

ZEISS CT LUCIA 621P demonstrates good efficacy, safety and very high patient satisfaction

At the 12 months post-operative visit, patients to have excellent visual acuity for distance, and no difficulties with daily activities in 84% of patients.

SOURCE



Title

Capsular bag performance of an aspheric hydrophobic IOL after conventional phacoemulsification or femtosecond laser-assisted cataract surgery: 12-month results of a randomized prospective study



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Publication

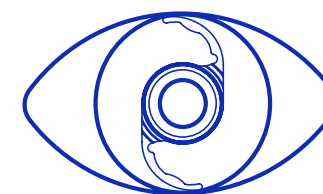
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<https://doi.org/10.1007/s00417-025-06919-1>

METHODOLOGY

- **Evaluation of capsular bag stability and refractive outcomes of the CT LUCIA 621P after conventional (CCS) or femtosecond laser-assisted cataract surgery (FLACS) over 12 months**
- Prospective, randomized, examiner-masked study with bilateral, intraindividual comparison
- Evaluation of IOL status (tilt, decentration, dislocation, glistening, PCO) at 1, 6 and 12 months postoperatively
- Subjective refraction, best-corrected and uncorrected distance visual acuity at every follow-up visit
- Monocular contrast sensitivity under photopic condition
- Binocular photopic phenomena at 6 and 12 months
- Patient-report outcome measures (PROMS) at 12 months with Catquest-9SF and Quality of Vision questionnaire

Sample Size



37 patients / 74 eyes (average age: 70.5)
Randomized implantation with CT LUCIA 621P – one eye FLACS and second eye CCS

RESULTS

Visual Acuity

Monocular UDVA was 0.06 ± 0.11 and 0.05 ± 0.11 , while monocular BCDVA was -0.08 ± 0.07 and -0.08 ± 0.08 for the CCS and the FLACS group, respectively (all values in logMAR) at 12 months. There was **no statistically significant difference** between groups.

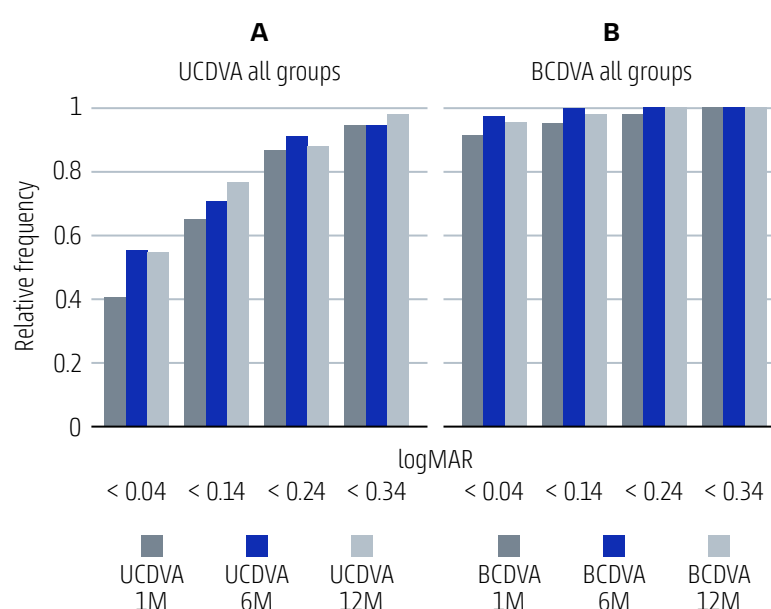


Figure 1: Relative frequency uncorrected (A) and best-corrected (B) distance visual acuity at 1, 6 and 12 months post-operatively

Defocus curve performance

A mean visual acuity better than 0.20 logMAR was observed within the range of +1.0 to -1.0 D. Furthermore, at -1.5D (66cm) monocular VA of close to 0.30 logMAR.

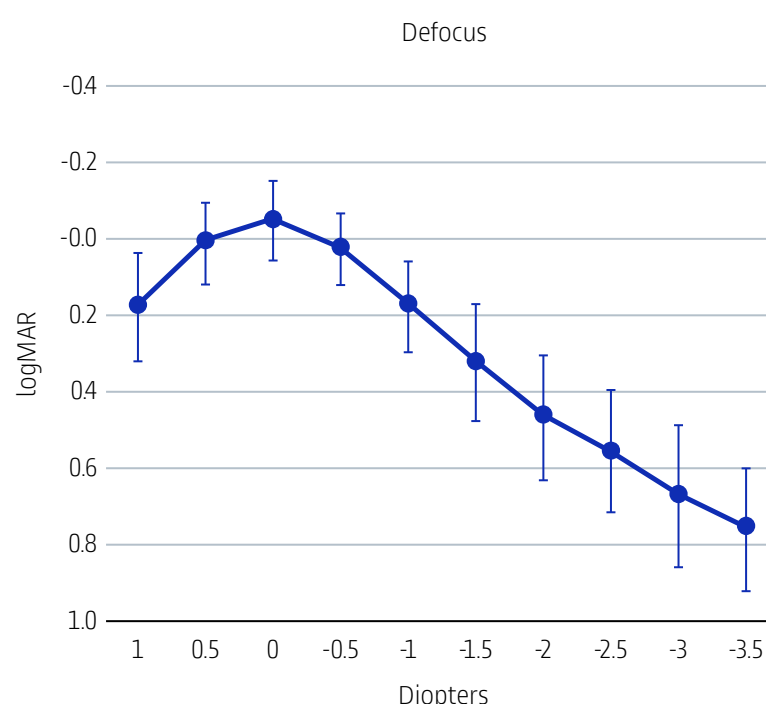


Figure 2: Monocular defocus curve for both groups at 1 year

Patient Satisfaction

97.30% of patients were very or fairly satisfied at 12 months. In 83.78% of patients, there were no difficulties with daily activities.

Visual Disturbances

At 12 months, 11 patients experienced halo, while 7 experienced glare. However, 97.3% of patients rated the halo as “not at all bothersome” or “a little”, and 100% of patients rated the glare as “not at all bothersome” or “a little”.

PCO & Glistening

At 6 months, 4 eyes underwent Nd:YAG capsulotomy for PCO treatment. At 12 months, PCO was considered not clinically significant in all cases, as no vision deterioration occurred. Mild glistening was present in 2 eyes.