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November 28, 2011

U.S. Nuclear Regulatory Commission (NRC)
Said Daibes, Ph.D., Health Physicist
11545 Rockville Pike
Rockville, Maryland 20852

Subject: Data Collection Regarding Patient Release

Dear Dr. Daibes,

The Organization of Agreement States (OAS) Executive Board (Board) has reviewed the above document and offers the following comments for review by the Nuclear Regulatory Commission (NRC).

The Board supports pursuit of Option 3 (review the calculations and methods described in the NUREG) as the correct course to be taken. This represents the most reasonable approach to improving the guidance in NUREG-1556, Vol. 9, Appendix U. The Board supports the inclusion of an internal dose component in the patient release calculations for iodine-131 therapies. The re-evaluation of the calculations could also result in a less conservative method to determine patient release, which would more accurately reflect the higher doses patients receive. Utilizing the new dose assessment programs available to evaluate the calculations and methods for determining patient release would accurately reflect exposure to others, whereas options 2 and 4 would require volunteers to receive exposure.

The Board also recommends that all patients and families/guardians be given verbal and written instructions to minimize external and internal exposure to others regardless of the expected exposure.

In considering the other options, we offer the following comments:

- The data collected on patient release after these procedures are performed is circumstantial evidence that the patient will abide by all instructions/rules given to them. The constant, uncontrollable unknown is human behavior.

- Option 1 does not seem to be a sufficient response to the matter due to public knowledge and political deliberation over the subject.

- Option 2 relies heavily on patient behavior and also the biological aspects of human excretions. The research involving internal dose could be skewed by selecting patients who emit more perspiration than others, or someone infected with the flu before receiving a therapy dose of radioactive iodine. Each patient who undergoes these therapies has different symptoms and underlying conditions, therefore the data will inevitably be inaccurate based on the patient population selected. The patients are given verbal and written procedures to minimize external and internal exposure to others. It is up to the patient to follow these procedures. All data collected would be circumstantial, therefore still giving estimates and best guesses for future patients treated. This seems to be an expensive and time consuming way to collect circumstantial data. In addition, volunteers will be necessary to represent members of the public. The external dose can be calculated using the decay factors known, proximity to the patient, and time spent with them.

- Option 4 would still rely on circumstantial patient behavior to revise the calculations associated with patient release.

We appreciate the chance to comment on this subject, and stand ready to answer any questions you may have.

Sincerely,

Cheryl K Rogers

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