

A Concise Guide to Aids
Drug Test & Treatment Data

by Mark Harrington

21 June 1988

i.

"I'm going down to Alphabet Street ..."

- Prince, 1988

The profusion of acronyms and tongue-twisting medical jargon proliferating in the era of Aids makes the Alphabet Soup of the New Deal look like child's play. Aids activists' efforts to force the powers that be to make concerted, life-saving actions are hampered by our own confusions and misunderstandings about these words, which for many block the view of the very issues they are intended to illuminate.

ACT UP is having a series of teach-ins to educate itself and others about the HIV virus, the Aids epidemic, drug treatment and testing, and this glossary is intended as a tool toward that end.

I thought of sequestering every word into its own section, e.g., the virus, the immune system, drugs, the drug testing procedure, drug companies, bureaucracies, bureaucrats ... but this only partial listing of categories makes it obvious that such a procedure would only add to the confusion. Ultimately it seemed simpler to list everything in the rational randomness of the Roman alphabet.

This alphabetical guide summarizes information about the medical conditions, test drugs, pharmaceutical companies, individuals and government bureaucracies which are involved in combating Aids.

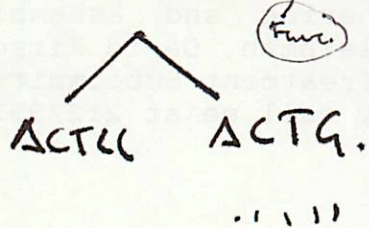
Entries are cross-referenced, listed in **bold-face**. When something is commonly abbreviated it will be listed by its acronym and then in full.

Responsibility for any mistakes contained herein is entirely mine; credit for the heroic effort of gathering and assembling the information rests with Jim Eigo, Gary Kleinman, David Kirschenbaum and Dr. Iris Long of ACT UP's Data and Treatment Subcommittee. Anyone who wishes to add information may call me at 212/353-8430.



- m.h.

Aids Treatment Branch.
@ NIAID, Dan Holby.



A/1.

ABPP: trade name of bropiramine, being tested against advanced Aids and KS.

replac
up
in

Accrual: the process of signing-up people to participate in drug trials. ACTG accrual has been very slow because the programs are underfunded, exclude over half the people who should be eligible (women, IV-drug users and people of color are barely represented), and often force subjects to discontinue all outside therapies while not refusing to guarantee they won't simply receive placebo, which does nothing to combat their life-threatening disease. As of 2.2.88, 82% of ACTG patients were white, 6% black, 9% Hispanic; 95% were male, 5% female; 90% were not IV-users, 10% were IV-users. These numbers are in scandalous contrast to the actual contours of the epidemic. keep
end.

myl. | ACDDC/ Aids Clinical Drug Development Committee: a group of 20 experts in infectious disease, virology, immunology and oncology who review the available data on various drugs and assign a research priority: low, medium or high. Drug investigators submit "concept sheets" which are evaluated at the ACDDC's quarterly meetings. In December 1987, the ACDDC gave dextran sulfate a "high priority;" then, in March 1988, they seemed to lose interest, claiming a need for more study of "absorption and tissue distribution," although the drug has been available over the counter in Japan for over 20 years. (II 2:3, p. 6). In December

ACT UP: the Aids Coalition To Unleash Power, "a diverse, non-partisan group of people united in anger and committed to direct action to end the Aids crisis."

ACTCC: the Aids Clinical Trials Coordinating Center, a branch of the Research Triangle Institute in North Carolina selected by NIAID to perform for the ACTG all functions that would be the manufacturer's responsibility if the drug trials were corporate-sponsored: field monitoring, data collection, storage and statistical analysis.

ACTG/ Aids Clinical Trials Group. ^{System of cooperating medical institutions administering} ~~Program administered~~ by NIAID ^{and} ~~to test Aids drugs.~~ Understaffed and inefficient, ACTG's are testing only 16 of the 130 drugs which the FDA has acknowledged may be effective against HIV virus and the many opportunistic infections. ^{and} ^{day} ^{week} ^{for} ^{NIAID} ^{clinical} ^{to} ^{study}

repl. | ACTU/ Aids Clinical Testing Unit. One of the ³⁵ 15 ACTG locations for NIAID Aids drug trials in 15 states and Washington DC. Includes both former ATEU's and former CTG's.

6 sites in NYC: ↓

16
 City of New York
 Cornell
 AE
 Mt Sinai
 St Lukes R
 Mount-Sinai
 NYU -

A/2. *Aids Clinical Trial Program: NIAID's: DTB*
ACTC ACT4.

Acute: sharp, sudden but brief affliction as opposed to chronic or long-term condition.

Acyclovir: anti-herpes drug manufactured by Burroughs-Wellcome,, being tested with AZT against Aids and ARC.

Aerosol Pentamidine: See pentamidine.

AIDS / Acquired Immunodeficiency Sndrome: that against which we struggle.

Aids Treatment Branch: (NIAID, lead: Don Hout).

replace

AL-721: egg-lecithin compound made by Ethigen (New York). May be effective in making blood-cells more impermeable and hence resistant to HIV invasion. In March the FDA ordered Houba to stop manufacturing its AL721 "workalike" because the company had been advertising its product's similarity to AL-721 and the beneficial effects of the latter.

Alpha interferon: see interferon.

§

Amebiasis: amoeba-induced disease which causes diarrhea and gastrointestinal disorder, can be contacted by rimming.

replace

AmFAR: the American Foundation for Aids Research, a non-profit organization founded by Dr. Mathilde Krim to fund research; its very existence points to the scandalous inadequacy of the Federal response. Last year AmFAR funded about \$4 million in Aids research; while their work is laudable, ACT UP has identified several deficiencies in their drug trial registry: AmFAR does not regularly list drug trials for opportunistic infections; thus, for example, pentamidine and trimetrexate studies were not listed; it does not list antineoplastic drugs which combat Aids-associated cancers; it does not give protocol code-numbers, limiting the ability to cross-reference; it fails to list either numbers of patients enrolled or patient accrual figures; and its listing is incomplete. PWA's and PWARC can receive the directory free by calling 212/333-3118.

A/3.

Ampligen: mismatched RNA, an anti-retroviral drug which mimics RNA but, being synthetic, doesn't infect. **Ampligen** may relieve fatigue, halt or slow deterioration of the immune system without side effects, cross the blood/brain barrier, and be synergistic with AZT. In test tube, it caused significant drops in tumor growth, but has been ineffective against KS. Nonetheless it has caused remission of leukemia and kidney cancer, inhibits HIV replication, induces enzymes to "chew up" foreign RNA, caused "immediate, striking clinical improvement" in 30 PWARC, (the Lancet, UK, 6.6.87) including increased energy, appetites, reduced lymph, liver & spleen swelling, cessation of thrush and night sweats. Seems to reduce ^{levels} of HIV found in blood and increase T4 cells. Manufactured by DuPont and HEM Research (Rockville, MD). GMHC says there's "overall more encouraging data for ampligen than for any other agent except AZT" (Treatment Issues, 5.2.88). Nonetheless, the FDA is acting as though it's nothing special. **Ampligen** is being tested intravenously at St. Luke's-Roosevelt & Metropolitan Hospitals in a 9-month study enrolling 90 patients beginning in December, 1987. *Projected cost 3x AZT at 24, 805493 2 mch.*

Anemia: depletion of ^{red} blood-cells; AZT causes sometimes-severe anemia, and thus can only be tolerated by half those with Aids; erythropoietin is being tested to counteract such anemia.

ASTA
Ansamycin: a.k.a rifabutin, an antiretroviral drug with "almost no toxic effects" being tested for KS with neurological impairment at Long Island Jewish Medical Center (718/470-7000) and SUNY Stony Brook (516/444-1660). Made by Adria Labs (Dublin, OH). Also being tested with ethambutol and clofazimine for MAI infection associated with Aids. Must be specially ordered from the CDC, which takes 2 weeks and only sends a month's supply. (ATN 53, 3.25.88, pp. 7-8.) *This drug is also being used vs the mycobacterial infections MAI.*

Antabuse: ^{prescription} drug originally developed to make alcoholics intensely nauseous from drinking; PWA's who don't drink can take antabuse which breaks down into DTC, ~~supposedly a nonspecific~~

(multitab/c) **immunomodulator** (New York Newsday, 4.12.88). *supposed to act by stimulating the immune system to produce antibodies which causes the growth of T4 cells*

13
DTC.
Antibiotic: bacteria-fighting; e.g. penicillin, pentamidine.

(Mplu)

A/4.

replac. Antibody: blood-cell which recognizes and targets a specific invading substance. Most antibodies kill the invading organism, but antibodies to HIV seem ineffective in killing off the virus. The famed but misnamed AIDS test merely indicates the presence of HIV-antibodies, not the presence of Aids itself. HIV infection precedes presence of HIV antibody by 12 to 14 months in a Finnish study, and from 18 to 42 months in a Cetus Co., Oakland, California, study. (NYT, 6.14.88, C5).

Antigen: of cancer.

Antineoplastic: cancer-fighting. Cancerous tissue is a neoplasm, drugs which combat such tissue are anti-neoplastic.

Antiretroviral: *1.345 HIV.* retrovirus-fighting, e.g. AZT.

Antiviral: *as substance that attacks a virus, stops + suppresses viral activity: e.g. DHPG, foscarnet, acyclovir.* virus-fighting drug such as AL-721, DHPG, DDC, foscarnet, HPA-23, eflornithine, Peptide T, reticulose, AZT, ansamycin, trimetrexate, ribavirin, alpha or beta interferon, acyclovir.

Antiviral: virus-fighting; e.g. acyclovir.

Approval process for drugs, in the USA, according to law and FDA regulations, involves six steps:

1. Pre-clinical: laboratory & animal studies.
2. Company files IND with FDA.
3. Clinical Phase I: pharmacological profile.
" Phase II: testing efficacy.
" Phase III: extensive clinical trials.
4. Company files NDA with FDA.
5. FDA review.
6. FDA approval.

Even after the NDA is approved the company is required to periodically submit reports to the FDA, including adverse reaction data, production and quality control information, and sometimes extended monitoring. In the 8 years since Aids appeared, the FDA has only approved two new drugs, AZT and trimetrexate.

ARC/ AIDS-Related Complex: stage of HIV-infection marked by symptoms such as swollen lymph glands (lymphadenopathy), night sweats, fevers, weight loss. *This term is being phased out. usually only sympt. of early HIV infection*

AS101: an immunomodulator being considered for drug trials. (II 2:3, p. 7). *Approved FDA Jun 97* *IND.*

accu, ph being sent Jun 88 *Phase I*
@ Mt. Sinai's ACTU

discovery
tried in Mexico
of Amher.

New
ACTU Dec-87 "med" priority

A/5.

HIV infection

infection
Asymptomatic: not showing symptoms of disease. Someone may be seropositive but asymptomatic, that is, carrying antibodies to HIV but not displaying any of the symptoms of (ARC or Aids). Many drug tests are limited to asymptomatic seropositives in the hope they will be useful in preventing progression to "full-blown" Aids. *ACTG 319 41 2/91*
~~ACT UP believes it is crucial to allow PWA's into drug trials; it is inhumane to treat only the well.~~ *1600 40.5p. 60% 110 1019*

hospital or charitable.
ATEU/ Aids Testing Evaluation Unit. Precursor to ACTG, and, like its successor, sluggish, underfunded and ineffective.

