

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

2. SCIENTIFIC SECTION PREFERENCE (REQUIRED): LOFT

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)

15. FIRST (PRESENTING) AUTHOR (REQUIRED):

Must be the author listed first in abstract body.

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

Last Name: Cariello  
First Name: Angelino  
Middle: Julio

Service (Sector): **(LA) LABORATORY**

CEP Number: 1573/08

**Assessment of *in vivo* ocular toxicity of nitric oxide donors compounds.**

**Authors:** Cariello AJ, de Souza GFP, Lowen M, Nakayama SA, de Oliveira MG, Hofling-Lima AL.

**Purpose:** To evaluate the ocular toxicity of two nitric oxide donors: S-nitrosoglutathione (GSNO) and S-nitroso-N-acetylcysteine (SNAC) prepared in a methylcellulose matrix by using an *in vivo* animal model.

**Methods:** twenty albino rabbits were enrolled in this study. All animals underwent clinical slit lamp examination. The animals were randomized into 4 groups of 5 animals: Group 1 (GSNO1), 0.15ml of GSNO at a concentration of 1mM prepared in a methylcellulose matrix was instilled onto the right eye. The left eye received the same volume of methylcellulose matrix (control). Group 2 (GSNO10), Group 3 (SNAC1) and Group 4 (SNAC10), the same procedure was performed with GSNO at concentration of 10mM and SNAC at concentrations of 1 and 10mM, respectively. After 30 minutes, 24 and 48 hours all the animals underwent a clinical evaluation and were scored according to Draize eye test. The eyes were analyzed histologically.

**Results:** There was no difference between control and treatment eye according Draize eye test score in all groups. There was no evidence of tissue toxicity in the histological analysis in all animals.

**Conclusion:** GSNO and SNAC at concentration of 1 and 10 mM are not ocular irritating compounds.