



MILAN



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Refractive And Visual Outcomes Of A Large Series Of A New Extended Depth Of Focus (Edof) Intraocular Lens

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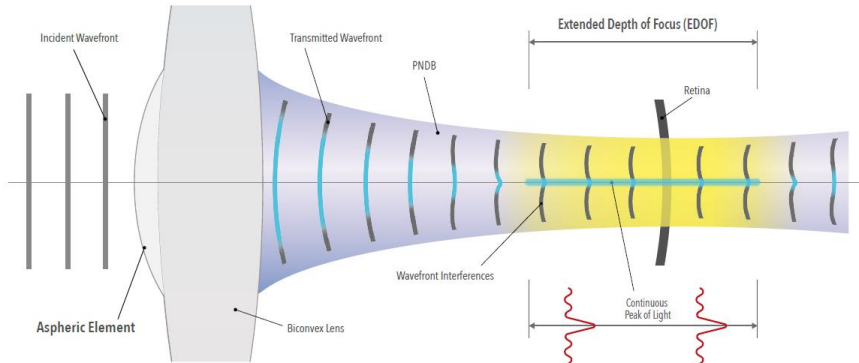
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Gilles Lesieur is consultant for Carl Zeiss Meditec and has Royalties for BVI and Rumex instrumentation
Paul Dupeyre has no financial interest in any of the mentioned products or methods

Purpose

- To assess **the refractive and visual outcomes** after implantation of a new **EDOF IOL**
- **Rotational stability, Interferometric IOL constant optimization, Spectacle independence and optical phenomena**
- What **side effects** should be expected with this implant?
- All surgeries were performed by **the same surgeon (GL)**



IOL characteristics

LUCIDIS - Swiss Made - EDOF IOL

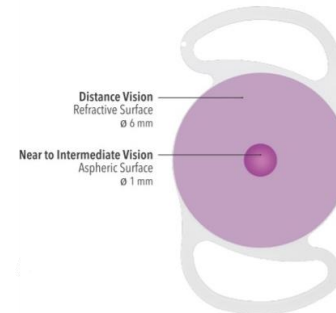
Hydrophilic Acrylic 26%

2 Diameters (**108** & **124mm**)

Toric version

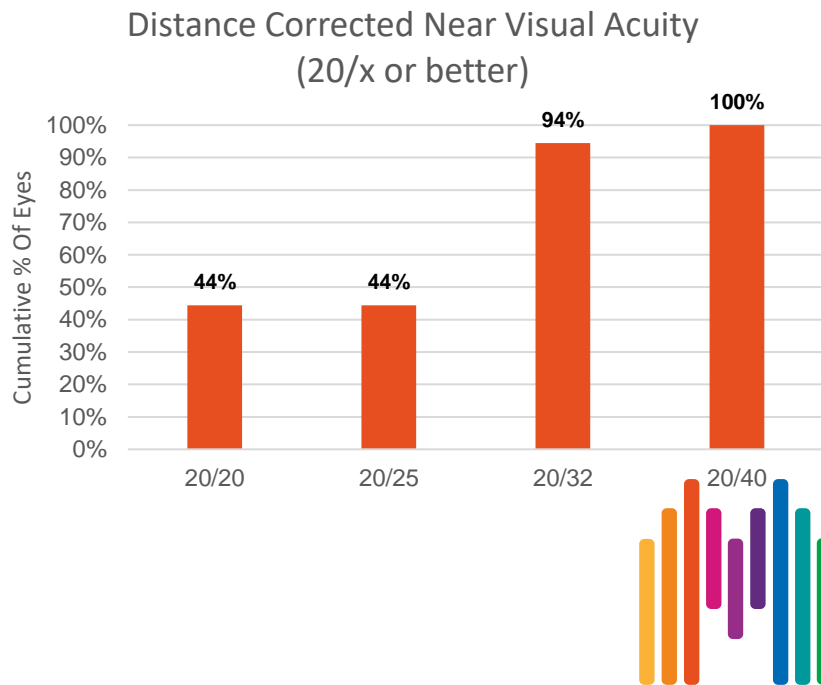
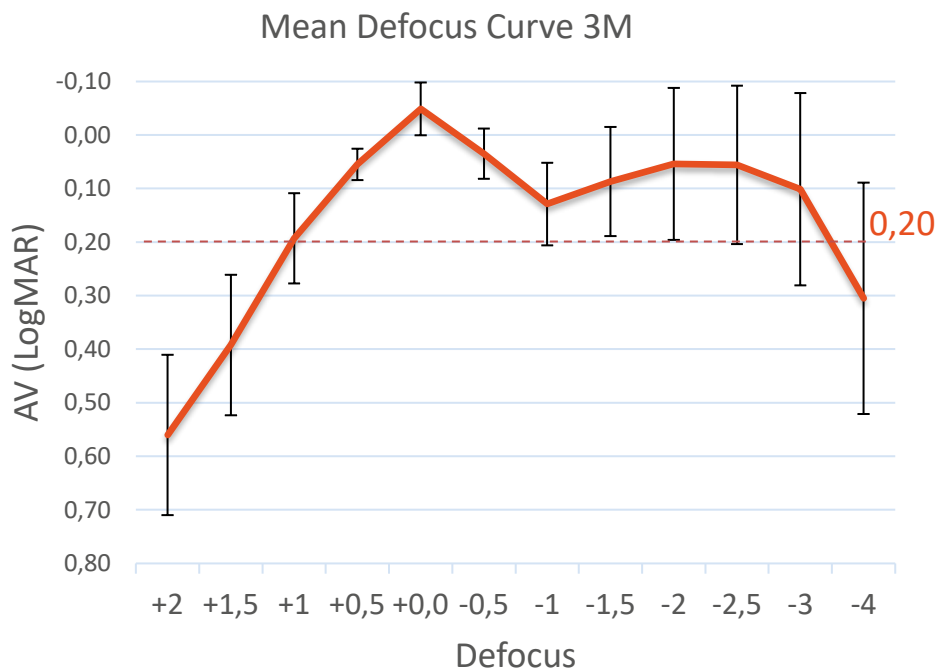
Unpolished

