

**THE RELATIONSHIP OF MELANOMA-ASSOCIATED ANTIGEN (MAGE) A3
EXPRESSION AND BRONCHOALVEOLAR LAVAGE (BAL) CYTOLOGICAL
RESULTS ON NSCLC AT DR. SOETOMO REGIONAL PUBLIC HOSPITAL OF
SURABAYA**

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ABSTRACT

Background

Lung cancer still becomes a worrying health issue, the major cause of death in malignant disease and the incidence rate may increase continuously. Most patients with lung cancer have been diagnosed with advanced stage lung cancer. Non-small cell lung cancer (NSCLC) is the most common type of lung cancer. To increase the cure rate and life expectancy, the lung cancer should be detected early when the cancer is still small and localized. Tumor antigen is tumor marker (biomarker) that provides information of growing cancer, which has been developed for early detection of lung cancer and therapy (immunotherapy) target. MAGE expression becomes sensitive marker in some types of cancer including lung cancer. Previous research stated that there is significant relationship between MAGE expression and histopathology of lung cancer and stage of lung cancer. The purpose of this research was to analyze the relationship between MAGE A3 expression and BAL specimen cytological results on NSCLC at Dr. Soetomo Regional Public Hospital of Surabaya.

Research methods

A total of 14 patients with NSCLC who underwent bronchoscopy for the removal of BAL in pulmonary room of Dr. Soetomo Regional Public Hospital that met the inclusion and exclusion criteria were included in this research, they were analyzed with fisher's exact test.

Results

There was only 1 (7.1%) subject with BAL cytological results of cancer cells (adenocarcinoma) of the 14 research subjects. Positive MAGE-A3 expression only occurred in 4 subjects (28.6%) of 14 subjects who were diagnosed with NSCLC.

Conclusion

There was no significant relationship between MAGE-A3 expression and histopathologic type.

Keywords: MAGE-A3, BAL, NSCLC