Axelrod, Dr. David: New York State Health Commissioner, who led effort to close gay bathhouses in NYC, classifying anal and oral sex as "high risk" activities, though with condom use they are not; has opposed efforts to list Aids as a sexually-transmitted communicable disease, since such action would, under New York State law, mandate inappropriate and unwieldy contact tracing.

o.i.'s
AZT/ Azidodeoxythymidine, a.k.a. Retrovir, zidovudine: effective but toxic antiretroviral drug which seems to postpone or prevent PCP infection and generally improve immune function among the 50% who can take it. Side effects include nausea, headaches, and bone marrow suppression leading to anemia. The FDA-sponsored original study was aborted after 5 months when the control group was dying uncontrollably and the group taking AZT successfully fought off PCP. The FDA then did the necessary paperwork for approval in only 2 1/2 months. This haste was unusual; the FDA "expended eight man-years of effort at the cost of \$600,000" according to Commissioner Frank Young (testimony to Pres. Comm. 2.19.88), and controversial, since few companies have profited so much from Aids as AZT's monopoly manufacturer under the Orphan Drug program, Burroughs-Wellcome, although it was developed as an anti-cancer drug in the 1960's with taxpayers' money at the NCI. In addition to AZT's toxic side effects, its beneficial effects seem to abate after 12-18 months, according to Dr. David Chernoff of UCSF (WSJ, 4.28.88). It's now being studied in PWARC as well as those with PCP and KS. In the UK it reduced virus levels and shrank swollen lymph glands in 18 PWARC's. In the USA, the NIH is studying it on 1600 asymptomatic seropositives. In a British study, 21 of 106 men taking AZT who experienced dangerous side effects were switched to lower doses; 5 to 9 developed brain inflammation, headaches, neck pain, confusion and fever within 17 days. The symptoms disappeared after about a week. Many of these men had Aids-related neurological impairment before starting AZT. (NYT, 6.21.88, C3).

Should reduction in mortality & the public because of OI's was lowered.
BW gave FDA follow-up long term effects
+ mortality rates in Oct 87,
 the FDA, citing proprietary interests, has yet to release the info

B/1.

of AIDS cases - CDC. an HIV infection
Babies: can get Aids from their mother's blood, during birth, or, rarely, during nursing. 40% of babies born with HIV develop Aids within 10 months, according to a Brooklyn study. (NYT, 6.15.88, A21). *Septa. 1 in 61 NYC March 1 in 20 babies. V43 Brav.*

Bactrim: *effective drug and for bacterial infections. General prescription. Prophylaxis PCP. Only one for babies as PCP. oral proph.*

Beds: in a city with as many 8,000 PWA's, at least 1,500 of them homeless and many more facing the possibility of losing their dwellings, New York now has 62 beds for PWA's and is proposing to fund 60 more for 1989. Meanwhile, local hospitals have their gravest bed shortages since the Depression. 95% of city hospital beds are full daily, with occupancy sometimes rising to the unreal ratio of 140%. In 1986, when the epidemic was spreading exponentially, the city had to decertify 1,000 hospital beds to comply with federal regulations, and St. Luke's-Roosevelt, in order to qualify for state reconstruction funds, had to cut 200, or 1/6 of its beds. NYC has lost 4,000 beds in the past 11 years. (WSS, 6.19.88, p. 1).

Beta interferon: see interferon. *works well before a, b, s.*

Bleach: can be used to sterilize needles so IV-users won't pass on HIV by sharing needles.

Blood/brain barrier: many promising drugs are large molecules whose configuration renders them unable to pass through the blood/brain barrier; in contrast, the tiny HIV accomplishes the passage with ease, where it wreaks havoc causing dementia and other neurological damage. *For an AIDS drug to be truly effective it must be able to pass through the barrier to flush the virus from its cerebral redoubts.*

For a drug to be active vs HIV.
Bone marrow: *are found* dense tissue in hollow bone interior where blood cells form. They form there as "stem cells" and are modified by various hormones in the blood to mature as the various specialized immune system cells. *cells blood cells immune system cells are manufactured in the bone marrow*

Breast milk: there is some risk of transmitting HIV postnatally to babies through breast milk, according to an Australian doctor's report at the Stockholm *Conf* conference. Recently infected women may have far higher levels of HIV in breast milk than those who have carried the virus longer. However experts recommended these findings should not deter women in underdeveloped countries from breast-feeding; in most poor countries the hazards of contaminated water used in bottle-feeding are worse than the chance of passing HIV through breast milk. (NYT, 6.14.88, p. C6).

*4th Int. Conf
 on
 AIDS*

in June 88

♫ **Bropirimine:** immunomodulator made by Upjohn (Kalamazoo, MI) in Phases II and III for use against advanced Aids and KS. Trade name ABPP.

- **Bureaucrat:** someone infatuated with cumbersome and time-consuming procedures yet utterly indifferent to human suffering and death.
- Cf. Cooper, Fauci, Young.

... OMB ... ^{Dr.} James
Wyngaarden : incl MH.

Sec. Otis Bowen.

Phs Peter Fischinger
also t.R.

B/2.

⊕ **Burkitt's Lymphoma:** rare cancer of the lymph glands sometimes found in advanced Aids.

Burroughs-Wellcome: makes alpha interferon, and, by Federal grant, sole manufacturer of AZT and acyclovir. Since the lucrative antiretroviral became theirs, profits and stock prices have skyrocketed, while Burroughs-Wellcome refuses to release its manufacturing expenses. Marketing shouldn't cost much, since the media have sold it for them, and developing the drug shouldn't have cost much either, since it was developed at taxpayers' expense in the 1960's at the NCI. So why is one year's supply of AZT variously priced from a mere \$8,000 to as much as \$12,000 per annum? Until they cease stonewalling and impoverishing our already-suffering community, boycott their other products, which are, unlike AZT, easily substitutable: Actifed, Sudafed, Neosporin. **OPEN THEIR (PL) BOOKS.**

Buyers' Club: groups of PWA's and PWARC who pool their resources to obtain drugs which are impossible to obtain through the sluggish, bloated and heartless FDA/PMA monopoly in the USA. One example is San Francisco's Healing Alternatives Buyers' Club, where people trade news on new remedies, and may procure such items as dextran sulfate in Japan or AL-721 in Israel.

CD4: protein has hi affinity for HIV. Receptor. Land on same HIV susceptible cells such as T4.
Provides mechanism of entry into cell.

11

C/1.

California: has passed an enlightened law which enables state investigators to circumvent FDA red tape by manufacturing and testing trial drugs within the state. (The FDA has jurisdiction only where interstate commerce is concerned). Unfortunately for New Yorkers, we have but a feeble pharmaceutical industry in our home state, far larger concentrations occurring in fair nearby New Jersey.

Candida: see thrush.

Careerist: a modern-day alchemist who can transform the dross of strangers' suffering into gold for his own research assistants, laboratory space, frequent publications, attendance at far-flung conferences and general career uplift: c.f. Gallo.

Sam Broder: ~~path. lab director~~

~~Curtis. Duesberg.~~

CD4: a protein being considered for drug trials. (TI 2:3, p. 7)

Receptor

(found on some HIV-susceptible cells, membrane synthesized "lookalike" may permit cell

CDC/ US Centers for Disease Control, Atlanta. Federal agency which compiled the original evidence for the outbreak of Aids when 5 gay men in Los Angeles died of PCP in 1981; later named the syndrome GRID (for Gay Related Immune Deficiency) before coming up with the less-stigmatizing Aids. The first Reagan budget halved the CDC budget just as Aids made its lethal debut. Their response to this epidemic was neither as sympathetic nor as rapid as their intense mobilization in the face of 1976's outbreak of "Legionnaire's Disease". The CDC is responsible for the exact definition of Aids, and generally lists 5 possible indications: KS, PCP, certain other opportunistic infections, severe weight loss or wasting away, and dementia. For the latest CDC figures on number of Aids cases nationwide, number of deaths, new cases since January 1, 1988 and distribution by age and race, call 404/330-3020; for breakdowns by risk category and sex, call 404/330-3021; for breakdowns by 10 leading states and metropolitan areas, call 404/330-3022.

Chronic: persistent condition of long duration; someone with ARC may experience chronic lymphadenopathy.

Circumcision: according to a Canadian-Kenyan study in Nairobi, uncircumcised men in Kenya seemed to have a greater chance of contracting HIV from heterosexual intercourse than circumcised ones. (NYT, 6.14.88, C6).

CL246,738: being tested for KS at NYU, made by American Cyanamid (Pearl River, NY).

C/2.

trials. full
 Clinical: ~~second stage of drug testing, divided into Phases I, II and III. Clinical tests use humans subjects in an effort to prove drug safety, and efficacy, look for effective dose levels, harmful side effects and possible toxicity. In the USA c.t.s. are done.~~ + efficacy

(homolog)
 CMV: Chronic Myelogenous Leukemia: variety of leukemia against which amplitgen appears effective.

AmFAR - herpes.
 CMV/ Cytomegalovirus: common virus which interacts with HIV to cause retinitis and colitis, leading in some cases to blindness and chronic diarrhea. Some who believe Aids is caused by several factors think CMV may interact with HIV to cause the syndrome. Possible treatments: DHPG, Foscarnet. *Some think its a cofactor in Aids.*

(factor. ambr.)

Colitis: inflammation of the colon, caused in some cases by CMV. + *crypt...*

Colony Stimulating Factor, see GM-CSF.

Condoms: penis sheaths worn while fucking; used either vaginally or anally they prevent transmission of HIV and other sexually-transmitted diseases. They should be used with water-based lubricants such as KY or with a spermicidal jelly like Nonoxonyl-9. During World War II, the US Army aggressively promoted condoms with the slogan, "If you can't say no, use a pro," and distributed as many as 50 million condoms each month during the war! (Science, 2.5.88, p. 239). Hypocrites 40 years later have yet to allow such directness either in distribution or in potentially life-saving TV and radio commercials.

Connaught: manufacturer of the Salk killed-virus vaccine. The FDA forced Connaught to stop selling this vaccine to doctors who were testing its efficacy in slowing viral growth in people with Aids and ARC.

COMPANIONATE USE IND: doctors may receive ph. can get drugs outside of hotel.

C/3.

HIV infection

condemns
might change
 Contact tracing: many right-wing and some medical groups are calling for tracing of sexual contacts of those with Aids and ARC. Often ignored in the discussion are questions such as: how could one trust information given, perhaps unwillingly, by someone who may have been subjected to mandatory testing? How would contact tracers be sure someone wasn't naming someone with whom they hadn't had relations, but wished to stigmatize as **seropositive**? ~~How would contact tracing improve the chances for people to seek out testing and treatment, voluntarily?~~ Doctors from New York State's Medical Society and Societies of Surgeons, of Orthopaedic Surgeons and of Obstetricians and Gynecologists obviously neglected to consider these issues when they filed a recent suit against State Health Commissioner David Axelrod to force reclassification of Aids as a communicable sexually transmitted disease, which, under state law, would then mandate contact testing. (NYT, 6.14.88, B4). *Pres. comm. in June (federal documents show that this is a state c.r. law)*

infectious
second
 Contagious: communicable by external contact. The common cold, influenza, or hepatitis A are contagious. AIDS is **infectious**, but not contagious. *infectious, not contagious. even by casual contact.* *NSF/* *Med* *disputed*

(15)
either inert or active control - historical control
 Control: drug trials use two groups, administering a new drug to the experimental group and giving the control group an inert substance (placebo), no substance, a useless small dosage of a substance or a drug whose likely results are well known. Thus the efficacy of the new drug can be scientifically measured against the results from no treatment or known treatment. When AZT itself was being tested, all those in the control group died, while more than half of those using AZT survived. If PWA's can obtain promising substances outside of drug trials, it is justifiably difficult to induce them to enter drug trials where they will be forced to renounce all outside treatments and may receive only inert substances as part of the control group.

Infectious Drug Div.

Cooper, Dr. Ellen: head of the FDA's ~~Aids Drug~~ Division, she recently said the Aids community is sadly mistaken if it thinks recent changes in regulations will result in significantly earlier access to treatments, and only those drugs that are already in Phase III trials and meet the strictest standards of efficacy should be released. *See budget.*

by
seriously
ill pts.
pts. w/
life threatening conditions

T. test/ND *inexpensive*

acting as
Dir. Antiviralogy Div. + Product
Center & Drug Eval. & Res.
FDA.

C/4.

Cost: Federal spending on Aids for the last 3 years (in millions):

<u>Type of spending</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Research/education	234	494	931
Treatment	155	243	433
Blood testing	79	76	55
Total:	468	831	1419

As recently as 2 years ago the Federal government was spending half as much on wasteful, spendthrift testing as on crucial, life-saving treatment! Meanwhile, estimates of the direct cost of Aids cases by 1991 range from \$6.3 billion to \$45.4 billion. This does not even count productivity losses from shortened lifespans. (Science, v. 239, 2.5.88, pp. 605-607.)

CRI/ the New York Community Research Initiative, a promising alternative to the slow, inhumane Federal drug testing program; the CRI uses local physicians and clinics to administer promising drugs to their patients, who keep records of their reactions. Funded on a shoestring and unendowed with the many resources of the Federal bureaucracies, the CRI is a model for a more enlightened investigation into the many potentially promising treatments for Aids; it is presently testing cryptosporidium-antibody cow's milk, egg lipids with IV TPN, erythropoietin, ^{protease} ~~protease~~ ^{inhibitors} ~~inhibitors~~. ^{will shut another trial in} ^{fungal} ^{new future.} ^{or pneumonic. many other conditions}

D. m. fer. Cryptococcus: ^{fungal} parasite common in ~~pigeon droppings~~. Normally harmless, it can cause cryptococcal meningitis in Aids, destroying nerve and brain functions. ^{D. m. fer.} ^{or pneumonic. many other conditions}

Cryptosporidium: gastrointestinal parasite which causes chronic diarrhea in Aids; may be treatable with spiramycin; CRI is testing antibody-rich milk from cows infected with cryptosporidium to see if the antibodies protect patients from discomfort.

Curran, Dr. James, epidemiologist at the CDC's Center for Infectious Diseases (CID) who has been in charge of data collection on the spread of the epidemic from the beginning.

6 Cytotoxic t-cells: "natural killer" white blood t-cells which directly attack tumors and virally infected cells by rupturing their outer membrane. They are not effective against cells infected with HIV. (TI 2:3, p. 4).

D/1.

To reduce toxicity, being tested w/ AZT.
reverse transcriptase inhibitor (AZT)

DDC/ Dideoxycytidine: a toxic, antiretroviral drug made by Hoffman-LaRoche and being tested in ARC patients. ^{disc. NCI.}
An initial trial. neurologically toxic. Orphan drug. Causes chronic pain in hands & feet.

Death: in the USA, 5,774 died from Aids in 1985, 8,932 in 1986, and 4,505 between 1.1.88 and 6.20.88. By then the cumulative total was 36,874. How many more must die before this society mobilizes its full resources to stop the suffering?

Dementia: severe loss of brain function, considered by the CDC to be a symptom of full-blown Aids. About 70% of those who die of Aids have significant mental and neurological problems, from memory loss and mental slowness to brain atrophy, blindness and dementia. (NYT, 6.17.88, B4). AZT may be effective in delaying the progression of such dementia. (NYT, 6.21.88, C3).

Deoxycytidine: a naturally-occurring substance, paired with AZT in hope that it will decrease the latter's toxicity, according to Dr. Kapil Bhalla of Columbia Presbyterian Hospital (212/305-9912), where the two drugs are being tested together.

Dextran sulfate: anti-coagulant used in Japan for 20 years to prevent blood clots. An NCI study published in Science magazine in 4.88 indicated it could prevent HIV virus from invading and killing immune cells in lab mice. Slated to be entering ACTG trials in summer 1988. While long available over-the-counter in Japan and Canada, short-sighted and turf-conscious Federal authorities have pressured both countries to block dextran sulfate sales to Americans who travel abroad seeking it. *Gallo patent & Q IV 144.*

DFMO: possible antibiotic against PCP.

DHPG/ Ganciclovir: being tested in ACTG 004 with AZT against CMV-induced blindness, manufacturer: Syntex.

available under "compassionate use" protocol excludes all other treatments. Causes bone marrow suppression.
Dideoxycytidine: see DDC. *Use in combination vs CMV colitis: trial.*

DNA/ deoxyribonucleic acid: the double strand of genetic matter inside each cell of every living organism. Humans have 46 chromosomes, and each chromosome is made up of long strands of DNA. DNA gives its instructions to cells by replicating onto strings of enzymes called RNA, which then produce proteins and hormones to perform organic functions. In Aids, HIV interrupts this process by recoding its own viral RNA onto the DNA of the host cell (for example, a T4 white blood cell), making the cell unable to perform its normal tasks and subjugating it to a destructive proliferation of viruses, which then emerge into the bloodstream to invade other cells. *enzymes*

a *chemical* ~~human~~ long chain molecule (polymer) of ~~sugar & nitrogen containing~~ units found inside the nucleus of each cell of every living organism.
DNA ~~contains~~ is the organism's ~~genetic~~ genetic code.

6-29-88

Barbara Starnett "somewhat encouraged"
"not as good as 1st like her 2nd"

→ 54 pts. "slippy" data.

26 aids

12 o-c

16 HIV+ "not healthy"

started 1-21-88

1800 mg/day - KOWA.

allured 2 shy on days

24 AZT

24 ACV 12 hrs

13 AL721

5 Naltrexone -

21 Dantrolene / (880)

not good results.

8 wks -

most so stuck to injecting

+ not go the stomach acid.

p24+ - results unimpressive

OK w/ T4 - 3090 - 5590 ↑

3020 ↑ w/ 800

5590 T w/ HIV+

↓ own T4 w/ AZT, ribovirin.

T4 ↑ may not be signif.

rise in T8's. Don't understand.

seropositive benefit more than Phase 3

6 only took dextro

all T4 ↑

sulfa - allergy - OK take dext.

Phase health group

will get regular supply

5165 - 3 mo. supply.

Phase low in cholesterol

take it on empty stomach 3x day.

D/2.

or other therapy.

Double-blind: ^{trial} procedure in which neither experimental subjects nor administering doctors know which subjects are receiving test drug and which are receiving placebo. Supposed to promote objective results, as doctors' opinions on ~~efficacy~~ ^{efficacy} of test drug may slant test results. ^{quicker} ~~the~~ Efficacy in ~~many~~ ^{some} Aids trials doubtful, as when drugs are tested against AZT, the latter's striking side-effects would cue administering doctors which group was getting what. ...

Doxyrubicin: being tested with AZT against KS at NYU (212/340-7227).

DTC: ^{multitrial} ~~a product of the breakdown of antabuse~~ it is a nonspecific immunomodulator with possible beneficial effects on those with weakened immune systems. ^{unlike ... lamivudine} ~~in d.b. placebo trial. Results slow. & encephalitis.~~

DuPont: one-time napalm manufacturer which now makes ampligen. ^{Acquired a pr. NEM. (Philly PA).} ^{neither} ^{do they} ^{get} ^{results.}

^{shred by researcher.}
 Q used to be
 + exclude 6 cases 2 ampligen
 n1 Act Up pit pressure.

useful Pts. must
 be given results.

Efficacy: '62 Keffer. ^{Hertze Foundation 82}
if it's effective @ dose prev. in pop.
(or condition presented)

Eflornithine: made as Ornidyl by Merrell Dow (Cincinnati, OH), an orphan drug whose NDA is pending for use against PCP.

Egg lipids: ^{see 86 721} fatty substance from eggs being tested with intravenous TPN at CRI. ...e.g. 86 721...

ELISA: Enzyme-Linked Immunosorbant Assay: test for HIV antibody, licensed to DuPont, Ortho, Cellular Products, Electro-Nucleonics.

Encephalitis: brain disease sometimes occurring in advanced Aids.

Erythropoietin: drug being tested for blood depletion caused by Aids or caused by AZT; manufactured by Ortho and tested by CRI.

(EPO) biological substance that stimulates bone marrow to produce red blood cells.

tested alone + w/ AZT.

in kidney: protein.
or synthetic

AmFAR: hormone-like glycoprotein

F.

subseq
FANSIDAR: *antibacterial used vs PCP. Prophylactic agent.*

FACS/ Fluorescent Activated Cell Sorter: a \$500 million device which sorts T-cells, counting T4's and T8's to see if they are present in the proper 2:1 ratio. *(unhealthy)* *determine*
or detect T4 depletion caused by AIDS.

Fauci, Dr. Anthony S. Director of NIAID, who admitted in April 1988 he'd been unable to test aerosol **pentamidine** for 13 months for lack of a single staff position, though Fauci admitted if he were a PWA who'd already gotten PCP he'd probably try to get **pentamidine** wherever he could. He admits NIAID needed 127 additional staff members last year but only 11 were funded. What has he done with the \$350 million he got?

explain its role in the USA the FDA must approve all drugs to protect publ. & pty. & more drugs.

FDA: US Food & Drug Administration. Glacial bureaucracy whose up-to-a-decade-long delays in approving Aids drugs for testing and treatment are responsible for the loss of thousands of lives. Originally established in the 1960's to protect the public from profiteering, irresponsible pharmaceutical companies, it now collaborates with those very companies in limiting public access to proprietary test-drug information and rigidly controlling such tests. Its Commissioner is Frank Young, the head of its Aids Drug Division Dr. Ellen Cooper. In the 11 months since the new treatment IND regulations went into effect, the FDA has released one drug, trimexetrate with much fanfare. Over 130 other drugs are stalled in stagnant bureaucratic backwaters. In March the FDA ordered Houba to stop manufacturing its AL721 "workalike" and seized a shipment of dextran sulfate en route from Canada to San Francisco; it has also distinguished itself recently by harrassing San Francisco's Healing Alternatives Buyer's Club.

FELV: feline leukemia virus: like HIV, a retrovirus, and, also like HIV, one which kills its host indirectly, by weakening immunity and making the host vulnerable to the onslaught of normally-benign infections. Unlike HIV, a vaccine exists to prevent cats from getting sick.

Foscarnet (trisodium phosphonoformate): *antiviral* made by Astra AB (Hopkinton, MA), being tested for HIV infection and CMV retinitis.

Fluconazole: *antifungal used vs. cryptococcal meningitis*

experimental.

to compress. use protocol

Physi-

Fungus. *primitive vegetable organism*

mushrooms

yeasts

molds.

thrush

cryptococcus

treating
in trials
w/ 1 pt enrolled

G.

Div. of.
Gallo, Dr. Robert: head of the NCI's Tumor Cell Biology
he disc. HTLV-I in 1978 + adapted to characterize for discovering HIV. in 84, after he disc. HTLV.
Gamma globulin: "a sterile substance made from pooled human blood
containing many antibodies normally present in blood" (McBride, NYNewsday 4.12.88), being tested for pediatric Aids at Albert
Einstein Hospital; see IVIG.

Gamma interferon: ~~see interferon.~~

^{see}
Ganciclovir/ DHPG: antiviral drug being tested in ACTG 004 with
AZT against CMV-induced blindness, manufacturer: Syntex.

Giardiasis: parasitic bowel infection which causes diarrhea, can
be transmitted by rimming.

^{Research of}
Gibson, Dr. Jeffrey: head of NYC's HHC ^{Research of} research division, which
~~conducts drug trials at 11 city hospitals.~~ ^{Research of} ~~which issues find approval for drug trials~~
^{clinical, legal, econ, and aspects}
^{of all drug trials in city hospitals}

GM-CSF/ Granulocyte-Macrophage Colony Stimulating Factor: immune-
enhancing drug which increases the number of certain kinds of
white blood cells, myeloids, neutrophil phagocytes, eosinophils,
red cells and platelets. GM-CSF may also reinforce phagocytes'
ability to rid the body of foreign substances. Side effects
during an IV-trial included mild aches, chills, fever, phlebitis, ^{phlebitis}
vein inflammation, muscle pains, ^{fatigue} decreased energy and diarrhea.
Improved amount of blood cells dropped off ^{after} after cessation of
treatment, and GM-CSF does nothing to multiply t-cells. (TI 2:3,
6-7). Immunomodulator in Phase I trials for use in ARC and KS.
Made by Sandoz (E. Hanover, NJ) and Genetics Institute (Cambridge,
MA). ^{W. A. T. @ NCI}

^{glyco}
gp110 (gp120): a protein on the HIV surface, which may be used to
make an antibody which will carry a toxin specifically to cells
with gp110; see immunotoxin.

glyco proteins. It attaches itself to CD4 receptor

gp120 ^{causes} toxic protein which causes T4 cells to fuse.
(Synchrony)

HIV releases ^{toxic} gp110 particles into bloodstream where
infected cells

they seek out T4's
and attach to the
CD4 receptor.

(causes T4 dysfunction
+ T4's fuse into ^{passing} passing

^{programmed} programmed cell
(Synchrony). ^{giant cell}

H/1.

Helms, Senator Jesse: racist, misogynistic, homophobic Bible Belt bigot. He referred to Aids activists' safe-sex education efforts as "an engraved invitation to sodomy."

Helper T-cell: see T4-cell.

per 1-cell: see 14-cell. Hepatitis

Herpes: virus which attacks skin and nerve tissue. Sometimes sexually-transmitted and often **stress**-induced, **herpes** attacks are generally transient except when one is severely immunosuppressed. **Acyclovir** often alleviates or prevents outbreaks.

Herpes zoster, a.k.a. shingles, a delayed ^{non-inflammatory} effect of chicken-pox common in ~~older people~~ and sometimes rampant in Aids, it causes painful skin sores.

HGP-30: synthetic, non-infectious test vaccine which duplicates p17, a string of amino acids from the HIV core, developed by Dr. Allan Goldstein at George Washington University but to be tested in the UK because the FDA was unenthusiastic in spite of promising pre-clinical trials. p17 antibody appears high in early ARC and drops sharply as disease progresses to Aids, so researchers hope HGP-30 will stimulate enough p17 antibodies to significantly retard or prevent this progression. (Fettner, Voice, 5.3.88).

HHC/ New York City Health and Hospitals Corporation, the branch of NYC government which oversees 11 area hospitals where much, though far from all, local Aids testing takes place. Its research head, ~~Dr. Gibson~~ *division*, is gravely understaffed. Recently the assistant director of HHC quit because he was unwilling to implement funding cuts, and the head of Bellevue was fired for the same reason.

HHS/ US Department of Health & Human Services: the oxymoronic name of a Federal agency whose inaction, coupled with frequent claims of "we're doing all we can," has led to bureaucratic genocide in the world's scientific and technological leader. HHS oversees the PHS, which in turn oversees the CDC, NIH, NCI, NIAID, FDA, etc. *Adolf Götz & Peter Fischinger.*

HIV-1/ Human Immunodeficiency Virus: the retrovirus which seems to be the sole or foremost causative agent of Aids and ARC. HIV is comprised of nine proteins. HIV-1 and HIV-2 share 8 known proteins, including the core protein p17, and p24, and the surface protein gp110 (gp120), and HIV-1 has a ninth known protein, vpu (viral protein U). *Δ slow acting virus...*

H/2.

HIV-2: a recently-discovered variant of **HIV-1**, which seems most prevalent in West Africa and which is "generally less dangerous than **HIV-1**," although information is slight. Newly-found and less deadly variations of **HIV-2** may help researchers discover why **HIV-1** is so much more deadly. (NYT, 6.10.88). **HIV-2** has a protein not found in **HIV-1**, **vpx**.

HIV-3: **virus** discovered in a man from Cameroon and his wife at the Institute for Tropical Medicine in Antwerp, Belgium in May, 1988. The man had **lymphadenopathy** and his wife was **asymptomatic**. There was only 45% similarity between the genes of the new virus and **HIV-1**, and only a 15% similarity with **HIV-2**. It is unknown whether **HIV-3** is as harmful as **HIV-1**, or whether existing blood tests would detect it.

Homeless: According to a doctor who worked in NYC homeless shelters, 15-20% of their inhabitants seemed likely to be **seropositives**, with weight-loss, diarrhea, chronic fever and pneumonia. Nonetheless, city doctors seldom diagnose Aids, seemingly unwilling to assume the cost of their care. New York City provides beds for only 62 **PWA's**, pays full housing costs for only 181 and helps pay rent for 596 more. A Bronx doctor, Jerome Ernst, said Aids patients often had to wait to find housing 6 months after they could have been discharged, and up to half died in the meantime. (Gina Kolata, NYT, 4.4.88).

Houba: health-food manufacturer whose "workalike" analogue to **AL-721** was prohibited by the **FDA**, although the substance had previously been available in health-food stores.

HPA-23, a.k.a. **antimoniotungstale**, anti-**HIV** drug discovered in the early 1970's by Dr. Jean-Claude Charmann, manufactured by Rhone-Poulenc Sante (Monmouth Junction, NJ), in Phase I trials. It seems to short-circuit **HIV's reverse transcriptase enzyme**, slowing or stopping the virus' replication of itself onto host cells' **DNA**.

HTLV-I/ Human T-cell Leukemia Virus: a **retrovirus** discovered in 1978 by the **NCI's** Dr. Robert Gallo. Whereas **HIV** destroys **t-cells**, the two **HTLV's** cause the uncontrolled proliferation of them known as **leukemia**.

HTLV-II: another **leukemia-causing virus** discovered in 1983.

I/1.

IL-2: see Interleukin-2. *alpha interferon*

Immunomodulator: A drugs which alter, suppress or strengthen the immune system: ~~ABPE~~, ampligen, AS101, GM-CSF, ~~CL246, 738~~, Imuthiol, Imreg-1, IL-2, ~~MAPOA~~, Isoprinosine, ~~methionine-encephalin~~, ~~MPT-PE~~, TP-5, ~~the various interferons~~, erythropoietin, ~~retrovex~~ ~~TNF~~. Some immo's also exhibit antiviral activities.

Immunotoxin: an antibody chemically attached to a toxin; the antibody is custom made to bring the toxin only to a specific group of cells, which the toxin then kills. The proposed Aids immunotoxin will use an antibody which seeks out the gp110 (gp120) protein but no normal human protein; the antibody will carry a toxin to HIV-infected cells which carry gp110 (gp120) on their surface. Call Dr. Alan Levin (415/788-7545). (ATN 53, 3.25.88, pp. 6-7).

research level.
Imreg-1: New Orleans pharmaceutical company's *immunomodulator* ~~antiretroviral~~ drug undergoing 158-subject trials in 5 states. Company spokesmen said in Stockholm that Imreg-1 had given the trial group of ARC patients a "significantly diminished" likelihood of progressing to Aids. Derived from human blood cells, the drug does not directly attack HIV, but improves immune function. Only 4 of 93 ARC patients who received Imreg-1 progressed to Aids, vs. 12 of the 48 who received placebo. Results for KS were inconclusive, since only 17 were tested. (NYT 6.14.88 p. C6). Trial sites include New York at St. Luke's - Roosevelt (212/554-7194) and Brooklyn Caledonian (718/403-6922). *The FDA is requiring new Phase III trials.*

Imreg-2: analogue of Imreg-1 in Phase II trials.

Imuthiol: trade name for *DTC* diethyldithiocarbamate, an immunomodulator made by Merieux Institute (Miami, FL) being tested at Downstate Medical Center (718/270-1849). *cf. entb. 5.11.88*

period *the time*
Incubation: the period between exposure to an infectious agent and the onset of disease. Hepatitis B may take as long as six months to strike; Aids may take much longer. ~~The mean incubation period for those with Aids in 1982 was 10.2 months. (RS, 447).~~
Current reports indicate 40% of infants born with HIV develop Aids within 10 months, but *current figures* indicate 40% of infected adults develop Aids within 9 years.

phases in some adults it takes 7-10 yrs.

IN VIVO

IN VITRO

I/2.

apply for IND status *within 30 days the FDA approves or denies.*

in vitro

IND/ Investigational New Drug: After **pre-clinical** trials, drug companies ~~submit INDs~~ to the **FDA**, showing the results of all animal testing and how the drug is made. The **IND** becomes effective if the **FDA** does not disapprove the application within 30 days. *Does this in the way* This ~~paves the way~~ for **Phase I clinical trials**. As of April, 1988, no **PWA** or **PWARC** had obtained treatment under the **FDA's** much-heralded new Treatment **IND** regulations. The draft proposals would have permitted release of drugs which showed promise well before they were proven effective, but a last-minute compromise, probably in response to pressure from pharmaceutical companies, resulted in vague and narrow language, which retains the status quo, in which it takes on average 4-8 years to undergo the **IND** procedure (**AZT's**, by contrast, took but 5 months).

sa. T. N. H. IND.

Indication: purpose for which a drug is intended; e.g. pentamidine is indicated for PCP.

no emphasis *infinite*

Infectious: communicable only by ~~sustained or invasive~~ contact. **AIDS** is infectious but not contagious.

think *J2*

Informed consent: supposedly, all patients must give their informed consent to participate in drug trials. This can lead to exclusion of non-English speakers from drug trials, whose protocols are written in English, the forms used can be confusing, and the pressure of doctors to obtain test subjects can render their efforts coercive. How does a baby with Aids give informed consent to an **IVIG** trial? How does someone suffering from Aids-related dementia give informed consent?

Insurance: "Health insurance and disability insurance in the USA have remained largely privatized, unlike in most other developed countries, because government has been persuaded by the insurance that the industry can provide adequate coverage. ... Rights of **HIV-infected** people to insurance depend significantly on government regulators of the insurance industry disallowing Aids-based discrimination, such as by exclusions from coverage and prohibitive premiums." (Science, 2.5.88, p. 239). Yet in Massachusetts Gov. Dukakis allowed the insurance industry to require **HIV** testing, and a New York State appeals court has struck down Cuomo regulations prohibiting such testing. Only legislation can adequately insure that everyone is entitled to insurance during this epidemic. If insurance companies are unwilling to provide it, they are unequal to their task and should give way to enlightened, socialized medicine, such as exists in Canada and, indeed, every other industrialized society besides the USA and its peer in inhumane and unequal health care, South Africa.

tie it into drug - who pays when pt gets expensive drugs
hosp. want let pt into trial b/c pt can't pay 4 drug or
side effect.

→ TREATMENT IND : new regulation
In Jun 87 FDA defined new category of ^{new drugs} ~~new drugs~~
ostensibly special 2 new drugs available to pts. _✓ ^{Drugs p13-}
by Phase III completed.

Does Efficacy not have been
demonstrated 150 mg
is only like PII - PIII
Only those ~~of~~ ^{with} ~~cardiac~~ ^{or} ~~more~~ ^{more} of
life threatening conditions ~~are~~ ^{are} eligible

Said it not made available
new drugs 4 sides p13.
Look it hasn't worked.

LIP SERVICE

Feasibility a prob.

Pres. Comm. randomly criticized

FDA & Trt IND

800 did Weiss submit

I/3.

PL
respiratory

Interferon: a family of anti-cancer drugs, including **alpha**, **beta** and **gamma** interferons. **Alpha interferon** is being tested against **KS** at St. Vincent's (212/790-7000) and with **AZT** at Cabrini Hospital (212/340-5020). Manufactured as **Wellferon** by **Burroughs-Wellcome** (Research Triangle Park, NC), as **Roferon** by **Hoffman-LaRoche** (Nutley, NJ) and as **Intron-A** by **Schering-Plough** (Madison, NJ). **Beta interferon** is being tested against **KS** at St. Luke's-Roosevelt (212/554-7194). **Gamma interferon** is being tested with **TNF** for **ARC**.

Interleukin-1: enzyme secreted by **macrophages** to produce fever and swelling, which assist the immune system's destruction of foreign substances.

IL-2
Interleukin-2: immunomodulator made by **Cetus** (Emeryville, CA), **Hoffman-LaRoche** (Nutley, NJ) and **Imunex** (Seattle, WA) in **Phase II** trials for **KS**.

alpha
Intron-A: see **interferon**.

JE
IRB: **Institutional Review Board:** team of hospital experts who must approve drug-testing protocols.

immunomod
IL
Isoprinosine: ~~antiretroviral~~ made by **Newport Pharmaceuticals** (Newport Beach, CA) and being tested vs. **ARC** and **PGL** at 13 US sites including **Nassau County Medical Center** (516/542-2505).

"a drug in search of a disease"

I/4.

IV-drug user: along with women and people of color, someone likely to be discriminated against and excluded unreasonably from drug trials. At the outbreak of Aids, 80% of patients in New York were gay or bisexual; in 1988, for the first time, more new cases are among **IV-users** than gays or bisexuals. Yet the drug bureaucracies prefer to enroll supposedly more educated, cooperative gay males in their drug trials, denying whole classes of sufferers any chance for life-saving therapy. Recent studies in San Francisco, New York and Stockholm indicate that the proportion of users who carry **HIV** has remained more or less constant in the last 3 years. In NYC, 55-63% of those entering drug treatment programs are **seropositive**, in Stockholm about 64%, in San Francisco 20% and in Bangkok, Thailand, 16%. Persuading IV-drug users not to share needles seem to have been more effective than inducing them to use condoms, so the continuing infection of their sexual partners and children is likely. Each year 6% of drug users not formerly infected become **HIV** carriers. (NYT, 6.16.88, A25). The election-year hysteria surrounding the drug issue is exemplified by demagogic demands by such as New York Senator Alphonse D'Amato for the death penalty for drug-related murders, which sounds harsh but costs little, while IV-users here must wait at least two years to enter treatment *millionaire* programs, which are expensive but crucial if the problem is to be resolved, and infection of IV-users' drug partners, lovers and children is to be stopped. *(ask Grgs how long)*

IVIG/ Intravenous Immunoglobulin: blood-derived substance which may be effective in raising immunity, reducing bacterial and viral infections in children with symptomatic Aids. A particularly pernicious drug test currently involves injecting the control group of babies with Aids with intravenous **placebo**, which not only does nothing to help them, but exposes them to infection via the long (3-7 hours monthly) and painful intravenous procedure.

J.

A?

Joseph, Dr. Stephen: New York City Health Commissioner wasting time and money in an effort to stigmatize **prostitutes** via **mandatory testing** rather than expanding services offering free, voluntary, confidential testing and ~~clean needles~~ to stop the spread of the epidemic. His inability to provide adequate Aids care for the 1,500 **homeless PWARC** and Aids, or fund more than the 60 beds for **PWA's** in a city with more than 6,000, is equally unimpressive.

(Liam Magnet McCarthy)

" Guess

he supports ^{some} ~~pitch~~ clean needle project

Ø

K.

Koch, Mayor Edward I.: a racist, divisive Mayor whose silence on Aids has been deafening and whose inaction on Aids lethal. He compared a recent ACT UP event, when for the first time in 12 years someone succeeded in shutting up this media-glutton, to "fascist and Nazi tactics". The Reich did not come to power by shouting for 20 minutes, however, and now, it is his own unjust inaction that is genocidal. *use 1st "fact" of fact sheet (IV. use's)*

Koch postulates: developed 100 years ago by bacteriologist Robert Koch, they list 3 prerequisites for any agent, such as HIV, to be identified as the "cause" of a disease, such as Aids: 1) the virus must be present in all cases of the disease; 2) antibody ~~at~~ the virus must be proven to develop in proportion to the development of Aids; and 3) transmission of the virus to a previously uninfected animal or human must be demonstrated, with subsequent development of the disease and reisolation of the virus. HIV has been introduced into animals, but they do not develop Aids. It would be unethical to introduce it deliberately in human subjects, but using HIV to make a vaccine which proved effective would fulfill the third requirement. (October 43, p. 55). *While HIV-AIDS test doesn't fit these problems, presence of HIV in phs... it is morphological... provides for some correlation*

KS/ Kaposi's Sarcoma: a cancer of the capillaries which occurs in Aids, ~~predominantly~~ among gay men. Once considered a slow-acting, rarely fatal cancer likely to affect older Mediterranean and Jewish men, only 500-800 cases were recorded since it was discovered in 1871, until it reappeared in more virulent form as a harbinger of Aids 110 years later. Lesions may first appear on the feet or legs and in the soft palate of the mouth. CDC studies on whether the seeming limitation of KS cases to gay men was connected with use of poppers were halted for lack of funds. Transient spots whose blood can be easily pushed out by manual pressure are not KS lesions; such innocuous blood-bruises have inflicted countless moments of terror upon those suffering from the epidemic of fear whose effects are more virulent and far-flung than the viral one's. *Gallo says KS may be caused not by a*

viral cofactor but by extracellular growth factor released by infected T-cells. (IV 7.5.88 21)

VILLAGE COPIER

call Faxino or D.E. Kirschbaum.

Natl Acad Scienc/Inst. of Medicine Committee Oversight of Aids Activities
"The evidence that HIV causes A. is scientifically conclusive"

6.15.88.

mostly
but has
some
♀ + kids.

L.

LAS:

LCV/ Leucovorin: anti-PCP substance being tested in conjunction with trimetrexate (TMXT). ~~Leucovorin~~ ^{Causes} toxicity of TMXT.

Leukemia: uncontrolled proliferation of leukocytes (white blood cells), sometimes fatal.

Leukocyte: any of the several varieties of white blood cells, crucial to immune function.

Leukoplakia, a.k.a. hairy leukoplakia, an abnormal condition in which thickened white patches occur on the mucous membranes (such as the mouth or vulva); may be counteracted by ampligen.

Lymphadenopathy: chronic swelling of the lymph glands. Can be an indication of ARC or Aids. LAS - assoc. syndrome. PGL
~~occur in ppl. w.~~

Lymphocytes: white blood cells that recognize and destroy specific antigens. B-lymphocytes produce antibodies in the lymph nodes. When the body encounters a foreign substance for the first time, this contact leads to acquired immunity. T4 and T8 lymphocytes mature in the thymus (hence T) gland and orchestrate the movement of other white blood cells by secreting lymphokine hormones.

Lymphokines: hormones secreted by T4 and T8 cells ^{into bloodstream} which perform ~~immune functions as directed by the T-cells.~~ ^{capable of stimulating other cells of the immune system}

LymphoMed: Melrose Park, Illinois, ^{genetic pharm. co.} pharmaceutical company lucky enough to have obtained Federal orphan drug license to manufacture ~~aerosol~~ pentamidine, whose price it has raised by 300% since the drug first showed promise against PCP. Is that what they mean by "economies of scale"?! ^{currently computing w/ Fisons to obtain Q.D. status for aerosol pt.}

Rationalized increased IV cost
on basis of aerosol research.

25 - 100

FDA into their plants & bud quality control.

M/1.

Macrophages: microbe-eating cells of the immune system, they course the blood in search of invading microorganisms, which they devour. Usually the first to arrive at an infection site, macrophages approach and swallow foreign particles. However, they are not capable of killing the invader alone, they need the assistance of the specialized T4 cell, which they summon and "introduce" to the enemy. (II 2:3, p.4) They produce fever and inflammatory responses to aid in attacking the invader. HIV seems able to avoid detection and destruction; it can invade macrophages, hide there and multiply for 12 to 42 months before it reenters the bloodstream to provoke **antibody** production. Macrophages may be packed with viruses and can pass through mucous membranes without the convenience of tears in the skin. This greatly expands the danger of sex without condoms.

MAI/ Mycobacterium Avium Intracellulare: ^{deadly} pulmonary infection which occasionally affects persons with normal immunity, and which infects PWA's systemically in the bloodstream, especially late in the course of Aids, often a year after the first bout with PCP. It may also affect bone marrow and cause **anemia**. Symptoms include night sweats, high spiking fevers, cough, appetite loss and general fatigue. MAI is often misdiagnosed as flu, and testing for it by blood culture takes 2 weeks. A new test treatment for it is **ciprofloxacin** along with three older TB drugs, ~~rifampin, ethambutol and amikacin~~. MAI treatments sometimes interfere with AZT therapy. (ATN 53, 3.25.88, pp. 7-8). *Highly lethal. No good treatment.*

MEK/ Methionine enkephalin: a substance naturally produced by the body, especially during or after strenuous exercise, may be tested by CRI as an **immunomodulator** which may boost immune function. In Phase I and II trials, made by TNI Pharmaceuticals (Chicago, IL).

Menogaril: anti-KS chemotherapy being tested at NYU Medical Center (212/340-7227) starting in January 1988.

MicroGeneSys: West Haven, Connecticut, company which made a synthetic HIV vaccine. When NIAID gave it to 59 healthy **seronegative** volunteers it prompted an immune response, and in chimpanzees, although not visibly in humans, it caused lymphocyte growth; side effects, common with any injected vaccine, include redness & swelling at the injection site and brief flu-like fevers. (WSJ, 5.2.88).

MMWR: the CDC's **Morbidity and Mortality Weekly Report**, which first reported the outbreak of Aids in 1981 under the page 2 headline "Pneumocystis pneumonia - Los Angeles."

M/2.

⌘ MTP-PE/ muramyl-tripeptide: immunomodulator made by Ciba-Geigy
(Summit, NJ) and being tested vs. KS.

N/1.

1988: between January 1, 1988 and June 20, 14,710 new cases of Aids were reported and 4,505 deaths. By 6.20.88 the total of cases in the USA was 65,099, and the total deaths 36,879. (CDC). At least 10% of cases are unreported. (Science 239, 2.5.88, p.573).

Naltrexone: immunomodulator similar to MEK and in early Phase II trials vs. Aids and ARC. Made by DuPont as Trexan.

