中文題目:轉移性肝癌患者:盛行率、決定因子、預後因子與對巴塞隆納分期系統之影響

英文題目: Metastasis in patients with hepatocellular carcinoma: Prevalence, determinants,

prognostic impact and ability to improve the Barcelona Clinic Liver Cancer system

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## **Background & Aim:**

Patients with hepatocellular carcinoma and metastasis are classified as advanced or terminal stage by the Barcelona Clinic Liver Cancer system. This study investigates the prevalence, determinants, and prognostic effect of metastasis and its ability to improve the Barcelona Clinic Liver Cancer system.

## **Methods:**

A total of 3,414 patients were enrolled. The Kaplan-Meier and Cox regression methods were used to determine survival predictors. Akaike information criterion was used to compare the prognostic performance of staging systems.

## **Results:**

There were 357 (10%) patients having extrahepatic metastasis at the time of diagnosis. Metastases were associated with old age, alcoholism, hepatitis B, poorer liver function, higher  $\alpha$ -foetoprotein level and larger tumour burden (all P < .05). Vascular invasion was associated with metastasis regardless of total tumour volume, and higher  $\alpha$ -foetoprotein level and multiple tumours were associated with metastasis in patients with smaller tumour volume (all P < .05). Patients with both vascular invasion and metastasis had significantly worse outcome compared to patients with either vascular invasion or metastasis (P < .05). In the Cox proportional model, the co-existence of vascular invasion and metastasis was an independent predictor of decreased survival (P < .05). Re-allocating 181 Barcelona Clinic Liver Cancer stage C patients with both vascular invasion and metastasis into stage D was associated with lower Akaike information criterion, indicating enhanced prognostic power of the Barcelona Clinic Liver Cancer.

## **Conclusions:**

Metastasis is not uncommon, and is strongly associated with tumoural factors and poor long-term survival in hepatocellular carcinoma. Modification of the Barcelona Clinic Liver Cancer system based on vascular invasion and metastasis may further improve its predictive accuracy in advanced stage patients.