



Expression and significance of myeloid differentiation factor 88 in non-small cell lung carcinoma and normal paracancerous tissues

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ABSTRACT. We studied the expression level of myeloid differentiation factor 88 (MyD88) in non-small cell lung carcinoma (NSCLC) and normal paracancerous tissues, to determine its relationship with clinical pathological characteristics and prognosis. In total, 82 NSCLC patients who had received surgical treatment in our hospital between September 2008 and December 2013 were selected for this study. Another 82 normal paracancerous lung tissue samples were used as controls. All patients had complete clinical records, and they were followed-up for 5 years. The expression level of MyD88 protein was detected by immunohistochemical assay. The positive expression rate of MyD88 in NSCLC tissues (62.2%) was markedly higher than that in normal tissues (10.9%), and was independent of patient characteristics such as age, gender, pathological pattern, history of smoking, and tumor size ($P > 0.05$). However, MyD88 expression was significantly correlated with degree of differentiation, clinical staging, and lymphatic metastasis ($P < 0.05$), and was negatively correlated with prognosis. The 5-year survival rate of patients with positive MyD88 expression was significantly lower than that of patients without

positive expression ($P < 0.05$). MyD88 was expressed at a higher level in NSCLC tissues and was closely associated with poor prognosis. MyD88 may be a novel eligible target for treating NSCLC.

Key words: Non-small cell lung carcinoma; Myeloid differentiation factor 88; MyD88