PNDB (Pseudo Nondiffracting Beam)



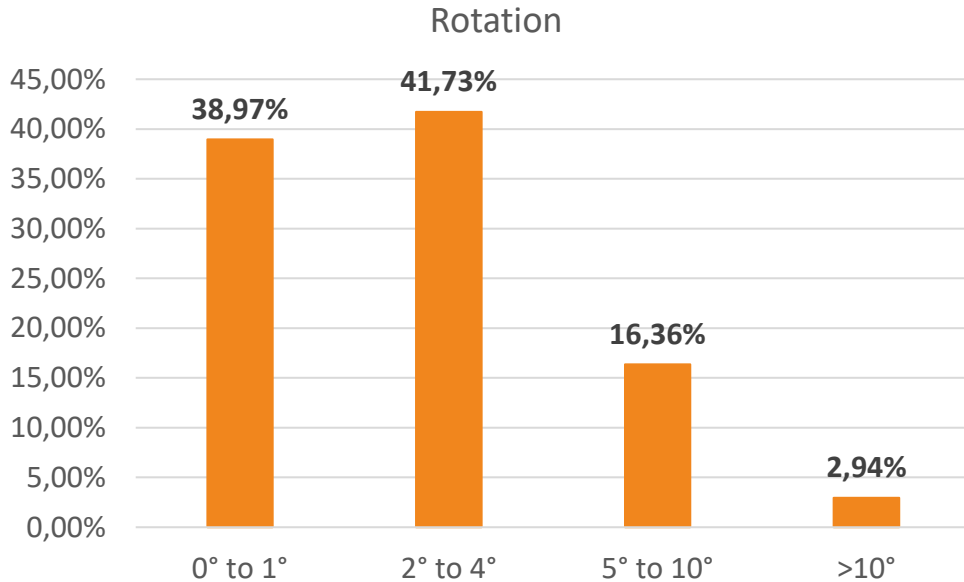
Results – Defocus curve & visual acuity

- Personal experience: **985 Lucidis 124M/MT** and **78 Lucidis 108M/MT**
- Interferometric IOL **constant optimization** has already been performed, going from **118.5** to **118.789** for the **Lucidis 124M/MT** (Thanks to Warren Hill)



Results – Postoperative Rotation

- **Good stability** for the 124MT (n=544)



56,80% $\leq 2^\circ$

86,03% $\leq 5^\circ$

97,06% $\leq 10^\circ$



Lucidis 124MT

N	544
Mean ($^\circ$)	2,80
STD \pm ($^\circ$)	2,74
Median ($^\circ$)	2
Min ($^\circ$)	0
Max ($^\circ$)	15



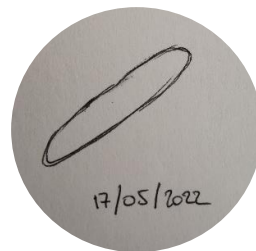
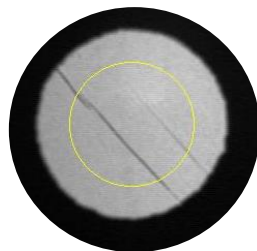
What side effects should be expected with this implant?

