



**Disclaimer**

This Molina Clinical Policy (MCP) is intended to facilitate the Utilization Management process. Policies are not a supplementation or recommendation for treatment; Providers are solely responsible for the diagnosis, treatment, and clinical recommendations for the Member. It expresses Molina's determination as to whether certain services or supplies are medically necessary, experimental, investigational, or cosmetic for purposes of determining appropriateness of payment. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered (e.g., will be paid for by Molina) for a particular Member. The Member's benefit plan determines coverage – each benefit plan defines which services are covered, which are excluded, and which are subject to dollar caps or other limits. Members and their Providers will need to consult the Member's benefit plan to determine if there are any exclusion(s) or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and a Member's plan of benefits, the benefits plan will govern. In addition, coverage may be mandated by applicable legal requirements of a State, the Federal government or CMS for Medicare and Medicaid Members. CMS's Coverage Database can be found on the CMS website. The coverage directive(s) and criteria from an existing National Coverage Determination (NCD) or Local Coverage Determination (LCD) will supersede the contents of this MCP and provide the directive for all Medicare members. References included were accurate at the time of policy approval and publication.

## TABLE OF CONTENTS

<b>STATEMENT</b> .....	<b>8</b>
GENERAL INFORMATION .....	8
PURPOSE .....	8
<b>BREAST CANCER</b> .....	<b>8</b>
POST-MASTECTOMY .....	8
<i>Indications for 3D-CRT to the Chest Wall</i> .....	9
<i>Indications for IMRT to the Chest Wall</i> .....	9
POST-LUMPECTOMY AND LYMPH NODE NEGATIVE .....	9
<i>Indications for 3D-CRT to the Whole Breast</i> .....	9
<i>Indications for IMRT to the Whole Breast</i> .....	10
<i>Indications for Accelerated Partial Breast (APBI) with 3D-CRT or IMRT</i> .....	10
<i>Indications for Accelerated Partial Breast Irradiation (APBI) with Brachytherapy</i> .....	10
POST LUMPECTOMY AND LYMPH NODE POSITIVE .....	11
<i>Indications for 3D-CRT to the Whole Breast</i> .....	11
<i>Indications for IMRT to the Whole Breast</i> .....	11
<b>CENTRAL NERVOUS SYSTEM TUMORS</b> .....	<b>11</b>
PRIMARY BRAIN AND SPINAL CORD CANCERS .....	11
<i>Low Grade Adult Glioma</i> .....	11
Indications for IMRT or 3D-CRT .....	11
<i>High Grade Adult Glioma</i> .....	12
Indications for IMRT or 3D-CRT .....	12
Indications for Brachytherapy .....	12
<i>Adult Intracranial and Spinal Ependymoma (Brain and/or Spine)</i> .....	12
Indications for IMRT or 3D-CRT .....	12
ADULT MEDULLOBLASTOMA .....	12
<i>Indications for IMRT or 3D-CRT</i> .....	12
PRIMARY CNS LYMPHOMA .....	12
<i>Indications for IMRT or 3D-CRT</i> .....	12
PRIMARY SPINAL CORD TUMORS .....	13
<i>Indications for IMRT or 3D-CRT</i> .....	13
MENINGIOMA (GRADE 1) .....	13
<i>Indications for IMRT or 3D-CRT</i> .....	13
<i>Indications for SRS or Fractionated SRS (SBRT)</i> .....	13
MENINGIOMA (GRADE 2) .....	13
<i>Indications for IMRT or 3D-CRT</i> .....	13

**Molina Clinical Policy**  
**Radiation Therapy Services: MEDICARE**  
**(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)**  
**Policy No. 463b**

Last Approval: 02/25/2026  
 Next Review Due By: December 2026



<i>Indications for SRS or Fractionated SRS (SBRT)</i> .....	13
MENINGIOMA (GRADE 3) .....	14
<i>Indications for IMRT or 3D-CRT</i> .....	14
BENIGN BRAIN LESIONS .....	14
<i>Acoustic Neuroma (Vestibular Schwannoma)</i> .....	14
Indications for IMRT or 3D-CRT .....	14
Indications for SRS or Fractionated SRS (SBRT) .....	14
ARTERIOVENOUS MALFORMATIONS (AVM) .....	14
<i>Indications for SRS or Fractionated SRS (SBRT)</i> .....	14
TRIGEMINAL NEURALGIA .....	14
<i>Indications for Stereotactic Radiosurgery (SRS)</i> .....	14
CRANIOPHARYNGIOMA .....	14
<i>Indications for IMRT or 3D-CRT</i> .....	14
<i>Indications for Stereotactic Radiosurgery (SRS)</i> .....	15
<i>Brachytherapy</i> .....	15
PITUITARY ADENOMA .....	15
<i>Indications for IMRT or 3D-CRT</i> .....	15
<i>Indications for SRS or Fractionated SRS (SBRT)</i> .....	15
PROPHYLACTIC CRANIAL IRRADIATION (PCI) .....	15
<i>Indications for 3D-CRT</i> .....	15
<i>Indications for IMRT</i> .....	16
<b>GASTROINTESTINAL CANCERS</b> .....	<b>16</b>
RECTAL CANCER .....	16
<i>Indications for IMRT or 3D-CRT</i> .....	16
ANAL CANCER .....	16
T1-T2N0 .....	16
Indications for IMRT or 3D-CRT .....	16
T3-T4N0 or LN positive .....	16
Indications for IMRT or 3D-CRT .....	16
COLON CANCER .....	17
<i>Indications for IMRT or 3D-CRT</i> .....	17
ESOPHAGEAL CANCER (THORACIC) .....	17
<i>Indications for IMRT or 3D-CRT</i> .....	17
ESOPHAGEAL CANCER (CERVICAL) .....	17
<i>Indications for IMRT or 3D-CRT</i> .....	17
GASTRIC CANCER .....	17
<i>Indications for IMRT or 3D-CRT</i> .....	17
PANCREATIC CANCER .....	18
<i>Indications for IMRT or 3D-CRT</i> .....	18
<i>Indications for SBRT</i> .....	18
CHOLANGIOCARCINOMA/GALLBLADDER CANCER .....	18
<i>Indications for IMRT or 3D-CRT</i> .....	18
<i>Indications for SBRT</i> .....	18
HEPATOCELLULAR CANCER .....	19
<i>Indications for IMRT or 3D-CRT</i> .....	19
<i>Indications for SBRT</i> .....	19
<b>GENITOURINARY CANCERS</b> .....	<b>19</b>
VERY LOW/LOW RISK PROSTATE CANCER .....	19
<i>Definition</i> .....	19
<i>Indications for IMRT or 3D-CRT</i> .....	19
<i>Indications for SBRT</i> .....	20

**Molina Clinical Policy**  
**Radiation Therapy Services: MEDICARE**  
**(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)**  
**Policy No. 463b**

Last Approval: 02/25/2026  
Next Review Due By: December 2026



<i>Indications for Brachytherapy</i> .....	20
FAVORABLE INTERMEDIATE RISK PROSTATE CANCER .....	20
<i>Definition</i> .....	20
<i>Indications for IMRT or 3D-CRT</i> .....	20
<i>Indications for SBRT</i> .....	21
<i>Indications for Brachytherapy</i> .....	21
UNFAVORABLE INTERMEDIATE/HIGH/VERY HIGH-RISK PROSTATE CANCER .....	21
<i>Definition</i> .....	22
<i>Indications for IMRT or 3D-CRT</i> .....	22
<i>Indications for SBRT</i> .....	23
<i>Indications for Brachytherapy</i> .....	23
PROSTATE CANCER WITH POSITIVE REGIONAL LYMPH NODES (N1) .....	23
<i>Definition</i> .....	23
<i>Indications for IMRT or 3D-CRT</i> .....	23
PROSTATE CANCER WITH A LOW METASTATIC BURDEN .....	24
<i>Definition</i> .....	24
<i>Indications for IMRT or 3D-CRT</i> .....	24
<i>Indications for SBRT</i> .....	24
POST-PROSTATECTOMY (ADJUVANT/SALVAGE) RADIATION FOR PROSTATE CANCER .....	24
<i>Definition</i> .....	24
<i>Indications for IMRT or 3D-CRT</i> .....	24
PROSTATE - PROPHYLACTIC BREAST RADIATION (FOR PATIENTS RECEIVING ADT) .....	25
<i>Indications for 3D-CRT</i> .....	25
BLADDER CANCER .....	25
<i>T2-T4 or positive lymph nodes</i> .....	25
<i>Indications for IMRT or 3D-CRT</i> .....	25
<i>Postoperative Treatment</i> .....	25
<i>Indications for IMRT or 3D-CRT</i> .....	25
URETHRAL CANCER .....	26
<i>T2-T4 or positive lymph nodes</i> .....	26
<i>Indications for IMRT or 3D-CRT</i> .....	26
<i>Postoperative treatment</i> .....	26
<i>Indications for IMRT or 3D-CRT</i> .....	26
<i>Recurrent disease</i> .....	26
<i>Indications for IMRT or 3D-CRT</i> .....	26
PENILE CANCER .....	26
<i>T1-2N0 or T3-4 or LN positive</i> .....	26
<i>Indications for IMRT or 3D-CRT</i> .....	26
<i>Indications for Brachytherapy</i> .....	26
<i>Postoperative Treatment</i> .....	27
<i>Indications for IMRT or 3D-CRT</i> .....	27
TESTICULAR CANCER .....	27
<i>Pure Seminoma (Stage IA/IB)</i> .....	27
<i>Indications for 3D-CRT</i> .....	27
<i>Pure Seminoma (Stage IIA/IIB)</i> .....	27
<i>Indications for 3D-CRT</i> .....	27
<b>GYNECOLOGICAL CANCERS</b> .....	<b>28</b>
GENERAL .....	28
CERVICAL CANCER .....	28
<i>Postoperative (Post-Hysterectomy)</i> .....	28
<i>Indications for IMRT or 3D-CRT and a Brachytherapy Boost</i> .....	28
<i>Intact cervix (Nonsurgical)</i> .....	28
<i>Indications for IMRT or 3D-CRT and a Brachytherapy Boost</i> .....	28

**Molina Clinical Policy**  
**Radiation Therapy Services: MEDICARE**  
**(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)**  
**Policy No. 463b**



Last Approval: 02/25/2026  
 Next Review Due By: December 2026

ENDOMETRIAL CANCER.....	28
<i>Postoperative (Post-Hysterectomy)</i> .....	28
Indications for Brachytherapy Alone .....	28
Indications for IMRT or 3D-CRT and a Brachytherapy Boost .....	29
<i>Nonsurgical (Inoperable)</i> .....	29
Indications for IMRT/3D-CRT with a Brachytherapy Boost OR Brachytherapy alone .....	29
VULVAR CANCER.....	29
<i>Nonsurgical (Inoperable)</i> .....	29
Indications for IMRT or 3D-CRT .....	29
<i>Postoperative</i> .....	30
Indications for IMRT or 3D-CRT .....	30
VAGINAL CANCER.....	30
<i>Very Early Nonsurgical (Inoperable)</i> .....	30
Indications for Brachytherapy alone.....	30
<i>Nonsurgical (Inoperable)</i> .....	30
Indications for IMRT/3RD-CRT and a Brachytherapy Boost.....	30
<b>HEAD AND NECK CANCERS .....</b>	<b>30</b>
ORAL CAVITY CANCER.....	30
<i>Organ preservation/nonsurgical</i> .....	30
Indications for IMRT or 3D-CRT .....	30
Indications for Brachytherapy .....	31
<i>Postoperative Treatment</i> .....	31
Indications for IMRT or 3D-CRT .....	31
OROPHARYNX CANCER.....	31
<i>Organ preservation/nonsurgical</i> .....	31
Indications for IMRT or 3D-CRT .....	31
<i>Postoperative Treatment</i> .....	32
Indications for IMRT or 3D-CRT .....	32
HYPOPHARYNX CANCER .....	32
<i>Organ preservation/nonsurgical</i> .....	32
Indications for IMRT or 3D-CRT .....	32
<i>Postoperative Treatment</i> .....	32
Indications for IMRT or 3D-CRT .....	32
NASOPHARYNX CANCER .....	32
<i>Organ preservation/nonsurgical</i> .....	32
Indications for IMRT or 3D-CRT .....	32
GLOTTIC LARYNX CANCER .....	32
<i>Organ preservation/nonsurgical</i> .....	32
Indications 3D-CRT.....	32
Indications for IMRT or 3D-CRT .....	33
<i>Postoperative Treatment</i> .....	33
Indications for IMRT or 3D-CRT .....	33
SUPRAGLOTTIC LARYNX CANCER.....	33
<i>Organ preservation/nonsurgical</i> .....	33
Indications for IMRT or 3D-CRT .....	33
<i>Postoperative Treatment</i> .....	34
Indications for IMRT or 3D-CRT .....	34
SALIVARY GLAND CANCER.....	34
<i>Organ preservation/nonsurgical</i> .....	34
Indications for IMRT or 3D-CRT .....	34
<i>Postoperative Treatment</i> .....	34
Indications for IMRT or 3D-CRT .....	34
ETHMOID AND MAXILLARY SINUS CANCER .....	34
<i>Organ preservation/nonsurgical</i> .....	34

**Molina Clinical Policy**  
**Radiation Therapy Services: MEDICARE**  
**(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)**  
**Policy No. 463b**



Last Approval: 02/25/2026  
 Next Review Due By: December 2026

Indications for IMRT or 3D-CRT .....	34
<i>Postoperative Treatment</i> .....	34
Indications for IMRT or 3D-CRT .....	34
UNKNOWN PRIMARY HEAD AND NECK CANCER.....	35
<i>Organ preservation/nonsurgical</i> .....	35
Indications for IMRT or 3D-CRT .....	35
<i>Postoperative Treatment</i> .....	35
Indications for IMRT or 3D-CRT .....	35
<b>LUNG CANCER.....</b>	<b>35</b>
NON-SMALL CELL LUNG CARCINOMA (NSCLC).....	35
<i>Early Stage I – IIA Non-Small Cell Lung Cancer (Nonsurgical)</i> .....	35
Indications for SBRT .....	35
Indications for IMRT.....	35
Indications for 3D-CRT .....	36
<i>Stage IIB-III Non-Small Cell Lung Cancer (Nonsurgical)</i> .....	36
Indications for IMRT or 3D-CRT .....	36
<i>Stage IIIA Non-Small Cell Lung Cancer (Preoperative)</i> .....	36
Indications for IMRT or 3D-CRT .....	36
<i>Stage IIIA Non-Small Cell Lung Cancer (Postoperative)</i> .....	36
Indications for IMRT or 3D-CRT .....	36
SMALL CELL LUNG CARCINOMA (SCLC).....	37
<i>Limited Stage Small Cell Lung Cancer (Nonsurgical)</i> .....	37
Indications for SBRT (for stages I or IIA) .....	37
Indications for IMRT or 3D-CRT .....	37
<i>Limited Stage Small Cell Lung Cancer (Postoperative)</i> .....	37
Indications for IMRT or 3D-CRT .....	37
<i>Extensive Stage SCLC</i> .....	38
Indications for IMRT or 3D-CRT .....	38
MALIGNANT PLEURAL MESOTHELIOMA (POSTOPERATIVE).....	38
<i>Indications for IMRT or 3D-CRT</i> .....	38
<b>LYMPHOMA.....</b>	<b>38</b>
HODGKIN'S LYMPHOMA – WHEN COMBINED WITH CHEMOTHERAPY.....	38
<i>Indications for IMRT or 3D-CRT</i> .....	38
HODGKIN'S LYMPHOMA - RADIATION AS MONOTHERAPY .....	39
<i>Indications for IMRT or 3D-CRT</i> .....	39
NON-HODGKIN'S LYMPHOMA (B-CELL).....	39
<i>Indications for IMRT or 3D-CRT</i> .....	39
NON-HODGKIN'S LYMPHOMA (T-CELL).....	40
<i>Indications for IMRT or 3D-CRT</i> .....	40
PRIMARY CUTANEOUS LYMPHOMA (B/T-CELL).....	40
<i>Indications for Electrons, Low Energy X-rays, and 2/3-D CRT</i> .....	40
<b>METASTATIC CANCER.....</b>	<b>41</b>
PALLIATION OF NON-OLIGO METASTATIC DISEASE .....	41
<i>Palliation of an organ, soft tissue mass, or non-spinal bone metastasis</i> .....	41
Indications for 3D-CRT .....	41
<i>Palliation of Spinal Bone Metastases</i> .....	41
Indications for SBRT .....	41
Indications for 3D-CRT .....	41
<i>Palliation of Brain Metastases</i> .....	42
Indications for Fractionated SRS (SBRT) .....	42
Indications for Whole Brain IMRT .....	42
Indications for Whole Brain 3D-CRT .....	42
TREATMENT OF OLIGOMETASTATIC DISEASE.....	42

**Molina Clinical Policy**  
**Radiation Therapy Services: MEDICARE**  
**(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)**  
**Policy No. 463b**

Last Approval: 02/25/2026  
 Next Review Due By: December 2026



<i>Indications for SBRT</i> .....	42
TREATMENT OF OLIGOPROGRESSIVE DISEASE .....	42
<i>Indications for SBRT</i> .....	42
<b>MYELOMA</b> .....	<b>43</b>
SOLITARY PLASMACYTOMA .....	43
<i>Definition</i> .....	43
<i>Indications for 3D-CRT</i> .....	43
MULTIPLE MYELOMA .....	43
<i>Definition</i> .....	43
<i>Indications for 3D-CRT</i> .....	43
<b>NON-CANCEROUS CONDITIONS</b> .....	<b>43</b>
INDICATIONS FOR OTHER NON-CANCEROUS CONDITIONS .....	44
<b>PALLIATION OF A PRIMARY TUMOR (NON-METASTATIC)</b> .....	<b>45</b>
INDICATIONS FOR 3D-CRT .....	45
<b>PEDIATRIC MALIGNANCIES</b> .....	<b>46</b>
<b>RE-IRRADIATION</b> .....	<b>46</b>
<b>SARCOMA</b> .....	<b>46</b>
SOFT TISSUE SARCOMA: EXTREMITY/BODY WALL/HEAD AND NECK (PRE-OPERATIVE) .....	46
<i>Indications for IMRT and 3D-CRT</i> .....	46
SOFT TISSUE SARCOMA: EXTREMITY/BODY WALL/HEAD AND NECK (POST-OPERATIVE) .....	47
<i>Indications for IMRT or 3D-CRT</i> .....	47
<i>Indications for Brachytherapy</i> .....	47
SOFT TISSUE SARCOMA: EXTREMITY/BODY WALL/HEAD AND NECK (UNRESECTABLE) .....	47
<i>Indications for IMRT or 3D-CRT</i> .....	47
DESMOID TUMORS (AGGRESSIVE FIBROMATOSIS) .....	47
<i>Indications for IMRT or 3D-CRT</i> .....	47
RETROPERITONEAL/ABDOMINAL SARCOMA (PREOPERATIVE) .....	48
<i>Indications for IMRT or 3D-CRT</i> .....	48
<b>RETROPERITONEAL SARCOMA - SEE SECTION ON IORT</b> .....	<b>48</b>
KAPOSI SARCOMA .....	48
<i>Indications for Electron Beam, Superficial Radiation Therapy (SRT), Orthovoltage, 2D/3D External Beam Radiation Therapy, or IMRT</i> .....	48
<b>SKIN CANCERS</b> .....	<b>48</b>
BASAL CELL (BCC) AND SQUAMOUS (SCC) CARCINOMA .....	48
<i>Indications for 2D/3D-CRT or Electron Beam</i> .....	48
<i>Indications for Superficial Radiation and Orthovoltage Radiation</i> .....	49
<i>Indications for Brachytherapy</i> .....	49
<i>Indications for IMRT</i> .....	49
MELANOMA OF THE SKIN AND EYE (UVEAL) .....	49
<i>Indications for IMRT or 2D/3D-CRT or Electron Beam of the Skin</i> .....	49
<i>Indications for Brachytherapy of the Eye (Uveal)</i> .....	50
MERKEL CELL CARCINOMA (MCC) .....	50
<i>Indications for IMRT or 2D/3D-CRT or Electron Beam</i> .....	50
DERMATOFIBROSARCOMA PROTUBERANS (DFSP) .....	50
<i>Indications for 2D/3D External Beam Radiation Therapy or Electron Beam</i> .....	50
<b>THYMOMAS AND THYMIC CARCINOMAS</b> .....	<b>50</b>
INDICATIONS FOR IMRT OR 3D-CRT .....	50



<b>THYROID .....</b>	<b>51</b>
DIFFERENTIATED, MEDULLARY OR POORLY DIFFERENTIATED (NON-ANAPLASTIC) THYROID CANCER.....	51
<i>Indications for IMRT or 3D-CRT .....</i>	<i>51</i>
ANAPLASTIC THYROID CANCER .....	51
<i>Indications for IMRT or 3D-CRT .....</i>	<i>51</i>
<b>UNIQUE TREATMENT MODALITIES.....</b>	<b>52</b>
IORT .....	52
<i>Indications for IORT .....</i>	<i>52</i>
HYPERTHERMIA.....	52
<i>Indications for Hyperthermia .....</i>	<i>52</i>
SIRT .....	53
<i>Indications for SIRT.....</i>	<i>53</i>
<b>CODING AND STANDARDS .....</b>	<b>53</b>
CODES.....	53
APPLICABLE LINES OF BUSINESS .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>BACKGROUND .....</b>	<b>53</b>
<b>SUMMARY OF EVIDENCE .....</b>	<b>54</b>
<b>ANALYSIS OF EVIDENCE.....</b>	<b>54</b>
<b>POLICY HISTORY.....</b>	<b>55</b>
<b>LEGAL AND COMPLIANCE .....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
GUIDELINE APPROVAL .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<i>Committee .....</i>	<i><b>Error! Bookmark not defined.</b></i>
DISCLAIMER .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>REFERENCES.....</b>	<b>55</b>

## STATEMENT

### General Information

- *It is an expectation that all patients receive care/services from a licensed clinician. All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.*
- *Where a specific clinical indication is not directly addressed in this guideline, medical necessity determination will be made based on widely accepted standard of care criteria. These criteria are supported by evidence-based or peer-reviewed sources such as medical literature, societal guidelines and state/national recommendations. This guideline is not a prescription for treatment. All individual treatment decisions are the responsibility of the treating physician.*
- *The guideline criteria in the following sections were developed utilizing evidence-based and peer-reviewed resources from medical publications and societal organization guidelines as well as from widely accepted standard of care, best practice recommendations. This guideline considers treatment endorsed by professional organizations (i.e., the American Society for Radiation Oncology and the National Comprehensive Cancer Network). It approves many treatment regimens that fall within that guidance, but it is also modified by significant factors such as toxicity and the level of available medical evidence.*

### Purpose

The purpose of this guideline is to provide general information applicable to the review and appropriateness of Radiation Therapy services. Although a service, supply or procedure may be medically necessary, it may be subject to limitations and/or exclusions under a member's benefit plan. Although a service, supply or procedure may be discussed in the guideline, it may be subject to limitations and/or exclusions under a member's benefit plan. If a service, supply, or procedure is not covered and the member proceeds to obtain the service, supply or procedure, the member may be responsible for the cost. This guideline does not apply to inpatient treatment such as inpatient two-dimensional (2D), three-dimensional conformal radiation therapy (3D-CRT), intensity-modulated radiation therapy (IMRT), brachytherapy, hyperthermia, stereotactic radiosurgery/stereotactic body radiation therapy (SRS/SBRT), selective internal radiation therapy (SIRT), and intraoperative radiation therapy (IORT) treatments. It only applies to treatment that is delivered to a patient as an outpatient or as an outpatient observation service rendered to a patient in a hospital.

## BREAST CANCER <sup>(1)</sup>

### Post-Mastectomy

## ***Indications for 3D-CRT to the Chest Wall*** <sup>(1)</sup>

### **Fractionation**

- Conventional Fractionation
  - Treatment to chest wall and regional lymph nodes in up to 28 fractions of **3D-CRT** followed by an optional chest wall scar boost in up to 5 fractions for patients with no metastatic disease
- Hypofractionation
  - Treatment to chest wall and regional lymph nodes in up to 16 fractions of **3D-CRT** followed by an optional chest wall scar boost in up to 5 fractions for patients with no metastatic disease

## ***Indications for IMRT to the Chest Wall*** <sup>(1,2)</sup>

**ONLY** when one of the following anatomical considerations are met <sup>(2)</sup>:

- The planned treatment area includes the Internal Mammary Lymph Node Chain **OR**
- The patient has an unfavorable anatomy with a breast separation of 25 cm or greater

### **Fractionation**

- Conventional Fractionation
  - Treatment to chest wall and regional lymph nodes in up to 28 fractions of **IMRT** followed by an optional chest wall scar boost in up to 5 fractions for patients with no metastatic disease
- Hypofractionation
  - Treatment to chest wall and regional lymph nodes in 16 fractions of **IMRT** followed by an optional chest wall scar boost of up to 5 fractions for patients with no metastatic disease

## **Post-Lumpectomy and Lymph Node Negative**

### ***Indications for 3D-CRT to the Whole Breast*** <sup>(1)</sup>

#### **Fractionation**

- Hypofractionation
  - Treatment to the whole breast in up to 16 fractions of **3D-CRT** followed by an optional boost in up to 5 fractions for patients with no metastatic disease
- Ultra-hypofractionation
  - Treatment to the whole breast in 5 fractions of **3D-CRT** may be considered in selected early-stage patients following breast conservation surgery for patients with no metastatic disease

### ***Indications for IMRT to the Whole Breast***

Only when the following anatomical consideration is met <sup>(3)</sup>:

- The patient has an unfavorable anatomy with a breast separation of 25 cm or greater

#### **Fractionation Irradiation**

- Conventional Fractionation
  - Treatment to the whole breast in up to 28 fractions of **IMRT** followed by an optional boost in up to 5 fractions boost for patients with no metastatic disease <sup>(1)</sup>

### ***Indications for Accelerated Partial Breast (APBI) with 3D-CRT or IMRT*** <sup>(3)</sup>

**ONLY** when **ALL** of the following criteria are met:

- Age ≥40 years
- Absence of BRCA 1/2 mutations, if assessed
- Invasive Ductal Carcinoma, ≤3 cm in size, negative margins
- Ductal Carcinoma In Situ (DCIS), ≤3 cm in size, negative margins
- Patients with no metastatic disease

#### **Fractionation** <sup>(1,3)</sup>

- 15 fractions **OR**
- 10 fractions delivered twice a day (BID) **OR**
- 5 daily fractions

### ***Indications for Accelerated Partial Breast Irradiation (APBI) with Brachytherapy***

**ONLY** when **ALL** of the following criteria are met <sup>(1,3)</sup>:

- Age ≥40 years
- Absence of BRCA 1/2 mutations, if assessed
- Invasive Ductal Carcinoma, ≤3 cm in size, negative margins
- Ductal Carcinoma In Situ (DCIS), ≤3 cm in size, negative margins
- Patients with no metastatic disease

#### **Fractionation** <sup>(1,4)</sup>

Appropriate fractionation schemes for APBI with **Brachytherapy** are

- Up to 10 fractions delivered twice a day (BID)

**\*Note:** The following types of brachytherapy are considered investigational/experimental for the treatment of breast cancer <sup>(5)</sup>

- Electronic Brachytherapy
- Non-Invasive Breast Brachytherapy (AccuBoost®)

## **Post Lumpectomy and Lymph Node Positive**

### ***Indications for 3D-CRT to the Whole Breast***

#### **Fractionation**

- Conventional Fractionation <sup>(1)</sup>
  - Treatment to the whole breast and regional lymph nodes in up to 28 fractions of **3D-CRT** followed by an optional boost in up to 5 fractions boost for patients with no metastatic disease.

### ***Indications for IMRT to the Whole Breast*** <sup>(1,2)</sup>

**ONLY** when **ONE** of the following anatomical considerations are met:

- The planned treatment area includes the Internal Mammary Lymph Node Chain **OR**
- The patient has an unfavorable anatomy with a breast separation of 25 cm or greater

#### **Fractionation**

- Conventional Fractionation <sup>(1)</sup>
  - Treatment to the whole breast and regional lymph nodes in up to 28 fractions of **IMRT** followed by an optional boost in up to 5 fractions for patients with no metastatic disease.

**\*Note:** Indications for radiation treatment of **Male Breast Cancer** are similar to indications for radiation treatment of female breast cancer. <sup>(1)</sup> Please refer to the clinical subsections above for radiation treatment options.

Breast Cancer- See section on **HYPERTHERMIA**

Breast Cancer - See section on **IORT**

## **CENTRAL NERVOUS SYSTEM TUMORS**

### **Primary Brain and Spinal Cord Cancers** <sup>(6)</sup>

#### ***Low Grade Adult Glioma (WHO grade 1 & 2, Glioma, Astrocytoma, Oligodendroglioma, and Oligoastrocytoma)*** <sup>(7)</sup>

#### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 30 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### ***High Grade Adult Glioma (WHO grade 3 & 4, GBM, Anaplastic Astrocytoma, Anaplastic Oligodendroglioma, and Anaplastic Oligoastrocytoma) (7)***

#### **Indications for IMRT or 3D-CRT**

##### **Fractionation**

- Conventional Fractionation for patients age <60 years old and PS 0-2
  - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease
- Hypofractionation (6)
  - For patients ≥ 60 years old **OR** patients with poor performance status (ECOG >2), treatment in up to 15 fractions using **IMRT or 3D-CRT**

#### **Indications for Brachytherapy (8,9)**

- In patients only with recurrent high-grade disease, a single treatment of GammaTile brachytherapy

### ***Adult Intracranial and Spinal Ependymoma (Brain and/or Spine)***

#### **Indications for IMRT or 3D-CRT**

##### **Fractionation**

- Conventional Fractionation (6)
  - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### **Adult Medulloblastoma**

#### ***Indications for IMRT or 3D-CRT***

##### **Fractionation**

- Conventional Fractionation (6)
  - Treatment with Craniospinal Irradiation (CSI) including a primary site boost in up to 31 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### **Primary CNS Lymphoma**

#### ***Indications for IMRT or 3D-CRT***

## **Fractionation**

- Conventional Fractionation <sup>(6)</sup>
  - Treatment with Whole Brain Radiation Therapy (WBRT) and a boost (if necessary) in up to 25 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Primary Spinal Cord Tumors**

### ***Indications for IMRT or 3D-CRT***

#### **Fractionation**

- Conventional Fractionation <sup>(6)</sup>
  - Treatment in up to 30 fractions using **IMRT or 3D-CRT**
  - For tumors below the conus medullaris, treatment in up to 33 fractions using **IMRT or 3D-CRT**

## **Meningioma (Grade 1)**

### ***Indications for IMRT or 3D-CRT***

#### **Fractionation**

- Conventional Fractionation <sup>(6)</sup>
  - Treatment in up to 30 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### ***Indications for SRS or Fractionated SRS (SBRT)***

#### **Fractionation**

- Treatment in 1 fraction of **SRS**
- Treatment in 2 to 5 fractions of Fractionated SRS (SBRT)

## **Meningioma (Grade 2)**

### ***Indications for IMRT or 3D-CRT*** <sup>(6)</sup>

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### ***Indications for SRS or Fractionated SRS (SBRT)*** <sup>(6)</sup>

#### **Fractionation**

- Treatment in 1 fraction of **SRS**

- Treatment in 2 to 5 fractions of **Fractionated SRS (SBRT)**

## **Meningioma (Grade 3)**

### ***Indications for IMRT or 3D-CRT*** <sup>(6)</sup>

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Benign Brain Lesions**

### ***Acoustic Neuroma (Vestibular Schwannoma)***

#### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation <sup>(10)</sup>
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT**

#### **Indications for SRS or Fractionated SRS (SBRT)** <sup>(10)</sup>

#### **Fractionation**

- Treatment in 1 fraction of **SRS**
- Treatment in 2 to 5 fractions of **Fractionated SRS (SBRT)**

## **Arteriovenous Malformations (AVM)**

### ***Indications for SRS or Fractionated SRS (SBRT)*** <sup>(11,12)</sup>

#### **Fractionation**

- Treatment in 1 fraction of **SRS**
- Treatment in 2 to 5 fractions of **Fractionated SRS (SBRT)**

## **Trigeminal Neuralgia** <sup>(13)</sup>

### ***Indications for Stereotactic Radiosurgery (SRS)***

#### **Fractionation**

- Treatment in 1 fraction of **SRS**

## **Craniopharyngioma**

### ***Indications for IMRT or 3D-CRT*** <sup>(2,14)</sup>

### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 30 fractions using **IMRT or 3D-CRT**

### **Indications for Stereotactic Radiosurgery (SRS)** <sup>(14,15)</sup>

#### **Fractionation**

- Treatment in 1 fraction of **SRS**
- Treatment in 2 to 5 fractions of **Fractionated SRS (SBRT)**

### **Brachytherapy** <sup>(16)</sup>

Treatment using intracavitary **Brachytherapy** via the injection of a radioisotope is considered medically necessary using isotopes such as:

- Yttrium-90 (Y90) **OR**
- Phosphorus-32 (P32)

## **Pituitary Adenoma**

### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation <sup>(17)</sup>
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT**

### **Indications for SRS or Fractionated SRS (SBRT)** <sup>(18)</sup>

#### **Fractionation**

- Treatment in 1 fraction of **SRS**
- Treatment in 2 to 5 fractions of **Fractionated SRS (SBRT)**

## **Prophylactic Cranial Irradiation (PCI)**

### **Indications for 3D-CRT** <sup>(19)</sup>

**ONLY** when **ALL** of the following apply:

- Diagnosis is limited or extensive stage small cell lung cancer
- The patient had a good response to initial therapy
- ECOG performance status  $\leq 2$

#### **Fractionation**

- Treatment in up to 10 fractions using **3D-CRT**

### ***Indications for IMRT*** <sup>(19)</sup>

**ONLY** when **ALL** of the following apply:

- Diagnosis is limited or extensive stage small cell lung cancer
- Had a good response to initial therapy
- ECOG performance status  $\leq 2$
- A hippocampal avoidance (HA), whole brain **IMRT** technique is being used for this treatment

#### **Fractionation**

- Treatment in up to 10 fractions using **IMRT**

## **GASTROINTESTINAL CANCERS**

### **Rectal Cancer** <sup>(20)</sup>

#### ***Indications for IMRT or 3D-CRT***

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 30 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

Rectal Cancer - See section on **IORT**

### **Anal Cancer** <sup>(21)</sup>

#### ***T1-T2N0***

#### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

#### ***T3-T4N0 or LN positive***

#### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 30 fractions using **IMRT or 3D-CRT** for patients with no

metastatic disease

## **Colon Cancer** <sup>(22)</sup>

### ***Indications for IMRT or 3D-CRT***

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease, **ONLY** in patients meeting **ONE** of the following criteria mentioned below:
    - T4 disease (tumor adherent to an adjacent structure after surgery) **OR**
    - Inoperable cancer

Colon Cancer - See section on **IORT**

## **Esophageal Cancer (Thoracic)** <sup>(23)</sup>

### ***Indications for IMRT or 3D-CRT***

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Esophageal Cancer (Cervical)** <sup>(23)</sup>

### ***Indications for IMRT or 3D-CRT***

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Gastric Cancer** <sup>(24)</sup>

### ***Indications for IMRT or 3D-CRT***

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Pancreatic Cancer** <sup>(25)</sup>

### ***Indications for IMRT or 3D-CRT***

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 31 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease
- Hypofractionation
  - Treatment in up to 15 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease
  - Treatment in up to 25 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### ***Indications for SBRT***

#### **Fractionation**

- Treatment in up to 5 fractions of **SBRT** for patients with no metastatic disease

## **Cholangiocarcinoma/Gallbladder Cancer** <sup>(26)</sup>

### ***Indications for IMRT or 3D-CRT***

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease
- Hypofractionation
  - Treatment in up to 15 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### ***Indications for SBRT***

#### **Fractionation**

- Treatment in up to 5 fractions of **SBRT** for patients with no metastatic disease

Cholangiocarcinoma - See section on

SIRT

## **Hepatocellular Cancer** <sup>(27)</sup>

### ***Indications for IMRT or 3D-CRT***

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease
- Hypofractionation
  - Treatment in up to 15 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

Hepatocellular carcinoma - See section on

SIRT

### ***Indications for SBRT***

#### **Fractionation**

- Treatment in up to 5 fractions of **SBRT** for patients with no metastatic disease

## **GENITOURINARY CANCERS**

### **Very Low/Low Risk Prostate Cancer** <sup>(28,29)</sup>

#### ***Definition***

##### **Very Low Risk Prostate Cancer:**

- Clinical Primary Tumor Stage [T] is T1c, PSA <10 ng/ml, Grade Group 1 (Gleason score 3+3 ≤ 6), PSA density <0.15 ng/mL/ g, and < 3 biopsy cores positive with ≤ 50% cancer in each core

##### **Low Risk Prostate Cancer:**

- Clinical Primary Tumor Stage [T] is T1c-T2a, PSA <10 ng/ml, and Grade Group 1 (Gleason score 3+3 ≤ 6) but does not qualify for the very low risk group

### ***Indications for IMRT or 3D-CRT*** <sup>(28,29)</sup>

#### **Fractionation**

- Hypofractionation

**Molina Clinical Policy**  
**Radiation Therapy Services: MEDICARE**  
**(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)**  
**Policy No. 463b**

Last Approval: 02/25/2026

Next Review Due By: December 2026



- Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease
- Conventional Fractionation
  - Treatment in up to 45 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease is considered medically necessary **ONLY** for patients who are exempt from hypofractionation due to **ONE** of the following criteria:
    - The prostate is 80 grams or larger <sup>(30)</sup> **OR**
    - There is a history of inflammatory bowel disease **OR**
    - The International Prostate Symptom Score (IPSS) is 12 or greater **AND** documented in the submitted records **OR**
    - There is a history of a prior transurethral resection of the prostate (TURP) <sup>(31)</sup>

**Indications for SBRT** <sup>(29)</sup>

**Fractionation**

- Treatment in up to 5 fractions of **SBRT** for patients with no metastatic disease

**Indications for Brachytherapy** <sup>(29)</sup>

**Fractionation**

- Treatment with LDR or HDR as monotherapy for patients with no metastatic disease
  - LDR (low dose-rate) brachytherapy options include:
    - 1 implant of Cesium-131
    - 1 implant of Palladium-103
    - 1 implant of Iodine-125
  - HDR (high dose-rate) brachytherapy options include:
    - 2 fractions given over 2 days using Iridium-192
    - 4 fractions given over 2 days (twice daily) using Iridium-192

**Favorable Intermediate Risk Prostate Cancer** <sup>(28,29)</sup>

**Definition**

- < 50% (e.g., <6 of 12) of the prostate biopsy cores contain cancer
- No high-risk or very high-risk group features, and no more than one of the following intermediate risk factors:
  - PSA 10-20 ng/mL
  - Clinical primary tumor stage T2b-c
  - Grade Group 2 (Gleason score 3+4=7; risk factor) with a PSA <10 ng/mL and clinical

primary tumor stage T1c-T2a

## ***Indications for IMRT or 3D-CRT***

### **Fractionation**

#### Hypofractionation

- Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

#### Conventional Fractionation

- Conventional fractionation is considered medically necessary **ONLY** for patients who are exempt from hypofractionation due to **ONE** of the following criteria:
  - The prostate is 80 grams or larger **OR**
  - There is a history of inflammatory bowel disease **OR**
  - The International Prostate Symptom Score (IPSS) is 12 or greater **AND** documented in the submitted records **OR**
  - There is a history of a prior transurethral resection of the prostate TURP <sup>(31)</sup>
- Treatment
  - Treatment in up to 45 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease
  - Treatment in up to 35 fractions (with a simultaneous integrated micro-boost to the MRI-dominant nodules) using **IMRT or 3D-CRT** for patients with no metastatic disease

## ***Indications for SBRT***

### **Fractionation**

- Treatment in up to 5 fractions of **SBRT** for patients with no metastatic disease

## ***Indications for Brachytherapy***

### **Fractionation**

- Treatment with LDR or HDR as monotherapy for patients with no metastatic disease
  - LDR (low dose-rate) brachytherapy options include:
    - 1 implant of Cesium-131
    - 1 implant of Palladium-103
    - 1 implant of Iodine-125
  - HDR (high dose-rate) brachytherapy options include:
    - 2 fractions given over 2 days using Iridium-192

- 4 fractions given over 2 days (twice daily) using Iridium-192

## **Unfavorable Intermediate/High/Very High-Risk Prostate Cancer** <sup>(28,29)</sup>

### **Definition**

**Unfavorable Intermediate Risk Prostate Cancer** has one or more of the following:

- ≥ 50% biopsy cores positive (e.g., <6 of 12)
- Grade Group 3 (Gleason score 4+3=7)
- 2-3 intermediate risk factors, including:
  - PSA 10-20 ng/mL
  - Clinical primary tumor stage T2b-c
  - Grade Group 2 (Gleason score 3+4=7)

**High Risk Prostate Cancer** has no very-high-risk features and at least one of the following high-risk features:

- Clinical Primary Tumor Stage T3-T4
- PSA > 20 ng/mL
- Grade Group 4 (Gleason score 8) or 5 (Gleason score 9-10)

**Very High Risk Prostate Cancer** has at least one of the following very high-risk features:

- Clinical Primary Tumor Stage T3-T4
- PSA > 40 ng/mL
- Grade Group 4 (Gleason score 8) or 5 (Gleason score 9-10)

### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

##### Hypofractionation

- Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

##### Conventional Fractionation <sup>(31-34)</sup>

- Conventional Fractionation is considered medically necessary **ONLY** for patients who are exempt from hypofractionation due to **ONE** of the following criteria:
  - The pelvic lymph node chains are included in the treatment plan **OR**
  - The prostate is 80 grams or larger **OR**
  - There is a history of inflammatory bowel disease **OR**

- The International Prostate Symptom Score (IPSS) is 12 or greater **AND** documented in the submitted records **OR**
- There is a history of a prior transurethral resection of the prostate (TURP)
- Treatment
  - Treatment in up to 45 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease
  - Treatment in up to 35 fractions (with a simultaneous integrated micro-boost to the MRI-dominant nodules) using **IMRT or 3D-CRT** for patients with no metastatic disease

### ***Indications for SBRT***

#### **Fractionation**

- Treatment in up to 5 fractions of **SBRT** for patients with no metastatic disease

### ***Indications for Brachytherapy***

#### **Fractionation**

- With no metastatic disease
  - LDR (low dose-rate) **Brachytherapy boost in combination with 3D-CRT or IMRT** treatment in up to 28 fractions. Brachytherapy boost options include:
    - 1 implant of Cesium-131
    - 1 implant of Palladium-103
    - A single implant of Iodine-125
  - HDR (high dose-rate) **Brachytherapy boost in combination with 3D-CRT or IMRT** treatment in up to 28 fractions. Brachytherapy boost options include:
    - 1 fraction using Iridium-192
    - 2 fractions using Iridium-192

## **Prostate Cancer with Positive Regional Lymph Nodes (N1) <sup>(29)</sup>**

### ***Definition***

**N1 M0 disease** refers to prostate cancer that has spread to the regional lymph nodes and is visible on conventional imaging (i.e., CT scan, MRI scan or bone scan).

### ***Indications for IMRT or 3D-CRT***

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 45 fractions using **IMRT or 3D-CRT** for patients with no

metastatic disease

- Hypofractionation
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Prostate Cancer with a Low Metastatic Burden** <sup>(29)</sup>

### **Definition** <sup>(29)</sup>

**Low metastatic burden, castration-sensitive disease** refers to prostate cancer that is metastatic and visible on conventional imaging (i.e., CT scan, MRI scan or bone scan) and meeting the following criteria:

- Up to 7 bony metastases (M1b) in patients without visceral (M1c) metastases

### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Hypofractionation
  - Treatment in up to 20 fractions using **IMRT or 3D-CRT**.

### **Indications for SBRT**

#### **Fractionation**

- Treatment in up to 5 fractions of **SBRT** for patients with no metastatic disease

## **Post-Prostatectomy (Adjuvant/Salvage) Radiation for Prostate Cancer** <sup>(29)</sup>

### **Definition**

**Post-Prostatectomy Radiation Therapy Suitable Patients** are patients with no metastatic disease who require **Adjuvant Radiation** due to concerning pathologic features following a radical prostatectomy **OR Salvage Radiation** due to persistently rising/detectable PSA after a radical prostatectomy.

