

# European Respiratory Society Annual Congress 2013

**Abstract Number:** 883

**Publication Number:** P4514

**Abstract Group:** 11.1. Lung Cancer

**Keyword 1:** Lung cancer / Oncology **Keyword 2:** Thoracic oncology **Keyword 3:** Monocyte / Macrophage

**Title:** Recombination of B7-H4 and CD68 predicted lymph node metastasis in human lung carcinoma

Prof. Jian An 7178 Huang huang\_jian\_an@163.com MD <sup>1</sup> and Dr. Cheng 7179 Chen  
chenchengatsd@sohu.com MD <sup>1</sup>. <sup>1</sup> Respiratory Department, Tthe First Affiliated Hospital of Soochow  
University, Suzhou, China, 215006 .

**Body:** Background: B7-H4 (also called B7S1 and B7x) is the most recent addition to the B7 family. Putative receptor of B7-H4 can be unregulated on activated T cells. By the cell cycle, B7-H4 ligation of T cells has a profound inhibitory effect on the growth, cytokine secretion, and development of cytotoxicity. The observations suggest that B7-H4 over-expression may reflect a more aggressive biologic potential and may play a role in tumor immune surveillance mechanisms. Objective: To study the expression of negative costimulatory molecule B7-H4 in non-small cell lung cancer (NSCLC) tissues and its relationship with the clinical features of NSCLC. Method: B7-H4 expression and infiltration of CD8 T cells and CD68 cells in NSCLC tissues were detected by immunohistochemistry. The correlation between B7-H4 expression and CD68 cells was studied. Result: The positive rate of B7-H4 in 52 NSCLC tissues was 45.76%. B7-H4 expression was positively correlated with the clinical tumor stages and lymph node metastasis of NSCLC and CD68 cells, negatively correlated with tumor infiltration of CD8 T cells. Combining detection of B7-H4 and CD68 expression in lung carcinoma tissues can offer a valuable reference to evaluate the lymph node metastasis. Conclusion: It is evident that B7-H4 is overexpressed in NSCLC, and it plays certain role in oncogenesis and progression of human NSCLC.