Initial Certification
Brachytherapy Requirements

Policy:

Purpose: To clarify classification of brachytherapy and radioactive unsealed sources for completion of residency training and registration for the ABR Certifying Examination.

Program directors and candidates for ABR certification have frequently raised questions regarding the appropriate category for logs in brachytherapy cases because of differing terminology employed by the ACGME, FDA, and NRC, and the periodic introduction of new agents and delivery systems that seem not to permit simple categorization. This policy has been developed to reduce that confusion and to better enable staff to deal with numerous candidate inquiries.

Current requirements (from the ACGME Program Essentials in Radiation Oncology, adopted 1/2009):

IV.A.5.a).(2)......must perform no fewer than five interstitial implants and 15 intracavitary implants. Resident involvement should include planning, review of dosimetry, and hands-on participation in a significant portion of the implantation procedure. Separate applications of an implant in a given patient (such as two separate intracavitary applications) may be counted as two separate procedures. However, multiple fractions of a single application (such as multiple fractions of an interstitial implant) may be counted only once. Only one resident may count a specific application.

IV.A.5.a).(3) ...... must participate in the administration of no fewer than six procedures using radioimmunotherapy, other targeted therapeutic radiopharmaceuticals, or unsealed radioactive sources.

Note: NRC requirements for Authorized User (AU) eligibility require a minimum of three oral $^{131}$I cases and three cases employing unsealed sources.

Acceptable case material:

Interstitial implants

- Any application of radioactive needles, wires, or seeds directly into a tumor volume or into catheters placed in a tumor volume (e.g., prostate brachytherapy, etc.)
- Any application of sealed or unsealed sources into a catheter pre-placed directly into tissue (non-natural body cavity or non-natural lumen) (e.g., breast balloons, GliaSite® applications, etc.)
- Surface molds
Intracavitary implants

- Any LDR or HDR application into a natural body cavity or lumen, whether direct or into a pre-placed applicator (e.g., endobronchial, billiary, cervix, endometrial, etc.)

Parenteral procedures (To be considered as unsealed sources for NRC Authorized User [AU] eligibility; a minimum of three is required.)

- Therapeutic microspheres for treatment of disease in any anatomic site (e.g., TheraSpheres®, SIR Spheres®, etc.)
- Unsealed sources for treatment of bone metastasis (e.g., strontium-89, samarium-153)
- Unsealed sources for treatment of hematologic malignancies (e.g., P-32)
- Unsealed source administration directly into a body cavity (e.g., P-32)
- Radium-223 for treatment of bone metastasis (e.g., Xofigo®)
- Yttrium-90 (ibritumomab tiuxetan) (e.g. Zevalin®) for treatment of hematologic malignancies
- Lutetium-177 dotate (e.g. Lutathera®) for treatment of neuroendocrine tumors
- Actinium-225 lintuzumab for treatment of relapsed acute myelogenous leukemia

Oral 131-Iodine procedures (For NRC Authorized User [or Agreement State] eligibility, a minimum of three cases with administered activity equal to or in excess of 1.22 Gigabecquerels [33 mCi] is required.)

- Conditions may be either benign or malignant, but the counted administration must be for therapeutic intent.

Case logs and case counting

- Program directors and/or clinical supervisors will be required to attest to the candidate’s meaningful participation in reported/counted cases on candidate case logs.
- Case logs must include the date of service, condition treated, radionuclide administered, and signature of the NRC authorized user preceptor

Procedure: 
N/A

Please note: This policy is subject to amendment from time to time. Candidates and diplomates are advised to check the ABR website periodically for the most current version.