LETTERS

Retrovirus Terminology

A human retrovirus, human T-cell leukemia virus (HTLV), was first isolated by Gallo and his colleagues in 1980 from a cell line established from a patient with cutaneous T-cell lymphoma (mycosis fungoides) (*1*). Subsequently, ATLV (adult T-cell leukemia virus) (*2*, *3*) was isolated from the cell line MT-2, established by Miyoshi *et al.* (*4*), from Japanese patients with adult T-cell leukemia-lymphoma (ATL). This disease was discovered by Takatsuki and his colleagues (*5*) as a unique T-cell malignancy clustered in the southwest part of Japan. These two independent viral isolates were shown to be closely associated with ATL by epidemiological and molecular biological studies.

HTLV and ATLV were shown to be similar by immunological cross-reactivities (*6*) and nucleic acid hybridization (*7*). However, the data were not sufficient to prove the identity of these two viral isolates because the immunological cross-reactivities of the core proteins p19 and p24 reflected only part of the *gag* gene of the viral genomes and because the viral complementary DNA preparations were not representative. Recently, we determined (*8*) the total nucleotide sequence of the ATLV genome cloned in λATK-1. On the basis of this structural information, we compared the provirus genomes of HTLV and ATLV integrated in the cell lines HUT-102 and MT-2, respectively, by Southern blotting analysis using five viral gene-specific probes. With every specific probe the expected viral fragments were identical for the HTLV and ATLV proviruses (*9*). These results clearly indicate that the locations of the gene-specific sequences and the cleavage sites of some restriction enzymes are identical in the proviral genomes integrated in HUT-102 and MT-2. Thus, we can conclude that HTLV and ATLV are the same, even if they differ in their base replacements, small insertions, or deletions. This conclusion indicates that the viral populations in the southwest of Japan and in the Caribbean have a common origin.

In view of these results we propose to use the term HTLV rather than ATLV, respecting the first isolate of this retrovirus. We will use the terminology "ATK strain of HTLV ($HTLV_{ATK}$)" for the ATLV previously cloned and reported as λATK-1, and whose total sequence was determined (*8*). At the conference on human T-cell leukemia viruses held at Cold Spring Harbor in September 1983, a letter proposing that the term HTLV be used for the retrovirus was signed by the following: W. A. Blattner, National Cancer Institute, Bethesda; D. Catovsky, Hammersmith Hospital, London; M. Essex, Harvard University School of Public Health; R. C. Gallo, National Cancer Institute, Bethesda; M. Greaves, Imperial Cancer Research Fund, London; Y. E. Ito, Kyoto University; I. Miyoshi, Kochi Medical School; K. Takatsuki, Kumamoto University Medical School; R. A. Weiss, Institute of Cancer Research, London; and M. Yoshida, Cancer Institute, Tokyo.

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The AAAS and Human Rights

We write to support the position of the AAAS Committee on Scientific Freedom and Responsibility (Letters, 7 Oct., p. 6) and to endorse Lee Frank's statement that "any systematic violation of human rights and repression of free expression is deserving of every public forum the free world offers" (Letters, 12 Aug., p. 604).

Some are concerned that expression of support for another human being who has been mistreated or tortured for his or her political views would be interpreted as political statements or political action (Letters, 15 July, p. 216). Even if that were so in some cases, we believe there are clear ethical and humane reasons which are paramount. Although not always honored, the basic principles recognized internationally are stated in the Universal Declaration of Human Rights of the U.N. General Assembly of 10 December 1948 and the Declaration on the Protection of All Persons from Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment,