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Corporate Medical Policy

Chemoembolization of the Hepatic Artery, Transcatheter Approach

File Name:	chemoembolization_of_the_hepatic_artery_transcatheter_approach
Origination:	3/1996
Last CAP Review:	5/2021
Next CAP Review:	5/2022
Last Review:	8/2021

Description of Procedure or Service

Transcatheter arterial chemoembolization (TACE) of the liver is a proposed alternative to conventional systemic or intra-arterial chemotherapy, and to various nonsurgical ablative techniques, to treat resectable and nonresectable tumors. TACE combines the infusion of chemotherapeutic drugs with particle embolization. Tumor ischemia secondary to the embolization raises the drug concentration compared to infusion alone, extending the retention of the chemotherapeutic agent and decreasing systemic toxicity. The liver is especially amenable to such an approach, given its distinct lobular anatomy, the existence of independent blood supplies, and the ability of healthy hepatic tissue to grow and thus compensate for tissue mass lost during chemoembolization.

Intrahepatic cholangiocarcinoma (ICC) is the second most common primary liver malignancy after HCC (10% vs 90%, respectively). Surgical resection represents the only form of curative therapy, however, most ICC patients are not surgical candidates due to their advanced disease at the time of diagnosis, which is caused by the lack of symptoms until late in the disease. The overall prognosis of ICC is far worse than for extrahepatic cholangiocarcinoma because of its late presentation. Most patients with ICC qualify for palliative therapy, including systemic chemotherapy and radiotherapy. However, such palliative options afford little to no survival improvement over supportive therapy alone, because ICC responds poorly to such existing therapies. Survival prognosis for patients with unresectable ICC is poor, with a median survival of 3 to 6 months if left untreated.

TACE of the liver is associated with its own potentially life-threatening toxicities and complications, including severe postembolization syndrome, hepatic insufficiency, abscess, or infarction. TACE has been investigated to treat resectable, unresectable, and recurrent hepatocellular carcinoma, cholangiocarcinoma, liver metastases, and in the liver transplant setting. Treatment alternatives include resection when possible, other locally ablative techniques (e.g., radiofrequency ablation, cryoablation), and chemotherapy administered systemically or by hepatic artery infusion. Hepatic artery infusion involves continuous infusion of chemotherapy with an implanted pump while TACE is administered episodically. Also, hepatic artery infusion does not involve the use of embolic material.

TACE has been explored in various settings: as a technique to prevent tumor progression in patients on the liver transplant waiting list, to downstage tumors such that the patient is considered a better candidate for liver transplantation, and to decrease the incidence of posttransplant recurrence in patients with larger (T3) tumors. All of these uses are in part related to the United Network for Organ Sharing (UNOS) liver allocation policy, which prioritizes patients for receiving donor livers. The UNOS policy and the previous 3 uses are discussed further in the following sections.

Neuroendocrine tumors are a heterogeneous group of typically slow-growing tumors with an indolent course, with the capacity to synthesize and secrete hormones. Liver metastases may result in significant hormonal symptoms and are associated with a poor prognosis. Systemic chemotherapy for these tumors has shown modest response rates of limited duration, and, although somatostatin analogs are usually effective in controlling symptoms, the disease eventually becomes refractory. Therefore, liver-directed

therapies aim to reduce tumor burden to lower hormone levels and to palliate symptoms in patients with unresectable neuroendocrine metastases.

The TACE procedure requires hospitalization for placement of the hepatic artery catheter and workup to establish eligibility for chemoembolization. Prior to the procedure, the patency of the portal vein must be demonstrated to ensure an adequate post-treatment hepatic blood supply. With the patient under local anesthesia and mild sedation, a superselective catheter is inserted via the femoral artery and threaded into the hepatic artery. Angiography is then performed to delineate the hepatic vasculature, followed by injection of the embolic chemotherapy mixture. Embolic material varies but may include a viscous collagen agent, polyvinyl alcohol particles, or ethiodized oil. Typically, only 1 lobe of the liver is treated during a single session, with subsequent embolization procedures scheduled from 5 days to 6 weeks later. In addition, since the embolized vessel recanalizes, chemoembolization can be repeated as many times as necessary.

