



# Medical Policy

**Policy:** 201009

**Initial Effective Date:** 01/21/2010

**SUBJECT:** Stereotactic Radiosurgery and Stereotactic Body Radiotherapy

**Annual Review Date:** 08/08/2018

**Last Revised Date:** 08/08/2018

**Prior approval is required for all procedure codes listed in the policy.**

**Definition:** Stereotactic radiosurgery (SRS) and stereotactic body radiotherapy (SBRT) (extracranial stereotactic radiotherapy) are noninvasive techniques in which high dose external beam radiation selectively ablates intracranial or extracranial targets while sparing adjacent tissue and supporting structures. Computed tomography (CT) or magnetic resonance imaging (MRI) generated three-dimensional images permit precise target mapping, determination of the required radiation dose and optimal radiation beam configuration. Radiotherapy may employ three different types of radiation energy, including gamma rays (Gamma Knife®, Elekta Instrument AB, Stockholm, Sweden), x-rays from a linear accelerator (LINAC) or a cyclotron-generated charged particle beam.

Stereotactic radiosurgery is intended for treatment of intracranial lesions while stereotactic body radiotherapy is utilized for treatment of extracranial lesions. Fractionated stereotactic radiosurgery involves multiple sessions of stereotactic radiosurgery and/or stereotactic body radiotherapy performed over several days.

These techniques differ from conventional radiation therapy, which involve exposing large areas of tissue to relatively broad fields of radiation over typically six or more treatment sessions.

## Medical Necessity:

**I. Stereotactic radiosurgery:** The Company considers stereotactic radiosurgery (**CPT Codes 61796, 61797, 61798, 61799, 61800, 77371, 77372, 77373, 77432, 77435, HCPCS Codes G0339, G0340 and applicable ICD-10-PCS Procedure Codes**) **medically necessary** and eligible for reimbursement providing that *at least one* of the following medical criteria is met:

- Inaccessible arterio-venous malformation(s) and individual is a poor surgical candidate; or
- Meningioma not suitable for complete surgical resection and/or failure of, intolerance to or unable to receive conventional medical therapy; or
- Brain metastases generally limited in number, with stable extra-cranial disease, performance status  $\geq 70\%$  on the Karnofsky Performance Scale<sup>†</sup> or  $\leq 2$  on the Eastern Cooperative Oncology Group (ECOG) Scale<sup>††</sup>; or
- Vestibular schwannomas and surgical resection is not feasible; or
- Trigeminal neuralgia refractory to conventional medical therapy; or

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- Pituitary adenoma; or
- Uveal melanoma; or
- Hemangiomas; or
- Craniopharyngiomas; or
- Pineal gland neoplasms (i.e., gliomas, germ cell tumors, pineal cell tumors); or
- High-grade gliomas defined as Grade IV<sup>†††</sup> (treatment of recurrence only and after fractionated radiotherapy is completed).

**II. Stereotactic body radiotherapy:** The Company considers stereotactic body radiotherapy (CPT Codes 63620, 63621, 77373, 77435, HCPCS Codes G0339, G0340 and applicable ICD-10-PCS Procedure Codes) **medically necessary** and eligible for reimbursement providing that *at least one* of the following medical criteria is met:

- Individuals who require repeat irradiation of a field that has received prior irradiation and conventional forms of radiation therapy cannot be safely utilized; or
- Primary or metastatic liver cancer and the following:
  1. Palliative treatment for individuals with specific liver-related symptoms due to tumor bulk (e.g., pain), with good performance status and well controlled extra-hepatic disease; or
- Primary or recurrent tumors of the spine or metastasis to the spine from other primary sites and the following:
  1. Tumor is not amenable to surgical removal (or 'extirpation') (e.g., prior surgery, tumor location, poor surgical candidate) or conventional radiation therapy; or
- Non-small cell lung cancer (NSCLC) and **all** of the following:
  1. Early (I or II) stage single lesion ( $\leq 5$  cm) and no known metastasis is present; and
  2. Staging has been performed and there are no known distant metastasis (M0); no metastasis to regional lymph nodes (N0); and
  3. Lung involvement limited to one lobe; and
  4. Lesion is inoperable due to tumor location or individual is a poor surgical candidate due to underlying medical condition(s) (e.g., limited pulmonary reserve);

### OR

- Metastatic lung cancer and **all** of the following:
  1. Single lesion ( $\leq 5$  cm); and



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2. Individual has a performance status  $\geq 70\%$  on the Karnofsky Performance Scale<sup>†</sup> or  $\leq 2$  on the Eastern Cooperative Oncology Group (ECOG) Scale<sup>††</sup>; and
  3. Stable extracranial disease if present; or
- Prostate cancer and **all** of the following:
    1. Low grade (low risk) defined as Gleason score 6 and serum prostate-specific antigen (PSA)  $< 10$  ng/mL;

**OR**

    2. Intermediate risk defined as Gleason score  $\leq 7$  [3+4] and serum prostate-specific antigen (PSA)  $< 20$  ng/mL;

**AND**

    3. Life expectancy of  $> 10$  years;

**AND**
  - **None** of the following prior treatments:
    1. Prostatectomy; or
    2. Cryotherapy; or
    3. High-intensity focused ultrasound (HIFU) treatment; or
    4. External beam radiation.

