Medical Policy
Cellular Immunotherapy for Prostate Cancer

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Policy Number: 268
BCBSA Reference Number: 8.01.53
NCD/LCD: National Coverage Determination (NCD) for Autologous Cellular Immunotherapy Treatment (110.22)

Related Policies
- Gene-Based Tests for Screening, Detection, and/or Management of Prostate Cancer, #333

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

Sipuleucel-T therapy may be considered MEDICALLY NECESSARY in the treatment of asymptomatic or minimally symptomatic, androgen-independent (castration-resistant) metastatic prostate cancer.

Sipuleucel-T therapy is INVESTIGATIONAL in all other situations, including but not limited to treatment of hormone-responsive prostate cancer, treatment of moderate to severe symptomatic metastatic prostate cancer, and treatment of visceral (liver, lung, or brain) metastases.

Medicare HMO BlueSM and Medicare PPO BlueSM Members

National Coverage Determination (NCD) for Autologous Cellular Immunotherapy Treatment (110.22)

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.
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.
Commercial Managed Care (HMO and POS) | No
---|---
Commercial PPO and Indemnity | No
Medicare HMO BlueSM | No
Medicare PPO BlueSM | No

**CPT Codes / HCPCS Codes / ICD Codes**

The following codes are included below for informational purposes. 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.

**CPT Codes**

There is no specific CPT code for this service.

**HCPCS Codes**

<table>
<thead>
<tr>
<th>HCPCS codes:</th>
<th>Code Description</th>
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<tbody>
<tr>
<td>Q2043</td>
<td>Sipuleucel-T, minimum of 50 million autologous cd54+ cells activated with PAP-GM-CSF, including leukapheresis and all other preparatory procedures, per infusion</td>
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**Description**

Prostate cancer is the second leading cause of cancer-related deaths among American men, with an estimated incidence of 220,800 cases and an estimated number of 27,540 deaths in 2015.1 In most cases, prostate cancer is diagnosed at a localized stage and is treated with prostatectomy or radiotherapy. However, some patients are diagnosed with metastatic disease or recurrent disease after treatment of localized disease. Androgen ablation is the standard treatment for metastatic or recurrent disease. Most patients who survive long enough eventually develop androgen-independent prostate cancer. At this stage of metastatic disease, docetaxel, a chemotherapeutic agent, has been demonstrated to confer a survival benefit of 1.9 to 2.4 months in randomized clinical trials.2,3 Chemotherapy with docetaxel causes adverse effects in large proportions of patients, including alopecia, fatigue, neutropenia, neuropathy, and other symptoms. Trials evaluating docetaxel included both asymptomatic and symptomatic patients, and results suggest a survival benefit for both groups. Because of the burden of treatment and its adverse effects, most patients therefore defer docetaxel treatment until cancer recurrence is symptomatic.

Cancer immunotherapy has been investigated as a treatment which could potentially be instituted at the point of detection of androgen-independent metastatic disease before significant symptomatic manifestations have occurred. The quantity of cancer cells in the patient during this time is thought to be relatively low, and it is thought that an effective immune response against the cancer during this interval could effectively delay or prevent progression. Such a delay could allow a course of effective chemotherapy, such as docetaxel, to be deferred or delayed until necessary, thus providing an overall survival benefit.

Sipuleucel-T (Provenge®; Dendreon Corp.) is a new class of therapeutic agent used in the treatment of asymptomatic or minimally symptomatic, androgen-independent (castration-resistant), metastatic prostate cancer. The agent comprises specially treated dendritic cells obtained from the patient through leukapheresis. The cells are then exposed in vitro to proteins that contain prostate antigens and immunologic-stimulating factors and are then reinfused back into the patient. At reinfusion, the cells are administered as 3 intravenous infusions given approximately 2 weeks apart. The proposed mechanism of action is that the treatment stimulates the patient’s own immune system to resist cancer spread.
Summary
Sipuleucel-T (Provenge®; Dendreon Corp.) is a new class of therapeutic agent used in the treatment of asymptomatic or minimally symptomatic, androgen-independent (castration-resistant), metastatic prostate cancer. The agent comprises specially treated dendritic cells obtained from the patient through leukapheresis. The cells are then exposed in vitro to proteins that contain prostate antigens and immunologic-stimulating factors and are then reinfused back into the patient. The proposed mechanism of action is that treatment stimulates the patient’s own immune system to resist cancer spread.

For patients with metastatic, androgen-independent prostate cancer, 3 randomized controlled trials (RCTs) of sipuleucel-T reported an improvement in median survival of approximately 4 months. The 2 early studies of sipuleucel-T were not specifically designed to demonstrate a difference in overall mortality but did show a survival difference. The third study, which was designed to demonstrate a mortality difference, showed a similar improvement in overall survival. All 3 studies also were consistent in demonstrating that sipuleucel-T does not delay time to measureable progression of disease. In all studies, many patients had further chemotherapy treatment at the discretion of the treating physician; thus, the survival benefit accrues in the context of additional treatment as needed for symptomatic recurrence. This evidence is sufficient to conclude that sipuleucel-T improves net health outcome for patients with androgen-independent, asymptomatic or minimally symptomatic, metastatic prostate cancer.

For patients who do not meet the previously described criteria, evidence does not demonstrate an improvement in net health outcome. One RCT of patients with androgen-dependent, nonmetastatic prostate cancer showed no statistical difference between sipuleucel-T and control in time to biochemical failure or prostate-specific antigen (PSA) doubling time. This evidence does not support the use of sipuleucel-T for patients with hormone-responsive prostate cancer, moderate-to-severe symptomatic metastatic prostate cancer, or visceral (liver, lung, brain) metastases.

Policy History

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
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<tbody>
<tr>
<td>9/2015</td>
<td>BCBSA National policy review. “Hormone-refractory” changed to the current clinically accepted term “castration-resistant” in the medically necessary policy statement and throughout the policy. Policy statements otherwise unchanged. 9/1/2015.</td>
</tr>
<tr>
<td>10/2014</td>
<td>Hormone refractory cancer clarified.</td>
</tr>
<tr>
<td>9/2014</td>
<td>New references added from BCBSA National medical policy.</td>
</tr>
<tr>
<td>10/2013</td>
<td>New references from BCBSA National medical policy.</td>
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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