

Bio-Med Associates, Inc.

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June 3, 2010

United States Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

RE: License No. 06-09522-01

Dear Ms. Nguyen:

This letter is to inform your office of the revised procedure relating to I-131 therapy administrations at Greenwich Hospital. We have scheduled an In-Service for June 15, 2010 to cover the material contained on the enclosed data sheet. The staff will be advised to complete the data form and verify that the exposure to any member of the general public is below 500 mrem prior to patient release. In addition for prescribed doses of 175 mCi of I-131 and above one of the medical physics staff shall verify that the exposure to any member of the general public will be below 500mrem prior to scheduling the patient for treatment.

If you have any additional questions regarding this correspondence, please contact me at 908-788-9440 or mmink@biomedphysics.com.

Sincerely:

BIO-MED ASSOCIATES, INC.



Michael Mink, M.S., DABR
Medical Physicist

Enclosure (1)

Greenwich Hospital

RELEASE OF PATIENTS ADMINISTERED RADIOACTIVE MATERIALS THYROID CANCER

The following information is intended to provide verification of dose limits from patients administered radioactive materials in accordance with 10 CFR 35.75. The method of calculation was adopted from NUREG 1556 vol. 9 Rev. 2.

I-131

For Thyroid Cancer patients receiving greater than 33 mCi, a calculation of the effective dose to any other individual is required. The exposure to any other individual shall not exceed 5 millisieverts (0.5 rem).

Patient Name _____

Was the patient treated in the last 12 months? **YES** **NO**

If **YES**, contact the medical physicist, and what was the previous I-131 D_t _____ or dosage _____ mCi

Does the patient have an uptake greater than 10%? **YES** **NO**

If **YES**, contact the medical physicist.

External Dose

$$D(\infty) = 34.6(2.2)(Q_0)/(100\text{cm})^2 [(0.75)(8.04)(0.8)(1 - e^{-0.693(0.33)/(8.04)}) + e^{-0.693(0.33)/(8.04)}(0.25)(0.95)(0.32) + e^{-0.693(0.33)/(8.04)}(0.25)(0.05)(75.2)]$$

D(∞) = 0.002267(Q₀)

D(∞) = 0.002267(_____ mCi)

D(∞) = _____ REM

Question? ↓

25%

Internal Dose

D_i = Q(10-5) (DCF)

D_i = 0.00053(_____ mCi)

D_i = _____ REM

Total Dose

D_t = D(∞) + D_i

D_t = _____ REM

Dose must be less than 0.5 REM

Is the dose less than 0.5 REM? **YES** **NO**

If **NO**, contact the medical physicist

Name

Date