NOV 9 - 1989

NOTE TO:

Themis P. Speis, DD:61/RES

FROM:

Alan K. Roecklein, RPHEB/DRA/RES

SUBJECT:

INFORMATION REQUESTED RE: KI

During discussions regarding Mr. Peter Crane's DPO on the agencies position on use of potasium iodide you requested that I find information on several questions that were raised. The questions and findings are as follows:

1. What is the current cost of KI tablets?

On 9/8/89, I spoke with Ms. Patricia Hendrickson of Wallace Laboratories (609-655-6146). Wallace Labs market "Thyrobloc." 130 mg KI tablets. The quoted price for 1 case, containing 100 vials, each with 14 tablets was \$75.00. This represents a cost of approximately 5 cents per tablet.

2. What is the current cost of treating a tyroid nodule?

On 8/28/89, I talked with Dr. David Becker, a member of the Thyroid Health Effects Committee of the American Thyroid Association (212-746-4583). Dr. Becker said that 20-30 thousand dollars was still a reasonable estimate because current diagnostic and treatment techniques have kept costs down. For example, needle biopsy is now used in most hospitals, and nodule surgery is now usually performed on an outpatient basis.

Dr. Becker volunteered the information that the thyroid Association supported stockpiling of KI, and that the thyroid cancer incidence numbers used earlier by the NRC were now believed to be too high. He referred us to several technical papers on the subject.

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3. What is the dose required to ablate the thyroid?

I spoke with Dr. Shlomo Yaniv who reviewed the findings on this issue as published recently in MUREG/CR-4214, Rev. 1, Part II. It is well known that large doses to the thyroid can ablate it, but the available data are insufficient for development of a dose-effect relationship.

There are only a small number of euthoiroid (normal) people treated with radioiodine (cardiac patients). In one study, it was found that at least 27,000 rads was required to obtain total ablation of the thyroid within one year after exposure. In another study, a mean dose of about 49,000 rads was required to ablate the thyroids of 65 authoroid adult cardiac patients.

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cc: Sesser NLS - 32 / FCongel PCrane