

Medical Coverage Policy | Whole Gland Cryoablation of Prostate Cancer



EFFECTIVE DATE: 02|17|15

POLICY LAST UPDATED: 10|15|2019

OVERVIEW

Cryoablation, also known as cryotherapy or cryosurgery, of prostate cancer is a technique in which cryoprobes are inserted percutaneously into the prostate gland to rapidly freeze and thaw tissue-causing necrosis. While most studies use total cryoablation, subtotal cryoablation is an emerging technique.

This policy is applicable to Commercial Products only. For BlueCHIP for Medicare, see related policy section.

PRIOR AUTHORIZATION

Not applicable

POLICY STATEMENT

Commercial Products

Cryoablation of the prostate may be considered medically necessary as treatment of clinically localized (organ-confined) prostate cancer when performed as initial treatment or as salvage treatment of disease that recurs following radiation therapy.

MEDICAL CRITERIA

Not applicable

BACKGROUND

Prostate cancer is the most commonly diagnosed cancer and the third leading cause of cancer deaths among men in the United States, with an estimated 161,360 new cases and 26,730 deaths in 2017.¹ The diagnosis and grading of prostate cancer are performed by taking a biopsy of the prostate gland.

Cryoablation, also known as cryotherapy or cryosurgery, is a procedure that attacks cancer cells using extremely cold gas. This technique can be used to treat prostate cancer by percutaneously inserting thin, needle-like cryoprobes into the prostate gland and then sending very cold gas down the cryoprobes to rapidly freeze and thaw the tissue, causing necrosis. This review evaluates evidence on the use of total (whole gland, definitive therapy) cryoablation. Subtotal (focal) cryoablation and alternative procedures are considered in evidence review 8.01.61.

For individuals who are considering initial treatment for localized prostate cancer who receive whole gland cryoablation, the evidence includes several systematic reviews, 2 randomized controlled trials, and many comparative and noncomparative observational studies. Relevant outcomes are overall survival, disease-specific survival, symptoms, functional outcomes, quality of life, and treatment-related morbidity. High-quality data comparing cryoablation with external-beam radiotherapy, radical prostatectomy, or active surveillance are lacking, but available data have suggested similar overall survival and disease-specific survival rates compared with radical prostatectomy and external-beam radiotherapy. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals who have salvage treatment for recurrence of localized prostate cancer following radiotherapy who receive whole gland cryoablation, the evidence includes primarily noncomparative case series and a few retrospective studies comparing salvage cryoablation with salvage prostatectomy. Relevant outcomes are overall survival, disease-specific survival, symptoms, functional outcomes, quality of life, and treatment-

related morbidity. High-quality data comparing cryoablation with prostatectomy was mixed, and evidence comparing cryotherapy with brachytherapy is lacking. Men in this group have few options and prostatectomy can be difficult in tissue that has been irradiated. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome

COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate Evidence of Coverage, Subscriber Agreement for applicable Not Medically Necessary benefits/coverage.

CODING

The following code is medically necessary when filed with a covered diagnosis below

55873 Cryoablate Prostate

ICD10 Covered Diagnosis

C61, C79.82, D07.5, Z85.46

RELATED POLICIES

BlueCHiP for Medicare National and Local Coverage Determinations Policy
Focal Treatments for Prostate Cancer

PUBLISHED

Provider Update, December 2019

Provider Update, February 2019

Provider Update January 2017

Provider Update April 2015

REFERENCES:

1. Wang C, Wang H, Yang W, et al. A multicenter randomized controlled trial of percutaneous cryoablation versus radiofrequency ablation in hepatocellular carcinoma. *Hepatology*. Oct 6 2014. PMID 25284802
2. Awad T, Ghorlund K, Glud C. Cryotherapy for hepatocellular carcinoma. *Cochrane Database Syst Rev*. 2009(4):CD007611.
3. Adam R, Hagopian EJ, Linhares M, et al. A comparison of percutaneous cryosurgery and percutaneous radiofrequency for unresectable hepatic malignancies. *Arch Surg*. 2002;137(12):1332-1339.
4. Yang Y, Wang C, Lu Y, et al. Outcomes of ultrasound-guided percutaneous argon-helium cryoablation of hepatocellular carcinoma. *J Hepatobiliary Pancreat Sci*. Dec 21 2012;19(6):674-684. PMID 22187145
5. Clavien PA, Kang KJ, Selzner N, et al. Cryosurgery after chemoembolization for hepatocellular carcinoma in patients with cirrhosis. *J Gastrointest Surg*. 2002;6(1):95-101.
6. Zhou L, Yang YP, Feng YY, et al. Efficacy of argon-helium cryosurgical ablation on primary hepatocellular carcinoma: a pilot clinical study. *Chin J Cancer*. 2009;28(1):45-48.
7. Wang C, Lu Y, Chen Y, et al. Prognostic factors and recurrence of hepatitis B-related hepatocellular carcinoma after argon-helium cryoablation: a prospective study. *Clin Exp Metastasis*. 2009;26(7):839-848.
8. Xu KC, Niu LZ, Zhou Q, et al. Sequential use of transarterial chemoembolization and percutaneous cryosurgery for hepatocellular carcinoma. *World J Gastroenterol*. 2009;15(29):3664-3669.
9. Jaeck D, Oussoultzoglou E, Bachellier P, et al. Hepatic metastases of gastroenterohepatic neuroendocrine tumors: safe hepatic surgery. *World J Surg*. 2001;25(6):689-692.
10. Gurusamy KS, Ramamoorthy R, Sharma D, et al. Liver resection versus other treatments for neuroendocrine tumours in patients with respectable liver metastases. *Cochrane Database Syst Rev*. 2009(2):CD0076060.
11. Saxena A, Chua TC, Chu F, et al. Optimizing the surgical effort in patients with advanced neuroendocrine neoplasm hepatic metastases: a critical analysis of 40 patients treated by hepatic resection and cryoablation. *Am J Clin Oncol*. Oct 2012;35(5):439-445. PMID 21654315
12. Chung MH, Pisegna J, Spirt M, et al. Hepatic cytoreduction followed by a novel long-acting somatostatin analog: a paradigm for intractable neuroendocrine tumors metastatic to the liver. *Surgery*. 2001;130(6):954-962.

13. Al-Asfoor A, Fedorowicz Z, Lodge M. Resection versus no intervention or other surgical interventions for colorectal cancer liver metastases. *Cochrane Database Syst Rev.* 2008(2):CD006039.
14. Korpan NN. Hepatic cryosurgery for liver metastases: long term follow-up. *Ann Surg.* 1997;225(2):193-201.
15. Bala MM, Riemsma RP, Wolff R, et al. Cryotherapy for liver metastases. *Cochrane Database Syst Rev.* 2013;6:CD009058. PMID 23740609
16. Pathak S, Jones R, Tang JM, et al. Ablative therapies for colorectal liver metastases: a systematic review. *Colorectal Dis.* Sep 2011;13(9):e252-265. PMID 21689362
17. Sotsky TK, Ravikumar TS. Cryotherapy in the treatment of liver metastases from colorectal cancer. *Semin Oncol.*2002;29(2):183-191.
18. Siperstein AE, Berber E. Cryoablation, percutaneous alcohol injection, and radiofrequency ablation treatment of neuroendocrine liver metastases. *World J Surg.* 2001;25(6):693-696.
19. Ng KM, Chua TC, Saxena A, et al. Two decades of experience with hepatic cryotherapy for advanced colorectal metastases. *Ann Surg Oncol.* Apr 2012;19(4):1276-1283. PMID 21913018
20. Huang A, McCall JM, Weston MD, et al. Phase I study of percutaneous cryotherapy for colorectal liver metastasis. *Br J Surg.* 2002;89(3):303-310.

[CLICK THE ENVELOPE ICON BELOW TO SUBMIT COMMENTS](#)

This medical policy is made available to you for informational purposes only. It is not a guarantee of payment or a substitute for your medical judgment in the treatment of your patients. Benefits and eligibility are determined by the member's subscriber agreement or member certificate and/or the employer agreement, and those documents will supersede the provisions of this medical policy. For information on member-specific benefits, call the provider call center. If you provide services to a member which are determined to not be medically necessary (or in some cases medically necessary services which are non-covered benefits), you may not charge the member for the services unless you have informed the member and they have agreed in writing in advance to continue with the treatment at their own expense. Please refer to your participation agreement(s) for the applicable provisions. This policy is current at the time of publication; however, medical practices, technology, and knowledge are constantly changing. BCBSRI reserves the right to review and revise this policy for any reason and at any time, with or without notice. Blue Cross & Blue Shield of Rhode Island is an independent licensee of the Blue Cross and Blue Shield Association.