- Patients who require **Adjuvant Radiation** after a radical prostatectomy include patients with concerning pathology findings such as:
  - Extracapsular extension (pT3a disease) **OR**
  - Seminal vesicle invasion (pT3b) **OR**
  - Positive surgical margin(s) **OR**
  - Gleason score 8-10 (on either a biopsy or found at the time of surgery)
- Patients who require **Salvage Radiation** after a radical prostatectomy include patients with:

## Molina Clinical Policy

### Radiation Therapy Services: MEDICARE (Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)

#### Policy No. 463b

Last Approval: 02/25/2026

Next Review Due By: December 2026



- A PSA that was undetectable after surgery and later became detectable again and increased on 2 additional measurements **OR**
- A PSA that remained persistently detectable after surgery

### ***Indications for IMRT or 3D-CRT***

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 40 fractions using **IMRT or 3D-CRT** in the absence of gross disease
- Hypofractionation <sup>(29)</sup>
  - Treatment in up to 20 fractions using **IMRT or 3D-CRT** to the prostate fossa alone

## **Prostate - Prophylactic Breast Radiation (for patients receiving ADT)**

### ***Indications for 3D-CRT*** <sup>(35)</sup>

- Prophylactic Breast Radiation with **3D-Conformal Radiation Therapy (3D-CRT)** for men receiving Androgen Deprivation Therapy (ADT) is considered medically necessary with treatment in up to 3 fractions to prevent gynecomastia.

## **Bladder Cancer** <sup>(36)</sup>

### ***T2-T4 or positive lymph nodes (organ preservation/nonsurgical)***

#### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment of the whole or partial bladder (and elective treatment to the lymph nodes is optional) in up to 37 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease
- Hypofractionation
  - Treatment in up to 20 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### ***Postoperative Treatment***

#### **Indications for IMRT or 3D-CRT**

Following a radical cystectomy with suspected microscopic disease, positive lymph nodes, or positive margins.

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Urethral Cancer** <sup>(36)</sup>

### ***T2-T4 or positive lymph nodes (organ preservation/nonsurgical)***

#### **Indications for IMRT or 3D-CRT**

##### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 39 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### ***Postoperative treatment*** <sup>(36)</sup>

#### **Indications for IMRT or 3D-CRT**

Following a urethrectomy with suspected microscopic disease, positive lymph nodes, or positive margins.

##### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 39 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### ***Recurrent disease*** <sup>(36)</sup>

#### **Indications for IMRT or 3D-CRT**

For areas of gross recurrent disease:

##### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 41 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Penile Cancer** <sup>(37)</sup>

### ***T1-2N0 or T3-4 or LN positive (organ preservation/nonsurgical)***

#### **Indications for IMRT or 3D-CRT**

##### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 39 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### **Indications for Brachytherapy** <sup>(37,38)</sup>

#### **Fractionation**

- In T1-2N0 patients following a circumcision, monotherapy treatment using an interstitial implant in patients with no metastatic disease

### **Postoperative Treatment** <sup>(37)</sup>

#### **Indications for IMRT or 3D-CRT**

Following a penectomy with:

- Suspected microscopic disease **OR**
- Positive lymph nodes **OR**
- Positive margins **OR**
- Gross residual disease

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 39 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### **Testicular Cancer** <sup>(39)</sup>

**\*Note:** The mean dose of radiation to sensitive organs may be lower when using 3D-CRT compared to IMRT and IMRT is therefore not necessary.

### **Pure Seminoma (Stage IA/IB)**

#### **Indications for 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 11 fractions using **3D-CRT** for patients with no metastatic disease

### **Pure Seminoma (Stage IIA/IIB)**

#### **Indications for 3D-CRT**

#### **Fractionation**

- Conventional Fractionation

- Treatment in up to 20 fractions for patients with no metastatic disease

## GYNECOLOGICAL CANCERS (40)

### General

**\*Note:** Treatment with additional fractions of **IMRT or 3D-CRT** may be approved (following manual review by a physician reviewer) in select cases including:

- **A Parametrial/Pelvic Sidewall Boost** - for patients with bulky parametrial/pelvic sidewall disease.
- **A Lymph Node Boost** - for patients with grossly positive nodal disease.
- **A Gross Residual Disease Boost** - for patients with gross residual disease postoperatively.

### Cervical Cancer (41,42)

#### *Postoperative (Post-Hysterectomy)*

#### Indications for IMRT or 3D-CRT and a Brachytherapy Boost

##### Fractionation

- Conventional Fractionation
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease followed by a **Brachytherapy boost** in cases of close or positive margin at the vaginal cuff
    - An **HDR vaginal cuff boost** in up to 5 insertions
    - An **LDR vaginal cuff boost** in up to 2 insertions

#### *Intact cervix (Nonsurgical)*

#### Indications for IMRT or 3D-CRT and a Brachytherapy Boost

##### Fractionation

- Conventional Fractionation
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease followed by a **Brachytherapy boost** with either
    - An **HDR boost** in up to 5 insertions
    - An **LDR boost** in up to 2 insertions

Cervical cancer - See section on IORT

## **Endometrial Cancer** <sup>(43)</sup>

### ***Postoperative (Post-Hysterectomy)*** <sup>(44)</sup>

#### **Indications for Brachytherapy Alone**

##### **Fractionation**

- **HDR vaginal cuff Brachytherapy** in up to 5 insertions
- **LDR vaginal cuff Brachytherapy** in up to 2 insertions

#### **Indications for IMRT or 3D-CRT and a Brachytherapy Boost**

##### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease followed by a **Brachytherapy boost** with either
    - An **HDR vaginal cuff boost** in up to 5 insertions
    - An **LDR vaginal cuff boost** in up to 2 insertions

### ***Nonsurgical (Inoperable)***

#### **Indications for IMRT/3D-CRT with a Brachytherapy Boost OR Brachytherapy alone**

Treatment of medically inoperable uterine cancer is determined by the risk of extrauterine spread.

##### **Fractionation**

- **IMRT/3D-CRT with a Brachytherapy boost**
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease followed by a **Brachytherapy boost** with either
    - An **HDR Brachytherapy Boost** in up to 5 insertions
    - An **LDR Brachytherapy Boost** in up to 2 insertions
- **Brachytherapy alone**
  - An **HDR Brachytherapy Boost** in up to 6 insertions
  - An **LDR Brachytherapy** in up to 2 insertions

Endometrial cancer - See section on IORT

## **Vulvar Cancer** <sup>(45)</sup>

**\*Note:** Brachytherapy can sometimes be used as a boost to treat anatomically amenable primary tumors and may be approved (following manual review by a physician reviewer).

### ***Nonsurgical (Inoperable)***

#### **Indications for IMRT or 3D-CRT**

##### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 36 fractions using **IMRT or 3D-CRT** for unresectable patients with no metastatic disease

### ***Postoperative***

#### **Indications for IMRT or 3D-CRT**

##### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT** postoperatively for patients with no metastatic disease

### **Vaginal Cancer** <sup>(46)</sup>

#### ***Very Early Nonsurgical (Inoperable)***

##### **Indications for Brachytherapy alone**

Treatment of very-early-stage vaginal cancers (<5 mm) for patients with no metastatic disease

##### **Fractionation**

- Intra-cavitary **Brachytherapy** alone may be used in up to 8 fractions of HDR
- Intra-cavitary **Brachytherapy** alone may be used in up to 4 fractions of LDR

### ***Nonsurgical (Inoperable)***

#### **Indications for IMRT/3D-CRT and a Brachytherapy Boost**

##### **Fractionation**

- Conventional Fractionation
  - Treatment in up 28 fractions with **IMRT/3D-CRT** for patients with no metastatic disease followed by
    - **HDR Brachytherapy** in up to 10 fractions
    - **LDR Brachytherapy** in up to 4 fractions

## HEAD AND NECK CANCERS

### Oral Cavity Cancer <sup>(47)</sup>

#### *Organ preservation/nonsurgical*

#### Indications for IMRT or 3D-CRT

##### Fractionation

- Conventional Fractionation
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

**\*Note:** For T1–T2 simple lip lesions, please see sections on Basal Cell and Squamous Cell Skin Cancers).

#### Indications for Brachytherapy

Treatment using **Brachytherapy** as monotherapy or in combination with **IMRT or 3D-CRT** for patients with no metastatic disease:

##### Fractionation

- LDR (low dose-rate) interstitial **Brachytherapy**:
  - In a single fraction as an LDR boost in combination with **IMRT or 3D-CRT** in up to 25 fractions **OR**
  - In a single fraction as LDR monotherapy**OR**
- HDR (high dose-rate) interstitial **Brachytherapy**:
  - In 7 fractions as an HDR boost in combination with **IMRT or 3D-CRT** in up to 25 fractions **OR**
  - In 10 fractions as HDR monotherapy

### *Postoperative Treatment*

#### Indications for IMRT or 3D-CRT

##### Fractionation

- Conventional Fractionation
  - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### Oropharynx Cancer <sup>(47)</sup>

#### *Organ preservation/nonsurgical*

## **Indications for IMRT or 3D-CRT**

### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## ***Postoperative Treatment***

### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Hypopharynx Cancer** <sup>(47)</sup>

### ***Organ preservation/nonsurgical***

#### **Indications for IMRT or 3D-CRT**

##### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## ***Postoperative Treatment***

### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Nasopharynx Cancer** <sup>(47)</sup>

### ***Organ preservation/nonsurgical***

#### **Indications for IMRT or 3D-CRT**

##### **Fractionation**

- Conventional Fractionation

- Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with or without metastatic disease <sup>(48)</sup>

## **Glottic Larynx Cancer** <sup>(47)</sup>

### ***Organ preservation/nonsurgical***

#### **Indications 3D-CRT**

**\*Note:** For early glottic laryngeal cancers, IMRT is not considered medically necessary when the cervical lymph nodes are not being treated.

#### **Fractionation**

- Conventional Fractionation
  - **Tis, N0**
    - Treatment in up to 27 fractions of **3D-CRT OR** up to 33 fractions of **3D-CRT**
  - **T1, N0**
    - Treatment in up to 25 fractions of **3D-CRT OR** up to 33 fractions of **3D-CRT**
  - **T2, N0**
    - Treatment in up to 29 fractions of **3D-CRT OR** in up to 35 fractions of **3D-CRT**

#### **Indications for IMRT or 3D-CRT**

Treatment using **Intensity Modulated Radiation Therapy (IMRT) or 3D-Conformal Radiation Therapy (3D-CRT)** is considered medically necessary for glottic larynx when the cervical lymph nodes are positive **OR** for T1N0 and T2N0 when cervical lymph node chain involvement is suspected **AND** the lymph nodes are being treated in the treatment plan.

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### ***Postoperative Treatment***

#### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Supraglottic Larynx Cancer** <sup>(47)</sup>

### ***Organ preservation/nonsurgical***

## **Indications for IMRT or 3D-CRT**

### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## ***Postoperative Treatment***

### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Salivary Gland Cancer <sup>(47)</sup>**

### ***Organ preservation/nonsurgical***

#### **Indications for IMRT or 3D-CRT**

##### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## ***Postoperative Treatment***

### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Ethmoid and Maxillary Sinus Cancer <sup>(47)</sup>**

### ***Organ preservation/nonsurgical***

#### **Indications for IMRT or 3D-CRT**

##### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## ***Postoperative Treatment***

### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Unknown Primary Head and Neck Cancer <sup>(47)</sup>**

### ***Organ preservation/nonsurgical***

#### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## ***Postoperative Treatment***

### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

Head and Neck cancer - See section on **HYPERTHERMIA**

## **LUNG CANCER**

### **Non-Small Cell Lung Carcinoma (NSCLC) <sup>(49)</sup>**

#### ***Early Stage I – IIA Non-Small Cell Lung Cancer (Nonsurgical)***

#### **Indications for SBRT <sup>(50)</sup>**

#### **Fractionation**

- Hypofractionation
  - Treatment in up to 5 fractions using **SBRT** for patients with tumors  $\leq 5$  cm with no metastatic disease

## **Indications for IMRT**

### **Fractionation**

- Hypofractionation
  - Treatment in up to 10 fractions using **IMRT** for patients with no metastatic disease
  - Treatment in up to 15 fractions using **IMRT** for patients with no metastatic disease <sup>(51,52)</sup>

## **Indications for 3D-CRT**

### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 35 fractions using **3D-CRT** for patients with no metastatic disease

## **Stage IIB-III Non-Small Cell Lung Cancer (Nonsurgical)**

### **Indications for IMRT or 3D-CRT <sup>(53)</sup>**

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease
- Hypofractionation <sup>(54)</sup>
  - Treatment in up to 15 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Stage IIIA Non-Small Cell Lung Cancer (Preoperative)**

### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation
  - Treatment preoperatively in up to 27 fractions using **IMRT or 3D-CRT** for patients that proceed to surgery and have no metastatic disease
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients that have preoperative radiation, and additional radiation is needed after surgery, in patients with no metastatic disease

## **Stage IIIA Non-Small Cell Lung Cancer (Postoperative)**

### **Indications for IMRT or 3D-CRT**

#### **Fractionation**

- Conventional Fractionation

- Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **Small Cell Lung Carcinoma (SCLC) <sup>(55)</sup>**

### ***Limited Stage Small Cell Lung Cancer (Nonsurgical)***

**\*Note:** Treatment principles of SBRT for SCLC are similar to those for NSCLC

#### **Indications for SBRT (for stages I or IIA)**

##### **Fractionation**

- Hypofractionation
  - Treatment in up to 5 fractions using **SBRT** for patients with tumors ≤5 cm with no metastatic disease.

#### **Indications for IMRT or 3D-CRT**

##### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease
- Hyperfractionation
  - Treatment in up to 30 fractions given BID (twice daily) using **IMRT or 3D-CRT** for patients with no metastatic disease
  - Treatment in up to 40 fractions given BID (twice daily) using **IMRT or 3D-CRT** for patients with no metastatic disease <sup>(56)</sup>
- Hypofractionation <sup>(57)</sup>
  - Treatment in up to 10 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

### ***Limited Stage Small Cell Lung Cancer (Postoperative)***

**\*Note:** Treatment principles for SCLC are similar to those for NSCLC.

#### **Indications for IMRT or 3D-CRT**

For postoperative patients with N1 or N2 disease.

##### **Fractionation**

- Conventional Fractionation

- Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

For guidelines regarding Prophylactic Cranial Irradiation (PCI), see the **PCI section of CNS tumors**.

## ***Extensive Stage SCLC***

### **Indications for IMRT or 3D-CRT**

For selected patients with complete response or good response to systemic therapy.