IL
add to Gallo.
NCI/ National Cancer Institute, ^{the largest} a Federal entity under the NIH; its most well-known Aids researcher is the territorial and self-aggrandizing Dr. Robert Gallo, who discovered HIV in 1984 (after a French group had already done so in 1983), tried to name it HTLV-III after two leukemia viruses he'd already discovered, although he had to change the L in this case to lymphotropic (affecting the lymph glands). The NCI runs the PDQ, a flawed registry of drug trials.

IL
NDA/ New Drug Application: upon completing Phase III clinical trials and before the drug can be released for prescription or over-the-counter sales, a drug sponsor must file a NDA with the FDA; the NDA typically runs into thousands of pages, including chemical analysis of the drug, a theory of how it works, its stated purpose, results of animal and human trials and prospective production and marketing details. FDA review and approval of NDA drugs often takes 2 to 3 years.

New York Times: a newspaper with a skewed perception of its immediate environs, this organ printed 3 stories on Aids in 1981 and 3 in 1982, while printing almost 60 stories within 2 months of the Tylenol poisoning scare. 7 died nationwide from cynaide-laced Tylenol; 260 cases of Aids had occurred by the same time, for a article-to-death ratio of 1:8 for Tylenol victims and 1:83 for Aids.

SE
NIAID/ National Institute of Allergy and Infectious Diseases. Administers ACTG's, network of testing units at hospitals around the country, which are only testing 16 of the 130+ drugs which may be of use. Corporate sponsors or physician researchers propose trials to ACTG directly or to NIAID's Aids Clinical Drug Development Center (ACDDC). NIAID's Director, Dr. Fauci, got only 11 staff positions last year, when he needed 127. Senate Bill 1220 would provide 300 new staff positions for 1988, but it hasn't been passed by both houses of Congress yet.

N/2.

NIH/ National Institutes of Health: agency headquartered in Bethesda, Maryland, subsidiary to the PHS and comprised of the NCI, NIAID, and the National Heart, Lung & Blood Institute, among others. Dispensing billions in research grants yearly, it funded Aids research only grudgingly as the epidemic took off and has yet to make amends. An unfavorable, but well-founded joke early in the epidemic claimed the NIH initials stood for "Not Interested in Homosexuals." In 1982, San Francisco alone spent more on Aids than the entire NIH. (RS, 311). *98 budget:*

NIMH: *of Univ. of Cal. - kids in - include now being 88 675 b.*

Nutrition: the S.F. Department of Public Health has some pamphlets on Nutrition and Aids, including tips on food preparation, boosting calories and protein, and improving food intake. Contact the Public Health Nutritionist, S.F. Dept. Public Health, 101 Grove St. Rm. 118, S.F., CA 94102, or phone 415/554-2572. (II 2:3, p. 8).

NYC: in 1983, New York City, with 45% of the nation's Aids cases, had yet to spend a penny on the disease. (RS, 310). By 6.20.88, the metropolitan area was home to 14,640 cases, almost three times as much as San Francisco, the runner-up. Yet San Francisco has spent far more per case and overall, on Aids. The 1988 NYC budget for Aids is a travesty, rejecting recommendations of the HHC, with the Mayor's Five Year Plan a shrill demand for Federal aid wholly ignoring the possibilities for enlightened local action. See beds, CRI, HHC. .. Koch (fact sheet?) *IV? new blood.*

"the aid burning"



*safe sex education work
given in NIMH
integration of subjects
counseling to 1 group
no c. to 2 group. } all child HHC + is ? vs.
call Mgr. at M-*

O.

cf. AmFAR

Opportunistic infection: disease which strikes those with weakened immunity - e.g. PCP, CMV, MAI TB ^{which may be complicated}

Ornidyl: trade name for **eflornidine**, an anti-PCP drug.

Orphan drug: drug developed by the Federal government and assigned, under its Orphan Drug Program, to a private pharmaceutical company, which is given a monopoly on its manufacture for ~~5-7~~ ⁷ years. Intended to make such drugs available when there aren't enough prospective patients to make them economically viable without such Federal protection, the program has become a massive, Federally-sanctioned taxpayer ripoff. For example, **AZT**, which was developed with taxpayer funds in the 1960's at the the National Cancer Institute (**NCI**), was given to **Burroughs-Wellcome**, whose profits and stock price have skyrocketed since receiving this Federal windfall. **Eflornithine** is another orphan drug. ^{Pentamidine}

Ortho: manufacturer of **erythropoietin**.

...

p17: a string of amino acids from the **HIV** core, after which the test vaccine **HGP-30** was modelled.

Papovavirus: normally benign virus which causes warts ^{in AIDS's.} ~~in AIDS.~~

PCP/ Pneumocystis carinii pneumonia. Common ^{opportunistic} 'bacteria' which propagates rapidly in the lungs of PWA's and is the leading cause of death in AIDS. Drugs which may be effective against PCP: pentamidine, eflornithine, trimetrexate, ^(80%) bacrim, dapsone, aerosol... _{for the}

PCR: Polymerase Chain Reaction: sophisticated new technique which multiplies small bits of DNA to detect HIV lurking in a tiny fraction of a person's cells, as little as 1 in a million. Developed by Cetus Corp. (Emeryville, CA). about 4 years ago. Also enables scientists to grow mummy and woolly mammoth DNA. (NYT, 6.21.88, C1).

PDQ: the Physician's Data Query database of the NCI, it fails to give a complete listing of Aids trials; in New York state, only 1/9 of active non-ATEU trials were listed; it fails to list trial-starting dates or accrual information; and it lists as open trials that were already closed. ~~also~~ is full of 87. (unreliable)

Pentamidine: antibiotic effective against PCP. Although pentamidine was dispensed by the CDC for the rare cases of this pneumonia before the Aids epidemic (RS, 54) ~~but eight years later~~ the drug ~~is still not readily available~~. Pentamidine has reached NDA stage in ~~vial~~ dosage and Phase III for seemingly more effective aerosol dosage in spite of Fauci's criminally negligent 13-month delay testing it due to lack of one staff position. 'Aerosol pentamidine relies on nebulizers to deliver the particles of the drug to the tiny air sacs in the lung. This form of the therapy was developed ... because many did not tolerate the injections by which it has been customarily administered and because it offered the possibility of treatment at home... Pentamidine injections can casue abcesses and dangerously lower blo^ssugar and blood pressure. But no major toxic reactions were reported. ~~NYT~~ A UK study, delivering the aerosol in larger particles, was ineffective. ~~(NYT, 6.15.88, A21)~~. Made by ~~LymphoMed~~ (Melrose Park, IL), who ~~raised~~ its price ~~over six times~~ since its usefulness became known. Described by one taker as "like sucking hairspray for breakfast." (WSJ 4.28.88). Research presented in Stockholm. ~~Pentamidine nebulizer is available now.~~

Peptide T: octapeptide sequence, made by Pensinsula Labs (Belmont, CA) and being tested in Phase I trials for Aids.

* IV pthamidine is an appropriate treatment for PCP infection. Prophylactic treatment also shown of aerosol pentamidine is in Pharmall trials but in spite of promising results is still far from readily available in many parts of the country (Newark).
If not a splenectomy by LymphMed; Fisons applied for D.D.
~~Pres. with~~ this drug should be available outside trials; + placebo trials s.b. discontinued.

→ p24 antigen: protein fragment of HIV
the p24 antigen test measures
this fragment. A positive
result for p24-a suggests
HIV replication.

or Answer.

In study of asy. sero +
59% p24-a + detected within 3 yrs.
15% p24-a - " " " "

BERS Jun 88 p 2
Bulletin of Exp Treatment of Aids
Soc Aids Foundation

decentralized prevention of 100 pts 4 9 mos.

→ a new high-dose short-acting Polyclonal for prev. of recurrence of PCP
includes 3 doses of either 5 60 or 90 mg. every 2 weeks
Fisox nebulizer.
the 5 mg. dose is a virtual placebo + its use is unadvised.
T1. 2:4 p 10

P/2.

PGL: Persistent Generalized Lymphadenopathy: chronic swelling of the lymph glands, symptom of ARC. *see lymphatic*

Phagocytes: white blood cells which eliminate foreign substances by engulfing them and destroying them with enzymes. **Macrophages** are one kind of phagocyte.

Phase I: of FDA ^{mandated} clinical trials test drugs on a small group of humans for side effects, dose levels, toxicity. "Safety testing & pharmacological profiling in humans." *Am FAR suppl. p. 85*.

Phase II: tests drug effectiveness against a particular medical condition in a greater number of patient volunteers, monitor its safety and traditionally last about 2 years. "Effectiveness testing in humans." *involve 100-200 humans*.

Phase III: trials involve 1,000 to 3,000 people from participating hospitals and clinics, confirm drug effectiveness and try to identify less-common adverse reactions. "Extensive clinical trials in humans." (Last 3 q's, PMA Update, Nov. 87).

PHS: the US Public Health Service, the branch of the HHS ^{which} ~~whose~~ ~~administrator in chief is Surgeon General C. Everett Koop. It~~ oversees the NIH, the CDC and the FDA. *Public Health Service - AIDS coordinator*

Placebo: inert substance against which test-drugs are compared. The control group takes placebo, while the test group takes experimental drug. Many such studies are conducted **double-blind** so administering doctors don't know which patients are receiving what. The test drug may be administered in such small doses that it is a virtual placebo. ^(*placebos*) Placebos are usually harmless, but when, as in the pediatric ^(*placebos*) **IVIG** trials, they're administered intravenously, they may induce the very diseases the experimental group is being protected against. ACT UP always opposes the use of placebos in people who are seriously ill, whenever the experimental drug can be measured against an accepted therapy of any efficacy, or when the test drug is available outside the trial. Although **NIAID** claims placebo-controlled, double-blinded trials are "highly ethical and humane because statistically sound proof of efficacy can be demonstrated in small numbers of people within a relatively brief time" (APC, 4.88 p.47), Presidential HIV-Commission Chairman James Watkins said "We don't need any more placebo-controlled drug testing for Aids patients." (Washington Post, 3.1.88, p.6).

P/3.

PMA: Pharmaceutical Manufacturers Association, a trade organization which has jealously defended the notion of business as usual in the midst of the Aids epidemic. (PI Perspective, SF, 4.88).

Poppers: inhalants made from alkyl, amyl or butyl nitrates, popular in the late 70's on disco floors and in gay sex. Early Aids researchers tried to establish a link between poppers and Aids; it was conclusively demonstrated not to be the cause, but the limitation of **KS** to gay men led to speculation they might be a co-factor for **KS**. However the **CDC** never concluded its study on this issue for lack of funding. Poppers are, however, known to be immunosuppressive and it would seem wiser to avoid them.

Portland, Oregon is giving IV-drug users free needles, in an impressive display of putting health concerns before moralistic hysteria. Just as impressive was the lack of opposition in even a single ~~such~~ letter to Portland's newspaper, the Oregonian. (NYT, 6.10.88).

Pre-clinical: first stage of drug testing, in the test-tube and with animals.

Prophylaxis: Prevention. E.g. **Aerosol pentamidine** may be effective as prophylaxis against **PCP**.

