



ZEISS Cataract Suite markerless
Products designed to work together
for markerless toric IOL alignment



We make it visible.

ZEISS Cataract Suite markerless
Products designed to work together
for markerless toric IOL alignment



Biometry and reference image

Automatic data transfer in OR



“ I can better predict the refractive outcome of my patients with markerless toric IOL alignment from ZEISS. With the markerless system more than

Surgery, alignment and visualization

99%

of my patients have a postoperative refractive cylinder within ± 0.50 D.”*

Dr. Daniel Black, Sunshine Eye Clinic, Birtinya, Australia



* Black, D. "Evaluation of Markerless Alignment System for Toric IOLs." Paper presented at: 2015 ASCRS-ASOA Symposium & Congress; 2015 Apr 17-21; San Diego, CA.



ZEISS IOLMaster family

Precise¹ alignment starts with excellent biometry from the IOLMaster[®] family from ZEISS. The reference image is the starting point of a markerless toric IOL workflow.

Building on gold standard biometry.



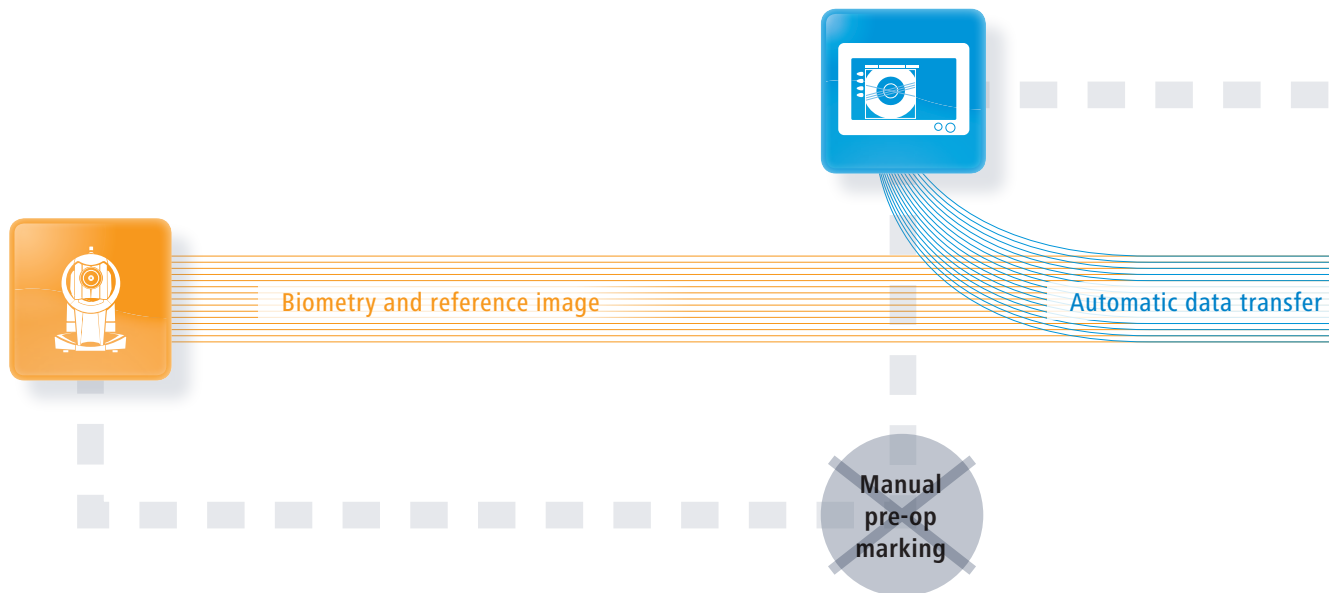
ZEISS CALLISTO eye

Connecting you and your devices, the computer assisted cataract surgery system CALLISTO[®] eye from ZEISS creates the overlays for the surgical microscope using data retrieved from FORUM[®] data management system from ZEISS.²

Designed to work together.

The direct way to precise¹ toric IOL alignment

Integrated. Precise¹. Markerless.





ZEISS Cataract Suite markerless

ZEISS OPMI LUMERA family³

All the information you need is injected into the eyepiece of the surgical microscopes of the OPMI LUMERA® family³ from ZEISS with IDIS or EDIS, to assist in precise¹ toric IOL alignment.

Building on gold standard visualization.

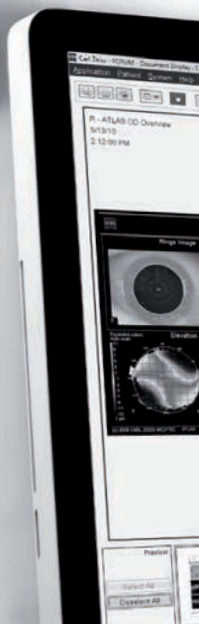
Increase the efficiency of your workflow

- Manual pre-op marking – **just skip it**
- Manual data transfer – **just skip it**
- Manual intra-op marking – **just skip it**



*"I have been using **ZEISS Cataract Suite** markerless for some time and I continue to experience the time saving and excellent results."*

Oliver Findl, MD
Hanusch Krankenhaus, Vienna, Austria



Next generation biometry

Skip preoperative corneal marking and avoid detours

ZEISS IOLMaster 700 with SWEPT Source Biometry and ZEISS IOLMaster 500 offer seamless toric workflow.

In case of relevant astigmatism, the reference image is automatically acquired along with keratometry measurement during routine biometry, all with just one device.

The image references the patient's astigmatic axis relative to the eye position using small blood vessels on the eye as landmarks. The image is later used for intraoperative matching with the live image of the surgical microscope. No preoperative corneal marking. No additional measurements for toric IOL alignment are needed later.

