AIDS PROGRAM

NIH TO IMPROVE DRUG DEVELOPMENT EFFORTS

WASHINGTON, D.C.—An advisory committee recently urged top officials at the National Institutes of Health (NIH, Bethesda, MD) to improve its rapidly growing AIDS therapeutic drug development program. In particular, the committee recommended that NIH, the Food and Drug Administration (FDA), and scientists from universities and industry join in a cooperative effort to identify reliable "surrogate" means for evaluating experimental drug performance. Priorities also must be set for evaluating drugs now entering, or about to enter, clinical trials—as the sheer volume of this effort could strain the system.

NIH now supports three targeted AIDS drug development programs: one of them intramural, the others extramural. The largest and most comprehensive of the three is the National Cooperative Drug Discovery Program. Sponsored by the National Institute of Allergy and Infectious Diseases (NIAID), it involves the collaborative efforts of more than a dozen companies and several dozen university teams. By guaranteeing corporate partners proprietary rights, officials expect the cooperative program to move promising drugs rapidly into clinical trials.

Despite the careful design of the program, participants are finding that problems have accompanied its rapid growth. For example, adequacy of resources is a basic concern. "With all the [clinical] trials out there, is there enough money to turn all the data around?" queried David Barry (Burroughs Wellcome Co., Research Triangle Park, NC), during the third meeting of the NIH AIDS Program Advisory Committee in December.

Currently, about 5,000 AIDS patients are enrolled in nearly 50 clinical studies. According to FDA Commissioner Frank Young, 186 investigational new drug applications (INDs) for 91 different AIDS therapeutic products were on file with the agency as of October 31, 1988—and that does not include experimental vaccines and diagnostic products.

Although new drug and drug combination trials are being planned, problems in recruiting patients could soon stymie the program or undermine its standards. According to David Martin of Genentech (South San Francisco, CA), "Patient accrual often is rate limiting, and it can force a broadening of the criteria for inclusion in a study, which weakens the quality of data."

Rapid expansion also will strain current research facilities and could lead to critical personnel shortages. Moreover, there is a "need to establish priorities" among drug candidates because not all of them can be clinically tested, explains Martin Hirsch of Massachusetts General Hospital (Boston, MA). Improved "surrogate" tests for evaluating drugs—both *in vitro* and in the clinic—are needed to help in setting such priorities. In addition, a more comprehensive registry of drugs being tested should be established.

Another problem to face concerns the cost of new and experimental drugs. The primary mission of NIH is health research, not healthcare delivery. Typically this means that NIH helps to pay for drug research and development costs. Thus, at the treatment stage, either patients, insurers, or (in Medicaid cases) the Health Care Financing Administration (HCFA) pays for drugs. For AIDS patients, however, the line between clinical experiment and state-of-the-art care is so blurred that no one is sure just who should pay. Moreover, to curb costs for AIDS patients, physicians may be forced into following treatment protocols that adhere to HCFA or insurance company guidelines instead of their best clinical judgments.

Similarly, third parties such as Medicaid or private insurance companies typically will not pay for drug uses other than those specified in the FDA-approved label, points out John Petricciani of the Pharmaceutical Manufacturers Association (Washington, DC). For example, until FDA recently approved the new indication, third party payers would not bear the cost of alpha-interferon treatments for Kaposi's sarcoma in AIDS patients. Similar limits are, and will continue to be, imposed on other drug products. Recently enacted catastrophic healthcare legislation, however, is beginning to ease this situation, Petricciani says. HCFA may now pay for drugs used for treatments other than those specified by FDA so long as certain other qualified experts agree.

—Jeffrey L. Fox

EPA REGULATIONS

BIOTECH TO WATCH WASTE

WASHINGTON, D.C.—When hypodermic needles and other discarded laboratory materials washed up on beaches last summer, the public outcry pricked Congress into drafting—and quickly approving—the Medical Waste Tracking Act of 1988. The new law directs the Environmental Protection Agency (EPA) to evaluate the public and environmental hazards of such wastes and to monitor 10 categories of medical wastes in two Eastern and eight Midwestern states over a two-year period. Although aimed principally at wastes from hospitals, clinics, and clinical laboratories, the new law could also have a costly impact on the biotechnology industry.

Currently, EPA officials are developing definitions and interim rules—expected to be published by February—for implementing the law. Federal, state, and local officials now use an assortment of definitions and rules for medical and infectious wastes, a fact that troubles institutional biosafety officers charged with setting procedures for handling and disposal.

Misguided perceptions about medical wastes can prove expensive. Alan Goldhammer of the Industrial Biotechnology Association (IBA, Washington, D.C.) points out that some biotechnology companies doing medically related research can no longer dispose of autoclaved wastes at landfill sites. Site operators apparently do not understand just how safe such decontaminated materials are, he explains.

Similarly, county officials refuse to accept any materials identified as "medical wastes" from the National Institutes of Health (NIH, Bethesda, MD), says Division of Safety director Robert McKinney. Faced with this broad definition, NIH decided to "overclassify" some wastes; it now generates from five to six tons per day for incineration at its own facility. Most of the material comes from research laboratories and is neither hazardous nor infectious. "The real problem," McKinney believes, "is the perception that medical wastes are contaminated."

Such problems could soon affect many institutions doing biotechnology-related research. Development and manufacture of drugs, diagnostic products, or vaccines are likely to generate waste that comes under the broadened "infectious" rubric. And projects involving virulent pathogens or blood products may be subject to more stringent control practices.

—JLF