#### **Fractionation**

- Treatment in up to 10 fractions using **IMRT or 3D-CRT**
- Treatment in up to 35 fractions using **IMRT or 3D-CRT**

**\*Note:** For guidelines regarding Prophylactic Cranial Irradiation (PCI), see the **PCI section of CNS tumors**.

## **Malignant Pleural Mesothelioma (Postoperative)**

### ***Indications for IMRT or 3D-CRT*** <sup>(58)</sup>

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 30 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

## **LYMPHOMA**

### **Hodgkin's Lymphoma – when combined with chemotherapy** <sup>(59)</sup>

#### ***Indications for IMRT or 3D-CRT***

Treatment using **Intensity Modulated Radiation Therapy (IMRT)** is considered medically necessary with combined modality therapy (chemotherapy) **ONLY** for treatment of lymphomas of the head/neck & mediastinum.

Treatment using **3D-Conformal Radiation Therapy (3D-CRT)** is considered medically necessary with combined modality therapy (chemotherapy) for treating lymphomas in all other regions of the body.

#### **Fractionation**

- Conventional Fractionation

## Molina Clinical Policy

### Radiation Therapy Services: MEDICARE (Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)

#### Policy No. 463b

Last Approval: 02/25/2026

Next Review Due By: December 2026



- For patients with **non-bulky disease (stage I–II)**, treatment in up to 20 fractions for patients with no metastatic disease
- For patients with **non-bulky disease (stage IB & IIB)**, treatment in up to 20 fractions for patients with no metastatic disease
- For patients with **bulky disease (all stages)**, treatment in up to 20 fractions for patients with no metastatic disease
- For patients with a **partial response/refractory disease (Deauville 4–5)**, treatment in up to 30 fractions for patients with no metastatic disease

## Hodgkin's Lymphoma - Radiation as Monotherapy <sup>(59)</sup>

### **Indications for IMRT or 3D-CRT**

Treatment using **Intensity Modulated Radiation Therapy (IMRT)** is considered medically necessary as monotherapy (without chemotherapy) **ONLY** for treatment of lymphomas of the head/neck & mediastinum.

Treatment using **3D-Conformal Radiation Therapy (3D-CRT)** is considered medically necessary as monotherapy (without chemotherapy) for treating lymphomas in all other regions of the body.

### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 24 fractions for patients with no metastatic disease. The treatment of Hodgkin's Lymphoma with radiotherapy alone is uncommon except for patients with Nodular Lymphocyte Predominant Hodgkin's Lymphoma (NLPHL)

## Non-Hodgkin's Lymphoma (B-cell) <sup>(60)</sup>

### **Indications for IMRT or 3D-CRT**

Treatment using **Intensity Modulated Radiation Therapy (IMRT)** is considered medically necessary **ONLY** for treatment of lymphomas of the head/neck & mediastinum.

Treatment using **3D-Conformal Radiation Therapy (3D-CRT)** is considered medically necessary for treating lymphomas in all other regions of the body.

### **Fractionation**

- Conventional Fractionation
  - For patients with **Follicular Lymphoma (FL)**, treatment in up to 20 fractions for patients with no metastatic disease
  - For patients with **Extranodal Marginal Zone Lymphoma (EMZL) of the stomach**, treatment in up to 16 fractions for patients with no metastatic disease
  - For patients with **Extranodal Marginal Zone Lymphoma (EMZL) of the orbit and salivary gland**, treatment in up to 16 fractions for patients with no metastatic disease

## Molina Clinical Policy

### Radiation Therapy Services: MEDICARE (Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT) Policy No. 463b

Last Approval: 02/25/2026

Next Review Due By: December 2026



- For patients with a **Mantle Cell Lymphoma (MCL)**, treatment in up to 24 fractions for patients with no metastatic disease
- For patients with a **Diffuse Large B-Cell Lymphoma (DLBCL)**, treatment in up to 33 fractions for patients with no metastatic disease
- For patients with a **High-Grade B-cell Lymphoma (HGBL)**, treatment in up to 33 fractions for patients with no metastatic disease
- For patients with a **Primary Mediastinal B-cell Lymphoma (PMBL)**, treatment in up to 33 fractions for patients with no metastatic disease

## Non-Hodgkin's Lymphoma (T-cell) <sup>(61)</sup>

### *Indications for IMRT or 3D-CRT*

Treatment using **Intensity Modulated Radiation Therapy (IMRT)** is considered medically necessary **ONLY** for treatment of lymphomas of the head/neck & mediastinum.

Treatment using **3D-Conformal Radiation Therapy (3D-CRT)** is considered medically necessary for treating lymphomas in all other regions of the body.

### **Fractionation**

- Conventional Fractionation
  - For patients with **Peripheral T-Cell Lymphoma (PTCL), including Extranodal Nasal/NK T-Cell Lymphoma (ENKL; previously known as Lethal Midline Granuloma)** treatment in up to 33 fractions for patients with no metastatic disease
  - For patients with **Breast Implant-Associated Anaplastic Large Cell Lymphoma (BIA-ALCL) and Post-Transplant Lymphoproliferative Disorders (PTLD)**, treatment in up to 24 fractions for patients with no metastatic disease

## Primary Cutaneous Lymphoma (B/T-cell) <sup>(62)</sup>

### *Indications for Electrons, Low Energy X-rays, and 2/3-D CRT*

Treatment using **electrons** or **low energy X-rays (~100 kV)** is considered medically necessary for Primary Cutaneous Lymphomas. <sup>(63)</sup> For certain body surfaces, treatment with higher energy photon fields (**2D or 3D-CRT**) may be required.

### **Fractionation**

- Conventional Fractionation
  - For patients with **Mycosis Fungoides (MF) and Sezary Syndrome (SS)**, treatment in up to 20 fractions for patients with no metastatic disease
  - For patients with **Primary Cutaneous Anaplastic Large Cell Lymphoma (PC-ALCL)**, treatment in up to 20 fractions for patients with no metastatic disease
  - For patients with **Primary Cutaneous Follicle Center Lymphoma (PCFCL) and Primary Cutaneous Marginal Zone Lymphoma (PCMZL)**, treatment in up to 20 fractions for patients with no metastatic disease

- For patients with **Primary cutaneous CD30+ T-cell Lymphoproliferative Disorders (PTCL)**, treatment in up to 28 fractions for patients with no metastatic disease
- For patients with **Primary Cutaneous NK/T-Cell Lymphoma (PCNK/TCL)**, treatment in up to 33 fractions for patients with no metastatic disease <sup>(63)</sup>
- For patients requiring **Total Skin Electron Beam Therapy (TSEBT)**, treatment in up to 24 fractions for patients with no metastatic disease

## **METASTATIC CANCER**

### **Palliation of Non-Oligo Metastatic Disease**

#### ***Palliation of an organ, soft tissue mass, or non-spinal bone metastasis***

##### **Indications for 3D-CRT**

###### **Fractionation**

- Palliative Fractionation
  - For palliative treatment to an **organ or soft tissue mass** in the body using up to 15 fractions of **3D-CRT** <sup>(64,65)</sup>
  - For palliative treatment to a **non-spinal bone** (i.e., femur, humerus, pelvis, etc.) in 10 fractions, 5 fractions, or in a single fraction of **3D-CRT** <sup>(66)</sup>
  - For palliative treatment of metastatic **Head and Neck cancers** in twice a day fractions (BID) for 2 consecutive days (4 fractions total) of **IMRT** (i.e., the quad shot) <sup>(64,65)</sup>

Liver Metastases – See section on

###### **SIRT**

#### ***Palliation of Spinal Bone Metastases***

##### **Indications for SBRT**

For **Spinal Metastases ONLY** when **ALL** of the following apply:

- There are painful MRI confirmed spinal metastases **AND**
- There are no more than 3 consecutive spinal segments that are included in the target radiation treatment volume **AND**

- There is no Spinal Instability Neoplastic Score (SINS) >12 (i.e., SINS unstable) **OR** neurologic deficits due to malignant epidural spinal cord compression **OR** cauda equina syndrome

#### **Fractionation** <sup>(67)</sup>

- Treatment in 2 fractions using **SBRT** to the Spinal Metastases

#### **Indications for 3D-CRT**

#### **Fractionation** <sup>(68)</sup>

- Palliative treatment to a **spinal bone** in 10 fractions, 5 fractions, or in a single fraction of **3D-CRT**

### ***Palliation of Brain Metastases***

#### **Indications for Fractionated SRS (SBRT)** <sup>(6)</sup>

#### **Fractionation for Non-surgical and Postoperative patients**

- Treatment in a 1 fraction using **SRS**
- Treatment in 2 to 5 fractions using Fractionated SRS (**SBRT**)

#### **Indications for Whole Brain IMRT** <sup>(6,55)</sup>

For patients only when a hippocampal avoidance (HA) whole brain **IMRT** technique is used

#### **Fractionation**

- Whole brain treatment in up to 10 fractions using **IMRT**

#### **Indications for Whole Brain 3D-CRT** <sup>(6)</sup>

#### **Fractionation**

- Whole brain treatment in up to 10 fractions using **3D-CRT**

### **Treatment of Oligometastatic Disease** <sup>(69)</sup>

#### ***Indications for SBRT***

Oligometastatic Disease (OMD) is limited metastatic disease in a patient with a total of ≤5 metastatic tumors present at the time of the initial cancer diagnosis or within 3 months of the initial treatment.

#### **Fractionation**

- Hypofractionation
  - Treatment in up to 5 fractions using **SBRT**

**\*Note:** Sufficient full body radiology documentation explaining the extent of the metastatic disease has been provided with either with a PET/CT scan report **OR** With CT scan reports of

the Chest, Abdomen, & Pelvis). These scans and their reports must be recent and performed no more than 2 months prior to the Treatment Start Date (TSD)

## **Treatment of Oligoprogressive Disease** <sup>(69)</sup>

### ***Indications for SBRT***

Oligoprogressive Disease (OPD) is defined as the development of limited metastatic tumor progression, generally but not always limited to 1-5 progressing metastases anywhere in the body (non-brain) when:

- New limited metastases (or limited progression of prior metastases) have developed after an initially successful course of systemic therapy was given to a patient with metastatic disease **AND**
- The primary tumor and other metastatic tumors are controlled with no progression

### **Fractionation**

- Hypofractionation
  - Treatment in up to 5 fractions using **SBRT**

**\*Note:** Sufficient full body radiology documentation explaining the extent of the metastatic disease has been provided with either a PET/CT scan report **OR** With CT scan reports of the Chest, Abdomen, & Pelvis. These scans and their reports must be recent and performed no more than 2 months prior to the Treatment Start Date (TSD).

## **MYELOMA**

### **Solitary Plasmacytoma** <sup>(70)</sup>

#### ***Definition***

**Solitary Plasmacytoma (SP)** is a rare plasma cell cancer that involves a single tumor of abnormal plasma cells in a one bone or soft tissue site.

#### ***Indications for 3D-CRT***

##### **Fractionation**

- Conventional Fractionation:
  - Treatment in up to 25 fractions using **3D-CRT** for patients with no metastatic disease

### **Multiple Myeloma** <sup>(70)</sup>

#### ***Definition***

**Multiple Myeloma (MM)** is a plasma cell cancer that involves multiple tumors of abnormal plasma cells in different locations.

## ***Indications for 3D-CRT***

### **Fractionation**

- Palliative Fractionation:
  - Treatment in up to 15 fractions using **3D-CRT**

## **NON-CANCEROUS CONDITIONS**

Several non-cancerous conditions were previously discussed in several prior sections of this guideline. These include:

- **Acoustic Neuroma (Vestibular Schwannoma)**
- **Arteriovenous Malformations**
- **Craniopharyngioma**
- **Desmoid Tumor (Aggressive Fibromatosis)**
- **Gynecomastia**
- **Pituitary Adenoma**
- **Trigeminal Neuralgia**

## **Indications for Other Non-Cancerous Conditions** <sup>(71,72)</sup>

- **Carcinoid tumor:** Treatment in up to 30 fractions using 2D or 3D-CRT <sup>(73)</sup>
- **Coronary artery disease:** Intravascular brachytherapy treatment using a single fraction using High Dose Rate (HDR); Brachytherapy is medically necessary to treat coronary artery disease as part of a percutaneous coronary intervention (PCI) for any of the following <sup>(74)</sup>:
  - In-stent re-stenosis in a bare-metal stent
  - Treatment of a native coronary artery or a saphenous vein graft to prevent re-stenosis
  - Recurrent drug-eluting stent in-stent restenosis
- **Dupuytren's contracture (palmar fibromatosis):** Treatment in up to 10 fractions using electrons, 2D, 3D-CRT, or superficial radiation therapy for progressive disease
- **Graves' ophthalmopathy:** Treatment in up to 10 fractions using 2D, 3D-CRT, or IMRT <sup>(75)</sup>
- **Hemangiomas** (brain, spinal cord, subglottis, glottis, liver, GI tract, urinary tract, joints, and orbit): Treatment in up to 25 fractions using 2D, 3D-CRT or IMRT and in 1 to 5 fractions using SRS or SBRT <sup>(76)</sup>

## Molina Clinical Policy

### Radiation Therapy Services: MEDICARE (Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT) Policy No. 463b

Last Approval: 02/25/2026

Next Review Due By: December 2026



- **Heterotopic ossification (bone):** Treatment in a single fraction preoperatively or postoperatively using 2D, 3D-CRT, or superficial radiation therapy <sup>(77)</sup>
- **Keloids:** Treatment in up to 5 fractions postoperatively using 2D (i.e., superficial radiation therapy, orthovoltage radiation therapy, or electron beam therapy), 3D-CRT or HDR brachytherapy <sup>(78)</sup>
- **Langerhans cell histiocytosis (LCH):** for localized growth: Treatment in up to 28 fractions using 2D or 3D-CRT <sup>(79)</sup>
- **Lentigo maligna (melanoma in situ), Hutchinson's melanotic freckle, or circumscribed precancerous melanosis of Dubreuilh:** Treatment in up to 30 fractions (skin) using 2D (i.e., superficial radiation therapy or orthovoltage radiation therapy or electron beam therapy) <sup>(80)</sup>
- **Orbital pseudotumor (lymphoid hyperplasia):** Treatment in 15 fractions using 2D, 3D-CRT, or IMRT <sup>(81)</sup>
- **Paraganglioma** (including carotid body, glomus jugulare, and glomus tympanicum tumors, organ of Zuckerkandl, pheochromocytoma, and pulmonary and vagal paragangliomas): Treatment in up to 28 fractions of 2D, 3D-CRT, or IMRT or up to 5 fractions of SBRT <sup>(83,84)</sup>
- **Pigmented villonodular synovitis:** Treatment in up to 28 fractions using 2D or 3D-CRT <sup>(85)</sup>
- **Plantar fibromatosis (Ledderhose disease):** Treatment in up to 10 fractions using 2D or 3D-CRT <sup>(88)</sup>
- **Pterygium:** Treatment in up to 6 fractions using brachytherapy with an SR-90 or Y-90 eye applicator <sup>(89)</sup>
- **Splenomegaly** (hypersplenism often secondary to Myelofibrosis): Treatment in up to 10 fractions using 2D or 3D-CRT <sup>(90)</sup>
- **Total Body Irradiation (TBI):** Treatment in up to 12 fractions using 2D, 3D-CRT, or IMRT <sup>(91,92)</sup>
- **Ventricular tachycardia:** Treatment in a single fraction of SBRT <sup>(93,94)</sup>

Radiation therapy to treat any non-cancer indication other than those listed above (e.g., osteoarthritis, plantar fasciitis) is considered **experimental, investigational, and unproven** due to insufficient evidence in the peer-reviewed medical literature to establish long-term safety, efficacy, and effect on net health outcomes.

