



BRACHYTHERAPY

Call for participation in the GEC-ESTRO/ BRAPHYQS “Global survey on Ru-106 eye plaque brachytherapy practice”

The working group of the brachytherapy physics quality assurance system (BRAPHYQS) in the Groupe Européen de Curiethérapie-European Society for Radiotherapy and Oncology (GEC-ESTRO) has launched a working package on ocular ruthenium-106 (Ru-106) brachytherapy. This working package is called the “WP22: Ru-106 eye plaque therapy” package. It is run jointly with the GEC-ESTRO head, neck & skin (HNS) working group, invited experts and support from industry representatives. An introduction to the working package, and a list of its members, can be found on the BRAPHYQS pages on the ESTRO website.

This working package was created after it was observed that recently published recommendations on medical physics practice in ocular plaque brachytherapy were focused on the use of photon-emitting isotopes iodine-125 (I-125) and palladium-103 (Pd-103), and that there was a lack of similar recommendations for the beta-emitting isotope Ru-106. Furthermore, the published literature reveals that prescription doses and planning methods vary considerably between clinics. Ocular melanoma and other ocular malignancies may be treated with brachytherapy through the use of Ru-106, I-125, Pd-103, enucleation (removal of the globe), or external radiation therapy that employs photons or protons. Using brachytherapy, the radioactive plaque is sutured onto the tumour and removed once the prescribed dose has been delivered. Ru-106 is a beta emitter with a half-life of 372 days and offers an effective treatment depth for tumour heights of up to about 5mm. Brachytherapy with Ru-106 is delivered at about 100 clinics worldwide.

A survey of Ru-106 brachytherapy practice has been created through Survey Monkey. It consists of two parts, one directed towards ophthalmologists and oncologists and the other towards medical physicists. Specialists from Eckert & Ziegler BEBIG were involved with the creation of the surveys and provided valuable input. The surveys aim to collect detailed knowledge of current global clinical practice.

We wish to encourage one clinician and one physicist from each clinic that performs Ru-106 brachytherapy treatments to participate in the surveys. Based on a small number of already completed surveys, the physicist survey is estimated to take around 10-15 minutes and the clinician survey around 20 minutes:

- Physician survey: <https://www.surveymonkey.com/r/WC6PQNR>
- Physicist survey: <https://www.surveymonkey.com/r/89YJZLF>

The responses will help us to build a picture of Ru-106 eye applicator practice. We aim to share the results of these surveys in a format that anonymises individual clinics. We believe that knowledge of the patterns of practice will be useful to clinical staff, thereby making it easier for us all to carry out optimal clinical practice. Once the surveys are finished, the possibility to create guidelines for clinical practice and so contribute to future best practice will be explored.

We thank you for your participation

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