

# **Overexpression of protein kinase Cα mRNA may be an independent prognostic marker for gastric carcinoma**

方嘉郎

**Lin KY;Fang CL;Uen YH;Chang CC;Lou HY;Hsieh  
CR;Cheng T;Pan S;Chen SH**

摘要

## **Abstract**

### Background and Objectives

The variability of the prognosis of gastric carcinoma drives extensive researches for novel prognostic markers. The aims of this study were to correlate the expression of protein kinase C (PKC) mRNA with clinicopathological parameters and to evaluate the significant value of PKC in gastric carcinoma prognosis.

### Methods

PKC mRNA levels were analyzed in tumor/non-tumor pairs of gastric tissues from surgical specimens of 41 patients with gastric carcinoma employing quantitative real-time polymerase chain reaction. Expression of PKC in gastric carcinoma was also examined using immunohistochemistry.

### Results

PKC mRNA expression was significantly upregulated in gastric carcinoma ( $P = 0.007$ ). Overexpression of PKC mRNA was correlated with distant metastasis ( $P = 0.040$ ). Patients with high PKC mRNA expression had a significantly poorer overall survival compared with patients with low PKC mRNA expression ( $P = 0.0113$ ). The uni-variate Cox regression analysis showed that high PKC mRNA expression ( $P = 0.0363$ ) and depth of invasion ( $P = 0.0443$ ) were two significant prognostic markers for gastric carcinoma. In backward stepwise multi-variate analysis, PKC mRNA overexpression was also proved to be an independent prognostic marker for gastric carcinoma ( $P = 0.0275$ ).

### Conclusions

Our results suggest that overexpression of PKC mRNA has correlation with distant

metastasis and may be an independent prognostic marker for gastric carcinoma. *J. Surg. Oncol.* 2008;97:538-543. © 2008 Wiley-Liss, Inc.