## PALLIATION OF A PRIMARY TUMOR (NON-METASTATIC)

### Indications for 3D-CRT

## Fractionation

- Palliative Fractionation
  - Palliative treatment of a **primary organ tumor** in up to 15 fractions of **3D-CRT** (to slow progression of the local disease or to palliate symptoms) <sup>(64,65)</sup>
  - For palliative treatment of **Head and Neck cancers** in twice a day fractions (BID) for 2 consecutive days (4 fractions total) of **IMRT** (i.e., the quad shot) <sup>(95,96)</sup>

## PEDIATRIC MALIGNANCIES

All treatments (i.e., 2D/3D-CRT, IMRT, SBRT, SRS, IORT, and Brachytherapy) will be approved for all pediatric cancer patients ( $\leq 18$  years old). Patients  $< 21$  years old with cancers that display the same histology as common pediatric cancers may be approved (following manual review by a physician reviewer) in select cases. <sup>(97)</sup>

## RE-IRRADIATION <sup>(98)</sup>

**Re-irradiation** is defined as the use of additional radiation treatment to treat an area of the body that has already received prior radiation to that same area.

The term "re-irradiation" does not apply to situations where a patient has received radiation treatment to one area of the body (i.e. the lung) and now requires radiation to a completely separate area of the body (i.e. the brain).

Treatments such as IMRT, IORT, Brachytherapy, SRS, SBRT, and Proton Beam are considered medically necessary in cases of re-irradiation since the organs in the treatment area are usually at or near their maximum tolerance levels. Greater accuracy with treatments such as IMRT, IORT, Brachytherapy, SRS, SBRT, and Proton Beam are therefore required to improve patient safety and decrease the toxicity as much as possible.

The radiation dose and the number of fractionations prescribed for each patient receiving re-irradiation will be different and based on that patient's prior treatment history. The dose and the number of fractionations will be left to the discretion on the treating physician and when possible, based on peer reviewed literature

## SARCOMA

### Soft Tissue Sarcoma: Extremity/Body Wall/Head and Neck (Pre-Operative)

### ***Indications for IMRT and 3D-CRT*** <sup>(99,100)</sup>

#### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

**\*Note:** Treatment with additional fractions as a boost of **IMRT or 3D-CRT** may be approved (following manual review by a physician reviewer) in select cases with positive margins.

## **Soft Tissue Sarcoma: Extremity/Body Wall/Head and Neck (Post-Operative)**

### ***Indications for IMRT or 3D-CRT*** <sup>(100)</sup>

#### **Fractionation**

- Conventional Fractionation
  - For patients with an **R0 resection**, treatment in up to 33 fractions (which is the sum of 28 fractions using **IMRT or 3D-CRT** followed by a boost of 5 fractions using **IMRT or 3D-CRT**) for patients with no metastatic disease
  - For patients with an **R1 resection**, treatment in up to 37 fractions (which is the sum of 28 fractions using **IMRT or 3D-CRT** followed by a boost of 9 fractions using **IMRT or 3D-CRT**) for patients with no metastatic disease

### ***Indications for Brachytherapy*** <sup>(100)</sup>

#### **Fractionation**

- For positive margins (treatment with a combined modality approach)
  - Treatment of up to 28 fractions using **IMRT or 3D-CRT** and a boost using a single fraction of **LDR Brachytherapy**
  - Treatment of up to 28 fractions using **IMRT or 3D-CRT** and a boost of up to 10 fractions using **HDR Brachytherapy**
- For negative margins (treatment with a Brachytherapy alone approach)
  - Treatment using 1 fraction of **LDR Brachytherapy**
  - Treatment using up to 10 fractions of **HDR Brachytherapy**

## **Soft Tissue Sarcoma: Extremity/Body Wall/Head and Neck (Unresectable)**

### ***Indications for IMRT or 3D-CRT*** <sup>(100)</sup>

### **Fractionation**

- Conventional Fractionation
  - For patients with unresectable disease, treatment in up to 45 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

Soft Tissue Sarcoma - See section on **IORT**

## **Desmoid Tumors (Aggressive Fibromatosis)**

***Indications for IMRT or 3D-CRT*** <sup>(100)</sup>

### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 31 fractions using **IMRT or 3D-CRT**

## **Retroperitoneal/Abdominal Sarcoma (Preoperative)**

***Indications for IMRT or 3D-CRT*** <sup>(100)</sup>

### **Fractionation**

- Conventional Fractionation
  - Treatment in up to 28 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease

Retroperitoneal Sarcoma - See section on **IORT**

## **Kaposi Sarcoma**

***Indications for Electron Beam, Superficial Radiation Therapy (SRT), Orthovoltage, 2D/3D External Beam Radiation Therapy, or IMRT*** <sup>(101)</sup>

### **Fractionation**

- Treatment in up to 20 fractions using **Electron Beam, SRT, Orthovoltage, 2D/3D external beam radiation therapy, or IMRT.**

## **SKIN CANCERS**

**\*Note:** Image guidance or IGRT (including ultrasound) is not considered medically necessary for treatment of skin cancer using electron beam, SRT or orthovoltage radiation.

## **Basal Cell (BCC) and Squamous (SCC) Carcinoma**

***Indications for 2D/3D-CRT or Electron Beam*** <sup>(102–104)</sup>

## **Fractionation**

- Hypofractionation
  - BCC and SCC skin cancers ≤ 2 cm (not including cancers of the nose & ear)
    - Treatment of up to 20 fractions using **2D or 3D-CRT or Electron Beam** for patients with no metastatic disease
- Conventional Fractionation
  - BCC and SCC skin cancers > 2 cm
  - BCC and SCC skin cancers of the nose & ear, any size
    - Treatment of up to 30 fractions **2D or 3D-CRT or Electron Beam** for patients with no metastatic disease.

## ***Indications for Superficial Radiation and Orthovoltage Radiation*** <sup>(105)</sup>

### **Fractionation**

- Conventional fractionation
  - Treatment of up to 25 fractions using **Superficial Radiation and Orthovoltage Radiation** for patients with no metastatic disease

## ***Indications for Brachytherapy*** <sup>(104,106)</sup>

### **Fractionation**

- Treatment of up to 10 fractions using **HDR Brachytherapy** (with Iridium-192) for patients with no metastatic disease

**\*Note:** The use of Electronic Brachytherapy is considered investigational and not medically necessary <sup>(102,103)</sup>

## ***Indications for IMRT*** <sup>(2,102,103)</sup>

Treatment using **Intensity Modulated Radiation Therapy (IMRT)** is considered medically necessary **ONLY** when the treatment includes a lymph node chain.

### **Fractionation**

- Conventional Fractionation
  - Treatment with up to 35 fractions using **IMRT** for patients with no metastatic disease

Basal Cell and Squamous Cell Skin Cancers - See section on **HYPERTHERMIA**

## **Melanoma of the Skin and Eye (Uveal)**

### ***Indications for IMRT or 2D/3D-CRT or Electron Beam of the Skin*** <sup>(107)</sup>

#### **Fractionation**

- **Unresectable Treatment**
  - For patients with unresectable disease, treatment of up to 35 fractions using **IMRT or 2D or 3D-CRT or Electron Beam** for patients with no metastatic disease
- **Postoperative Treatment**
  - For postoperative treatment of up to 33 fractions using **IMRT or 2D or 3D-CRT or Electron Beam** for patients with no metastatic disease

Melanoma of the Skin - See section on **HYPERTHERMIA**

### ***Indications for Brachytherapy of the Eye (Uveal)*** <sup>(108)</sup>

#### **Fractionation**

- Treatment using 1 fraction of plaque brachytherapy for patients with no metastatic disease

### **Merkel Cell Carcinoma (MCC)**

#### ***Indications for IMRT or 2D/3D-CRT or Electron Beam*** <sup>(109)</sup>

#### **Fractionation**

- Treatment for postoperative and unresectable disease in up to 33 fractions using **IMRT or 2D or 3D-CRT or Electron Beam** for patients with no metastatic disease

### **Dermatofibrosarcoma Protuberans (DFSP)**

#### ***Indications for 2D/3D External Beam Radiation Therapy or Electron Beam*** <sup>(110)</sup>

#### **Fractionation**

- For postoperative treatment in up to 33 fractions using **2D or 3D-CRT or Electron Beam**

## **THYMOMAS AND THYMIC CARCINOMAS**

### ***Indications for IMRT or 3D-CRT*** <sup>(111)</sup>

#### **Fractionation**

- **Unresectable disease**
  - Conventional Fractionation
    - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease.

- **Postoperative Disease**
  - Conventional Fractionation
    - Following an **R0 resection** with close margins, treatment in up to 25 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease.
    - Following an **R1 resection** with microscopically positive margins, treatment in up to 27 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease.
    - Following an **R2 resection** with grossly positive margins, treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease.

## THYROID

### Differentiated, Medullary or Poorly Differentiated (Non-Anaplastic) Thyroid Cancer

#### *Indications for IMRT or 3D-CRT* <sup>(112)</sup>

##### Fractionation

- **Unresectable disease**
  - Conventional Fractionation
    - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease.
- **Postoperative Disease**
  - Conventional Fractionation
    - Following an **R1 resection** with microscopically positive margins, treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease.
    - Following an **R2 resection** with grossly positive margins, treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease.

### Anaplastic Thyroid Cancer

#### *Indications for IMRT or 3D-CRT* <sup>(112)</sup>

##### Fractionation

- **Unresectable or salvage treatment following an R2 resection**
  - Conventional Fractionation
    - Treatment in up to 35 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease.
  - Hyperfractionation

- Treatment in up to 58 fractions delivered twice daily (BID) using **IMRT or 3D-CRT** for patients with no metastatic disease.
- **Postoperative treatment following an R0 resection or R1 resection**
  - Conventional Fractionation
    - Treatment in up to 33 fractions using **IMRT or 3D-CRT** for patients with no metastatic disease.
  - Hyperfractionation
    - Treatment in up to 55 fractions delivered twice daily (BID) using **IMRT or 3D-CRT** for patients with no metastatic disease.

## UNIQUE TREATMENT MODALITIES

### IORT

#### *Indications for IORT*

- For the treatment of **Cervical and Uterine Cancers** in 1 fraction only in the following scenarios <sup>(41,43)</sup>:
  - Unresectable disease **OR**
  - Residual disease (including positive margins) following surgery **OR**
  - Recurrent disease
- For the treatment of **Colon and Rectal Cancers** in 1 fraction only in the following scenarios <sup>(113,114)</sup>:
  - Unresectable disease **OR**
  - Residual disease (including positive margins) following surgery **OR**
  - Recurrent disease **OR**
  - Initial treatment of T4 tumors penetrating a fixed structure
- For the treatment of **Soft Tissue & Retroperitoneal Sarcoma** in 1 fraction only in the following scenarios <sup>(115)</sup>:
  - Residual disease (including positive margins) following surgery **OR**
  - Recurrent disease

**\*Note:** For **Breast Cancer**, Intraoperative Radiation Therapy (IORT) is not recommended

### HYPERTHERMIA

#### *Indications for Hyperthermia*

Up to 10 local hyperthermia treatments are considered medically necessary for **ANY** of the following indications:

- Recurrent melanoma of the skin <sup>(107)</sup> **OR**
- Recurrent basal cell carcinoma or squamous cell carcinoma of the skin **OR**
- A chest wall recurrence of breast cancer <sup>(116)</sup> **OR**
- Recurrent cervical lymph node metastases from head and neck cancer <sup>(117)</sup>

## **SIRT**

### ***Indications for SIRT***

For Selective Internal Radiation Therapy (SIRT) utilizing yttrium-90 (90Y) microspheres (TheraSphere, SIR-Spheres, or QuiremSpheres) to treat hepatocellular cancer please refer to ***MCP 181 Radioembolization (Selective Internal Radiation Therapy) for Liver Tumors.***

The use of SIRT for the treatment of all other conditions is considered investigational and not medically necessary.

## **CODING AND STANDARDS**

### **Codes**

0395T, 19294, 19296, 19297, 19298, 20555, 31643, 32701, 41019, 43499, 47999, 55860, 55862, 55865, 55875, 55899, 55920, 57155, 57156, 58346, 61796, 61797, 61798, 61799, 61800, 63620, 63621, 67218, 76145, 76873, 76965, 77011, 77261, 77262, 77263, 77280, 77285, 77290, 77293, 77295, 77299, 77300, 77301, 77306, 77307, 77316, 77317, 77318, 77321, 77331, 77332, 77333, 77334, 77336, 77338, 77370, 77371, 77372, 77373, 77387, 77399, , 77402, 77407, 77412, 77417, 77424, 77425, 77427, 77431, 77432, 77435, 77436, 77437, 77438, 77439, 77469, 77470, 77499, 77600, 77605, 77610, 77615, 77620, 77750, 77761, 77762, 77763, 77767, 77768, 77770, 77771, 77772, 77778, 77789, 77790, 77799, C2616, G0339, G0340, G0458

## **BACKGROUND**

Radiation Oncology is the specialty of medicine that utilizes high-energy ionizing radiation in the treatment of malignant neoplasms and certain non-malignant conditions. Radiation Oncology uses several distinct therapeutic modalities: Teletherapy or, 2D external beam radiation therapy

## Molina Clinical Policy

### Radiation Therapy Services: MEDICARE

(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)

#### Policy No. 463b

Last Approval: 02/25/2026

Next Review Due By: December 2026



(EBRT), 3D external beam radiation therapy (EBRT), electron beam therapy, intensity modulated radiation therapy (IMRT), brachytherapy, hyperthermia, proton beam therapy, carbon ion therapy, neutron beam therapy and stereotactic radiation.

Radiation Therapy Treatment Process:

- Consultation
- Simulation
- Treatment Planning
- Treatment Delivery

## SUMMARY OF EVIDENCE (2,99,122)

**3D-Conformal Radiation Therapy (3D-CRT):** This technique uses imaging to create a three-dimensional representation of the tumor, allowing for precise targeting of radiation. It is particularly useful for treating tumors in complex areas like the brain and spinal cord, where precision is crucial to minimize damage to surrounding healthy tissue.

**Intensity Modulated Radiation Therapy (IMRT):** IMRT is an advanced form of 3D-CRT that modulates the intensity of the radiation beams. This allows for even more precise targeting, which is beneficial for tumors located near sensitive structures. IMRT is commonly used for head and neck cancers, prostate cancer, and certain types of brain tumors.

**Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (SBRT):** These techniques deliver high doses of radiation in fewer sessions. SRS is typically used for brain tumors, while SBRT is used for tumors in the body, such as lung and liver cancers. The high precision of these methods reduces the risk of damage to surrounding tissues.

