## Burden on AIDS-specialist Hospitals in Japan, Based on the Number of Patients Taking Anti-HIV Drugs

Takeshi KUWAHARA\*<sup>1</sup>, Toshio MAKIE\*<sup>2</sup>, Yoshihiko YAMAMOTO\*<sup>2</sup>, Munehiro YOSHINO\*<sup>1</sup>, Hiroki YAGURA\*<sup>1</sup>, Toshihiko SANO\*<sup>3</sup>, Ken-ichi KOJIMA\*<sup>4</sup>, Satoshi HIGASA\*<sup>5</sup> and Takuma SHIRASAKA\*<sup>2</sup>

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## Summary

Highly active antiretroviral therapy (HAART) has improved mortality rates of patients with human immunodeficiency virus (HIV), but the incidence of new HIV patients in Japan has not decreased. Thus, the number of patients taking antiretroviral drugs has increased cumulatively each year, and treating these patients has become a challenge. As HIV patients are treated primarily with medication, we examined the situation regarding anti-HIV drugs at hospitals specializing in the treatment of acquired immune deficiency syndrome (AIDS) in Japan. Based on the number of patients, 98 AIDS-specialist hospitals were categorized as extra-large (ExLN-H, >50 patients), large (LN-H, 30-50 patients), medium (MN-H, 10-29 patients), and small hospitals (SN-H, <10 patients). The number of patients taking drugs, the drugs and HAART regimens used, and the stocked drugs were investigated, and the stock cost per patient was calculated by category. ExLN-Hs and LN-Hs maintained a wide range of drugs for difficult-to -treat patients, whereas MN-Hs and SN-Hs had adopted a smaller number of drugs, with which the doctors were more familiar. Nevertheless, in terms of HAART regimens, LN-Hs, like MN-Hs and SN-Hs, chiefly employed commonly used, and not new, regimens. Owing to their large drug inventory yet limited use of regimens, LH-Hs had a stock cost per patient that was 3.7, 2.2, and 2.9 times those at SN-Hs, MN-Hs, and ExLN-Hs, respectively. In attempting to meet the needs of all patients, LN-Hs appear to suffer from inefficient use of HIV therapies. To resolve this problem, we suggest that difficult-to-treat patients should be treated only at ExLN-Hs, and LN-Hs should receive other HIV patients, as should MN-Hs and SN-Hs.

## Key words

Human immunodeficiency virus, Anti-HIV drug, Retroviral therapy, Stock cost