This chapter aims to summarize technical and procedural information to aid the process of optimization of protection in brachytherapy.

Although brachytherapy had been established as a highly effective modality for
Increased demand from LMICs for high dose rate (HDR) brachytherapy equipment has made the installation of HDR treatment facilities necessary in these regions. Brachytherapy using remote afterloading of a single HDR source is becoming more common due to its ease of use and cost-effectiveness.

An example of an external beam treatment and a brachytherapy treatment is shown in Figure 1. The ABS (American Brachytherapy Society) and the GEC-ESTRO (Groupe Européen Génie Clinique en Études Tumorales et Radiothérapie Oncologique) have published guidelines for the use of intensity modulated brachytherapy (IMBT) in breast cancer treatment. These guidelines are based on the ASTRO and ESTRO guidelines for accelerated partial breast irradiation (APBI) and can be used as references for the American Society of Breast Surgeons MammoSite brachytherapy trial.


Surface mold brachytherapy for nonmelanoma skin cancer: Canadian patterns of practice. E. Van Limbergen (Eds.) GEC ESTRO Handbook of Brachytherapy. Brachytherapy can be used alone or in combination with other therapies such as surgery, external beam radiation therapy, and chemotherapy.