Medical Policy
Embryonic Mesencephalic Transplantation for the Treatment of Parkinsons Disease

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Policy Number: 625
BCBSA Reference Number: 7.01.10A

Related Policies
None

Policy
Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity
Medicare HMO BlueSM and Medicare PPO BlueSM Members
Fetal mesencephalic transplantation for the treatment of Parkinson’s disease is INVESTIGATIONAL.

Prior Authorization Information
Commercial Members: Managed Care (HMO and POS)
This is NOT a covered service.

Commercial Members: PPO, and Indemnity
This is NOT a covered service.

Medicare Members: HMO BlueSM
This is NOT a covered service.

Medicare Members: PPO BlueSM
This is NOT a covered service.

CPT Codes / HCPCS Codes / ICD-9 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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<tr>
<td>S2103</td>
<td>Adrenal tissue transplant to brain</td>
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**Description**
Parkinson's disease is a degenerative disease that includes symptoms of resting tremor, rigidity, and bradykinesia. The condition usually appears after age 40 years and progresses slowly over many years. Drug treatment with levodopa can usually restore smooth motor function for up to 5–10 years after onset of Parkinson's disease by permitting surviving dopaminergic cells to bypass a rate-limiting enzyme, tyrosine hydroxylase, and thus produce enough dopamine to maintain adequate motor function. Eventually, more dopaminergic cells die, leading to progressive disability.

In an effort to modify motor disability of advanced Parkinson's disease, embryonic mesencephalic (midbrain) tissue containing dopamine-producing cells is implanted into the caudate and putamen of the candidate's brain.

**Summary**
Because of the variability in the therapeutic effect of transplantation, particularly in patients older than 60 years of age, and the risk of severe dyskinesia and dystonia unresponsive to withdrawal of dopamine-agonist medication, the evidence is not sufficient to permit a conclusion that transplantation of embryonic dopamine neurons improves the net health outcomes for patients with advanced Parkinson's disease. Studies have reported a strong placebo effect, since patients reported better scores if they believed they had received the transplant. In a study of cognition 1 year post-procedure in the NINDS study, the authors reported no significant differences in cognitive performance at follow-up for the transplant or placebo group as performance for most measures remained the same. For all these reasons, transplantation of embryonic dopamine neurons for patients with advanced Parkinson's disease is investigational.

**Policy History**

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<td>No changes to policy statements</td>
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<td>2/2010</td>
<td>BCBSA National medical policy review.</td>
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References