

**2007 Research Days Abstract Form – Department of Ophthalmology – UNIFESP/EPM**

2. SCIENTIFIC SECTION PREFERENCE (REQUIRED): Review the Scientific section Descriptions. Select and enter the two -letter Code for the one (1) Section best suited to review your abstract  
**(CA) CATARACT**

3. PRESENTATION PREFERENCE (REQUIRED) Check one (1)  
 (a) Paper  
**(b) Poster**

4. The signature of the First (Presenting) Author, (REQUIRED) acting as the authorized agent for all authors, hereby certifies.  
 That any research reported was conducted in compliance with the Declaration of Helsinki and the UNIFESP Ethical Committee"

\_\_\_\_\_  
 Signature of First

Scientific Section Descriptions  
 (OR) ORBIT  
 (PL) OCULAR PLASTIC SURGERY  
 (RE) RETINA AND VITREOUS  
 (RX) REFRACTION-CONTACT LENSES  
 (NO) NEURO-OPHTHALMOLOGY  
 (TU) TUMORS AND PATHOLOGY  
 (ST) STRABISMUS  
 (UV) UVEITIS  
 (LS) LACRIMAL SYSTEM  
 (LV) LOW VISION  
 (CO) CORNEA AND EXTERNAL DISEASE  
 (GL) GLAUCOMA  
 (RS) REFRACTIVE SURGERY  
**(CA) CATARACT**  
 (US) OCULAR ULTRASOUND  
 (TR) TRAUMA  
 (LA) LABORATORY  
 (BE) OCULAR BIOENGINEERING  
 (EP) EPIDEMIOLOGY  
 (EF) ELECTROPHYSIOLOGY

Deadline: 29/10/2007

FORMAT:  
 Abstract should contain:  
**Title, Name of Authors, Name of other authors (maximum 6), Purpose, Methods, Results, Conclusions.**  
 Example: ARVO (1.10 x 1.70)  
 Abstract Book

1. FIRST (PRESENTING) AUTHOR (REQUIRED)  
 Must be author listed first in body of abstract  
 ( ) R1 ( **X** ) R2 ( ) R3  
 ( ) PG0 ( ) PG1 ( ) Estagiário ( ) Tecnólogo ( ) PIBIC

**PEREIRA** **CAROLINA** **ISOLANI**  
 Last Name First Name Middle

**CATARACT** **0714/07**  
 Service (sector) Nº CEP  
 (Comitê de Ética em Pesquisa da Universidade Federal de São Paulo-UNIFESP)

5. ABSTRACT (REQUIRED)

**WAVEFRONT ANALYSIS OF ACRYSOFT® TORIC IOL**  
 PEREIRA, C. I.; BARROS, M.; VANDERLEI, S.; SORIANO, E.; NOSÉ, W.

**PURPOSE:** To compare visual performance, total and high order wavefront aberrations (coma, spherical aberration, and other terms) and contrast sensitivity in eyes implanted with monofocal spherical intraocular lens (IOL) or toric spherical IOL.

**METHODS:** Randomized prospective study. Ninety patients will be randomized to receive two IOL types: Alcon AcrySof® Natural (45 eyes) or AcrySof® Toric (45 eyes). Complete ophthalmologic examination including uncorrected visual acuity (UCVA), best-spectacle corrected visual acuity (BSCVA), corneal topography, and wavefront analysis were performed preoperatively, 30 days, and 90 days postoperatively. Pelli-Robson chart test and functional acuity contrast testing were performed approximately 60 days after surgery.

**RESULTS:** So far 36 eyes were included with 30 days of follow up. The preliminary results showed that total and high order wavefront aberrations ( $1.29 \pm 0.4$  and  $0.38 \pm 0.2$  in the AcrySof® Toric and  $1.11 \pm 0.38$  and  $0.48 \pm 0.18$  in the AcrySof® Natural, respectively) analyzed 30 days after the surgeries were similar in both IOLs. Full results will be presented.

**CONCLUSION:** The AcrySof® toric IOL seems to promote astigmatism correction without inducing more wavefront aberration than a regular spherical IOL.