TITLE: **Study of Safety and Efficacy of a Simplified Fixed-dose Combination of Stavudine, Lamivudine and Nevirapine (GPO-VIR®) for the Treatment of Advanced HIV-Infected Patients**

ชื่อภาษาไทย: **การขยายระยะเวลาศึกษาประสิทธิผลและความปลอดภัยของยาเม็ดรวมประกอบด้วยสตาวูดีน, ลามิวูดีน และเนวิราพีน (จีพีโอเวียร์) ในขนาดคงที่ในการรักษาผู้ป่วยติดเชื้อเอชไอวีที่เป็นผู้ใหญ่**

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ABSTRACT

Objective: To determine the efficacy and safety of the fixed-dose combination of stavudine (d4T), lamivudine (3TC) and nevirapine (NVP) in the treatment of antiretroviral naïve HIV-infected Thai adults.

Methods: An open-label, single arm trial was conducted. Baseline clinical assessment and blood test was done on 101 antiretroviral naïve HIV-infected patients, who then received a fixed dose combination of d4T, 3TC and NPV (GPO-VIR®, Thai Government Pharmaceutical Organization, Bangkok, Thailand). Nevirapine was given as 200 mg once daily for the first 2 weeks. The patients were followed up at 2, 4, 8, 12, 24 weeks and then every 12 weeks through 152 weeks. A CD4 cell count and HIV-RNA assay were done at 12, 24, 52, 76, 104, 128 and 152 weeks.

Results: One hundred and one patients were enrolled. The mean baseline CD4 cell count and mean HIV RNA were 59 (57.7) cells/mm^3 and 5.3 (0.5) log_{10} copies/mL respectively. For overall virological response at 24, 52, 76, 104 and 152 weeks, 73.3%, 58.4%, 63.4%, 69.4%, 65.3% and 67.3% of the patients by ITT respectively, and 89.2%, 77.6%, 94.4%, 98.5%, 97% and 98.5% by OT respectively, had plasma HIV RNA<50 copies/mL. For virological response by ITT, 78.9% vs. 76.7% (p=0.698), 42.1% vs. 81% (p=0.073), 63.2% vs. 70.9% (p=0.512), 63.2% vs. 70.9% (p=0.512), 57.9% vs. 67.1% (p=0.45) and 52.6% vs. 70.9% (p=0.128) of patients with baseline HIV RNA≤100,000 copies/mL vs. >100,000 copies/mL, had HIV RNA<50 copies/mL at weeks 24, 52, 76, 104, 128 and 152 respectively. By OT 88.2% vs. 89.4% (p=0.891), 61.5% vs. 81% (p=0.126), 100% vs. 93.3% (p=0.357), 100% vs. 98.2% (p=0.644), 100% vs. 96.4% (p=0.521), and 100% vs. 98.2% (p=0.673) of patients with baseline HIV RNA≤100,000 copies/mL vs. >100,000 copies/mL had HIV RNA<50 copies/mL at week 24, 52, 76, 104, 128 and 152, respectively. Mean change of CD4 cell count from baseline to week 152 was 341 (164.9) cell/ mm^3 (p<0.001). The incidence of severe hepatotoxicity (grade 3 or 4) was 7%, peripheral neuropathy 2%, ≥ grade 2 hypertriglyceridemia 3%, lactic academia 6% and lipoatrophy 46%. Total cholesterol, HDL-cholesterol and LDL-cholesterol significantly increased at week 52.

Conclusion: The 152-week results from this study demonstrated that the fixed-dose combination of d4T+3TC+NVP (GPO-VIR®) was well tolerated in short-term but the rate of lipoatrophy was very high after one-year of treatment. The efficacy was similar to other studies of the same regimen.