**Brachytherapy:** This involves placing radioactive sources directly into or near the tumor. It is often used for prostate cancer, cervical cancer, and certain types of breast cancer. Brachytherapy allows for high doses of radiation to be delivered to the tumor while sparing surrounding healthy tissue.

**Intraoperative Radiation Therapy (IORT):** IORT is administered during surgery, allowing for direct application of radiation to the tumor site. This technique is beneficial for certain types of cancers, such as pancreatic and colorectal cancers, where it can help to control local disease.

**Hypofractionation and Hyperfractionation:** Hypofractionation involves delivering larger doses of radiation over fewer sessions, while hyperfractionation involves smaller doses over more sessions. These approaches can be tailored to the specific needs of the patient and the type of cancer being treated.

## ANALYSIS OF EVIDENCE (2,99,122)

## Molina Clinical Policy

### Radiation Therapy Services: MEDICARE (Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT) Policy No. 463b

Last Approval: 02/25/2026

Next Review Due By: December 2026



**Type and Stage of Cancer:** Different types of radiation therapy are suitable for different cancers and stages. For example, 3D-Conformal Radiation Therapy (3D-CRT) and Intensity Modulated Radiation Therapy (IMRT) are commonly used for various cancers, while Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (SBRT) are used for more precise targeting of tumors in the brain and body.

**Location of the Tumor:** The location of the tumor plays a crucial role in determining the type of radiation therapy. Tumors near sensitive structures may benefit from IMRT due to its precision in modulating radiation intensity.

**Patient's Anatomy:** Factors such as breast separation in breast cancer patients can influence the choice of therapy. For instance, IMRT is considered medically necessary for patients with a breast separation of 25 cm or greater.

**Presence of Metastases:** The presence or absence of distant metastases can affect the choice of therapy. For example, certain therapies like SBRT and brachytherapy may not be considered medically necessary for patients with metastatic disease.

**Prior Treatments:** Previous treatments, including surgeries and chemotherapy, can impact the choice of radiation therapy. For instance, postoperative radiation therapy may be necessary for patients with positive surgical margins.

**Patient's Health and Performance Status:** The patient's overall health and performance status, such as ECOG performance status, can influence the choice of therapy. Hypofractionation or palliative fractionation may be considered for patients with poor performance status.

**Specific Clinical Scenarios:** Certain clinical scenarios, such as the need for a boost to the treatment area or the presence of specific genetic mutations, can dictate the choice of therapy. For example, accelerated partial breast irradiation (APBI) with brachytherapy is considered medically necessary for selected patients meeting specific criteria.

**Medical Necessity and Exclusions:** The guideline outlines specific indications and exclusions for each type of radiation therapy. For instance, intraoperative radiation therapy (IORT) is considered investigational and not medically necessary for certain cancers.

These considerations help ensure that the chosen radiation therapy is tailored to the patient's specific needs, maximizing effectiveness while minimizing potential side effects and damage to healthy tissues.

## APPROVAL HISTORY

**Molina Clinical Policy**  
**Radiation Therapy Services: MEDICARE**  
**(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)**  
**Policy No. 463b**

Last Approval: 02/25/2026

Next Review Due By: December 2026



- 02/25/2026** Added E/I/U statement for all non-cancerous indications other than those listed in the policy.
- 12/10/2025** Updated fractions according to societal guidance throughout policy; Radiation doses (i.e., Grays (Gy)) were removed; 'Exclusion' sections were removed; Palliative care indications were consolidated; Unnecessary wording was removed; Added a Summary of Evidence and Analysis of Evidence; Updated references
- 06/11/2025** Removed SIRT therapy guidelines for Hepatocellular Carcinoma and routed the criteria to reference MCP 181
- 12/11/2024** New Policy.

## REFERENCES

1. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Breast Cancer Version 6.2024 © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
2. ASTRO. Model Policies: Intensity Modulated Radiation Therapy (IMRT). *American Society for Radiation Oncology*. Published online June 30, 2024. Accessed November 13, 2024. <https://www.astro.org/ASTRO/media/ASTRO/Daily%20Practice/PDFs/IMRTMP.pdf>
3. Shaitelman SF, Anderson BM, Arthur DW, et al. Partial Breast Irradiation for Patients With Early-Stage Invasive Breast Cancer or Ductal Carcinoma In Situ: An ASTRO Clinical Practice Guideline. *Pract Radiat Oncol*. 2024;14(2):112-132. doi:10.1016/j.prro.2023.11.001
4. Vicini FA, Cecchini RS, White JR, et al. Long-term primary results of accelerated partial breast irradiation after breast-conserving surgery for early-stage breast cancer: a randomised, phase 3, equivalence trial. *The Lancet*. 2019;394(10215):2155-2164. doi:10.1016/S0140-6736(19)32514-0
5. Anderson B, Arthur D, Hannoun-Levi JM, et al. Partial breast irradiation: An updated consensus statement from the American brachytherapy society. *Brachytherapy*. 2022;21(6):726-747. doi:10.1016/j.brachy.2022.07.004
6. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Central Nervous System Cancers Version 5.2024. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
7. Halasz LM, Attia A, Bradfield L, et al. Radiation Therapy for IDH-Mutant Grade 2 and Grade 3 Diffuse Glioma: An ASTRO Clinical Practice Guideline. *Pract Radiat Oncol*. 2022;12(5):370-386. doi:10.1016/j.prro.2022.05.004
8. Gessler DJ, Neil EC, Shah R, et al. GammaTile® brachytherapy in the treatment of recurrent glioblastomas. *Neurooncol Adv*. 2022;4(1). doi:10.1093/noonl/vdab185
9. Smith K, Nakaji P, Thomas T, et al. Safety and patterns of survivorship in recurrent GBM following resection and surgically targeted radiation therapy: Results from a prospective trial. *Neuro Oncol*. 2022;24(Supplement\_6):S4-S15. doi:10.1093/noonc/noac133
10. Brun L, Mom T, Guillemin F, Puechmaille M, Khalil T, Biau J. The Recent Management of Vestibular Schwannoma Radiotherapy: A Narrative Review of the Literature. *J Clin Med*. 2024;13(6):1611. doi:10.3390/jcm13061611
11. Shah SN, Shah SS, Kaki P, Satti SR, Shah SA. Efficacy of Dose-Escalated Hypofractionated Radiosurgery for Arteriovenous Malformations. *Cureus*. 2024;16(1):e52514. doi:10.7759/cureus.52514
12. Hirata T, Umekawa M, Shinya Y, et al. Radiation-induced malignancies after stereotactic radiosurgery for brain arteriovenous malformations: a large single-center retrospective study and systematic review. *Neurosurg Rev*. 2024;47(1):870. doi:10.1007/s10143-024-03093-6
13. Xu R, Xie ME, Jackson CM. Trigeminal Neuralgia: Current Approaches and Emerging Interventions. *J Pain Res*. 2021;Volume 14:3437-3463. doi:10.2147/JPR.S331036
14. Kortmann RD. Different Approaches in Radiation Therapy of Craniopharyngioma. *Front Endocrinol (Lausanne)*. 2011;2:100. doi:10.3389/fendo.2011.00100

**Molina Clinical Policy**  
**Radiation Therapy Services: MEDICARE**  
**(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)**  
**Policy No. 463b**

Last Approval: 02/25/2026

Next Review Due By: December 2026



15. Lara-Velazquez M, Mehkri Y, Panther E, et al. Current Advances in the Management of Adult Craniopharyngiomas. *Current Oncology*. 2022;29(3):1645-1671. doi:10.3390/currncol29030138
16. Zhang LY, Guo W, Du HZ, et al. Brachytherapy in craniopharyngiomas: a systematic review and meta-analysis of long-term follow-up. *BMC Cancer*. 2024;24(1):637. doi:10.1186/s12885-024-12397-1
17. Ramos-Prudencio R, Pérez-Álvarez SI, Flores-Balcazar CH, et al. Radiotherapy for the treatment of pituitary adenomas: A dosimetric comparison of three planning techniques. *Reports of Practical Oncology & Radiotherapy*. 2020;25(4):586-593. doi:10.1016/j.rpor.2020.04.020
18. Minniti G, Osti MF, Niyazi M. Target delineation and optimal radiosurgical dose for pituitary tumors. *Radiation Oncology*. 2016;11(1):135. doi:10.1186/s13014-016-0710-y
19. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Small Cell Lung Cancer Version 3.2025 © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
20. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Rectal Cancer Version 4.2024. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
21. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Anal Carcinoma Version 3.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
22. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Colon Cancer Version 5.2024. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
23. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Esophageal and Esophagogastric Junction Cancers Version 4.2024. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
24. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Gastric Cancer Version 4.2024. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
25. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Pancreatic Adenocarcinoma Version 2.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
26. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Biliary Tract Cancers Version 1.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
27. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Hepatocellular Carcinoma Version 3.2024. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
28. Morgan SC, Hoffman K, Loblaw DA, et al. Hypofractionated Radiation Therapy for Localized Prostate Cancer: Executive Summary of an ASTRO, ASCO, and AUA Evidence-Based Guideline. *Pract Radiat Oncol*. 2018;8(6):354-360. doi:10.1016/j.prro.2018.08.002
29. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Prostate Cancer Version 1.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org. [https://www.nccn.org/professionals/physician\\_gls/pdf/prostate.pdf](https://www.nccn.org/professionals/physician_gls/pdf/prostate.pdf)
30. Natesan D, Carpenter DJ, Floyd W, et al. Effect of Large Prostate Volume on Efficacy and Toxicity of Moderately Hypofractionated Radiation Therapy in Patients With Prostate Cancer. *Adv Radiat Oncol*. 2021;7(2):100805. doi:10.1016/j.adro.2021.100805
31. Neerhut T, Grills R, Lynch R, Preece PD, McLeod K. Genitourinary toxicity in patients receiving TURP prior to hypofractionated radiotherapy for clinically localized prostate cancer: A scoping review. *Urologic Oncology: Seminars and Original Investigations*. 2024;42(6):165-174. doi:10.1016/j.urolonc.2024.02.011
32. Bodofsky S, Freeman RH, Hong SS, et al. Inflammatory bowel disease-associated malignancies and considerations for radiation impacting bowel: a scoping review. *J Gastrointest Oncol*. 2022;13(5):2565-2582. doi:10.21037/jgo-22-138

**Molina Clinical Policy**  
**Radiation Therapy Services: MEDICARE**  
**(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)**  
**Policy No. 463b**

Last Approval: 02/25/2026

Next Review Due By: December 2026



33. Pollack A, Walker G, Horwitz EM, et al. Randomized Trial of Hypofractionated External-Beam Radiotherapy for Prostate Cancer. *Journal of Clinical Oncology*. 2013;31(31):3860-3868. doi:10.1200/JCO.2013.51.1972
34. Kerkmeijer LGW, Groen VH, Pos FJ, et al. Focal Boost to the Intraprostatic Tumor in External Beam Radiotherapy for Patients With Localized Prostate Cancer: Results From the FLAME Randomized Phase III Trial. *Journal of Clinical Oncology*. 2021;39(7):787-796. doi:10.1200/JCO.20.02873
35. Aksnessæther BY, Solberg A, Klepp OH, et al. Does Prophylactic Radiation Therapy to Avoid Gynecomastia in Patients With Prostate Cancer Increase the Risk of Breast Cancer? *Int J Radiat Oncol Biol Phys*. 2018;101(1):211-216. doi:10.1016/j.ijrobp.2018.01.096
36. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Bladder Cancer Version 1.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
37. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Penile Cancer Version 1.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
38. Crook J, Ma C, Grimard L. Radiation therapy in the management of the primary penile tumor: an update. *World J Urol*. 2009;27(2):189-196. doi:10.1007/s00345-008-0309-5
39. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Testicular Cancer Version 2.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
40. Albuquerque K, Hrycushko BA, Harkenrider MM, et al. *Compendium of Fractionation Choices for Gynecologic HDR - An American Brachytherapy Society Task Group Report*. Vol 18. Elsevier Inc.; 2019:429-436. doi:10.1016/j.brachy.2019.02.008
41. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Cervical Cancer V.4.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
42. Chino J, Annunziata CM, Beriwal S, et al. Radiation Therapy for Cervical Cancer: Executive Summary of an ASTRO Clinical Practice Guideline. *Pract Radiat Oncol*. 2020;10(4):220-234. doi:10.1016/j.prr.2020.04.002
43. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Uterine Neoplasms V.3.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
44. Harkenrider MM, Abu-Rustum N, Albuquerque K, et al. Radiation Therapy for Endometrial Cancer: An American Society for Radiation Oncology Clinical Practice Guideline. *Pract Radiat Oncol*. 2023;13(1):41-66. doi:10.1016/j.prr.2022.09.002
45. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Vulvar Cancer Version 1.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
46. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Vaginal Cancer Version 5.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
47. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Head and Neck Cancers NCCN Evidence Blocks Version 2.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org. Accessed November 13, 2024. [https://www.nccn.org/professionals/physician\\_gls/pdf/head-and-neck.pdf](https://www.nccn.org/professionals/physician_gls/pdf/head-and-neck.pdf)
48. You R, Liu YP, Huang PY, et al. Efficacy and Safety of Locoregional Radiotherapy with Chemotherapy vs Chemotherapy Alone in de Novo Metastatic Nasopharyngeal Carcinoma: A Multicenter Phase 3 Randomized Clinical Trial. In: *JAMA Oncology*. Vol 6. American Medical Association; 2020:1345-1352. doi:10.1001/jamaoncol.2020.1808
49. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Non-Small Cell Lung Cancer Version 3.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
50. Videtic GMM, Donington J, Giuliani M, et al. Stereotactic body radiation therapy for early-stage non-small cell lung cancer: Executive Summary of an ASTRO Evidence-Based Guideline. *Pract Radiat Oncol*. 2017;7(5):295-301. doi:10.1016/j.prr.2017.04.014

**Molina Clinical Policy**  
**Radiation Therapy Services: MEDICARE**  
**(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)**  
**Policy No. 463b**