Prostitutes: category of sex-worker which enables married heterosexual men to assert their economic dominance both on their wives, by supporting yet cheating on them, and on the prostitutes, who are then scapegoated by laws and punitive practices which punish them, not their clients, for providing the services the clients solicit and pay for. As this legacy of hypocrisy might suggest, prostitutes are one of the groups most stigmatized by Aids hysteria. In the USA, where there are 1 to 1.5 million prostitutes, few carry **HIV**, most of these being **IV-users** (only 10% of prostitutes are **IV-users**). Prostitutes used condoms long before Aids, and have tested **seropositive** no more often than other women with 3-5 sexual partners a year. Nonetheless, popular opinion targets them as passers of Aids to heterosexuals. Nevada tested all its prostitutes in legal brothels, 4500 tests of 500 women, and not one tested positive. Nonetheless prostitutes are arrested 9x more often than their clients, and prostitutes of color, while numbering less than half the total, comprise 85% of those imprisoned. (October 43, pp. 135, 177-181). In World War I, more than 30,000 prostitutes were incarcerated by an over-zealous Federal government. (Science, 2.5.88, p. 239). In Nairobi, Kenya, 85% of prostitutes carry **HIV**. (NYT, 6.14.88, C6).

P/4.

Protocol: detailed plan which states the drug trial's reason, goal, hypothesis, drugs involved, dosage levels, methods of administration, treatment durations and methods of administration, who may participate, their disease and its severity. It often indicates patient's age, sex, and with Aids, a range of blood values. Protocols must be approved by an institution's **IRB**. Precious months have been wasted due to ill-drafted protocols which must be sent back to the drawing board.

PWA: Person With Aids. The People With Aids Coalition (PWAC) motto says it best: "We challenge the label victim, which implies defeat, and we are only occasionally patients. We are People With Aids."

PWAC: People With Aids Coalition, NYC.

PWARC: Person With Aids-Related Complex. See ARC.

R/1.

Rectum: in February, UCSF's Dr. Jay Levy reported finding HIV in intact bowels of Aids patients, suggesting anal sex could cause infection without breaking the rectal lining. (PI, 5.6.88); in addition it is possible that the virus-rich macrophage could pass through unbroken rectal mucus membranes. This all reinforces the desirability of using condoms.

Registry: a central listing of every clinical trial for a drug to treat Aids or Aids-related **opportunistic infection**. Current public and private registries are incomplete, out-of-date and riddled with errors. ACT UP seeks the establishment of a complete, accurate and timely national registry. Laughably, neither the NIH nor the FDA nor the amply-funded AmFAR has been able to keep up with our own efforts to compile such information.

Repligen: Cambridge, Massachusetts pharmaceutical company which identified a fragment from the outer coat of HIV which may prove useful in developing a vaccine. (WSJ 5.2.88).

Reticulose, a nucleophosphoprotein made by Advanced Viral Research (Miami, FL) for Aids and ARC.

Retinitis: inflammation of the retina, linked in Aids to CMV infection and leading in some cases, unless treated with drugs such as DHPG, to blindness. Drugs which combat it: DHPG, Foscarnet.

Retrovir: see AZT.

Retrovirus: a virus which replicates using the reverse of the usual process. Normal viruses have DNA cores and replicate via RNA in the host cell; retroviruses such as HIV replicate by copying their own RNA onto the DNA of the host, using an enzyme discovered in the mid-1970's by Dr. Robert Gallo called **reverse transcriptase**. Retroviruses include FeLV, HTLV-I, HTLV-II, HIV-I, HIV-II and HIV-III.

Reverse transcriptase: enzyme secreted by a retrovirus which pulls the DNA of the host cell into the configuration of the viral RNA, turning the host into a assembly-line factory for making more retroviruses. HPA-23 may prevent reverse transcriptase from doing its evil work.

Ribavarin: made as Virazole by Viratek/ICN (Costa Mesa, CA), in Phase II and III tests for KS and ARC.

R/2.

Rifabutin: a.k.a. **ansamycin**, an **antiretroviral** drug made by Adria Labs (Dublin, OH) with "almost no toxic effects" being tested for **KS** associated with neurological impairment at Long Island Jewish Medical Center (718/470-7000) and SUNY Stony Brook (516/444-1660).

RNA: Ribonucleic acid: most viruses and all bacteria, plants and animals have genetic codes made up of **DNA**, which utilizes **RNA** to issue specific hormones and proteins, the genetic material of a **retrovirus** is the simpler **RNA** itself. **HIV** inserts its own **RNA** into the host cell's **DNA**, preventing the host cell from carrying out its natural functions and turning it into a virus factory. Some drugs, such as **ampligen**, utilize mismatched **RNA** in the hope that the synthetic version will impair the virus' ability to perform its genetic sabotage.

Roferon: see interferon.

S/1.

Safe sex: sexual practices which reduce the risk of transmitting or contacting **HIV**; according to the **GMHC**, these include avoiding the exchange of cum and pre-cum in oral sex, always using a condom in anal sex, in conjunction with water soluble lubricants such as KY or spermicidal jelly with Nonoxydol-9, withdrawing before ejaculation since condoms can break, not fist fucking (or "if you must," using a rubber glove), never sharing needles if using IV-drugs, avoiding contact with menstrual flow (dental dams are a possibility), using a condom in vaginal sex, not rimming, not using poppers.

Saliva: Aids has never been shown to be transmitted through deep kissing or other oral contact. Recent research at the National Institute of Dental Research isolated saliva from glands under the tongue which deactivated **HIV**. In contrast to **HIV**, **hepatitis B** and Epstein-Barr (**EBV**) virus can survive for hours in saliva. Both human and chimpanzee saliva prevent **HIV** from infecting lymphocytes. (Phil.Inq., D.C. Drake, 5.6.88).

Salk, Dr. Jonas. Discovered polio vaccine in 1950's, and is taking advantage of California's **FDA**-circumventing law to experiment on a possible killed virus **HIV vaccine**. Salk strips the outer coat from the virus, leaving only its core before injecting it in 18 **seropositive** volunteers. None suffered dangerous reactions. Salk hopes to see if injecting the killed viral core will stimulate patients' bodies to produce defensive substances that suppress the activity of the live **HIV** in their systems. (NYT, 6.16.88, A25). If it works in virus carriers, Salk will try developing a similar vaccine to prevent infection.

Seropositive: blood-positive; one whose blood tests indicate presence of **HIV-antibodies**. A recent **UCSF** study indicates as many as 50% of those who are now **seropositive** will develop Aids within the next six years, and 25% more will display signs of **ARC**. (WSJ 4.28.88). However, mere seropositivity does not seem to bring on neurological impairment or dysfunction until **ARC** itself occurs, according to a recent **NIAID**-sponsored Johns Hopkins study. (NYT, 6.17.88, B4).

Seronegative: blood-negative; one whose blood tests free of **HIV-antibodies**.

Sex: as of 6.20.88, 59,485 people with aids were men, 5,614 women. Among **IV-users**, 9,364 cases were men, 2,662 women. Numbers among children were more evenly divided, with 558 boys sick and 459 girls. (CDC).

S/2.

Shillegosis: parasitic bowel infection leading to diarrhea, can result from rimming.

Shingles: see herpes zoster.

SIV: simian immunodeficiency virus: retrovirus which causes Aids-like immune dysfunction in certain kinds of monkeys. Macaque monkeys were given whole, inactivated **SIV** to immunize them, then injected with live **SIV**. They have survived almost a year without becoming infecting, lending hope for a similar vaccine to be tested on humans. (NYT, 6.21.88, A21).

SPF: Sun Protection Factor, from 1 to 15 to 23 and even higher, greater number indicating greater protection from harmful solar rays. Use it.

Spiramycin: being tested for **cryptosporidium** infection.

SSD/ Social Security Disability insurance: established by the New Deal in the 1930's, this program was intended to provide for the living expenses of American workers who become disabled. All working Americans contribute a share of their earnings towards Social Security, yet in the case of Aids, it has taken the Social Security system as long as two years to process the paperwork involved in signing up someone with Aids or **ARC**. In contrast, those with kidney ailments may receive benefits immediately upon diagnosis. Needless to say, many **PWA's** and **PWARC** die before receiving any benefits from a fund they may have contributed to for decades.

Stress: it's immunosuppressive and causes **herpes** outbreaks. Who knows whether it helps triggers **HIV**?

Suppressor T-cell: see **T8-cell**.

Sun: solar ultraviolet rays damage and destroy areas in the skin where **T-cells** grow. **Opportunistic infections** seem to peak during the summer. Sunbathing is immunosuppressive. So slather on that **SPF**. (NYT, 6.8.88).

Suramin: toxic, now discontinued **antiretroviral** drug.

S/3.

Synergistic: when two substances are more effective in combination than either is alone, they are said to be synergistic. For example, **ampligen** may be synergistic with **AZT**.

Syphilis: sexually-transmitted disease called by a tiny organism called a spirochete (smaller than a bacterium, larger than a virus). It was introduced to Europe by sailors returning from Columbus' expedition to the Americas, and in the early 1500's it spread rapidly across the Eurasian landmass. Syphilis can be contacted by kissing, sucking or fucking. Initial infection can be marked by a sore blister, or chancre, on genitals or mouth, or can be **asymptomatic**. Secondary symptoms include ...

Tertiary syphilis usually takes decades to develop and can cause paralysis, **dementia** and death. **Antibiotics** helped diminish the dangers of this occurring, but the advent of Aids has overloaded urban VD clinics, lowering the number of syphilis cases which are caught and treated. This has had very serious results, since syphilis in conjunction with advanced **ARC** or Aids seems to proceed rapidly to the tertiary phase and all its horrifying effects.

Syntex: Palo Alto, California, based manufacturer of **DHPG/ganciclovir**.

T/1.

T-cells: white blood cells made in the thymus (hence T) gland, they coordinate the immune system by secreting lymphokine hormones which perform various tasks. Two two types of t-cells are especially important:

T4 (helper) cells: antibody-triggered immune cells which seek and attack invading organisms. **Macrophages** summon T4 cells to the infection site, where they present a protruding **antigen** onto which the T4 cell locks, thus "recognizing" the invading substance. Then the T4 reproduces and secretes its potent **lymphokines**, which stimulate B-cell production of **antibodies**, signal "natural killer" or **cytotoxic** (cell-killing) T-cells, and summon other **macrophages** to the infection site. In healthy immune systems, T4 cells are twice as common as T8's. In Aids, the proportion is often reversed. The virus enters T4's through its receptor protein, encodes its genetic information into the host cell's **DNA**, making T4 cells virtual virus factories. HIV-invaded T4's may not die, but simply become dysfunctional, unable to secrete **lymphokines**, signal B-cells to produce **antibodies** or summon **cytotoxic t-cells** to destroy invading organisms. They also secrete a substance known as "soluble suppressor factor", which inhibits the functioning even of uninfected t-cells.

T8 (suppressor) cells: immune cells which shut down the immune response after it has effectively wiped out invading organisms. Sensitive to high concentrations of circulating **lymphokines**, they release their own lymphokines when an immune response has achieved its goal, signaling the other participants to cease their coordinated attack. A number of "memory" B- and T- **lymphocytes** remain in circulation in order to fend off a possible repeated attack. With HIV, however, the immune system goes haywire. T4 cells are dysfunctional, **lymphokines** proliferate in the bloodstream, and T8 cells compound the problem by misreading the oversupply of **lymphokines** as meaning the immune system has effectively dispatched the invader. Hence, while HIV is multiplying, T8-cells are simultaneously attempting to further shut down the immune system. 'The stage is set for normally repressed infectious agents, such as pneumocystis carinii, to proliferate unhindered and to cause disease'. (II 2:3, p. 5).

TB/ Tuberculosis: lung disease long virtually eradicated by **antibiotics** but now making a comeback. Often undiagnosed in **IV-users** and other inner-city dwellers, TB seems to take advantage of the vulnerable lungs of the immunosuppressed just as **PCP** does.