Uveal (ocular) melanoma is the most common primary ocular malignancy in adults and shows a strong predilection for liver metastases. Even with successful treatment of the primary tumor, up to 50% of patients will subsequently develop systemic metastases, with liver involvement in up to 90% of these patients. Metastatic uveal melanoma is resistant to systemic chemotherapy, leading to the evaluation of locoregional treatment modalities to control tumor progression in the liver, including TACE.

UNOS Liver Allocation Policy

In 2002, UNOS introduced a new liver allocation system model for end-stage liver disease (referred to as MELD) for adult patients awaiting liver transplant. The MELD score is a continuous disease severity scale incorporating bilirubin, prothrombin time (i.e., international normalized ratio [INR]), and creatinine into an equation, producing a number that ranges from 6 (less ill) to 40 (gravely ill). Aside from those in fulminant liver failure, donor livers are prioritized to those with the highest MELD number. This scale accurately predicts the risk of dying from liver disease except for those with HCC, who often have low MELD scores, because bilirubin, INR, and creatinine levels are near normal. Therefore, patients with HCC are assigned additional allocation points according to the size and number (T stage) of tumor nodules as follows:

T1: 1 nodule greater than 1 cm and 1.9 cm or smaller
T2: 1 nodule between 2.0 and 5.0 cm, or 2 or 3 nodules each 1 cm or greater and up to 3.0 cm
T3: 1 nodule larger than 5.0 cm, or 2 or 3 nodules with at least 1 larger than 3.0 cm

In considering how to allocate the scarce donor organs, UNOS sought to balance risk of death on the waiting list against risk of recurrence after transplant. Patients with T1 lesions are considered at low risk of death on the waiting list, while those with T3 lesions are at high risk of posttransplant recurrence and are generally not considered transplant candidates. Patients with T2 tumors have an increased risk of dying while on the waiting list compared with those with T1 lesions, and are an acceptable risk of posttransplant tumor recurrence. Therefore, UNOS criteria, which were updated in 2020, prioritize only T2 HCC patients who meet specified staging, laboratory, and imaging criteria by awarding exception scores in place of the calculated MELD score. This definition of T2 lesions is often referred to as the Milan criteria, in reference to a key 1996 study that examined the recurrence rate of HCC according to the size of the initial tumor. Liver transplantation for those with T3 HCC is not prohibited, but these patients do not receive any priority on the waiting list. All patients with HCC awaiting transplantation are reassessed at 3-month intervals. Those whose tumors have progressed and are no longer T2 tumors will lose the additional allocation points.

Additionally, nodules identified through imaging of cirrhotic livers are given an OPTN (Organ Procurement and Transplantation Network) class 5 designation. Class 5B and 5T nodules are eligible for automatic priority. Class 5B criteria consist of a single nodule 2 cm or larger and up to 5 cm (T2 stage) that meets specified imaging criteria. Class 5T nodules have undergone subsequent locoregional treatment after being automatically approved on initial application or extension. A single class 5A nodule (>1 cm and <2 cm) corresponds to T1 HCC and does not qualify for automatic priority. However, combinations of class 5A nodules are eligible for automatic priority if they meet stage T2

criteria. Nodules less than 1 cm are considered indeterminate and are not considered for additional priority.

The UNOS allocation system provides strong incentives to use locoregional therapies to downsize tumors to T2 status and to prevent progression while on the waiting list. A 2010 report of a national conference on liver allocation in patients with HCC in the United States addressed the need to better characterize the long-term outcomes of liver transplantation for patients with HCC and to assess whether it is justified to continue the policy of assigning increased priority for candidates with early-stage HCC on the U.S. transplant waiting list. There was a general consensus at the meeting for the development of a calculated continuous HCC priority score for ranking HCC candidates on the list that would incorporate the calculated MELD score, α-fetoprotein, tumor size, and rate of tumor growth and that only candidates with at least stage T2 tumors would receive additional HCC priority points. The report addressed the role of locoregional therapy to downstage patients from T3 to T2 and stated that the results of downstaging before liver transplantation are heterogeneous, with no upper limits for tumor size and number before downstaging across studies, and the use of different end points for downstaging before transplantation. The 2020 UNOS criteria specify that certain patients may undergo downstaging with locoregional therapy in order to qualify for a MELD exception score. Downstaging is possible in patients with 1 lesion between 5 and 8 cm; patients with 2 or 3 lesions with at least 1 lesion greater than 3 cm, no lesion greater than 5 cm, and a total diameter of all lesions of 8 cm or less; and patients with 4 or 5 lesions that are less than 3 cm each and less than or equal to 8 cm total. Patients must meet T2 criteria after downstaging in order to qualify for an exception score. Patients with T2 lesions and elevated α fetoprotein (>1000 ng/mL) may also undergo locoregional therapy in order to qualify for a MELD exception score (α fetoprotein must be below 500 ng/mL after treatment in order to qualify for an exception score).

