CHAPTER VI

CONCLUSION

IL-18, RANTES and MIP-1α genes are highly expressed in PBMC of HIV-infected patients, even before initiation of either antiretroviral therapy alone or in combination with IL-2. These observations indicate that also in macrophages, a high level of immune activation at the early stage of HIV-infection (CD4+ T cell count >350 cells /μl) is common. IL-2 therapy has no significant effects on these cytokine and chemokines in peripheral blood mononuclear cells of patients infected with HIV.

Subcutaneous IL-2 administration in addition to antiretroviral therapy, although mainly in combination with dual nucleoside RT inhibitors, showed significantly enhanced *in vivo* IL-2 gene expression in PBMC of HIV-infected patients. The percentages of response were dose-dependent . The results suggest that a dose of at least 4.5 MIU bid of IL-2 given for 5 days per cycle for a minimum of 2 cycles is effective in enhancing endogenous IL-2 production