2007 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 sullied to review your abstract
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 w as 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

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5. ABSTRACT (REQUIRED)

Expression of C-kit in retinoblastoma: a potential therapeutic targe

Letícia R. de Moura, Robert J. Barry, Jean-Claude Marshall, Bruno F. Fernandes, Claudia Martins, Miguel N. Burnier Jr.

Purpose: C -kit is a transmembrane tyrosine kinase protein thought to play an important role in tumourigenesis. With the development of the compound Imatinib Mesylate that specifically inhibits tyrosine kinase recep tors, C -kit has emerged as a potential therapeutic target. This study aims to determine the immunoexpression of C-kit in retinoblastoma and correlate this expression with histopathological prognostic features.

Methods: Eighty -four paraffin -embedded retinoblastomas were collected from the Henry C. Witelson Ocular Pathology Registry. The C -kit immunostaining was used according to the protocol provided by Ventana Medical System Inc. Arizona. Immunoreactivity was correlated with the presence or absence of invas ion into the choroid and optic nerve; and the degree of tumour differentiation. Odds ratios were calculated to quantify differences in C -kit expression between tumours with different patterns of invasion and differentiation.

Results: Twenty -one (25%) slide s were excluded from analysis due to the presence of extensive tissue necrosis or absence of sufficient optic nerve tissue for analysis. Overall, C-kit expression was identified in 33/63 (52.38%) specimens analysed. Two out of the 13 tumours (15.4%) withou t choroidal and/or optic nerve invasion were positive for C -kit. On the other, C -kit was seen in 31 (62%) of the 50 tumours with extra-retinal invasion ($p<0.01$). Twenty -six of 44 specimens with choroidal involvement (59.9%, $p<0.2$), and 20/29 with optic ner ve involvement (68.96%) expressed immunoreactivity for C -kit ($p<0.02$). Fourteen of 25 specimens (56%) moderate or well differentiated and 19 of 38 (50%) undifferentiated specimens displayed positivity for C-kit ($p>0.5$).

Conclusions: More than half of retin oblastomas in this study expressed C -kit. The expression of C -kit strongly correlated with histopathological features of worse prognosis including optic nerve and choroidal invasion.