

中文題目：慢性乙型肝炎病人接受肝腫瘤切除手術後,FIB-4 指數可作為良好的預後預測工具

英文題目：The FIB-4 index is a good predictor to the outcome of patients who have chronic hepatitis B after resection of hepatocellular carcinoma

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## **Background**

Liver fibrosis is associated with the prognosis of patients with hepatocellular carcinoma (HCC) after resection. The fibrosis-4 (FIB-4) index is an accurate and non-invasive marker to determine the degree of liver fibrosis.

## **Aim**

The aim of this study was to evaluate the effect of FIB-4 index in predicting the outcomes after resection of HCC in patients who have chronic hepatitis B(CHB) infection.

## **Method**

A total of 534 CHB patients with BCLC stage 0 or A HCC received curative hepatectomy between 2001 and 2016 at Kaohsiung Chang Gung Memorial Hospital, Taiwan were enrolled in this study. Univariate and multivariate analysis were performed to identify the risk factors. The impact of the FIB-4 index (preoperative and the 1<sup>st</sup> year after operation) on overall survival (OS) and recurrence-free survival (RFS) was evaluated.

## **Result**

The multivariate analysis showed that preoperative FIB-4 >2 to be an independent risk factor for RFS and OS after HCC curative resection [hazard ratio (HR),1.902;95%CI,1.491 – 2.460; P<0.001, and HR,2.207; 95%CI, 1.420 – 3.429; P<0.001, respectively]. Importantly, in non-cirrhotic patients, preoperative FIB-4 is also an independent risk factor for RFS (HR,1.219; 95%CI, 1.014 – 1.466; P = 0.035). In addition, patients had deteriorated FIB-4 1 year after operation [definition: the value (the 1<sup>st</sup> year FIB-4 after operation minus preoperative FIB-4 >1) had an adverse outcome in RFS (P<0.001).

## **Conclusion**

The pre and postoperative FIB-4 index are useful clinical markers in HBV-HCC patients after curative hepatectomy. Therefore, the FIB-4 index should be assessed routinely for HCC patients.