Related Policies:
Cryosurgical Ablation of Primary or Metastatic Liver Tumors
Radioembolization for Primary and Metastatic Tumors of the Liver

This policy does not pertain to Intrahepatic Arterial Chemotherapy or Selective Internal Radiation Therapy for Tumors of the Liver.

******Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.***

Policy

BCBSNC may provide coverage for Chemoembolization of the Hepatic Artery, Transcatheter Approach when it is determined to be medically necessary because the medical criteria and guidelines shown below are met.

Benefits Application

This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

When Chemoembolization of the Hepatic Artery, Transcatheter Approach is covered

Transcatheter hepatic arterial chemoembolization may be **medically necessary** for the following:

1. Hepatocellular cancer (HCC) that is unresectable but confined to the liver and not associated with portal vein thrombosis and liver function not characterized as Child-Pugh class C; **Or**
2. As a bridge to transplant in patients with hepatocellular cancer where the intent is to prevent further tumor growth and to maintain a patient's candidacy for liver transplant; **Or**
3. Liver metastasis in symptomatic patients with metastatic neuroendocrine tumors whose symptoms persist despite systemic treatment and who are not candidates for surgical resection; **Or**
4. Liver metastasis in patients with liver-dominant metastatic uveal melanoma.

When Chemoembolization of the Hepatic Artery, Transcatheter Approach is not covered

1. For indications other than those listed above.
2. Transcatheter hepatic arterial chemoembolization is considered **investigational:**
   a. To treat liver metastases from any other tumors or to treat hepatocellular cancer that does not meet criteria noted above, including recurrent hepatocellular carcinoma.
   b. To treat hepatocellular tumors prior to liver transplantation except as noted above.
   c. As neoadjuvant or adjuvant therapy in hepatocellular cancer that is considered resectable.
   d. To treat unresectable cholangiocarcinoma.
   e. As part of combination therapy (with radiofrequency ablation) for resectable or unresectable hepatocellular carcinoma.

Policy Guidelines

When using transcatheter hepatic arterial chemoembolization as a bridge to transplant to prevent further tumor growth, the following patient characteristics apply:

1. a single tumor less than 5 cm or no more than 3 tumors each less than 3 cm in size, and
2. absence of extrahepatic disease or vascular invasion, and
3. Child-Pugh score of either A or B.

Unresectable and Resectable Hepatocellular Carcinoma
For individuals who have unresectable HCC confined to the liver and not associated with portal vein thrombosis who receive TACE, the evidence includes several randomized controlled trials (RCTs), large observational studies, and systematic reviews. The relevant outcomes are overall survival (OS), disease-specific survival, quality of life (QOL), and treatment-related mortality and morbidity. Evidence from one RCT has suggested that survival with TACE is at least as good as with systemic chemotherapy. One systematic review has highlighted possible biases associated with RCTs that compared TACE with no therapy. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have resectable HCC who receive neoadjuvant or adjuvant TACE, the evidence includes several RCTs and systematic reviews. The relevant outcomes are OS, disease-specific survival, QOL, and treatment-related mortality and morbidity. Studies have shown little to no difference in OS rates with neoadjuvant TACE compared with surgery alone. A meta-analysis found no significant improvements in survival or recurrence with preoperative TACE for resectable HCC. While both RCTs and the meta-analysis that evaluated TACE as adjuvant therapy to hepatic resection in HCC reported positive results, the quality of individual studies and the methodologic issues related to the meta-analysis preclude certainty when interpreting the results. Well-conducted multicentric trials from the U. S. or Europe representing relevant populations with adequate randomization procedures, blinded

