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REPLY: We welcome the comments of Dr. Wahl, whose note of caution is appropriate and important. Clinically, with the use of appropriately fractionated doses, hepatic and renal tissue tolerate doses of ~2000 rad (*1*,*2*). The response of melanoma to radiation is variable (*3*); some tumors respond favorably to doses as low as 1400 rad while others demonstrate resistance to doses as high as 6000 rad. The reason for this discrepancy is not clear; it may be related to tumor size (hypoxia), degree of dose fractionation, or individual cell sensitivity to radiation. Obviously, hepatic and renal problems are less important in patients with relatively radiosensitive tumors.

We agree with Dr. Wahl on the importance of recognizing the *relative* radiation sensitivity of the liver and kidney, and we stressed the need for improved methods of labeling and/or purification to lower the radiation dose to these organs. Until this is accomplished, the palladium-109-labeled antibodies reported in the manuscript would be of value only in treating the patient with a radiosensitive melanoma. The results, however, do demonstrate the feasibility of this approach for radiotherapy. A similar labeling approach should be able to be used to produce antibodies against other tumors with greater sensitivity to radiation and greater margins of safety with respect to hepatic and renal radiation exposure.

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Selection of Energy Windows for the NEMA Standard Specifications

TO THE EDITOR: Over the last several years our group at the University of Washington has had the opportunity to conduct a variety of test procedures on a large number of scintillation cameras. More recently, in conjunction with a portable computer system being developed for the National Center for Devices and Radiological Health (FDA contract #223-80-6004), we have applied the National Electrical Manufacturers Association (NEMA) standard specification procedures (*1*) to over 30 scintillation cameras. After analyzing the data obtained from these cameras, we are convinced that the current recommended pulse height analyzer window setting of 20% (or the proposed change to a 15% window setting that is under consideration) does not reflect optimal performance of any given camera. We have noticed a wide range of energy resolution in the cameras we have measured and while testing some of the cameras, we repeated the NEMA standard specifications with a full width at half maximum (FWHM) energy window. Selecting a FWHM window is based both on the early work in rectilinear scanners which indicated that a FWHM window presented a good compromise between sensitivity and scatter rejection and on the notion that a FWHM energy window results in all cameras accepting approximately the same percentage of the unscattered photopeak events. A camera with a better energy resolution can certainly be operated with a narrower window providing better scatter rejection and essentially no loss in image information. A 20% energy window becomes even less appealing when measuring a modern scintillation camera since many of the instruments currently in production provide energy resolution on the order of 10% at FWHM. Therefore, we suggest changing the pulse height analyzer window setting in the NEMA standard test procedures to the FWHM in order to provide a more objective measurement of the imaging performance of modern scintillation cameras.

Reference

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Brain Scan: A Useful Tool in Detection of Neurosyphilis

TO THE EDITOR: Recent statistics from the Centers for Disease Control, Atlanta, reflect an increase in cases of primary syphilis, the incidence having risen by more than 25% between 1979 and 1981 (*1*). In Finland, since 1966, the annual incidence of early syphilis has been a steady increase at about four cases per 100,000 (*2*). Because of the extensive preventive measures and the use of antibiotics (*3*), clinical neurosyphilis is seldom seen today. As a result, atypical forms become more common and physicians have forgotten that the disease still exists (*2*). Acute meningovascular syphilis constitute 1-2% of cases of symptomatic neurosyphilis (*1*). Angiographic and computerized tomographic (CT) findings have already been described (*1*,*3-9*). To our knowledge, scintigraphic changes of menin-