The Company considers stereotactic radiosurgery and stereotactic body radiotherapy for treatment of **all** other lesions **not medically necessary** and **not** eligible for reimbursement.

**NOTE:** The Company considers reimbursement for image guided radiation therapy (IGRT) (**CPT Codes 77014, 77387 and applicable ICD-10-PCS Codes**) as included in payment for the primary procedure. Therefore, separate billing for IGRT is **not** eligible for reimbursement when performed with stereotactic radiosurgery and/or stereotactic body radiotherapy.



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## †KARNOFSKY PERFORMANCE STATUS SCALE DEFINITIONS RATING (%) CRITERIA

Able to carry on normal activity and to work; no special care needed	100	Normal no complaints; no evidence of disease
	90	Able to carry on normal activity; minor signs or symptoms of disease
	80	Normal activity with effort; some signs or symptoms of disease
Unable to work; able to live at home and care for most personal needs; varying amount of assistance needed	70	Cares for self; unable to carry on normal activity or to do active work
	60	Requires occasional assistance, but is able to care for most of his personal needs
	50	Requires considerable assistance and frequent medical care
Unable to care for self; requires equivalent of institutional or hospital care; disease may be progressing rapidly	40	Disabled; requires special care and assistance
	30	Severely disabled; hospital admission is indicated although death not imminent
	20	Very sick; hospital admission necessary; active supportive treatment necessary
	10	Moribund; fatal processes progressing rapidly
	0	Dead

<b>GRADE</b>	<b>†† ECOG PERFORMANCE STATUS</b>
0	Fully active, able to carry on all pre-disease performance without restriction
1	Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work
2	Ambulatory and capable of all selfcare but unable to carry out any work activities; up and about more than 50% of waking hours
3	Capable of only limited selfcare; confined to bed or chair more than 50% of waking hours
4	Completely disabled; cannot carry on any selfcare; totally confined to bed or chair
5	Dead

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GRADE	††† <u>WORLD HEALTH ORGANIZATION (WHO) GRADING SYSTEM</u>
I	Least malignant tumors and are usually associated with long-term survival. Grow slowly and have an almost normal appearance when viewed through a microscope. Surgery alone may be effective treatment.
II	Slow-growing and look slightly abnormal under a microscope. Some can spread into nearby normal tissue and recur, sometimes as a higher grade tumor.
III	Malignant by definition though there is not always a big difference between grade II and grade III tumors. Cells of grade III tumor are actively reproducing abnormal cells which grow into nearby normal brain tissue. These tumors tend to recur, often as a grade IV.
IV	Most malignant; reproduce rapidly, can have a bizarre appearance when viewed under the microscope and easily grow into nearby normal brain tissue. These tumors form new blood vessels (so can maintain their rapid growth), also have areas of dead cells in their centers.

**Documentation Requirements:**

The Company reserves the right to request additional documentation as part of its coverage determination process. The Company may deny reimbursement when it has determined that the services performed were not medically necessary, investigational or experimental, not within the scope of benefits afforded to the member and/or a pattern of billing or other practice has been found to be either inappropriate or excessive. Additional documentation supporting medical necessity for the services provided must be made available upon request to the Company. Documentation requested may include patient records, test results and/or credentials of the provider ordering or performing a service. The Company also reserves the right to modify, revise, change, apply and interpret this policy at its sole discretion, and the exercise of this discretion shall be final and binding.

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<b>Applicable Code(s):</b>	
<b>CPT:</b>	<b>61796, 61797, 61798, 61799, 61800, 63620, 63621, 77371, 77372, 77373, 77432 and 77435</b>
<b>HCPCS:</b>	<b>G0339 and G0340</b>
<b>ICD-10-CM Procedure:</b>	<b>D020JZZ, D021JZZ, D026JZZ, D027JZZ, D720JZZ, D721JZZ, D722JZZ, D723JZZ, D724JZZ, D725JZZ, D726JZZ, D727JZZ, D728JZZ, D820JZZ, D920JZZ, D921JZZ, D924JZZ, D925JZZ, D926JZZ, D927JZZ, D928JZZ, D929JZZ, D92BJZZ, D92CJZZ, D92DJZZ, DB20JZZ, DB21JZZ, DB22JZZ, DB25JZZ, DB26JZZ, DB27JZZ, DB28JZZ, DD20JZZ, DD21JZZ, DD22JZZ, DD23JZZ, DD24JZZ, DD25JZZ, DD27JZZ, DF20JZZ, DF21JZZ, DF22JZZ, DF23JZZ, DG20JZZ, DG21JZZ, DG22JZZ, DG24JZZ, DG25JZZ, DM20JZZ, DM21JZZ, DT20JZZ, DT21JZZ, DT22JZZ, DT23JZZ, DU20JZZ, DU21JZZ, DU22JZZ, DV20JZZ, DV21JZZ, DW21JZZ, DW22JZZ, DW23JZZ and DW26JZZ</b>

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