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

2. SCIENTIFIC SECTION PREFERENCE (REQUIRED):
TU

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 Heisinki 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 ( ) R2 ( ) R3
(x) PG0 ( ) PG1 ( ) Estagiário ( ) Tecnólogo ( ) PIBIC

Pereira	Patricia	Rusa
Last Name	First Name	Middle

Ocular Pathology
Service (sector)

This paper was conducted at the Henry C Witelson Ocular Pathology Laboratory, McGill University, Montreal, Canada

Nº CEP

5. ABSTRACT (REQUIRED)

MIA LEVELS OF UVEAL AND CUTANEOUS MELANO MA IN A RABBIT MODEL

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Purpose: Melanoma inhibitory activity (MIA) is a protein that has been shown to be secreted by malignant melanoma cells and to elicit gr owth inhibition of melanoma cells *in vitro*. Bosserhoff *et al*. found using Northern blot analysis that MIA gene was expressed in all melanoma cell lines tested. MIA levels were elevated in stage III and stage IV metastatic malignant melanoma but levels decr eased significantly after surgery. Also, MIA levels subsequently increased in 29 of 34 patients with rapid disease progression and decreased in 5 patients who responded to immunochemotherapy. The Henry C. Witelson Ocular Pathology Laboratory has previously described an animal model of uveal melanoma. Group 1:Uveal Melanoma (UM) 15 rabbits. 1 million human UM cells (cell line 92.1) were inoculated into the supra-choroidal space of the right eye of each albino rabbit of this group. Group 2: Cutaneous Melanom a (CM), 15 rabbits. Following the afore mentioned protocol, 1 million CM cells (cell line WM-266-4, metastatic to the lymph node) were inoculated into the eyes of each rabbit in this group. All rabbits had metastasis to the lung by the end of the model. Th e purpose of this study is to measure MIA levels in an animal model of CM and UM.
Material and Methods: Blood sample of each rabbits were collected once a week. Samples from 5 rabbits with CM intraocular tumors and 5 rabbits with UM intraocular tumors were analysed. These samples from the 7th, 8th, 10th, 11th, 12th weeks. All animals already had lung metastases by the 7th week. MIA serum levels were measured by a one -step ELISA (Roche formerly Boehringer Mannheim). Blood from one animal that had not been inoculated with melanoma was used as a control.
Results: The mean MIA serum levels in the UM rabbits were 1.17, 1.70, 1.60, 1.48, 1.37 ng in the 7th, 8th, 10th, 11th, 12th weeks respectively. The mean MIA serum levels in the CM rabbits were 4.08, 4.36, 5.09, 4.49, 5.50 ng in the 7th, 8th, 10th, 11th, 12th weeks respectively. There was no statistically significant increase between the weekly serum levels in both CM and UM groups, likely because all animals already had metastatic disease at time of blood collec tion. Although the CM group showed progressive increases in MIA levels throughout the disease progression, this was not observed in the UM group.
Conclusions: The average CM serum levels of MIA measured three times higher than those of UM. CM showed a prog ressive increase in MIA levels throughout the evolution of the disease, a result that was not observed in the UM group.