assessments, centralized oversight and publication in peer-reviewed journals are required. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have resectable HCC who receive TACE plus radiofrequency ablation (RFA), the evidence includes a single RCT and a systematic review. The relevant outcomes are OS, disease-specific survival, QOL, and treatment-related mortality and morbidity. The RCT failed to show the superiority in survival benefit with combination TACE plus RFA treatment compared with surgery for HCC lesions 3 cm or smaller. Further, an ad hoc subgroup analysis showed a significant benefit for surgery in recurrence and OS in patients with lesions larger than 3 cm. It cannot be determined from this trial whether TACE plus RFA is as effective as a surgical resection for these small tumors. The systematic review, which included mostly retrospective observational studies, did not find a survival benefit with TACE plus RFA over surgery alone. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have unresectable HCC who receive TACE plus RFA, the evidence includes multiple systematic reviews and RCTs. The relevant outcomes are OS, disease-specific survival, QOL, and treatment-related mortality and morbidity. Multiple meta-analyses and RCTs have shown a consistent benefit in survival and recurrence-free survival favoring combination TACE plus RFA over RFA alone. However, results of these meta-analyses are difficult to interpret because the pooled data included heterogeneous patient populations and, in a few cases, data from a study retracted due to questions about data veracity. A larger well-conducted RCT has reported a relative reduction in the hazard of death by 44% and a 14% difference in 4-year survival favoring combination therapy. The major limitations of this trial were its lack of a TACE-alone arm and the generalizability of its findings to patient populations that have unmet needs such as those with multiple lesions larger than 3 cm and Child-Pugh class B or C. Further, this single-center trial was conducted in China, and until these results have been reproduced in patient populations representative of pathophysiology and clinical stage more commonly found in the U. S. or Europe, the results may not be generalizable. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

TACE as a Bridge to Liver Transplant

For individuals who have a single hepatocellular tumor less than 5 cm or no more than three tumors each less than 3 cm in size, absence of extrahepatic disease or vascular invasion, and Child-Pugh class A or B seeking to prevent further tumor growth and to maintain patient candidacy for liver transplant who receive pretransplant TACE, the evidence includes multiple small prospective studies. The relevant outcomes are OS, disease-specific survival, QOL, and treatment-related mortality and morbidity. There is a lack of comparative trials on various locoregional treatments as a bridge therapy for liver transplantation. Multiple small prospective studies have demonstrated that TACE can prevent dropouts from the transplant list. TACE has become an accepted method to prevent tumor growth and progression while patients are on the liver transplant waiting list. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

TACE for Unresectable Cholangiocarcinoma

For individuals who have unresectable cholangiocarcinoma who receive TACE, the evidence includes several retrospective observational studies and systematic reviews. The relevant outcomes are OS, disease-specific survival, QOL, and treatment-related mortality and morbidity. RCTs evaluating the benefit of adding TACE to the standard of care for patients with unresectable cholangiocarcinoma are lacking. Results of retrospective studies have shown a survival benefit with TACE over the standard of care. These studies lacked matched patient controls. Although the observational data are consistent, the lack of randomization limits definitive conclusions. The evidence is insufficient to determine that the technology results in an improvement in the net health.

TACE for Symptomatic Unresectable Neuroendocrine Tumors

For individuals who have symptomatic metastatic neuroendocrine tumors despite systemic therapy and are not candidates for surgical resection who receive TACE, the evidence includes retrospective single-cohort studies. The relevant outcomes are OS, disease-specific survival, symptoms, QOL, and

treatment-related mortality and morbidity. There is a lack of evidence from RCTs supporting the use of TACE. Uncontrolled trials have suggested that TACE reduces symptoms and tumor burden and improves hormone profiles. Generally, the response rates are over 50% and include patients with massive hepatic tumor burden. While many studies have demonstrated symptom control, survival benefits are less clear. Despite the uncertain benefit on survival, the use of TACE to palliate the symptoms associated with hepatic neuroendocrine metastases can provide a clinically meaningful improvement in net health outcome. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

TACE for Hepatic Metastases From Uveal (Ocular) Melanoma
For individuals who have liver-dominant metastatic uveal melanoma who receive TACE, the evidence includes observational studies and reviews. The relevant outcomes are OS, disease-specific survival, QOL, and treatment-related mortality and morbidity. There is a lack of evidence from RCTs assessing the use of TACE. Noncomparative prospective and retrospective studies have reported improvements in tumor response and survival compared with historical controls. Given the very limited treatment response from systemic therapy and the rarity of this condition, the existing evidence may support conclusions that TACE meaningfully improves outcomes for patients with hepatic metastases from uveal melanoma. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