Thrush: **candida**, a fungal infection of the mouth and throat often found in **ARC** and Aids.

T/2.

Thymopentin: antiretroviral being tested in **asymptomatic seropositives** at Cabrini Hospital (212/340-5020). Previous trials in children with full-blown Aids showed only transient clinical and immunological improvement. However, this trial will ascertain whether it is more effective at an earlier stage of infection, when there are more T4 cells to be reinforced. No side effects have been observed. (TI 2:3, p. 8).

Thymus gland: site of t-cell production.

TMXT: see trimetrexate.

TNF/ Tumor Necrosis Factor: anti-cancer drug made by Genentech (S. San Francisco, CA) and being tested in conjunction with **gamma interferon** for **ARC**.

TP-5/ thymic compound: immunomodulator made by Ortho Pharmaceuticals (Raritan, NJ) and being tested in **ARC**.

TPN: Total Parenteral Nutrition; intravenous nutrition containing amino acids, proteins and vitamins for people with chronic diarrhea or weight loss, injected via large Hickman catheter; it can produce significant increases in weight, energy and well-being and is being tested with **egg lipids** at **CRI**.

Toxicity: poisonous harmfulness. **AZT's** toxicity is such that only half the patients with Aids can tolerate it.

Toxoplasmosis: rare brain parasite which causes atrophy and dementia in Aids.

Transfer factor: nontoxic antiviral immune system booster, extracted from human lymphocytes. (NYNewsday, 4.12.88).

Trexan: see naltrexone.

Trimetrexate a.k.a. TMXT: **PCP**-combatting antibiotic recently released with much fanfare by the **FDA**, which rewrote the protocol so even fewer **PWA's** than originally planned will have access to the drug; you have to have had a severe or life-threatening adverse reaction to **AZT** or **T-S** before you can try this. Being tested in conjunction with **leucovorin**. Made by **Warner-Lambert** (Morris Plains, NJ).

T-S/ trimethoprim-sulfamethoxazole: **BACTRIM** a standard therapy for **PCP**.

Typhoid vaccine: Long Island's Dr. Sal Catapano contends ingesting it significantly reduces **KS**. **CRI** is investigating.

U.

UCSF: University of California, San Francisco.

Upjohn: pharmaceutical company in Kalamazoo, Michigan, which makes bropirimine.

V.

Vaccine: substance containing enough of a virus or bacteria's genetic material to stimulate **antibody** production and inoculate people to prevent infection. Making a vaccine to **HIV** will be difficult because producing **antibodies** alone fails to stop the viral onslaught. Nonetheless, the **Salk** killed-virus vaccine which doctors were testing for treatment of **Aids** and **ARC** has been prohibited due to **FDA** pressure. And a **NIH** scientist who discovered a potential vaccine has been forced to test it in Britain because the **FDA** makes the process too cumbersome here. Companies investigating possible vaccines include Ciba-Geigy, Gen-Probe, Genentech, Merieux Institute, Cambridge Biosciences, Merck, Viral Technologies. For further along see **HGP-30**, **MicroGeneSys**, **Repligen**, **Salk**.

Victim: everyone who has been affected by the pervasive fear, rampant intolerance, violent hostility, staggering government inaction, pharmaceutical profiteering, civic indifference, glacial bureaucratic mobilization, media coverage swinging manic-depressively between hysterical sensationalism and a conspiratorial silence resounding with the unacknowledged suffering of those in stigmatized "risk groups", glassy-eyed stares of denial and apathy in the faces of that media fiction "the general public", or who has lost a friend, lover, relative or acquaintance to **HIV** has been or is an **Aids** victim. Those with the disease are not victims, but Persons with **Aids**. See **PWA**.

Virazole: see **ribavarin**.

Virus: tiny organism whose organization is just this side of a lifeless molecule. Its core is genetic **DNA**, and in the case of the more unusual **retrovirus**, **RNA**, surrounded by a shell of proteins. By virtue of their miniscule size and uncanny ability to usurp the functions of larger, more complex organisms' cells for their own purpose, they have survived and proliferated throughout the biological epoch. Viruses cause, among other things, feline leukemia, human t-cell leukemia, hepatitis, herpes and, seemingly, **Aids**.

vpu: viral protein U: a protein found in **HIV-1** which retards the virus' growth.

vpX: viral protein X: a protein found in **HIV-2**.

W.

Warner-Lambert: pharmaceutical company in Morris Plains, NJ, makers of trimetrexate.

Wellferon: see interferon.

Worldwide: the Aids epidemic is worldwide, with cases reported to WHO by 12.9.87 distributed as follows:

<u>Continent</u>	<u># Cases</u>	<u>Countries w/ Aids</u>
Africa	8,652	37
Americas	55,354	42
Asia	224	19
Europe	8,775	27
Oceania	742	4
Total	73,747	129

WHO estimates that in reality at least 150,000 cases of Aids had occurred worldwide by the end of 1987. (Science, 2.5.88, p. 573)

WHO: World Health Organization: subsidiary to the United Nations, it monitors Aids worldwide. The USA has, in recent years, failed to contribute its promised share to WHO, in spite of the unprecedented worldwide medical crisis.

Women: blatantly-underrepresented group in Aids drug trials, in spite of their growing numbers with Aids. In February 1988, NIH officials admitted only 5% of those enrolled in ACTG trials were women. Most of those enrolled are in ACTG group 019, a trial for asymptomatic seropositives. Thus very few ill women are enrolled in clinical trials. Of the 2 NYU trials that admit women for which we have any figures, one woman is enrolled in trial 004, two in trial 019 - in the city where Aids is the leading killer of young adult women.

X.

Xenophobia: aversion to foreigners, common in insecure and domineering societies. Reagan administration pressure to require **mandatory testing** of immigrants and those seeking permanent residency in the USA reflect xenophobia (why should we fear foreigners bearing a virus with more known carriers here than anywhere else in the world?) Similarly irrational and unenforceable was the recent proposal of Avtar Singh Paintal, the director general of India's Council for Medical Research, to prevent the spread of Aids by forbidding sex with foreigners, though India already has 19 recorded cases of the disease. As usual, puritanical governments prefer unrealistically to recommend abstinence rather than to promote safe practices which would save lives. The Indian Express editorialized "No Sex Please, We're Indian", raising the possibility that Aids might be used to the same end as Indira Gandhi's notorious forced sterilization campaign: repressive, compulsory population control. (NYT, 6.15.88, A21).

Y.

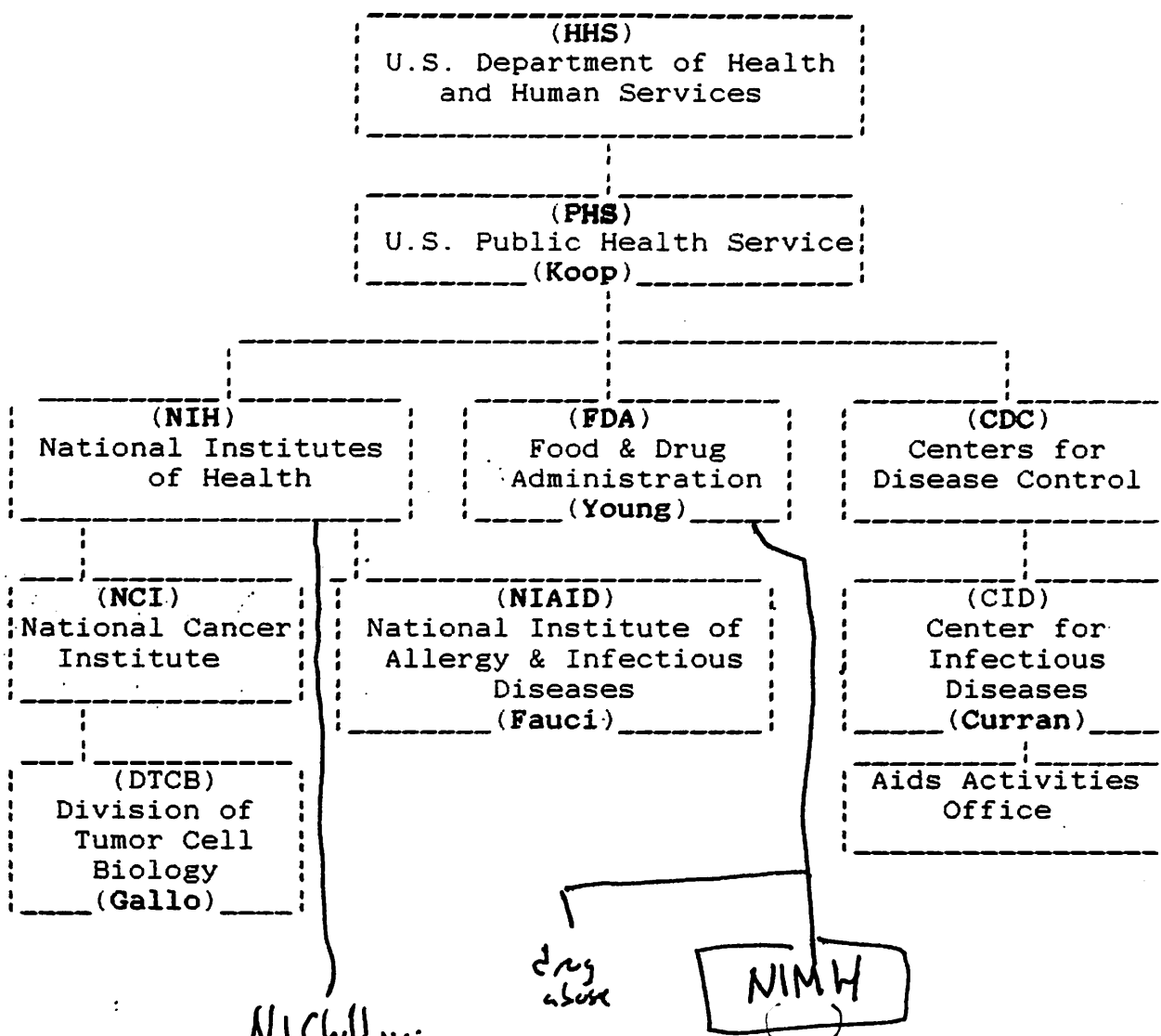
Young, Frank. Commissioner of the **FDA**. Despite repeated claims that members of the Aids community should be free to pursue any potentially useful nontoxic treatment, he has stepped in frequently to prevent wider availability of such substances as **AL-721** and **dextran sulfate**, shutting down **buyer's clubs** which distribute such substances privately and defining substances previously considered food as drugs to widen the scope of **FDA** control. See **bureaucrat**.

Z.

Zidovudine: see AZT.

Zovirax: trade name of **acyclovir**, made by **Burroughs-Wellcome** for treatment and prevention of .

THE BUREAUCRACY



NICHD....
Health &
Human Development

NICHD

S O U R C E S

APN: Aids Patient News.

ATN: Aids Treatment News, published by John S. James, PO Box 411256, San Francisco CA 94141, 415/255-0588.

NYN: The New York Native.

NYT: The New York Times.

PI: The Philadelphia Inquirer.

RS: Randy Shilts. And the Band Played On. St. Martin's Press, New York, 1987.

TI: Treatment Issues, the GMHC Newsletter of Experimental Aids Therapies, available from GMHC's Dept. of Medical Information, 132 W. 24th St., Box 274, NY NY 10011.

VV

WSJ: The Wall Street Journal.

WSS: West Side Spirit.

Δ=TD: Δ=FA

add:

epidemic
pandemic
size effects