cost from retreatment with radioiodide as well as from "... extended disability and income loss ..." To this we have to add expenses from possible anti-thyroid drugs in the interim as well as potential side effects from these medications (2).

3. The results of retreatment with radioiodide have been analyzed in some detail (3). If we define "cured" of hyperthyroidism as being euthyroid or hypothyroid, then expressions are available for describing the results as a function of the quantity of radioiodide administered. Each physician must determine for herself/himself what fraction of patients they wish to cure with a single dose of radioiodide, while leaving the remainder still hyperthyroid. Choices between radiation exposure, prolonged disease, and possible side effects of anti-thyroid drugs are not easy to make. If evidence mounts of the relative "benign" nature of larger doses of oral radioiodide, therapy of hyperthyroidism will be simplified.

REFERENCES

Richard P. Spencer
University of Connecticut Health Center Farmington, Connecticut

REPLY: Dr. Spencer's thoughtful comments and general agreement with our approach to the treatment of hyperthyroidism with radioiodide are appreciated. Although not stated in our article (1), we agree that the use of anti-thyroid drugs both before and after treatment with 131I adds to the cost and risk for many patients.

Dr. Spencer states that the choice between radiation exposure and prolonged hyperthyroidism will be simplified "if evidence mounts of the benign nature of larger doses of oral radioiodide." Perhaps so. In the meantime, we feel that our approach is simple enough. It clearly lays out the probability of cure of hyperthyroidism versus the amount of radioiodide administered. This allows both the physician and the patient to participate in the decision of how much radioiodide to use. Such informed decisions should be a major concern of both physicians and patients (2).

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REFERENCES

The Difference in Clearance Between Kit-Prepared Technetium-99m-MAGI and Radiiodinated Hippuric Acid

TO THE EDITOR: Müller-Suur et al. (1) reported that the renal clearance of kit-prepared 99mTc-MAGI was lower than that of 123I-labeled o-iodohippuric acid (OIH) by about 50%. These results were based on studies in only 17 patients, who were examined at intervals of 2-8 days, as opposed to our simultaneous investigations in 124 patients using HPLC-purified 99mTc-MAGI, under steady-state conditions (2,3). Their clearance calculations were performed during slope with the aid of totally different methods, and additionally, the radiochemical purity of 95% was not verified by HPLC but by a simplified method (4).

The renal clearances of different radiopharmaceuticals can be compared with each other only if the measurements are per-
Reply
Robert A. Nordyke and Fred I. Gilbert, Jr.