

# **EKSPRESI PROTEIN P53 MUTAN, CYCLIN D1 DAN BCL-2 PADA MELANOMA MALIGNA DAN NEVUS ELANOSITIK**

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## **ABSTRACT**

### **p53, cyclin D1 and bcl-2 protein expression in Malignant Melanoma and Melanocytic Nevi**

Background: Melanoma is the form of skin cancer that has an aggressive behavior and resistance to conventional therapy. These unusual behaviors reflecting its unique carcinogenesis process which involve several mutations in chromosomes and genome that regulate proliferation and apoptotic process. The most common mutated genes in malignant tumors is p53, cyclin D1 and bcl-2. The object of this study is to determine whether these three genes play an important role in melanoma carcinogenesis and whether there was correlation of the expression of these genes.

Methods: block paraffin of melanoma patients from Pathologic Department were collected from the period of July 2007 until June 2008. Five cases of melanocytic nevi were added as a control groups. The block then cut by microtome, placed on microscopic slides which stained with monoclonal antibody against p53, cyclin D1 and bcl-2 respectively.

Results: melanoma specimen show 100% cases positive for bcl-2, 80% cases positive for cyclin D1 and only 50% cases has scattered positive cell for p53 staining. The data then statistically analyzed Mann Whitney and the result shows that there were significance difference in expression of cyclin D1 (  $p = 0,013$  ;  $p < 0,05$  ) and bcl-2 (  $p = 0,01$  ;  $p < 0,05$  ) in malignant melanoma compared with melanocytic nevus but there was no significance difference in the expression of p53 (  $p = 0,129$  ;  $p > 0,05$  ) in melanoma compared with nevus. There was also correlation between the expression of cyclin D1 and bcl-2 (  $p = 0,0001$  :  $p < 0,01$  ) in melanoma while there were no correlation between the expression either of p53 and cyclin D1 or p53 and bcl-2 in malignant melanoma.

Conclusions: cyclin D1 and bcl-2 play an important role in melanoma carcinogenesis and there was correlation in their expression in melanoma while p53 has a less role in melanoma carcinogenesis suggesting that there was another tumor suppressor genes that was mutated in melanoma cells.

Keywords: malignant melanoma, p53, cyclin D1, bcl-2