

2009 Research Days Abstract Form – Department of Ophthalmology – UNIFESP/EPM

2. SCIENTIFIC SECTION PREFERENCE (REQUIRED): RS

Review the Scientific Section Descriptions. Select and enter the two-letter Code for the one (1) Section best suited to review your abstract.

3. PRESENTATION PREFERENCE (REQUIRED) Check one:

- Paper
- Poster
- FAST Paper

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'

Scientific Section Descriptions (two-letter code):

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

Deadline: Oct 12, 2009

FORMAT: Abstract should contain:

Title
Author, Co-authors (maximum 6),
Purpose, Methods, Results,
Conclusion.

Poster guidelines:
 ARVO Abstract Book (1.10 x 1.70m)

77. FIRST (PRESENTING) AUTHOR (REQUIRED):

Must be the author listed first in abstract body.

- () R1 (x) R2 () R3 () PIBIC
- () PG0 () PG1 () Fellow () Technician

Last Name: Vianna
 First Name: Lucas
 Middle: Monferrari Monteiro

Service (Sector): Refractive Surgery

CEP Number: 1623/09

5. ABSTRACT (REQUIRED):

Title **LASIK retreatment with customized versus conventional photo-ablation using LADAR – Alcon**

Author and Co-authors Lucas Monferrari Monteiro Vianna¹
 Heloisa Moraes do Nascimento¹
 Mauro Silveira de Queiroz Campos²

Purpose: To evaluate the conventional (LADAR, Alcon) versus customized (LADARWave) retreatment results of eyes submitted to primary conventional LASIK. **Methods:** Retrospective revision of consecutive clinical report forms of 50 eyes of 39 patients submitted to LASIK retreatment for myopia and astigmatism correction. The eyes were divided into two groups: one group of 25 eyes of 19 patients in which LADAR (Alcon, Texas, USA) conventional retreatment was performed and other group of 25 eyes of 20 patients that undergone LADARWave (Alcon, Texas, USA) customized retreatment. The following variables were analyzed: high contrast visual acuity and manifest refraction. Visual quality was esteemed and compared by subjective patient's questionnaire. **Results:** The results of corrected visual acuity was higher for the group submitted to conventional surgery when compared to the group undergoing customized surgery. However, the uncorrected visual acuity was not statistically different between groups. About 25% of patients in the conventional group reported glare, a percentage that reached statistical significance when compared to the custom group. The other assessed symptoms were also more prevalent in the conventional group, but without statistical significance. **Conclusion:** By applying subjective questionnaire, customized photoablation shows apparently higher results than the conventional. With respect to high contrast visual acuity, the results are similar when comparing the two groups considered, although the corrected visual acuity was higher in the conventional group. A system for asses the visual quality is necessary for evaluation and comparison of different techniques for correcting higher order aberrations.

Keywords: retreatment; Keratomileusis, Laser In Situ; myopia; astigmatism; anterior eye segment