External radiation therapy employs advanced imaging and sophisticated treatment planning systems to arrive at optimal dose distribution and, thereby, provide the best treatment for individual patients. Similarly, appropriate assessment of the radiation doses deposited in the tumor and normal tissues is crucial for the success of targeted radionuclide therapies (TRT). Advances in imaging and biodistribution science allows new approaches to radionuclide therapy treatment planning. By administration of the dosimetric (trace-labeled) dose, and determination of the patient's residence time (a measure of how long the radionuclide is retained in the body), the therapeutic dose can be precisely adjusted to maximize the therapeutic effect and minimize toxicity. To offer the best possible treatment, a prospective treatment planning should be performed and a patient-specific maximally tolerated therapeutic radiation dose should be used.

Goals

1. To develop standard operation procedures (SOPs) for TRT.
2. To support dosimetry for TRT Clinical Trials.

Current Chairperson

- Stanley Benedict, PhD (UC Davies, shbenedict@ucdavis.edu)
- Ying Xiao, PhD. (Upenn & IROC Philadelphia, yingxiao1@gmail.com)
Teleconference Schedule

☐ The TRT Dosimetry Interest Group meets virtually via the WebEx platform once a month – every 2nd Monday of each at 3pm ET.
☐ The group membership is approximately 10

Activities and Accomplishments

☐ SOPs for dosimetry of Lu-177 and Ra-223 have been developed for implementation in clinical trials through IROC.

Interested in becoming a member of the TRT Dosimetry Interest Group?

☐ Please Contact the Interest Group Coordinator:

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