



Overregulation of microRNA-212 in the poor prognosis of esophageal cancer patients

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ABSTRACT. There have been few reports evaluating the expression and function of the microRNA miR-212 in esophageal cancer. The aim of this study was to investigate the relationship between miR-212 expression and clinicopathological factors and prognoses of esophageal cancer. MicroRNA was extracted from 46 esophageal cancer patients using the Taqman MicroRNA assay. All patients were at the same tumor node metastasis stage, but with different prognoses, and had all undergone surgery. The correlation between miR-212 expression and clinicopathological features was analyzed and the significance of miR-212 as a prognostic factor as well as its relationship with survival was determined. miR-212 expression was higher in patients with poor prognoses than in those with good prognoses ($P < 0.0001$). Kaplan-Meier analysis results showed that the miR-212 expression level was significantly correlated with survival time ($P = 0.024$). Patients with higher expression of miR-212 showed longer survival times. Cox multi-factor model analysis showed that miR-212

expression was significantly correlated with survival time ($P = 0.026$). mir-212 is related with prognostic factors and survival time and may be a biomarker for esophageal cancer.

Key words: Esophageal cancer; Human microRNA-212; Prognostic factor