One device, one click, all the data.

- Gold standard biometry with ZEISS IOLMaster 500
- Unique telecentric keratometry for superior measurements
- SWEPT Source Biometry and unique Fixation Check for fewer refractive surprises with ZEISS IOLMaster 700
- Automatic reference image acquisition in case of relevant astigmatism
- Optimized lens constants for over 270 IOL models



Integrated reference image





Data transfer

Skip manual data transfer and avoid hassles

With one click, **ZEISS FORUM data management system** receives the biometry data and reference image in DICOM format for later import into the computer assisted cataract surgery system ZEISS CALLISTO eye.

No need for manual transfer of data via portable storage media. Data when and where you need it.

Seamless data transfer.

- Review of data – the ZEISS IOLMaster report with all relevant biometry data is available anywhere
- Reference image imported to ZEISS CALLISTO eye at the touch of a button
- Ready to use, no complex installation



*“The first benefit with **ZEISS Cataract Suite** markerless is, we gain a lot of time. The second, we don’t have to touch the eye – the references appear as an overlay. And the third benefit, and we have proven this, it is more exact.”*

Ekkehard Fabian, MD
Augenzentrum Rosenheim, Rosenheim, Germany

Surgery and alignment

Skip manual intraoperative marking
and align precisely¹

ZEISS CALLISTO eye matches the reference image for alignment to the patient’s eye and continuously tracks the image to provide assistance overlays. The target axis is displayed as an overlay on the live image for markerless and precise¹ toric IOL alignment. No intraoperative marking of the cornea is necessary. **Just skip it.**

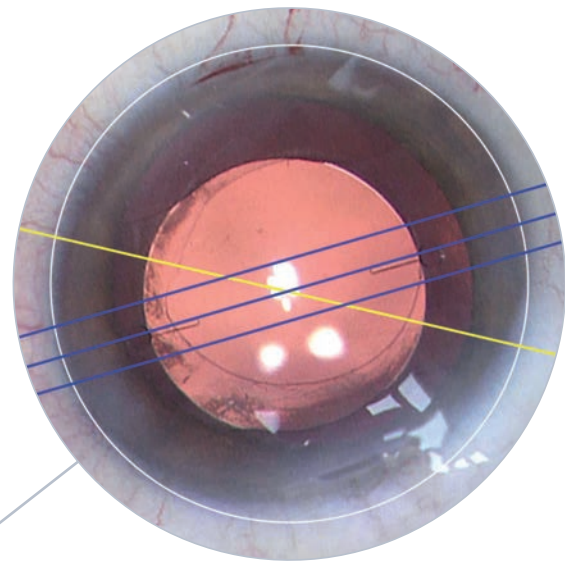
- Imports patient data from ZEISS FORUM at the touch of a button
- Assistance functions for surgery
- Provides full HD display and fully flexible HD recording, including overlays





Visualization

Skip changing your visual field of reference and stay focused



Result: Precise¹ and efficient toric IOL alignment

The data injection function of the ZEISS OPMI LUMERA family³ with IDIS or EDIS, displays the markerless toric IOL alignment data in high resolution and color right where you need it – in the eyepiece. No distraction from the surgical field. **Pure focus.**

- Crisp and clear visualization
- Multicolor data injection configurable by surgeon
- Integrated controls for relevant ZEISS CALLISTO eye functions with the ZEISS OPMI LUMERA 700

HD

HD video recording
including assisting overlay function

The moment you reach precise results. Fast.
This is the moment we work for.



// MARKERLESS
MADE BY ZEISS

ZEISS Cataract Suite markerless Streamline your cataract surgery with products designed to work together.

- Computer assisted surgery for precise¹ toric IOL alignment
- Efficient and reliable data transfer from biometry to surgery
- No manual eye marking

*"I think that if you don't use toric lenses because it's very difficult for the management of the patient, **ZEISS Cataract Suite** markerless will change your view. I think that this is the best system to go to for premium lenses; for all the parts of the surgery."*

Gilles Lesieur, MD
Centre Ophtalmologique Iridis, Albi, France

"The precision achieved in IOL alignment with this technology allows a highly predictable astigmatic correction and therefore an efficient visual rehabilitation."

Dinh Liem Trinh, MD
Centre Hospitalier National d'Ophtalmologie des Quinze-Vingts, Paris, France

*"**ZEISS Cataract Suite** markerless seamlessly integrates into our eye care data management network, allowing for direct data transfer from the diagnostic to the surgical workplace. A real efficiency gainer!"*

Wolfgang Mayer, MD
Augenklinik der Ludwig-Maximilians-Universität, Munich, Germany

*"The ZEISS integrated surgical suite contributes to:
better outcomes, greater efficiency, and better bottom line."*

William W. Culbertson, MD
Bascom Palmer Eye Institute, Miami, Florida, USA

1. Clinical data of Prof. Findl/Dr. Hirnschall presented at ESCRS 2013 – technically verified pre-/intraoperative matching precision $\pm 1.0^\circ$ in mean
2. Or other compatible PACS (Picture Archiving and Communication System)
3. **ZEISS Cataract Suite** markerless is available with: S7/OPMI Lumera, S88/OPMI Lumera T, OPMI Lumera i and OPMI LUMERA 700

CE 0297 CALLISTO eye
FORUM
IOLMaster 700
IOLMaster 500

CE OPMI LUMERA 700
OPMI Lumera i
S7 / OPMI Lumera
S88 / OPMI Lumera T
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EN_32_010_0002II / SUR_6516 Rev B

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