

# One-year follow-up of a new posterior chamber toric phakic intraocular lens implantation for moderate-to-high myopic astigmatism

M E Sucu <sup>1</sup>, A Agca <sup>2</sup>, B Tulu <sup>3</sup>

Affiliations + expand

PMID: 33880683 DOI: [10.1007/s10792-021-01853-7](https://doi.org/10.1007/s10792-021-01853-7)

 Full text links

 Cite

## Abstract

**Purpose:** To investigate refractive and visual outcomes as well as rotational stability following implantation of Eyecryl phakic toric intraocular lens (pIOL) for moderate-to-high myopic astigmatism.

**Methods:** The efficacy, safety, predictability, stability, and adverse events of Eyecryl toric pIOL were evaluated in patients with spherical refraction from - 4.50 to - 18.50 diopters (D) and cylindrical refraction from - 0.50 to - 5.50 D.

**Results:** This study included 60 eyes of 31 patients. The mean manifest refraction spherical equivalent (MRSE) dropped from  $- 10.45 \pm 2.74$  D preoperatively to  $- 0.34 \pm 0.51$  D and  $- 0.40 \pm 0.56$  D at 6 and 12 months postoperatively, respectively. There was an 81% decrease in astigmatism after surgery. The safety and efficacy of indices were  $1.36 \pm 0.43$  and  $1.20 \pm 0.32$ . At the final follow-up, the rate of eyes within  $\pm 1.00$  D and  $\pm 0.50$  D of the desired MRSE were 85% and 68.33%, respectively. Vision-threatening complications were not observed during the follow-up.

**Conclusions:** The implantation of pIOL was effective, safe, and predictable in patients with moderate-to-high myopic astigmatism during 1-year follow-up.

**Keywords:** Astigmatism; High myopic astigmatism; Myopia; PIOL; Toric phakic intraocular lens.

Link: <https://pubmed.ncbi.nlm.nih.gov/33880683/>