

中文題目：利用蛋白質體分析 EB 病毒相關淋巴腫瘤接受抗病毒藥物 Cidofovir 治療前後之比較

英文題目：**Comparative Proteomic Profiles of Epstein-Barr Virus-Associated Lymphoma Grown in SCID Mouse with and Without Cidofovir Treatment**

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Background and Purpose: We evaluated the effect of the antiviral agent (S)-1-(3-hydroxy-2-phosphonylmethoxypropyl) cytosine (HPMPC or Cidofovir) on proteomic profiles of Epstein-Barr virus (EBV)-associated lymphoma grown in SCID mouse.

Methods and Results: Intratumoral injection of HPMPC arrested tumor growth within 10 days and by 21 days tumor regressed to $25 \pm 8\%$ of the original size. We isolated proteins from control and drug-treated tumors and did two-dimensional gel electrophoresis to determine protein expression patterns. Sixty four proteins showed significantly differential expression level between control and HPMPC-treated samples. Some of the proteins were analyzed and identified by MALDI-TOF MS/MS and confirmed by Western blotting. Among these differentially expressed proteins we found that prohibitin, a tumor suppressor protein, was over-expressed in tumors that had been treated with HPMPC. The expression level of prohibitin correlated with the tumor regression.

Conclusions: We established differential proteomic profiles that characterize and distinguish the HPMPC-treated tumors from the control tumors. The proteins and proteomic profiles enhance understanding of the pathogenesis of EBV and have implications for diagnosis, prognosis, and treatment.