on average, 1 more line of near visual acuity. In addition to the benefit of providing a wide range of functional vision, the MplusXC lens design addresses the minimal drawbacks of the first-generation design. Although it is not a trifocal lens, the results are probably better than what we can achieve with a trifocal.” 
Prof. Dr. Sunil Shah, MD, FRCPht, FRCSEd, 02/2014.

“Initial outcomes are remarkable, and the IOL provides very clear vision from far to near distances. Due to its design, the loss of light is minimal and, therefore, my patients do not complain about night driving problems or waxy vision. I acknowledge the advantage of the LENTIS® Mplus X IOL and, therefore, at the moment it is my first choice among multifocal IOLs.” 
Hiroyuki Araki, MD, PhD, 02/2014.

What do the professionals say about the LENTIS® MplusX?

“I think that what we have to remember is that diffractive multifocal lenses have been available for 20 years, with a typical energy loss of approximately 20%. If we compare this to 7% (with the Mplus), the difference is not the 14% or 15% we showed in our study—the difference is a 66% less loss of energy. I think if you look at it from this perspective, then you can understand the big difference between this and other multifocal IOLs.”
Gerd U. Auffarth, MD, PhD in LENTIS® Mplus and LENTIS® MplusX - Advanced multifocal IOL technology for the treatment of presbyopia, astigmatism, and cataract, supplement to CRST Europe 02/2012.

“There are 40 Optical Express clinics in the United Kingdom, and each clinic performs laser vision correction as well as refractive lens exchange/cataract procedures. […] Ninety-five percent of all patients who are treated at one of our centers will receive the Mplus. […] We have so much confidence in the Mplus that the surgeon sees the patient on the day of surgery for the first time.”
Jan A. Venter, MD, PhD in LENTIS® Mplus and LENTIS® MplusX - Advanced multifocal IOL technology for the treatment of presbyopia, astigmatism, and cataract, supplement to CRST Europe 02/2012.

“My results were so good that I moved to implanting only this lens, without particular discrimination in terms of patient selection.”
Jorge L. Alió, MD, PhD in LENTIS – The only Presbyopia Lens with HD-Vision, supplement to CRST Europe 05/2010.

What do the professionals say about the LENTIS® MplusXtronic?

“The MplusXtronic IOL provides good visual acuity for all ranges of vision. In comparison with the first-generation LENTIS® Mplus IOL, the near visual acuity has improved with the MplusXtronic, and my patients no longer require spectacles for reading small print or computer use. Additionally, because of the reduction in the incidence of glare and halos with the MplusXtronic IOL in comparison to some rotationally symmetric multifocal IOLs I have previously implanted, I am able to implant the Mplus Xtronic lens also in my demanding male patients. The improvement in near visual acuity that this lens provides makes it a great choice for my female patients as well. As a result, I am now able to offer one lens—the LENTIS® MplusXtronic IOL—to all of my patients, regardless of gender.”
Magda Rau, MD, is the Head of the Augenklinik Cham and Refractive Privatklinik- Dr. Rau, Cham, Germany, and Eye Centre Prague, Czech Republic and a Visiting Professor at the Bulgarian-American Eye Institute Prolight, 02/2014.

“The new IOL design seems to improve intermediate vision and minimise the incidence of halos and glare, especially with large pupils in younger patients. As another important point, the near segment works well in eyes with small pupils, which is common in cataract patients. Patients already had no major complaints with the LENTIS® Mplus, but with the new MplusX lens design, patient satisfaction seems to be even higher. The LENTIS® MplusXtronic is a great tool for our presbyopic patients to achieve spectacle independence.”
Ruediger Schmid, MD, FEBO, practices at the AugenAllianz Zentrum Dillingen, Germany, 02/2014.
What do the professionals say about the LENTIS® \textsuperscript{TM} Mplus\textsuperscript{torc} ?

“I have to say that, of all the multifocal toric IOLs on the market, the best experience we have had, has been with the Mplus\textsuperscript{torc}. The loss of light is the lowest among all of the multifocal lenses, and the accuracy of the IOL manufacturing is excellent. Another good thing about the Mplus\textsuperscript{torc} is that the lens is always implanted in the same position; there is no need to rotate the lens toward the axis of astigmatism. You just implant it at the 12- o’clock position (90°), and it always fits well in the eye. I have yet to see a case in which the lens decenters, and this is much more than I can say for competing lenses from other companies.”

Prof. Dr. Gerd U. Auffarth, MD, PhD in LENTIS® Mplus and LENTIS® \textsuperscript{TM} Mplus\textsuperscript{torc} – Advanced multifocal IOL technology for the treatment of presbyopia, astigmatism, and cataract, supplement to CRST Europe 02/2012.

“We started implanting the Mplus in October 2010. To date, we have implanted this lens in more than 2,000 eyes. We then started with the Mplus\textsuperscript{torc} in February 2011 and have already implanted this lens in approximately 350 eyes. The main feeling across our centers is that the Mplus and the Mplus\textsuperscript{torc} are really good lenses. We have no buts anymore; there simply are not the side effects we have seen with other multifocal IOLs.”

Anders Granberg, MD, PhD in LENTIS® Mplus and LENTIS® \textsuperscript{TM} Mplus\textsuperscript{torc} – Advanced multifocal IOL technology for the treatment of presbyopia, astigmatism, and cataract, supplement to CRST Europe 02/2012.

“We have been implanting the LENTIS' Mplus\textsuperscript{torc} since November 2010 and so far our experience has been very good. This is partly because we only implant the ‘customised’ version. In practical use and with regard to implantation behaviour, this toric MIOL clearly showed excellent results in terms of the good visibility of the position of the cylinder axis and the resulting simplified implantation, plus the positioning charts also supplied for the operating theatre monitor.” Lutz Bauer, MD, PhD in LENTIS® Mplus\textsuperscript{torc} – Case study from surgery, Oculentis NEWS 02/2011.

Citations originate from the medical literature referenced in the bibliography, unless otherwise noted.

* Source: ULIB (User Group for Laser Interference Biometry)  www.ocusoft.de/ulib
Reference: www.ocusoft.de/ulib/c1.htm

The given constants are to be seen as a guide value and basis for the calculation of the IOL refractive power. Detailed information on the calculation of own constants can be found at www.ocusoft.de/ulib/c1.htm.

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We envision. You see. | www.oculentis.com/lentis-mplus-family