



**BlueCross  
BlueShield  
of Arizona**

An Independent Licensee of the  
Blue Cross and Blue Shield Association

**MEDICAL COVERAGE GUIDELINES  
SECTION: SURGERY**

**ORIGINAL EFFECTIVE DATE: 08/21/13  
LAST REVIEW DATE: 11/26/13  
LAST CRITERIA REVISION DATE:  
ARCHIVE DATE:**

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## **RADIOFREQUENCY ABLATION OF MISCELLANEOUS SOLID TUMORS EXCLUDING LIVER TUMORS**

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**Coverage for services, procedures, medical devices and drugs are dependent upon benefit eligibility as outlined in the member's specific benefit plan. This Medical Coverage Guideline must be read in its entirety to determine coverage eligibility, if any.**

**The section identified as "Description" defines or describes a service, procedure, medical device or drug and is in no way intended as a statement of medical necessity and/or coverage.**

**The section identified as "Criteria" defines criteria to determine whether a service, procedure, medical device or drug is considered medically necessary or experimental or investigational.**

**State or federal mandates, e.g., FEP program, may dictate that any drug, device or biological product approved by the U.S. Food and Drug Administration (FDA) may not be considered experimental or investigational and thus the drug, device or biological product may be assessed only on the basis of medical necessity.**

**Medical Coverage Guidelines are subject to change as new information becomes available.**

**For purposes of this Medical Coverage Guideline, the terms "experimental" and "investigational" are considered to be interchangeable.**

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**Description:**

**Radiofrequency Ablation (RFA):**

An electrode is inserted into a tumor to deliver an alternating current, causing protein denaturation, coagulation and ultimately cell death. This surgical procedure may be performed as an open or percutaneous procedure or under laparoscopic guidance. RFA has been investigated as a treatment for inoperable tumors or for an individual who is ineligible for surgery due to age, comorbidities or poor health.



## **RADIOFREQUENCY ABLATION OF MISCELLANEOUS SOLID TUMORS EXCLUDING LIVER TUMORS (cont.)**

### **Definitions:**

**Renal Cell Carcinoma:**

Cancer of the lining of the renal (kidney) tubules.

**Renal Carcinoma:**

Cancer that forms in the center of the kidney.

**Wilms' Tumor:**

A type of kidney cancer that generally develops in children under 5 years of age.

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### **Criteria:**

#### **Radiofrequency Ablation (RFA):**

- Radiofrequency ablation for osteoid osteoma is considered ***medically necessary*** with documentation of **BOTH** of the following:
  1. Failure to respond to a three month trial of non-steroidal anti-inflammatory drugs (NSAIDs) **and**
  2. Osteoid osteoma is not located in the spine **or** hand
- Radiofrequency ablation to palliate pain in osteolytic bone metastases is considered ***medically necessary*** for individuals who have failed or are poor candidates for standard treatments such as radiation or opioids.



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## **RADIOFREQUENCY ABLATION OF MISCELLANEOUS SOLID TUMORS EXCLUDING LIVER TUMORS (cont.)**

**Criteria:** (cont.)

**Radiofrequency Ablation:** (cont.)

- Radiofrequency ablation for the treatment of lung cancer is considered ***medically necessary*** with documentation of **ONE** of the following:
  1. Individual with isolated, peripheral non-small cell lung cancer with documentation of **ALL** of the following:
    - Tumor size is 3 cm or less
    - Surgical resection or radiation treatment with curative intent is considered appropriate based on stage of disease, however, individual is not a candidate for these interventions due to medical comorbidity
    - Tumor located at least 1 cm from trachea, main bronchi, esophagus, aorta, aortic arch branches, pulmonary artery and heart
  2. Individual with malignant non-pulmonary tumor(s) metastatic to the lung with documentation of **ALL** of the following:
    - Tumor size is 3 cm or less
    - Procedure is intended to preserve lung function when surgical resection or radiation treatment is likely to substantially worsen pulmonary status **or** Individual is not a candidate for surgical resection
    - No evidence of extrapulmonary metastases **and** tumor located at least 1 cm from trachea, main bronchi, esophagus, aorta, aortic arch branches, pulmonary artery and heart
    - No more than 3 tumors per lung will be ablated
    - Tumors are amenable to complete ablation
    - If repeat ablation, at least 12 months have elapsed since prior ablation
- If the above criteria are not met, radiofrequency ablation for the treatment of lung cancer is considered ***experimental or investigational*** based upon:
  1. Insufficient scientific evidence to permit conclusions concerning the effect on health outcomes, and
  2. Insufficient evidence to support improvement of the net health outcome, and
  3. Insufficient evidence to support improvement of the net health outcome as much as, or more than, established alternatives.



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## **RADIOFREQUENCY ABLATION OF MISCELLANEOUS SOLID TUMORS EXCLUDING LIVER TUMORS (cont.)**

**Criteria:** (cont.)

**Radiofrequency Ablation:** (cont.)

- Radiofrequency ablation for the treatment of localized renal cell carcinoma is considered ***medically necessary*** for tumors less than or equal to 4 cm in size with documentation of **ANY** of the following:
  1. Individual has a solitary kidney
  2. Surgery is contraindicated and specific contraindication is documented
  3. Renal insufficiency with glomerular filtration rate less than 60mL/min per m<sup>2</sup>
- Radiofrequency ablation for the following indications is considered ***experimental or investigational*** based upon:
  1. Insufficient scientific evidence to permit conclusions concerning the effect on health outcomes, and
  2. Insufficient evidence to support improvement of the net health outcome, and
  3. Insufficient evidence to support improvement of the net health outcome as much as, or more than, established alternatives.

These indications include, *but are not limited to*:

- Breast cancer
- Breast fibroadenomas
- Osteolytic bone metastases as initial treatment
- Osteoma other than osteoid osteoma
- All other tumors outside the liver (e.g., adrenal gland, head and neck, thyroid, ovary and pelvic/abdominal metastases of unspecified origin)
- Renal cell carcinoma not meeting the above criteria
- Wilms' tumor

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### **Resources:**

**Resources prior to 08/21/13 may be requested from the BCBSAZ Medical Policy and Technology Research Department.**

1. 7.01.95 BCBS Association Medical Policy Reference Manual. Radiofrequency Ablation of Miscellaneous Solid Tumors Excluding Liver Tumors. Re-issue date 10/10/2013, issue date 10/09/2003.