TACE for Other Hepatic Metastases
For individuals who have unresectable hepatic metastases from any other types of primary tumors (e.g., colorectal or breast cancer) who receive TACE, the evidence includes multiple RCTs, observational studies, and systematic reviews. The relevant outcomes are OS, disease-specific survival, QOL, and treatment-related mortality and morbidity. Multiple RCTs and numerous nonrandomized studies have compared TACE with alternatives in patients who have colorectal cancer and metastases to the liver. Nonrandomized studies have reported that TACE can stabilize disease in 40% to 60% of treated patients but whether this translates into a prolonged survival benefit relative to systemic chemotherapy alone is uncertain. Two small RCTs have reported that TACE with drug-eluting beads has resulted in statistically significant improvements in response rate and progression-free survival. Whether this translates into a prolonged survival benefit relative to systemic chemotherapy alone is uncertain. For cancers other than colorectal, the evidence is extremely limited and no conclusions can be made. Studies have assessed small numbers of patients and the results have varied due to differences in patient selection criteria and treatment regimens used. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

National Comprehensive Cancer Network Guidelines

Hepatocellular Carcinoma
The NCCN(v. 2.2021) guidelines on hepatocellular carcinoma list TACE as an option for patients who are not candidates for surgically curative treatments or as a part of a strategy to bridge patients for other curative therapies (category 2A). The guidelines also recommend that patients with tumors size between 3 and 5 cm can be considered for arterially directed therapy or combination therapy with ablation and arterial embolization, and those with unresectable or inoperable tumors greater than 5 cm can be treated using arterial embolic approaches , systemic therapies, or external beam radiation therapy. Additionally, TACE in highly selected patients has been shown to be safe in the presence of limited tumor invasion of the portal vein. The American Association for the Study of Liver Diseases 2018 guidelines on hepatocellular carcinoma suggest using liver-directed therapies (which may include TACE) for bridging to liver transplant in patients with T2 lesions, in order to prevent disease progression and prevent dropouts from the waiting list. The guidelines recommend the use of locoregional therapies, including TACE, in patients with cirrhosis and T2 or T3 disease that is not amenable to resection or transplantation.

Intrahepatic Cholangiocarcinoma

The NCCN (v. 2.2021) guidelines on intrahepatic cholangiocarcinoma consider arterially directed therapies, including TACE, to be treatment options for unresectable and metastatic intrahepatic cholangiocarcinoma.

Neuroendocrine Tumors, Carcinoid, and Islet Cell Tumors
The NCCN (v.1.2021) guidelines on neuroendocrine tumors, carcinoid, and islet cell tumors consider chemoembolization as an effective approach for patients with hepatic-predominant metastatic disease (category 2A).

Uveal Cancer
The NCCN (v.1.2021) guidelines on uveal melanoma state that in patients with disease that is confined to the liver, regional liver-directed therapies such as chemoembolization, radioembolization, or immunoembolization should be considered.

Colon Cancer
The NCCN (v. 2.2021) guidelines on colon cancer recommend TACE only for clinical trials. The American Society of Clinical Oncology (2020) resource-stratified guidelines on late-stage colorectal cancer state that patients with unresectable liver metastases may receive TACE (weak recommendation). However, this recommendation should only be implemented in centers with expertise in the technique, after multidisciplinary review, or in the context of a clinical trial.

Breast Cancer
The NCCN (v. 4.2021) guidelines on breast cancer do not address TACE as a treatment option for breast cancer metastatic to the liver.

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable codes: *37243, 75894, 75898*

Diagnoses that are subject to medical necessity review:

ICD-10 Diagnosis Codes: C18.0, C18.1, C18.2. C18.3, C18.4, C18.5, C18.6, C18.7, C18.8, C18.9, C22.0, C22.1, C22.2, C22.3, C22.4, C22.7, C22.8, C22.9, K76.89, K76.9, C78.7, N94.89

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources

TEC - 1/96

BCBSA Medical Policy Reference Manual, 8.01.11, issued 7/31/96.

Consultant Review - 6/98.

