IRA MEETING

BST MAKERS TEAM UP FOR EDUCATION CAMPAIGN

LOS ANGELES, Calif.—The five major producers of animal growth hormones have bound together in an informational campaign to promote bovine somatotropin (BST). American Cyanamid, the Elanco Products subsidiary of Eli Lilly, International Minerals & Chemicals Corp. (IMC), Monsanto, and Upjohn, are all contributing equally to the "BST Public Information Working Group," a 10-month program that began this past March under the auspices of the Animal Health Institute (AHI, Alexandria, VA). Four of these firms are actively working on BST; the fifth, IMC, has publicly announced development of porcine somatotropin only.

Speaking here at a May meeting of the Industrial Biotechnology Association (Washington, D.C.), Lee Miller, vice president of the animal science division of Monsanto (St. Louis, MO), stressed that BST administration induces mature dairy cows to produce 10–25 percent more milk from only about 6 percent more feed. The hormone thereby boosts production-per-cow in a non-capital-intensive way. Trace levels of BST (around two parts per billion) are often present naturally in milk, and supplementing cows with the protein does not increase these levels.

The Monsanto executive did admit, however, that BST producers erred earlier when they angered some dairy cooperatives by neglecting to inform them that they were receiving (FDA-approved) milk from BST studies: "For competitive reasons, we did not

AHI's informational campaign on bovine somatotropin includes fact sheets, brochures, and a slide show.

want to attract one another's attention to our respective research sites. But that was clearly a mistake on our part." Now, however, all the companies notify state authorities and dairy concerns before milk from BST research is shipped.

Bovine somatotropin has generated controversy on a number of fronts. Not surprisingly, its major opponent has been the seemingly ubiquitous Jeremy Rifkin of the Foundation on Economic Trends (Washington, D.C.). The anti-biotech lobbyist argues that BST could hurt the health of animals; that it could render milk unhealthy; that it could devastate the structure of the dairy economy; and that it will change land-use patterns, so BST's environmental impact must be examined prior to approval.

The AHI working group is producing fact sheets, brochures, and slide shows, as well as participating in dairy and animal health meetings for the purpose of educating the dairy industry about BST. (AHI is a trade association for the makers of animal health products.) Eventually, the effort will also include academic dairy researchers, veterinarians, and state and federal government officials. "But unless the dairy industry is knowledgeable and comfortable with BST, it will not be able to serve as a source of information for consumers," says Monsanto Agricultural Co. manager of public relations Larry O'Neill.

According to an AHI-sponsored telephone survey of 1,300 people in February, only one-third of those polled had heard of BST. Of these, equal numbers favored it, opposed it, and were uncertain. The more affluent the person surveyed—or the more milk he or she drank—the more favorable the opinion on BST. Moreover, in "the overwhelming majority" of cases, according to Miller, information about BST improved the hormone's image in the eyes of those previously against it or uncertain.

As Miller concluded: "In the last analysis, BST will prosper or poop out on the issue of whether it provides value to the dairy farmer. He or she will decide if it makes economic sense....and we think we deserve to learn that lesson from the marketplace, not from individuals with an unreasoning bias against the whole science of biotechnology."

—Arthur Klausner

DIAGNOSTIC INSTRUMENTATION

CUBA TO MARKET AN ULTRA-MICROELISA SYSTEM

HAVANA—According to José Fernandez Yero, Director of the Immunoassay Branch of Cuba's National Research Center (CENIC), the ultra-micro immunoassay analytical system (SUMA) his institution has developed, "combines the economy of a Yugo with the elegance of a Cadillac." And in fact, the system—on display recently at this country's Health for All Exposition—does show an impressive array of performance characteristics.

Designed specifically for applications in mass diagnostic programs where cost efficiency is often low, the computer-assisted optics, measurement, and calculation components operate with high accuracy and speed on volumes between 8–10 microliters. This translates to as much as a 90-

percent savings in the cost of reagents over other automated systems and, as Yero explains, has allowed the implementation of comprehensive screening for a variety of circulating antibodies.

Thus far, more than 320,000 prenatal tests for alpha-fetal protein (AFP) have been performed throughout Cuba, and 500 potential birth defects detected. In the last year, 25,000 children in Havana were tested for antibodies characteristic of congenital hyperthyroidism, with three positive results. Both tests are now in general use.

In addition to these applications, the system is currently used in the Havana blood bank to screen all donors for antibodies against the AIDS and hepatitis B viruses. Future appli-

cations will include the analysis of donated blood for hyperimmune gamma-globulins against a number of viral and bacterial agents, and—in conjunction with vaccination programs—the detection of antibodies against meningococci.

Currently, 10 pediatric hospitals in the country have the complete system, where apart from immunoassays, it is used to perform much of the routine clinical chemistry. SUMA is produced at a CENIC facility, and 40 units are expected by the end of this year. With a goal of 100 units per year, and arrangements with the electronics industry already in place, Yero expects Cuba to be able to meet all domestic need and offer the system on the world market by 1988.

—Harvey Bialy