Medical Coverage Policy

Ablation of Renal Tumors/Masses-PREAUTH

☐ Device/Equipment ☐ Drug ☐ Medical ☒ Surgery ☐ Test ☐ Other

Effective Date:	6/1/2006	Policy Last Updated:	2/21/2012

☒ **Prospective review is recommended/required. Please check the member agreement for preauthorization guidelines.**

☐ **Prospective review is not required.**

Description:
Traditional methods of treating localized renal cell carcinoma (RCC) include radical nephrectomy or nephron-sparing surgery. Cryosurgical ablation or radiofrequency ablation of RCC is reported to be beneficial for patients who are not candidates for surgery due to comorbidities; patients who have only one kidney, or if nephrectomy would lead to dialysis dependency; patients with small tumors; and patients who are at risk for complications following kidney removal if the risk would not be present by other methods. The hypothesized advantage of ablation methods for RCC is that the procedure is less invasive than traditional surgery, thus the recovery time is substantially shorter. Tumor ablation may also permit a better chance of preserving kidney function in situations when multiple tumors are present.

Radiofrequency ablation is a percutaneously performed procedure that utilizes a small needle electrode which is placed directly into a tumor using computed tomography (CT), magnetic resonance imaging (MRI), or ultrasound guidance. High frequency radio waves heat the tumor and cause local necrosis of the tumor. The dead cells are not removed, but become scar tissue and eventually shrink.

Cryosurgical ablation (hereafter, cryosurgery) involves the use of extreme cold to destroy abnormal tissue. Liquid nitrogen or argon gas is circulated through a hollow probe that is placed in contact with the tissue to be destroyed. A mass of ice crystals forms around the tip of the probe and freezes nearby cells. After cryosurgery, the ablated tissue is absorbed by the body. Cryosurgery may be performed as an open surgical technique, or as a closed procedure under ultrasound guidance.

Medical Criteria:
Cryosurgery OR radiofrequency ablation of tumors located in the kidney is considered medically necessary when one of the following criteria is met:

When open procedure is not safe; or
Palliative care; or
Unilateral kidney; or
Bilateral tumors/masses (von Hippel Landau); or
Nephrectomy would lead to dialysis dependency due to poor renal function.

Policy:
Cryosurgery or radiofrequency ablation of tumors located in the kidney is covered for patients who meet the medical criteria listed above; all other indications are considered not medically necessary due to lack of peer-review literature which support improved health outcomes. Prospective medical review is required for BlueCHiP for Medicare and recommended for all other BCBSRI products.

Coding:
50250
50542
50592
50593

Coverage:
Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage or Subscriber Agreement for applicable surgery benefits/coverage.

Publications:
Policy Update, October 2004
Policy Update, December 2007
Provider Update, September 2008
Provider Update, September 2009
Provider Update, May 2010
Provider Update, May 2011
Provider Update, May 2012

References:
Blue Cross Blue Shield Association Medical Policy Reference Manual, Policy. 7.01.092 Cryosurgical Ablation of Miscellaneous Solid Tumors Other Than Liver or Prostaten or Dermatologic Tumors. 10:2011

Cryoablation of Renal Tumors in Patients with Solitary Kidneys. W.B. Shingleton and P.E. Sewell, Jr.

Emerging Nephron Sparing Treatments for Kidney Tumors: A Continuum of Modalities From Energy Ablation to Laparoscopic Partial Nephrectomy.*Journal of Urology*. February 2004 Mabjeesh, Nicola; Avidor, Yoav; Matzkin, Haim.

New Approaches to the Minimally Invasive Treatment of Kidney Tumors. By: Trabulsi, Edouard J.; Kalra, Pankaj; Gomella, Leonard G.. *Cancer Journal*, Jan/Feb2005, Vol. 11 Issue 1, p57, 7p; (*AN 1697228*)

Imaging-Guided Percutaneous Radiofrequency Ablation of Solid Renal Masses: Techniques and Outcomes of 38 Treatment Sessions in 32 Consecutive Patients. American Journal of Roentgenol., June 2003; 180: 1503-1508. Mayo-Smith, William; Dupuy, Damien E.; Parikh, Praney M.; Pezzullo, John A.; Cronan, John J.

RF Ablation Shown Effective, Safe for Renal Tumors. www.urologytimes.com, February 2004.

National Institute for Clinical Excellence (NICE). Percutaneous radiofrequency ablation of renal cancer. Interventional Procedure Consultation Document. London, UK: NICE; January 2004.