NATIONAL news

Small Advances

HIV/AIDS conference brought no earth-shaking news, just dogged fine-tuning

by Inga Sorensen

The 5th Conference on Retroviruses and Opportunistic Infections focused on "the drudge work—making drug regimens work in the real world," said Spencer Cox. "It is a lot of little adjustments that will hopefully add up to easier, safer, cheaper regimens."

Many participants agreed with Cox, who is spokesman for the Treatment Action Group, a New York AIDS activist research think tank. There were no breakthrough announcements, either positive or negative, during the world's foremost scientific gathering on HIV, which drew 3,500 participants to Chicago, Feb. 1-5.

Dr. Douglas Richman, chair of the event and a researcher at the University of California at San Diego, says nearly 1,300 abstracts were submitted.

Fewer than half were selected for presentation, which prompted some activists to grumble about who was doing the selecting and what was being excluded. But it went no further—there was plenty to keep everyone busy.

Researcher David Ho's theory of eradication of HIV from the body garnered him star status, including being featured on the cover of *Time* magazine. His initial calculation of eradication in as few as three years, however, has been pushed back to perhaps 20 years, due to an accumulation of new knowledge. In fact, many scientists speculate that the goal of eradication is an impossible one and believe the focus should be on helping the body contain HIV at tolerable levels.

There is a greater understanding now of the sanctuaries where HIV resides. In a paper published last fall, Johns Hopkins researcher Dr. Robert Siliciano showed the presence of HIV in resting cells that lie dormant for years. Current medications act against HIV only during its stages of replication, so these dormant cells may continuously drip active HIV into the body as they reactivate, necessitating continued therapy.

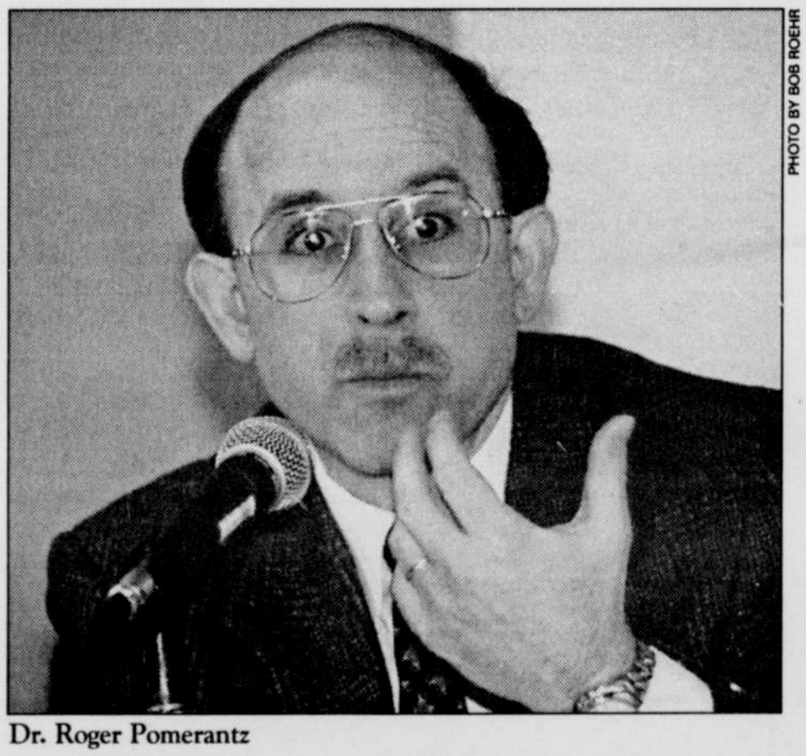

PHOTO BY BOB ROEHR

Dr. Roger Pomerantz

Dr. Roger Pomerantz of Thomas Jefferson University explained how various tissues may create micro-environments in which HIV evolves under differing conditions. Some drugs have difficulty penetrating the blood barriers to the brain, eyes and testes. Other localized enzymes may also pressure the virus differently.

One activist called this information "gently tapping nails into the coffin of Ho's theory of eradication."

As for therapy, Boston researcher Dr. Scott Hammer said: "The holy grail is a drug with a high degree of potency, a minimal side effect profile, absence of cross resistance to current drugs, antiviral synergy with other agents, the ability to penetrate cellular and body compartments, ease of use, and low cost. No drug on the horizon meets all of these criteria."

Much of the buzz has been about drugs likely to be submitted to the Food and Drug Administration later this year for full market approval. Abacavir (1592) is a nucleoside analogue from Glaxo Wellcome whose resistance pattern is still being determined. About 3 percent of people in trials are sensitive to the drug and must discontinue use. Restarting treatment has led to death.

DuPont Merck's non-nucleoside reverse transcriptase inhibitor Sustiva (efavirenz or DMP 266) seems potent and easy to use.

Preveon (adefovir dipivoxil or bis-POM PMEA) is a nucleotide analogue from Gilead that shows modest activity in monotherapy but may be more useful in combination and may have a different resistance profile.

Amprenavir (141W94) is Glaxo's new protease inhibitor. It is a small molecule that should cross the blood/brain barrier. Its effectiveness in comparison with other protease inhibitors is not known, nor is its cross resistance.

Hydroxyurea, PMPA, FTC, zinc fingers—all are drugs or approaches that hold great excitement for many researchers. But it is a lot like the rush of a new love interest: Will it last? Is there a solid foundation for long-term results?

Hydroxyurea is the current darling of many activists because of tantalizing data on both effectiveness and a non-resistant profile, but also because it is inexpensive and comes from the fringes of the research establishment.

Dr. Franco Lori is studying the drug in combination with ddI and d4T at Georgetown University and sites in Europe.

He claims to have reduced HIV to undetectable levels (below 500 copies) in 24 patients. Reports from France indicate that two people who went off the therapy a year ago have maintained viral loads below detectable levels.

But Lori cautioned his work is preliminary. "Dosage is very important; we have to work out this part," he said.

■ *Conference resources available online include abstracts on the* OFFICIAL CONFERENCE WEB SITE *(www.retroconference.org/) and summaries of major presentations from* PROJECT INFORM, *a patient education and advocacy group (www.projinf.org/RetrConf/).*