Medical Policy

Transcatheter Arterial Chemoembolization - TACE - to Treat Primary or Metastatic Liver Malignancies

Table of Contents
- Policy: Commercial
- Policy: Medicare
- Authorization Information
- Coding Information
- Description
- Information Pertaining to All Policies
- Policy History
- References
- Endnotes

Policy Number: 634
BCBSA Reference Number: 8.01.11

Related Policies
- Cryosurgical Ablation of Primary or Metastatic Liver Tumors, #633
- Radiofrequency Ablation of Primary or Metastatic Liver Tumors, #286
- Radioembolization for Primary and Metastatic Tumors of the Liver, #292

Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO BlueSM and Medicare PPO BlueSM Members

Transcatheter hepatic arterial chemoembolization, including the use of drug-eluting beads, may be MEDICALLY NECESSARY:
- To treat hepatocellular cancer that is unresectable but confined to the liver and not associated with portal vein thrombosis
- 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.
- To treat liver metastasis in symptomatic patients with metastatic neuroendocrine tumor whose symptoms persist despite systemic therapy and who are not candidates for surgical resection, or
- To treat liver metastasis in patients with liver-dominant metastatic uveal melanoma.

Transcatheter hepatic arterial chemoembolization, including the use of drug-eluting beads, is INVESTIGATIONAL:
- As neoadjuvant or adjuvant therapy in hepatocellular cancer that is considered resectable,
- To treat hepatocellular tumors prior to liver transplantation except as noted above,
- To treat liver metastases from any other tumors or to treat hepatocellular cancer that does not meet the criteria noted above, including recurrent hepatocellular carcinoma, or
- To treat unresectable cholangiocarcinoma.
**Prior Authorization Information**

Pre-service approval is required for all inpatient services for all products. See below for situations where prior authorization may be required or may not be required for outpatient services.

Yes indicates that prior authorization is required.
No indicates that prior authorization is not required.
N/A indicates that this service is primarily performed in an inpatient setting.

<table>
<thead>
<tr>
<th>Outpatient</th>
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<tbody>
<tr>
<td>Commercial Managed Care (HMO and POS)</td>
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<td>Commercial PPO and Indemnity</td>
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<td>Medicare HMO BlueSM</td>
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**CPT Codes / HCPCS Codes / ICD Codes**

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The above medical necessity criteria MUST be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

**CPT Codes**

<table>
<thead>
<tr>
<th>CPT Codes</th>
<th>Code Description</th>
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<tr>
<td>37243</td>
<td>Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; for tumors, organ ischemia, or infarction</td>
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<tr>
<td>75894</td>
<td>Transcatheter therapy, embolization, any method, radiological supervision and interpretation</td>
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**Description**

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 2 independent blood supplies, and the ability of healthy hepatic tissue to grow and thus compensate for tissue mass lost during chemoembolization.

The TACE procedure involves the insertion of a superselective catheter via the femoral artery, which is 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.
TACE of the liver has been associated with 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, to treat liver metastases, and in the liver transplant setting.

**Summary**

**Unresectable HCC:** Studies (including randomized trials) of TACE for patients with unresectable HCC confined to the liver who meet specific selection criteria (i.e., good hepatic function/reserve and no portal vein thrombosis) have shown improved survival compared to only supportive care.

**Resectable HCC:** There are little data on the use of TACE in the neoadjuvant or adjuvant setting, and a significant long-term survival benefit has not been demonstrated.

**TACE in the liver transplant setting for HCC:** TACE has become an accepted method to prevent tumor growth while patients are on the liver transplant wait list.

**Cholangiocarcinoma:** Most of the data for the use of TACE to treat unresectable cholangiocarcinoma is for unresectable intrahepatic cholangiocarcinoma. Although the data suggest a survival advantage with TACE versus supportive care or systemic chemotherapy alone, the data consist mostly of retrospective reviews without matched patient controls, and clinical vetting did not uniformly support the use of TACE for this indication.

**Metastatic neuroendocrine tumors:** Studies have included heterogeneous patient populations, and interpretation of survival data using TACE is difficult. Several studies have shown reduced tumor burden, reduced hormone levels, and palliation of symptoms with TACE.

**Metastatic uveal melanoma:** Several studies have shown a survival advantage using locoregional treatment modalities, including TACE, in patients who have liver-dominant metastases from ocular melanoma.

**Metastatic colorectal cancer and other metastases:** Studies have consisted of small numbers of patients, and the results have been variable across studies due to variation in patient selection criteria and regimens used between different studies. At this time, the data do not support the use of TACE in these settings.

**Policy History**

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<thead>
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**Information Pertaining to All Blue Cross Blue Shield Medical Policies**

Click on any of the following terms to access the relevant information:

- Medical Policy Terms of Use
- Managed Care Guidelines
- Indemnity/PPO Guidelines
- Clinical Exception Process
- Medical Technology Assessment Guidelines

**References**


42. Sato T. Locoregional management of hepatic metastasis from primary uveal melanoma. Semin Oncol. Apr 2010;37(2):127-138. PMID 20494705


Endnotes
1. Based on local expert opinion