

**2009 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.

**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)

**105. FIRST (PRESENTING) AUTHOR (REQUIRED):**

Must be the author listed first in abstract body.

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

Last Name: Barros  
First Name: Thaise  
Middle: Cardoso

Service (Sector): Glaucoma (GL)

CEP Number: 1438/05

**5. ABSTRACT (REQUIRED):**

**New methods for glaucoma diagnosis: agreement between Stratus OCT e GDx VCC RNFL measurements**

Thaise C. Barros, Andrea Kara Jose, Luiz Alberto S Melo Jr, Mauro Leite, Daniela Valença, Eglailson Almeida Jr, Ivan M Tavares

**Purpose:** To compare and correlate retinal nerve fiber layer (RNFL) thickness assessed by two different technologies: the optical coherence tomography (Stratus OCT) and the scanning laser polarimetry with variable corneal compensator (GDx VCC).

**Methods:** Thirty-seven eyes of 37 normal individuals were scanned with Stratus OCT and GDx VCC to assess the RNFL thickness. The mean ( $\pm$  SD) age was 22.70 ( $\pm$  3.46) years. The Fast RNFL Thickness 3.4 protocol and GDx VCC 2.8 mm standard scan circle were used for obtaining images in all subjects. Pupils were dilated for OCT images only. GDx VCC TSNIT Average, Superior Average and Inferior Average, as well as Stratus OCT Average Thickness, Superior Average and Inferior Average parameters were assessed and compared.

**Results:** GDx VCC mean ( $\pm$  SD) TSNIT Average, Superior Average and Inferior Average were 57.73 ( $\pm$  8.92), 70.84 ( $\pm$  6.82) and 68.13 ( $\pm$  8.92), respectively. Stratus OCT mean ( $\pm$  SD) Average Thickness, Superior Average and Inferior Average were 107.75 ( $\pm$  9.45), 131.92 ( $\pm$  15.37) and 137.49 ( $\pm$  15.02), respectively. Pearson's Correlation coefficients for these parameters were 0.62 ( $P < 0.001$ ), 0.43 ( $P < 0.01$ ) and 0.71 ( $P < 0.001$ ), respectively.

**Conclusion :** RNFL thickness obtained by GDx and OCT presented moderate to strong correlation, but OCT measurements were about two-fold thicker. Therefore, RNFL thickness data obtained by GDx VCC and Stratus OCT are not interchangeable.