

**Memorandum****Protocol 82-CC-90: "Investigation of the Acquired Immunodeficiency Syndrome"**

Protocol 82-CC-90 was organized to study the etiology, pathogenesis, and therapy of the newly described Acquired Immunodeficiency Syndrome. The protocol is designed to be an intensive effort to study selected patients. This protocol is a collaborative effort among eight laboratories at the Clinical Center, National Institute of Allergy and Immunology, National Cancer Institute, National Institute of Dental Research, and the Bureau of Biologics, FDA. As of November 10, 1982, twenty-nine patients have been entered: these include twenty-eight males and one female; twenty-five homosexuals; one drug addict; two Haitians. They range in age from 22-52 years. Twenty-seven reside in Eastern Seaboard states.

These twenty-nine patients include four with Kaposi's Sarcoma, one with Burkitt's Lymphoma, seventeen with opportunistic infection, and seven with lymphadenopathy but no tumor or serious infection.

**A. Etiology of AIDS**

Extensive investigations of the etiology are under way. Under the direction of Drs. Robert Gallo and Ed Gelmann (NCI), retroviruses are being sought in peripheral lymphocytes, tumor blocks, and lymph nodes. Antibody is being sought against the retroviruses under the supervision of Dr. Gelmann and Dr. Quinnan (FDA), DNA hybridization is being done looking for cytomegalovirus and Epstein-Barr virus insertions in host cell genomes. Clinical isolations of CMV, EBV, and Herpes Simplex viruses are under way on blood, urine, throat, and tissue specimens under the supervision of Dr. Masur (CC), Dr. Quinnan (FDA), Dr. Straus (NIAID) and Dr. Hooks (NIDR).

All patients have been extensively cultured. Results are being evaluated.

Animal inoculations with patient specimens are currently planned to look for the etiologic agent.

## B. Pathogenesis of AID

The mechanism for altering immune response in this syndrome is being evaluated under the direction of Dr. A. Fauci (NIAID) in collaboration with Dr. Masur (CC), Dr. Lane (NIAID), Dr. Quinnan (FDA), Dr. Hooks (NIDR), and Dr. Poplack (NCI). The function of T lymphocytes, B lymphocytes, suppressor cells, helper cells, monocytes, interferon, and IL-2 are being studied in a sequential fashion. Significant information about the interaction of T cells, B cells, and serum factors have been generated. The role of viruses is also being studied.

## C. Treatment of AID

The possibility of treatment of AID is being investigated by using in vitro techniques to evaluate possible usefulness of cell transfers, humoral factors, and antiviral agents in humans. Based on promising in vitro results, it seems likely that trials of immunotherapy will be started in early 1983 using at least two treatment modalities. Agents under investigation include alpha interferon, gamma interferon, interleukin-2, acyclovir, Ara A, peripheral lymphocytes, and bone marrow cells.

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