CRYOABLATION OF SOLID TUMORS

Description: Cryoablation uses extreme cold to destroy cancer cells by circulating liquid nitrogen or argon through a probe which is placed in contact with the tumor. The procedure involves a cycle of treatments in which the tumor is frozen, allowed to thaw, and then refrozen. Cryoablation may be performed as an open, laparoscopic, or percutaneous technique, and has been used to treat several types of solid tumors including prostate, kidney, and liver. Subtotal prostate cryoablation (also known as “focal cryoablation” or “male lumpectomy”) is also being evaluated as a form of localized therapy for small, localized prostate cancer.

Proposed advantages of cryoablation include improved local control and benefits common to any minimally invasive procedure (e.g., preserving normal organ tissue, decreasing morbidity, decreasing length of hospitalization). Potential complications of the procedure include those caused by hypothermic damage to normal tissue adjacent to the tumor, structural damage along the probe track, and secondary tumors, if cancerous cells are seeded during probe removal.

Policy:

I. Cryoablation may be considered MEDICALLY NECESSARY for the following indications:

   A. Treatment of liver tumors under the following circumstances:
      1. Treatment of hepatocellular carcinoma (HCC) when all the following criteria are met:
         a. The patient is not a candidate for surgical resection (e.g., due to location of the tumor(s) and/or comorbid conditions); AND
         b. Presence of three (3) lesions or less; AND
         c. Tumor size is ≤ 5 cm in diameter; AND
         d. All tumor foci can be adequately treated by ablation.
      2. Treatment of hepatic metastases from colorectal cancer when all the following criteria are met:
         a. The patient is not a candidate for surgical resection
(e.g., due to location of the tumor(s) and/or comorbid conditions); AND
b. Absence of extrahepatic metastatic disease; AND
c. Tumor size is ≤ 5 cm in diameter; AND
d. All tumor foci can be adequately treated by ablation.

3. Treatment of hepatic metastases from neuroendocrine tumors when all the following criteria are met:
   a. The patient is not a candidate for surgical resection (e.g., due to location of the tumor(s) and/or comorbid conditions); AND
   b. Systemic therapy has failed to control symptoms; AND
c. All tumor foci can be adequately treated by ablation.

B. Treatment of prostate cancer under the following circumstances:
   1. Primary treatment for clinically localized prostate cancer; OR
   2. Salvage treatment for recurrent prostate cancer following failed radiation therapy

C. Treatment of localized renal cell carcinoma when tumor size is ≤ 4 cm and either of the following criteria are met:
   1. Preservation of kidney function is necessary (i.e., the patient has one kidney or renal insufficiency, defined as a glomerular filtration rate [GFR] of < 60 mL/min/m²) and standard surgical approaches would compromise kidney function; OR
   2. Patient is not considered a surgical candidate due to co-morbid disease

II. Cryoablation is considered INVESTIGATIVE for treatment of all other solid tumors or metastases including, but not limited to, the following:
   A. Benign breast tumors (e.g., fibroadenomas);
   B. Malignant breast tumors;
   C. Renal cell carcinomas in patients who are surgical candidates;
   D. Pancreatic cancer;
   E. Lung cancer;
   F. Subtotal prostate ablation.

Coverage: Blue Cross and Blue Shield of Minnesota medical policies apply generally to all Blue Cross and Blue Plus plans and products. Benefit plans vary in coverage and some plans may not provide coverage for certain services addressed in the medical policies.

Medicaid products and some self-insured plans may have additional policies and prior authorization requirements. Receipt of benefits is subject to all terms and conditions of the member’s summary plan description (SPD). As applicable, review the provisions relating to a specific coverage determination, including exclusions and limitations. Blue Cross reserves the right to revise, update and/or add to its medical policies at any time without notice.
For Medicare NCD and/or Medicare LCD, please consult CMS or National Government Services websites.

