

中文題目: IL28B 遺傳變異在 C 型肝炎不同病毒基因型感染的病患對於肝病嚴重程度的影響

英文題目: Role of IL-28B genetic variants in HCV related liver disease severity in patients with different viral genotypes

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**Background :** The role of host interleukin 28B (IL-28B) in liver disease severity in patients of chronic hepatitis C (CHC) is conflicting. Its impact on Asian patients with different viral genotypes remains elusive.

**Aims :** To elucidate the effect of IL-28B genetic variants in a large Asian cohort with different viral genotype

**Methods :** 1288 biopsy proven CHC patients were enrolled for testing the association of liver fibrosis and IL-28B rs8099917 genotype

**Results :** HCV genotype 1 (HCV-1) infection accounted for 59.4 % of the patients and the remaining 518 patients (40.6 %) were with HCV non-1 infection ( the majority were with HCV-2 infection). Of the 1084 patients with IL-28 genotype available, nine hundred and twenty eight (85.6 %) patients were with TT genotype. Univariate analysis revealed that patients with advanced liver fibrosis (F34) were older, had lower platelet counts, higher  $\alpha$ -fetoprotein, alanine aminotransferase (AST) levels, had higher proportion of diabetes, rs8099917 non-TT genotype carriage, APRI & FIB-4 level. Logistic regression analysis revealed that factors associated with advanced liver fibrosis included Age ( odds ratio[OR]/95 % confidence intervals: 1.023/1.009-1.037,  $p=0.001$ ), diabetes ( odds ratio[OR]/95 % confidence intervals: 1.736/1.187-2.539,  $p=0.004$ ),  $\alpha$ -fetoprotein ( odds ratio[OR]/95 % confidence intervals: 1.007/1.002-1.012,  $p=0.009$ ), platelet count (odds ratio [OR]/95 % confidence intervals: 0.991/0.988-0.993,  $p<0.001$ ), rs8099917 non-TT genotype carriage ( odds ratio[OR]/95 % confidence intervals: 0.585/0.400-0.856,  $p=0.006$ ), While patients were divided based on their viral genotype. Factors independently associated with advanced liver fibrosis in patients with HCV-1 infection included diabetes ( odds ratio[OR]/95 % confidence intervals: 2.379/1.452-3.896,  $p=0.001$ ),  $\alpha$ -fetoprotein ( odds ratio[OR]/95 % confidence intervals: 1.023/1.012-1.035,  $p<0.001$ ), platelet count (odds ratio [OR]/95 % confidence intervals: 0.990/0.987-0.994,  $p<0.001$ ), rs8099917 non-TT genotype carriage ( odds ratio[OR]/95 % confidence intervals: 0.529/0.328-0.854,  $p=0.009$ ). On other hand, factors independently associated with advanced liver fibrosis in patients with HCV- non 1 infection included Age (odds ratio

[OR]/95 % confidence intervals: 1.039/1.016-1.063,  $p=0.001$ ), platelet count (odds ratio [OR]/95 % confidence intervals: 0.990/0.986-0.995,  $p<0.001$ ),...

**Conclusions :** Unfavorable IL-28B genotype was associated with advanced liver disease. The genetic effect was restricted to patients with HCV-1 infection.