Medical Policy Advisory Group 11/98

Medical Policy Advisory Group - 12/99

BCBSA Medical Policy Reference Manual, 8.01.11; 5/31/01

Specialty Matched Consultant Advisory Panel - 6/01

Specialty Matched Consultant Advisory Panel - 6/03

Specialty Matched Consultant Advisory Panel - 4/05

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11. 4/1/2005

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11. 4/25/2006

Specialty Matched Consultant Advisory Panel - 4/07

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11. 2/14/2008

Specialty Matched Consultant Advisory Panel - 4/2009

BCBSA-Medical Policy Reference Manual [Electronic Version]. 8.01.11. 7/2009

Specialty Matched Consultant Advisory Panel- 5/2010

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11. 10/8/2010

Specialty Matched Consultant Advisory Panel 5/2011

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11, 3/8/2012

Medical Director review 5/2012

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11, 10/11/12

Specialty Matched Consultant Advisory Panel 7/2013

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11, 10/10/13

Specialty Matched Consultant Advisory Panel 7/2014

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11, 10/9/14

Specialty Matched Consultant Advisory Panel 6/2015

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11, 9/10/15

National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Hepatobiliary cancer. Version 2.2016. http://www.nccn.org/professionals/physician_gls/pdf/hepatobiliary.pdf.

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11, 8/11/2016

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11, 7/13/2017

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11, 7/12/2018

National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines): Hepatobiliary Cancers, Version 2.2019. Updated March 6, 2019. https://www.nccn.org/professionals/physician_gls/pdf/hepatobiliary.pdf. Accessed May 29, 2019.

National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines): Neuroendocrine and Adrenal Tumors, Version 1.2019. Updated March 5, 2019. https://www.nccn.org/professionals/physician_gls/pdf/neuroendocrine.pdf. Accessed May 28, 2019.

Specialty Matched Consultant Advisory Panel 05/2020

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11, 7/11/2019

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11, 7/16/2020

Specialty Matched Consultant Advisory Panel 5/2021

Medical Director review 5/2021

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.11, 7/8/2021

Policy Implementation/Update Information

3/96	Original local policy issued.
11/96	Reaffirm: National Issued policy. No changes.
6/98	Reaffirm: Consultant review continues to indicate investigational.
6/99	Reformatted, Description of Procedure or Service changed, Medical Term Definitions added.
12/99	Medical Policy Advisory Group
4/01	System changes.
7/01	Policy name changed from Transcatheter Chemoembolization of the Hepatic Artery to Chemoembolization of the Hepatic Artery, Transcatheter Approach
8/01	Specialty Matched Consultant Advisory Panel, 6/2001. Revised the policy statement for investigational status and added statement to policy guidelines.
6/03	Specialty Matched Consultant Advisory Panel review. No criteria changes.
11/11/04	CPT codes 75896 and 75898 were removed as they do not apply to this policy. Policy remains unchanged. Chemoembolization of the hepatic artery, transcatheter approach is considered investigational. Listed codes will be reviewed. Updated format of Benefit Application and Billing/Coding sections for consistency. Notification given 11/11/2004. Effective date 1/20/2005.
05/05/05	Specialty Matched Consultant Advisory Panel review 4/14/05. No changes to criteria. Information added in the "Description of Procedure or Service" indicating "*****Please note that this policy does not pertain to Intrahepatic Arterial Chemotherapy or Selective Internal Radiation Therapy for Tumors of the Liver."** Policy guidelines added. References added.
6/2/05	Updated References.
5/21/07	Specialty Matched Consultant Advisory Panel review 4/25/2007. Revised "Description" section. Changed "Policy" to state that "BCBSNC may provide coverage for Chemoembolization of the Hepatic Artery, Transcatheter Approach when it is determined to be medically necessary because the medical criteria and guidelines shown below are met." Added criteria to the "When covered" section to indicate: "Chemoembolization of the hepatic artery, transcatheter approach may be medically necessary for the following: 1. For unresectable primary hepatocellular cancers (HCC); or 2. Prior to liver transplantation for hepatocellular cancer (HCC); or 3. For palliative treatment of functional neuroendocrine cancers that are symptomatic and involve the liver, such as: 3a. carcinoid tumors that have failed systemic therapy to control the carcinoid syndrome. Symptoms of carcinoid syndrome are debilitating wheezing, diarrhea, and flushing. 3b. pancreatic endocrine tumors that involve the liver." Added the following to the "When not covered" section; "1. For indications other than those listed above. 2. Transcatheter hepatic arterial chemoembolization is considered investigational for palliative treatment of liver metastases