Refer to the Pre-Certification/Pre-Authorization section of the Medical Behavioral Health Policy Manual for the full list of services, procedures, prescription drugs, and medical devices that require Pre-certification/Pre-Authorization. Note that services with specific coverage criteria may be reviewed retrospectively to determine if criteria are being met. Retrospective denial of claims may result if criteria are not met.

**Coding:**

*The following codes are included below for informational purposes only, and are subject to change without notice. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement.*

**CPT:**

19105 Ablation, cryosurgical, of fibroadenoma, including ultrasound guidance, each fibroadenoma
47371 Laparoscopy, surgical, ablation of one or more liver tumor(s); cryosurgical
47381 Ablation, open, of one or more liver tumor(s); cryosurgical
50250 Ablation, open, 1 or more renal mass lesion(s), cryosurgical, including intraoperative ultrasound guidance and monitoring, if performed
50542 Laparoscopy, surgical; ablation of renal mass lesion(s), including intraoperative ultrasound guidance and monitoring, when performed
50593 Ablation, renal tumor(s), unilateral, percutaneous, cryotherapy
55873 Cryosurgical ablation of the prostate (includes ultrasonic guidance for interstitial cryosurgical probe placement)
0340T Ablation, pulmonary tumor(s), including pleura or chest wall when involved by tumor extension, percutaneous, cryoablation, unilateral, includes imaging guidance

**ICD-9 Procedure:**

50.25 Laparoscopic ablation of liver lesion or tissue
55.33 Percutaneous ablation of renal lesion or tissue
55.34 Laparoscopic ablation of renal lesion or tissue

**ICD-10 Procedure:**

0F500ZZ Destruction of Liver, Open Approach
0F503ZZ Destruction of Liver, Percutaneous Approach
0F504ZZ Destruction of Liver, Percutaneous Endoscopic Approach
0T500ZZ Destruction of Right Kidney, Open Approach
0T510ZZ Destruction of Left Kidney, Open Approach
0T530ZZ Destruction of Right Kidney Pelvis, Open Approach
0T540ZZ Destruction of Left Kidney Pelvis, Open Approach
0T503ZZ Destruction of Right Kidney, Percutaneous Approach
0T513ZZ Destruction of Left Kidney, Percutaneous Approach
0T533ZZ Destruction of Right Kidney Pelvis, Percutaneous Approach
0T543ZZ Destruction of Left Kidney Pelvis, Percutaneous Approach
0T504ZZ Destruction of Right Kidney, Percutaneous Endoscopic Approach
0T514ZZ Destruction of Left Kidney, Percutaneous Endoscopic Approach
0T534ZZ Destruction of Right Kidney Pelvis, Percutaneous Endoscopic Approach
0T544ZZ Destruction of Left Kidney Pelvis, Percutaneous Endoscopic Approach
0T507ZZ Destruction of Right Kidney, Via Natural or Artificial Opening
0T508ZZ Destruction of Right Kidney, Via Natural or Artificial Opening Endoscopic
0T517ZZ Destruction of Left Kidney, Via Natural or Artificial Opening
0T518ZZ Destruction of Left Kidney, Via Natural or Artificial Opening Endoscopic
0T537ZZ Destruction of Right Kidney Pelvis, Via Natural or Artificial Opening
0T538ZZ Destruction of Right Kidney Pelvis, Via Natural or Artificial Opening Endoscopic
0T547ZZ Destruction of Left Kidney Pelvis, Via Natural or Artificial Opening
0T548ZZ of Left Kidney Pelvis, Via Natural or Artificial Opening Endoscopic
0V500ZZ Destruction of Prostate, Open Approach
0V503ZZ Destruction of Prostate, Percutaneous Approach
0V504ZZ Destruction of Prostate, Percutaneous Endoscopic Approach

Policy History: Developed September 21, 1994
Most recent history:
Reviewed March 9, 2011
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Revised April 9, 2014

Cross Reference: Microwave Ablation of Solid Tumors, IV-04

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