Ra-226 Roundtable – Opening Remarks

Introduce myself on behalf of the DOE Isotope Program

There has been a surge of interest in radiopharmaceuticals that target cancer at the cellular level

Specifically, the properties of alpha-emitting isotopes make them well suited for treatment of cancer with their ability to deliver a high target-specific radiation dose due to their short & well-defined track length in targeted alpha therapy

There continues to be exciting developments in research/clinical trials with for example Ac-225. The DOE IP has worked for over a decade as a leader in the development of production techniques and separation chemistry for relevant alpha-emitters, including Ac-225

Ra-226 is a valuable but limited feedstock that can be used for production of alpha-emitting radioisotopes used in TAT – Ac-225, Ac-227, Th-228, Th-229.

Two points -

1. Working with Ra-226 is hard and needs awareness of its risks/hazards and careful planning for its safe handling. It takes appropriate facilities, equipment, experienced personnel, procedures, operational controls – to work with safely. Engineering, administrative, PPE controls need to be tailored to its use.

2. As it is mostly obtained from legacy waste medical devices and is a limited resource, it is important to properly use and steward Ra-226 through its recovery, processing, and recycling.

We've lined up a presenters from various institutions around the world with expertise in handling Ra-226. The goal is to share best practices, lessons learned, and convey that taking on Ra-226 work requires sober analysis, planning, and implementation of appropriate controls.

I look forward to the presentations and discussion in this roundtable and appreciate your participation!
Julie.