

NEWS BRIEFS

Quality Assurance Programs Sought

The new standards for quality assurance recently issued by the Joint Committee on Accreditation of Hospitals (JCAH) are posing a demanding challenge to nuclear medicine departments. In a special contribution in this issue of the journal, Ben I. Friedman, MD, describes how the Department of Nuclear Medicine at the Morton Plant Hospital in Clearwater, FL, responded to these rules (see pp. 1366-1372).

The Education and Training Committee of The Society of Nuclear Medicine (SNM) has been asked to make recommendations for improving the quality assurance training of nuclear medicine physicians and technologists, and is actively seeking descriptions of quality assurance programs used in nuclear medicine departments and in nuclear medicine training programs.

"We ask that you make a distinction in your thinking between quality control, which is largely aimed at laboratory procedures in radiopharmacy and instrumentation, and an overall quality assurance program," said Howard J. Dworkin, MD, president of the SNM. "In addition to quality control, a quality assurance program would also include a critical examination and review of study interpretation and comparison of these interpretations with other forms of documentation—such as other procedures and the results of surgery and/or autopsy," explained Dr. Dworkin.

The committee plans to assemble and summarize this information for distribution to nuclear medicine facilities and training program directors.

[Information may be sent to: Eva Dubovsky, MD, PhD, Division of Nuclear Medicine, University of

Alabama in Birmingham, University Station, Birmingham, AL 35294 (205)934-2140.] ■

New Dosimetry Changes Atomic Bomb Data

The Radiation Effects Research Foundation (RERF) in Hiroshima, Japan, held a workshop last fall on the reassessment of atomic bomb radiation dosimetry to review new data and discuss the official reassessment report expected this year (see *Newsline*, Aug. 1985, pp. 833-836). Measurements of exposed samples were reviewed and compared to computer calculations.

In a separate report that updates the Life Span Study, RERF investigators said that among persons exposed to at least 0.5 rad, an estimated 8% of the cancer deaths are excess deaths attributable to atomic bomb radiation, according to the *RERF Newsletter* (Dec. 1, 1985, p. 9).

Mortality from leukemia and other cancers was examined in relation to the interim set of dose estimates established in 1985 and to the revised tentative dose estimates established in 1965. Based on the revised dosimetry, relative and absolute risk estimates are about 50% greater than those based on the 1965 dose estimates, and the report concludes that there is virtually no difference in the dose response for the two cities—Hiroshima and Nagasaki.

Assuming that the relative biologic effectiveness of neutrons is 10 compared to gamma rays, estimates of radiogenic risks based on revised effective dose equivalents were 2.50-2.75 times greater than those based on the 1965 estimates, according to the RERF report. ■

Free Software Available to Calculate MIRD

Nuclear medicine physicians and researchers who need radiation dose estimates that are not available in the literature can now calculate these estimates with a software package designed for IBM personal computers. The Radiopharmaceutical Internal Dose Information Center, of the Oak Ridge Associated Universities (ORAU), is now offering this computer program free of charge.

Developed in 1984 by Evelyn E. Watson and Michael Stabin, the program calculates internal doses by the MIRD (Medical Internal Radiation Dose) technique. "The program may also be useful to educators when they demonstrate the MIRD technique to students," said Mr. Stabin.

The program can calculate absorbed doses to any of 25 target organs from any combination of 24 source organs. Its database includes 59 radionuclides and specific absorbed fractions for the MIRD adult male phantom. "Additional radionuclides may be added temporarily through minor program modifications. The program structure also allows for the inclusion of specific absorbed fractions for five pediatric phantoms and for phantoms representing three stages of pregnancy when they become available," explained Mr. Stabin.

The dynamic bladder model of Cloutier *et al.* (*Health Phys.*: 25:147-161) and the gastrointestinal tract model of ICRP 30 are included for calculation of residence times in these special source organs.

[The programs and associated data files may be obtained by sending two 5¼-inch double-sided, double-density floppy disks to: Michael Stabin, ORAU, PO Box 117, Oak Ridge, TN 37831-0117 (615)576-3449.] ■