

## **SASCRO STATEMENT ON UNSEALED RADIO-ACTIVE ISOTOPES**

Unsealed radio-active isotopes may be used to treat selected patients with cancer, for example, patients with cancer of the thyroid, prostate and neuro-endocrine tumours. With reference to their training, education and scopes of practice and [the law](#), only Radiation Oncologists and Nuclear Physicians may administer unsealed radio-active isotopes to patients.

Radiation Oncology is a clinically-based specialty, which is involved in the treatment of patients with cancer. Radiation Oncologists are trained and skilled to consider all treatment options for cancer. In South Africa, they administer the largest proportion of non-surgical treatment for cancer. In addition, Radiation Oncologists are specifically trained in cancer biology and the use and calculation of radiation doses designed to kill or sterilise cells and avoid toxicity to normal tissue. Special training is critical to the treatment of patients with radiation.

SASCRO believes that the treatment of patients with unsealed radio-active isotopes should follow a multi-disciplinary approach. In this regard SASCRO acknowledges the key contribution of Medical Physics. Medical Physicists function amongst others as Radiation Protection Officers in support of Radiation Oncologists and Nuclear Physicians. SASCRO also acknowledges the imaging and diagnostic skills of its Nuclear Medicine colleagues and their contribution to the treatment of patients with unsealed isotopes within the context of a multidisciplinary team.

April 2016

### THE LAW

1. The Health Professions Council of SA (HPCSA) is the authority responsible for the registration and regulation, including the scopes of practice, of radiation oncologists, nuclear physicians and medical physicists.
2. Unsealed radio-active isotopes are regulated in terms of the Hazardous Substances Act 15 of 1973, which Act is also applicable to radiation activities performed by Radiation Oncologists, Nuclear Physicians and Medical Physicists.
3. Unsealed radio-active isotopes are classified as Group IV hazardous substances in terms of the Hazardous Substances Act.
4. According to the Directorate Radiation Control of the National Department of Health only Radiation Oncologists and Nuclear Physicians may in terms of their scopes of practice administer unsealed radio-active sources to patients.
5. Medical Physicists are also generally authorised by the Director-General of Health in terms of the Hazardous Substances Act to conduct certain activities in respect of Group IV hazardous substances.
6. GNR. 247 of 26 February 1993 contains the Regulations applicable to Group IV hazardous substances. These Regulations include amongst others the duties of Medical Physicists and Radiation Protection Officers.
7. The authority issued by the Director-General to perform certain activities in respect of Group IV hazardous substances contain amongst others the following conditions:

#### **Condition 01**

1. *No activity may take place in the absence of the appointment of a Radiation Protection Officer.*
2. *The authority holder must ensure that the appointed Radiation Protection Officer and/or the acting Radiation Protection Officer are replaced by suitable nominees before the former person(s) have terminated their service(s). Form RN 785 must be used for this purpose.*
3. *The authority holder must, prior to engaging in any action with regard to this authority, compile internal rules pertaining to the specific circumstances in his undertaking.*

#### **Condition 41**

*The holder of the authority must have access to the services of a qualified Medical Physicist, who should provide guidance, where necessary, on matters pertaining to radiation protection, and who should be available for consultation in the event of an emergency.*

**Condition 92**

*Compliance with the requirements of the Directorate's most recent Code of Practice for the Safe Use of Unsealed Radioactive Nuclides, and the Internal Rules drawn up by the Authority Holder, and approved by the Directorate.*