

**PROFILE THE PATHWAYS OF THE ADHESION MOLECULES WHICH ARE AFFECTED BY TREATMENT OF NON SMALL CELL LUNG CANCER (NSCLC) CELLS LINES WITH EPIDERMAL GROWTH FACTOR (EGF)**

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Lung cancer is the leading cause of death in developed countries. Due to the lack of diagnostic tools for early detection and an efficient treatment for advanced disease, the prognosis of lung cancer is still poor. Recently, several investigators attributed some tumor events to an important group of molecules called cadherins and integrins. The purpose of this study was to verify the interactions of cell adhesion molecules (CAM) in cell lines from lung cancer. Two of these cell lines were non-metastatic (H-358, H441) and two were metastatic ones (H1299, H292). All cell lines were treated with EGF and western blot was performed to assess the interactions between these proteins. Results showed important differences between metastatic and non-metastatic cells when both group were treated with EGF. These findings could contribute to understand how the cell can detachment from the main tumor, as well as, migrate out into the circulation and move to new places, where they form a secondary tumor (metastasis). Also provide an explanation for many lacks on interactions between adhesion molecules and improve the therapeutic approach in lung cancer.