Side effects have a **low incidence** with this implant, we nevertheless observed:

- **Some photophobic** patients the **first two months** (myosis or slight inflammation?)
- **Some postoperative rotation** for the small diameter (**108M**)
- **Anterior capsule contraction syndrome (ACCS)** → (Solved by widening the rhexis from 5.2mm to 5.5mm)
- **Some capsular folds** causing photic symptoms as "**Light streaks**":



Capsular folds



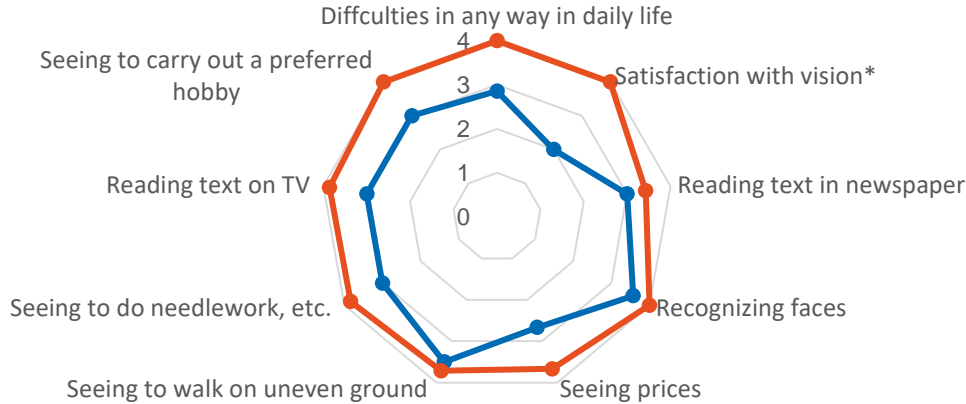
Exteriorization of light streaks



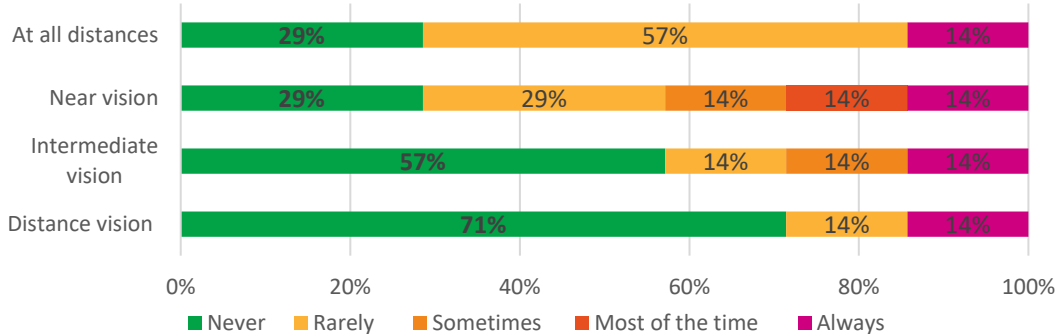
Results – Questionnaire

Global Mean - CatQuest-9SF

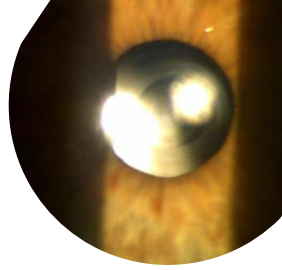
● Before surgery ● After surgery



Spectacle independence - Do you use your glasses ?



Conclusion



- The **Lucidis EDOF IOL** showed very good **refractive and visual results** and a **defocus curve** with a shape specific to its optics
- **Toric version** already available with really **high rotational stability (124MT)**
- For small eyes, it is better to select the small diameter (108M) and **enlarged the capsulorhexis to 5.5mm**
- **Very satisfied patients**, with an evolution of the average CatQuest-9SF **score of +33%**
- Total spectacle independence in **29% of cases**
- No dysphotopsia at 3-months follow-up

