2. SCIENTIFIC SECTION PREFERENCE (REQUIRED):

(GL)

3. PRESENTATION PREFERENCE (REQUIRED) Check one:
☐ Paper
X 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"

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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)

118. FIRST (PRESENTING) AUTHOR (REQUIRED):
Must be the author listed first in abstract body.

(X) R1   ( ) R2   ( ) R3   ( ) PIBIC
( ) PG0   ( ) PG1   ( ) Fellow   ( ) Technician

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Middle: Adami

Service (Sector): Glaucoma

CEP Number: 1438/05

5. ABSTRACT (REQUIRED):

AGREEMENT OF RETINAL NERVE FIBER LAYER THICKNESS MEASUREMENTS BETWEEN SPECTRAL-DOMAIN AND TIME-DOMAIN OPTICAL COHERENCE TOMOGRAPHY.
Author and Co-authors (maximum 6): LFA Lucatto, AC Kara-José, MT Leite, LA Melo Jr., LM Pinto, IM Tavares

Purpose: To evaluate the agreement between Spectral Domain Optical Coherence Tomography (SD-OCT) and Time-Domain (TD) OCT retinal nerve fiber layer (RNFL) thickness measurements in glaucomatous and healthy patients.
Methods: Twenty-one eyes with primary open-angle glaucoma and 18 healthy eyes were included in this cross- sectional study. Inclusion criteria consisted of age higher or equal to 50 years, best-corrected visual acuity of 20/40 or better, spherical refraction within ± 5.0D and cylinder correction within ± 3.0D, reliable SAP results and no prior intraocular surgery except for uncomplicated cataract extraction and filtering surgery for more than 3 months. Eyes with previous blunt ocular trauma and with ocular disease other than glaucoma and cataract were excluded.
All participants underwent complete ophthalmological examination, standard automated perimetry, optic disc photography and RNFL measurements using TD-OCT (Stratus; software version 4.0, Carl Zeiss Meditec, California, USA) and SD-OCT (Spectralis; software version 4.0, Heidelberg Engineering, Dossenheim, Germain). TD-OCT and FD-OCT imaging of the RNFL was performed consecutively at the same session and through dilated pupils. 95% limits of agreement between TD-OCT and SD-OCT was calculated.
Results: The mean difference (95% limits of agreement) between Spectralis and Stratus OCT RNFL thickness in the superior, inferior, nasal, temporal and global area was 8.3 µm (-22.4 to 39.0), 1.5 µm (-23.5 to 26.4), 6.3 µm (-20.3 to 32.9), 6.8 µm (-12.0 to 25.6), and 5.6 µm (-13.9 to 25.2), respectively.
Conclusion: Poor agreement was found between Spectralis and Stratus RNFL thickness measurements.

Keywords:Glaucoma, Retinal Nerve Fiber Layer Thickness, Spectral-Domain, Time-Domain, Optical Coherence Tomography