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Development of Kaposi Sarcoma Despite Sustained Suppression of HIV Plasma Viremia

To the Editor: We read with great interest the letter by Chan et al. published in the October 1, 1999 issue of *JAIDS* (1). Both their patients had a CD4 count of 446 and 519 cells/μl respectively, with no evidence of systemic Kaposi's sarcoma (KS). Although we agree with their observation regarding absence of relation between complete HIV plasma viral suppression and the possible development of KS, we disagree with their last statement of excluding KS as a clinical endpoint in HIV clinical trials. We recently observed the development of pulmonary KS in a 28-year-old Hispanic man who was virologically suppressed for >8 months with poor immune response on highly active antiretroviral therapy (HAART), as evidenced by his low CD4 count (50 cells/μl), and who died despite aggressive therapy. The pathogenesis of KS in HIV-infected patients remains complex. In fact, it is possible that HIV-1 could cause KS in the absence of severe immunodepression by different mechanism, such as coinfection with human herpesvirus 8 (HHV8), chronic antigenic stimulation, and disregulation of the immune system (2–4). Despite these observations and reduction of incidence of opportunistic complications after HAART, the development of systemic KS in immunocompromised patients is of concern, and until the results of larger studies are available, it still carries a poor outcome and may herald the development of other opportunistic infections (5–7).

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Author's Reply

Khanlou et al. disagree with the statement that Kaposi's sarcoma (KS) should be excluded as a clinical endpoint in HIV clinical trials. In fact, the final statement of our report was "... it may not be appropriate to include KS as a clinical endpoint in HIV clinical trials" (1). There is no dispute that the immune suppression associated with progressive HIV disease is associated with an increased risk of the development and progression of KS, as is the case with the patient presented by Khanlou et al. KS is also an indicator of poor prognosis and may herald the development of other opportunistic infections when it develops in the absence of effective antiretroviral therapy (2,3). However, it is clear that KS can develop in individuals without overt immune suppression (4), which is almost unique among AIDS-defining opportunistic processes. The point that was intended to be made by the presentation of our 2 patients (1) was that, in the context of a favorable virologic and immunologic response to effective antiretroviral therapy, the development of limited Kaposi's sarcoma may have little or no impact on the clinical course of HIV disease progression. If such patients had been involved in a clinical endpoint trial of antiretroviral or immune-based therapies, their development of KS would have led to the arguably inappropriate conclusion that the therapy that they were receiving had failed to prevent or delay the progression of HIV disease. Perhaps a less contentious concluding statement would have been: "As the development of KS in the setting of suppression of plasma viremia and restoration of the CD4 T cell count appears to have no or little effect on HIV disease progression, it may not be appropriate to include KS as a clinical endpoint in HIV clinical trials."

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