	from other non-endocrine primaries such as colon cancer, melanoma, and unknown primaries." Updated rationale in the "Policy Guidelines" section. References added.
7/28/08	Updated the "When Covered" section to allow additional indications; "1.Hepatocellular cancer (HCC) that is unresectable but confined to the liver and not associated with portal vein thrombosis; or 2. As a bridge to transplant in patients with hepatocellular cancer where the intent is to prevent further tumor growth and to maintain a patient's candidacy for liver transplantation; or 3. Liver metastasis in symptomatic patients with metastatic neuroendocrine tumors whose symptoms persist despite systemic treatment and who are not candidates for surgical resection; or 4. Liver metastasis in patients with liver-dominant metastatic uveal melanoma." Updated the "When Not Covered" section to remove new allowed indications. Updated the "Policy Guidelines" section to indicate; "When using transcatheter hepatic arterial chemoembolization as a bridge to transplant to prevent further tumor growth, the following patient characteristics apply: 1. A single tumor less than 5 cm or no more than 3 tumors each less than 3 cm in size, and 2. Absence of extrahepatic disease or vascular invasion, and 3.Child-Pugh score of either A or B." References added.
5/18/09	Revised Description section for clarity. Updated Policy Guidelines section. Specialty Matched Consultant Advisory Panel review 4/21/09. No change to policy statement. (btw)
6/22/10	Specialty Matched Consultant Advisory Panel review 5/24/10. No policy statement changes.(lr)
10/26/10	Added diagnoses codes to the "Billing/Coding" section. (lpr)
6/7/11	Under "Not Covered" section: added policy statement "As neoadjuvant or adjuvant therapy in hepatocellular cancer that is considered resectable" is investigational. Specialty Matched Consultant Advisory panel review 5/25/2011. References added. (lpr)
11/22/11	Corrected coding format for diagnoses in the "Billing/Coding" section. (btw)
6/29/12	Description section revised. Added the following statement to the When Not Covered section to indicate; "Transcatheter hepatic arterial chemoembolization is considered investigational to treat unresectable cholangiocarcinoma." No change to policy intent. Policy Guidelines updated. Reference added. Medical Director review 5/2012. (sk)
11/27/12	Reference added. No change to Policy statement. (sk)
1/1/13	CPT codes 75896 and 75898 added to Billing/Coding section. (sk)
7/1/13	ICD-10 diagnosis codes added to Billing/Coding section. (sk)
8/13/13	Specialty Matched Consultant Advisory Panel review 7/17/2013. No change to Policy statement. (sk)
12/31/13	Reference added. CPT code updated with new 2014 coding. CPT code 37204 deleted and CPT code 37243 added to Billing/Coding section. Policy statements unchanged. (sk)
10/28/14	Specialty Matched Consultant Advisory Panel review 7/29/2014. Removed effective date 10/1/2014 from ICD-10 list. No change to Policy statement. (sk)
7/28/15	Specialty Matched Consultant Advisory Panel review 6/24/2015. Reference added. No change to policy statement. (lpr)
10/30/15	Updated Description and Policy Guidelines sections. Reference added. No change to policy statement. (lpr)
7/26/2016	CPT 75896 deleted, no longer a valid code. Specialty Matched Consultant Advisory Panel review 6/29/2016. No change to policy statement. (an)

6/30/17 Policy Guidelines updated. References added. Specialty Matched Consultant Advisory Panel review 5/26/2017. No change to policy statement. (an)

6/29/18 References added. ICD-9 codes deleted from Billing/Coding section. Specialty Matched Consultant Advisory Panel review 5/23/2018. No change to policy statement. (an)

6/11/19 Revised Item 1 in the Covered Section to read: "Hepatocellular cancer (HCC) that is unresectable but confined to the liver and not associated with portal vein thrombosis and liver function not characterized as Child-Pugh class C". References added. Specialty Matched Consultant Advisory Panel review 5/15/2019. (an)

6/9/20 Policy guidelines updated. References added. Specialty Matched Consultant Advisory Panel review 5/20/2020. (eel)

8/11/20 When not covered section clarified with bullet 2→e. No change to policy intent. (eel)

6/1/21 Description section updated. Policy guidelines section: National Comprehensive Cancer Network Guidelines updated. References added. Specialty Matched Consultant Advisory Panel review 5/2021. Medical Director review 5/2021. (bb)

9/21/21 Reference added. Description section updated. Policy Guidelines section updated. (sk)