Last Approval: 02/25/2026

Next Review Due By: December 2026



51. Zeng KL, Poon I, Ung Y, et al. Accelerated Hypofractionated Radiotherapy for Centrally Located Lung Tumours Not Suitable for Stereotactic Body Radiotherapy or Chemoradiotherapy. *Clin Oncol (R Coll Radiol)*. 2023;35(2):e173-e181. doi:10.1016/j.clon.2022.11.013
52. Bogart JA, Hodgson L, Seagren SL, et al. Phase I study of accelerated conformal radiotherapy for stage I non-small-cell lung cancer in patients with pulmonary dysfunction: CALGB 39904. *J Clin Oncol*. 2010;28(2):202-206. doi:10.1200/JCO.2009.25.0753
53. Chun SG, Hu C, Choy H, et al. Impact of intensity-modulated radiation therapy technique for locally advanced non-small-cell lung cancer: A secondary analysis of the NRG oncology RTOG 0617 randomized clinical trial. *Journal of Clinical Oncology*. 2017;35(1):56-62. doi:10.1200/JCO.2016.69.1378
54. Iyengar P, Zhang-Velten E, Court L, et al. Accelerated Hypofractionated Image-Guided vs Conventional Radiotherapy for Patients With Stage II/III Non-Small Cell Lung Cancer and Poor Performance Status: A Randomized Clinical Trial. *JAMA Oncol*. 2021;7(10):1497-1505. doi:10.1001/jamaoncol.2021.3186
55. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Small Cell Lung Cancer Version 4.2025 © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
56. Grønberg BH, Killingberg KT, Fløtten Ø, et al. High-dose versus standard-dose twice-daily thoracic radiotherapy for patients with limited stage small-cell lung cancer: an open-label, randomised, phase 2 trial. *Lancet Oncol*. 2021;22(3):321-331. doi:10.1016/S1470-2045(20)30742-7
57. Zhou W, Wang P, Ti X, et al. Sequential Hypofractionated versus Concurrent Twice-Daily Radiotherapy for Limited-Stage Small-Cell Lung Cancer: A Propensity Score-Matched Analysis. *Cancers (Basel)*. 2022;14(16). doi:10.3390/cancers14163920
58. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Mesothelioma: Pleural Version 2.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
59. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Hodgkin Lymphoma Version 2.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
60. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for B-Cell Lymphomas Version 2.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
61. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for T-Cell Lymphomas Version 1.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
62. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Primary Cutaneous Lymphomas Version 2.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
63. Specht L, Dabaja B, Illidge T, Wilson LD, Hoppe RT. Modern radiation therapy for primary cutaneous lymphomas: Field and dose guidelines from the international lymphoma radiation oncology group. *Int J Radiat Oncol Biol Phys*. 2015;92(1):32-39. doi:10.1016/j.ijrobp.2015.01.008
64. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Palliative Care Version 2.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org. Accessed April 6, 2025. <https://www.nccn.org/guidelines/guidelines-detail?category=3&id=1454>
65. Williams GR, Manjunath SH, Butala AA, Jones JA. Palliative Radiotherapy for Advanced Cancers. *Surg Oncol Clin N Am*. 2021;30(3):563-580. doi:10.1016/j.soc.2021.02.007
66. Lutz S, Balboni T, Jones J, et al. Palliative radiation therapy for bone metastases: Update of an ASTRO Evidence-Based Guideline. *Pract Radiat Oncol*. 2017;7(1):4-12. doi:10.1016/j.ppro.2016.08.001
67. Alcorn S, Cortés AA, Bradfield L, et al. External Beam Radiation Therapy for Palliation of Symptomatic Bone Metastases: An ASTRO Clinical Practice Guideline. *Pract Radiat Oncol*. 2024;14(5):377-397. doi:10.1016/j.ppro.2024.04.018
68. Hahn C, Kavanagh B, Bhatnagar A, et al. Choosing Wisely: The American Society for Radiation Oncology's Top 5 list. *Pract Radiat Oncol*. 2014;4(6):349-355. doi:10.1016/j.ppro.2014.06.003
69. Jahraus CD, Wallner PE, Heron DE, et al. ACROPath Oligometastases: The American College of Radiation Oncology Clinical Pathway. *Cureus*. Published online November 20, 2024. doi:10.7759/cureus.74098

**Molina Clinical Policy**  
**Radiation Therapy Services: MEDICARE**  
**(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)**  
**Policy No. 463b**



Last Approval: 02/25/2026

Next Review Due By: December 2026

70. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Multiple Myeloma Version 1.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
71. Seegenschmiedt MH, Micke O, Muecke R. Radiotherapy for non-malignant disorders: State of the art and update of the evidence-based practice guidelines. *British Journal of Radiology*. 2015;88(1051). doi:10.1259/bjr.20150080
72. Jutkowitz E, Rieke K, Lucia Caputo E, et al. *Radiation Therapy for Benign Conditions: A Systematic Review.*; 2024.
73. Bilski M, Mertowska P, Mertowski S, et al. The Role of Conventionally Fractionated Radiotherapy and Stereotactic Radiotherapy in the Treatment of Carcinoid Tumors and Large-Cell Neuroendocrine Cancer of the Lung. *Cancers (Basel)*. 2021;14(1):177. doi:10.3390/cancers14010177
74. Detloff LR, Ho EC, Ellis SG, Ciezki JP, Cherian S, Smile TD. Coronary intravascular brachytherapy for in-stent restenosis: A review of the contemporary literature. *Brachytherapy*. 2022;21(5):692-702. doi:10.1016/j.brachy.2022.05.004
75. Beige A, Boustani J, Bouillet B, Truc G. Management of Graves' ophthalmopathy by radiotherapy: A literature review. *Cancer/Radiothérapie*. 2024;28(3):282-289. doi:10.1016/j.canrad.2023.09.004
76. Sharma S, Kamal R, Rathi AK. Vertebral hemangioma — the current radiation therapy perspective. *Reports of Practical Oncology and Radiotherapy*. 2023;28(1):93-101. doi:10.5603/RPOR.a2023.0009
77. Milakovic M, Popovic M, Raman S, Tsao M, Lam H, Chow E. Radiotherapy for the prophylaxis of heterotopic ossification: A systematic review and meta-analysis of randomized controlled trials. *Radiotherapy and Oncology*. 2015;116(1):4-9. doi:10.1016/j.radonc.2015.05.022
78. Lee JW, Seol KH. Adjuvant Radiotherapy after Surgical Excision in Keloids. *Medicina (B Aires)*. 2021;57(7):730. doi:10.3390/medicina57070730
79. Laird J, Ma J, Chau K, et al. Outcome After Radiation Therapy for Langerhans Cell Histiocytosis Is Dependent on Site of Involvement. *Int J Radiat Oncol Biol Phys*. 2018;100(3):670-678. doi:10.1016/j.ijrobp.2017.10.053
80. Hendrickx A, Cozzio A, Plasswilm L, Panje CM. Radiotherapy for lentigo maligna and lentigo maligna melanoma - A systematic review. *Radiation Oncology*. 2020;15(1). doi:10.1186/s13014-020-01615-2
81. Fang Y, Shen B, Dai Q, Xie Q, Wu W, Wang M. Orbital inflammatory pseudotumor: new advances in diagnosis, pathogenesis, and treatment. *Eur J Med Res*. 2023;28(1). doi:10.1186/s40001-023-01330-0
82. Dove APH, Cmelak A, Darrow K, et al. The Use of Low-Dose Radiation Therapy in Osteoarthritis: A Review. *Int J Radiat Oncol Biol Phys*. 2022;114(2):203-220. doi:10.1016/j.ijrobp.2022.04.029
83. Ikram A, Rehman A. Paraganglioma. *StatPearls*. Published online February 29, 2024. <https://www.ncbi.nlm.nih.gov/sites/books/NBK549834/>
84. Gilbo P, Morris CG, Amdur RJ, et al. Radiotherapy for benign head and neck paragangliomas: A 45-year experience. *Cancer*. 2014;120(23):3738-3743. doi:10.1002/cncr.28923
85. Heyd R, Micke O, Berger B, Eich HT, Ackermann H, Seegenschmiedt MH. Radiation Therapy for Treatment of Pigmented Villonodular Synovitis: Results of a National Patterns of Care Study. *Int J Radiat Oncol Biol Phys*. 2010;78(1):199-204. doi:10.1016/j.ijrobp.2009.07.1747
86. Canyilmaz E, Canyilmaz F, Aynaci O, et al. Prospective Randomized Comparison of the Effectiveness of Radiation Therapy and Local Steroid Injection for the Treatment of Plantar Fasciitis. *Int J Radiat Oncol Biol Phys*. 2015;92(3):659-666. doi:10.1016/j.ijrobp.2015.02.009
87. Niewald M, Holtmann H, Prokein B, et al. Randomized multicenter follow-up trial on the effect of radiotherapy on painful heel spur (plantar fasciitis) comparing two fractionation schedules with uniform total dose: first results after three months' follow-up. *Radiation Oncology*. 2015;10(1):174. doi:10.1186/s13014-015-0471-z
88. de Haan A, van Nes JGH, Kolff MW, et al. Radiotherapy for Ledderhose disease: Results of the LedRad-study, a prospective multicentre randomised double-blind phase 3 trial. *Radiotherapy and Oncology*. 2023;185. doi:10.1016/j.radonc.2023.109718
89. Ali AM, Thariat J, Bensadoun RJ, et al. The role of radiotherapy in the treatment of pterygium: A review of the literature including more than 6000 treated lesions. *Cancer/Radiothérapie*. 2011;15(2):140-147. doi:10.1016/j.canrad.2010.03.020
90. Zaorsky NG, Williams GR, Barta SK, et al. Splenic irradiation for splenomegaly: A systematic review. *Cancer Treat Rev*. 2017;53:47-52. doi:10.1016/j.ctrv.2016.11.016
91. Wong JYC, Filippi AR, Dabaja BS, Yahalom J, Specht L. Total Body Irradiation: Guidelines from the International Lymphoma Radiation Oncology Group (ILROG). *Int J Radiat Oncol Biol Phys*. 2018;101(3):521-529. doi:10.1016/j.ijrobp.2018.04.071

**Molina Clinical Policy**  
**Radiation Therapy Services: MEDICARE**  
**(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)**  
**Policy No. 463b**

Last Approval: 02/25/2026

Next Review Due By: December 2026



92. Misson-Yates S, Cunningham R, Gonzalez R, Diez P, Clark CH. Optimised conformal total body irradiation: a heterogeneous practice, so where next? *Br J Radiol.* 2023;96(1144):20220650. doi:10.1259/bjr.20220650
93. Ninni S, Gallot-Lavallée T, Klein C, et al. Stereotactic Radioablation for Ventricular Tachycardia in the Setting of Electrical Storm. *Circ Arrhythm Electrophysiol.* 2022;15(9):E010955. doi:10.1161/CIRCEP.122.010955
94. Arkles J, Markman T, Trevillian R, et al. One-year outcomes after stereotactic body radiotherapy for refractory ventricular tachycardia. *Heart Rhythm.* 2024;21(1):18-24. doi:10.1016/j.hrthm.2023.10.005
95. Paris KJ, Spanos WJ, Lindberg RD, Jose B, Albrink F. Phase I-II study of multiple daily fractions for palliation of advanced head and neck malignancies. *Int J Radiat Oncol Biol Phys.* 1993;25(4):657-660. doi:10.1016/0360-3016(93)90012-k
96. Corry J, Peters LJ, Costa I D', et al. The 'QUAD SHOT'—a phase II study of palliative radiotherapy for incurable head and neck cancer. *Radiotherapy and Oncology.* 2005;77(2):137-142. doi:10.1016/j.radonc.2005.10.008
97. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Adolescent and Young Adult (AYA) Oncology Version 2.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
98. Willmann J, Balermipas P, Rimner A, et al. Ongoing prospective studies on reirradiation: A systematic review of a clinical trials database. *Radiotherapy and Oncology.* 2025;202. doi:10.1016/j.radonc.2024.110624
99. ASTRO. Model Policies: Brachytherapy. *American Society for Radiation Oncology.* Published online January 25, 2019. Accessed November 13, 2024. <https://www.astro.org/ASTRO/media/ASTRO/Daily%20Practice/PDFs/BrachyModelPolicy.pdf>
100. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Soft Tissue Sarcoma Version 1.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
101. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Kaposi Sarcoma Version 2.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
102. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Basal Cell Skin Cancer Version 3.2024. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
103. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Squamous Cell Skin Cancer Version 1.2024. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
104. Likhacheva A, Awan M, Barker CA, et al. Definitive and Postoperative Radiation Therapy for Basal and Squamous Cell Cancers of the Skin: Executive Summary of an American Society for Radiation Oncology Clinical Practice Guideline. *Pract Radiat Oncol.* 2020;10(1):8-20. doi:10.1016/j.pro.2019.10.014
105. Nestor MS, Berman B, Goldberg D, et al. Consensus Guidelines on the Use of Superficial Radiation Therapy for Treating Nonmelanoma Skin Cancers and Keloids. *J Clin Aesthet Dermatol.* 2019;12(2):12-18.
106. Guinot JL, Rembielak A, Perez-Calatayud J, et al. GEC-ESTRO ACROP recommendations in skin brachytherapy. *Radiotherapy and Oncology.* 2018;126(3):377-385. doi:10.1016/j.radonc.2018.01.013
107. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Melanoma: Cutaneous V.3.2024. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
108. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Melanoma: Uveal Version 1.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
109. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Merkel Cell Carcinoma Version 1.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
110. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Dermatofibrosarcoma Protuberans Version 1.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
111. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Thymomas and Thymic Carcinomas Version 2.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.

**Molina Clinical Policy**  
**Radiation Therapy Services: MEDICARE**  
**(Teletherapy Brachytherapy IMRT SBRT SRS IORT IGRT)**  
**Policy No. 463b**

Last Approval: 02/25/2026

Next Review Due By: December 2026



112. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Thyroid Carcinoma Version 4.2024. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
113. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Colon Cancer V.2.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
114. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Rectal Cancer V.2.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
115. Referenced with permission from the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Soft Tissue Sarcoma V.5.2024. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. To view the most recent and complete version of the guideline, go online to NCCN.org.
116. Youssef I, Amin NP. Hyperthermia for Chest Wall Recurrence. *StatPearls*. Published online July 17, 2023. <https://www.ncbi.nlm.nih.gov/books/NBK513294/>
117. Datta NR, Rogers S, Ordóñez SG, Puric E, Bodis S. Hyperthermia and radiotherapy in the management of head and neck cancers: A systematic review and meta-analysis. *International Journal of Hyperthermia*. 2016;32(1):31-40. doi:10.3109/02656736.2015.1099746
118. Kouri BE, Abrams RA, Al-Refaie WB, et al. ACR Appropriateness Criteria® Radiologic Management of Hepatic Malignancy. *Journal of the American College of Radiology*. 2016;13(3):265-273. doi:10.1016/j.jacr.2015.12.001
119. Hong K, Akinwande O, Bodei L, et al. ACR-ABS-ACNM-ASTRO-SIR-SNMMI practice parameter for selective internal radiation therapy or radioembolization for treatment of liver malignancies. *Brachytherapy*. 2021;20(3):497-511. doi:10.1016/j.brachy.2021.01.006
120. Tom MC, Hepel JT, Patel R, et al. The American Brachytherapy Society consensus statement for electronic brachytherapy. *Brachytherapy*. 2019;18(3):292-298. doi:10.1016/j.brachy.2018.10.006
121. Negi SI, Torguson R, Gai J, et al. Intracoronary Brachytherapy for Recurrent Drug-Eluting Stent Failure. *JACC Cardiovasc Interv*. 2016;9(12):1259-1265. doi:10.1016/j.jcin.2016.03.018
122. ASTRO. Model Policies: Stereotactic Body Radiation Therapy (SBRT). *American Society for Radiation Oncology*. Published online June 2020. Accessed November 13, 2024. <https://www.astro.org/ASTRO/media/ASTRO/Daily%20Practice/PDFs/ASTROSBRTModelPolicy.pdf>