Background: There are few reports on the natural history of HIV disease and response to antiretroviral treatments among Asian HIV/AIDS patients. The Taiwan HIV Observational database (THOD) has been established for two years and its objectives were to assess HIV disease natural history in treated and untreated patients in Taiwan and to understand the parameters associated with AIDS disease progression.

Methods: Data were collected from HIV/AIDS patients from Taipei Veterans General Hospital and Taipei City Hospital. Retrospective data were analyzed to assess the response to antiretroviral treatment (ART) over a 6-month period in terms of changes in CD4 count, proportions of patients achieving an undetectable HIV viral load (<400 copies/mL). The HBV and HCV infections were tested. HIV subtypes were determined using PCR and DNA sequencing of prol or env gene.

Results: By February 2006, 560 patients have been recruited to THOD. Most of the patients were male (93%), with median age of 36 years old. 78% of the patients were men who have sex with men. 96% of the cohort were infected with subtype B. The HBV and HCV coinfected rates were 13.5% and 18.3%, respectively (2 patients had triple infection). Since entering THOD, 63% of patients were diagnosed with an AIDS defining illness, of whom 65% had PCP and 37% had tuberculosis. After starting ART, the mean 6-month CD4 count increase was 183 cells/mL (SD = 176). Among patients started ART and had a HIV-1 viral load assessment at 6 months, 87.5% have achieved an undetectable level.

Conclusions: Although the risk groups and subtype distributions in our cohort were similar to that in the Western countries, both the HBV and HCV prevalence rates were higher in our cohort. The responsive rate to ART in THOD was similar to that in the Western countries.