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| <b>National Imaging Associates, Inc.*</b>  |  |
| <b>Clinical guideline:</b><br><b>BRACHYTHERAPY</b><br><b>(Low Dose Radiation (LDR),</b><br><b>High Dose Radiation (HDR),</b><br><b>Selective Internal Radiation Therapy (SIRT, Electronic</b><br><b>Brachytherapy)</b> | <b>Original Date: November 2013</b>      |
| <b>CPT Codes:</b><br><b>LDR: 77761, 77762, 77763, 77778, 77789</b><br><b>HDR: 77767, 77768, 77770, 77771, 77772</b><br><b>Electronic Brachytherapy: 0394T, 0395T</b>   | <b>Last Revised Date: February 2020</b>  |
| <b>Guideline Number: NIA_CG_224 - 1</b>  | <b>Implementation Date: January 2021</b> |

This guideline applies to other cancers not listed below for programs that manage all cancer sites. LDR (low dose rate brachytherapy) and HDR (high dose rate brachytherapy) must be requested separately and are not interchangeable.

Refer to applicable site-specific guidelines for the management of primary malignancies. Applicable site-specific guidelines may include all or some of the sites below, depending on the specific program.

- Anal Cancer
- Bone Metastases
- Breast Cancer
- Cervical Cancer
- CNS Cancer
- Colon Cancer
- Rectal Cancer
- Endometrial Cancer
- Gastric Cancers
- Head and Neck Cancer
- Lung - Non Small Cell
- Lung - Small Cell Lung Cancer
- Lymphoma - Hodgkin's Lymphoma
- Lymphoma - Non Hodgkin's Lymphoma
- Pancreas Cancer
- Prostate Cancers

For metastasis to the brain, regardless of primary site, refer to the NIA clinical guideline for Central Nervous System (CNS). For metastasis to bone, refer to the NIA clinical guideline for Bone Metastases. For all other metastases, refer to the NIA clinical guideline for Metastatic Disease.

#### **TREATMENT OPTIONS REQUIRING PHYSICIAN REVIEW**

- Brachytherapy for sites beyond those listed above may be approvable with submission of supportive documentation (ASTRO, 2012).

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- Intracavitary balloon catheter brain brachytherapy for malignant gliomas or metastasis to the brain is considered *investigational*.
  - Indications for SIRT include:
    - Unresectable metastatic liver tumors – see “**Metastatic Disease Guideline**”
    - Unresectable metastatic liver tumors from primary colorectal cancer see “**Metastatic Disease Guideline**”
    - Unresectable primary hepatocellular carcinoma (ACR, 2015)
    - Unresectable neuroendocrine tumors
  - The use of electronic brachytherapy for basal cell and squamous cell cancers of the skin (of non-melanomatous skin cancers) and benign skin conditions are considered investigational and experimental at this time.
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**BACKGROUND:**

Selective Internal Radiation Therapy (SIRT), also known as radioembolization with microsphere brachytherapy device (RMBD) and transarterial radioembolization, uses microscopic radioactive spheres to deliver radiation to the tumor site. Treatment is delivered through catheter injection of radioactive Yttrium-90 (90Y) microspheres into the hepatic artery.

**POLICY HISTORY:**

**Review Date:** February 2019

**Review Summary:** Added and updated references

**Review Date:** February 2020

**Review Summary:** Updated references

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