GUIDELINES
This policy does not certify benefits or authorization of benefits, which is designated by each individual policyholder contract. Paramount applies coding edits to all medical claims through coding logic software to evaluate the accuracy and adherence to accepted national standards. This guideline is solely for explaining correct procedure reporting and does not imply coverage and reimbursement.

DESCRIPTION
The goal of amniotic membrane transplantation and limbal stem cell transplantation is to reconstruct damaged ocular surfaces and promote healing, decrease scarring, reduce inflammation and restore function and appearance of corneal, conjunctival and eyelid tissues after injury due to trauma, disease, or surgery.

Amniotic membrane is the innermost layer of the placenta consisting of a thick basement membrane and an avascular stromal matrix. It can be obtained from cesarean deliveries and is prepared and cryo-preserved under sterile conditions. It may be sutured into place, or placed without sutures onto the ocular surface and used as a graft and/or a dressing to facilitate ocular surface reconstruction and promote healing. Amniotic membrane contains an avascular matrix, which inhibits angiogenesis in adjacent tissues, thus minimizing vascularization during ocular healing. It exhibits anti-inflammatory properties and suppresses expression of transforming growth factor-beta (TGF-β) isoforms, minimizing scar tissue.

Limbal stem cells act as a “barrier” to conjunctival epithelial cells and normally prevent them from migrating on to the corneal surface. Limbal stem cell deficiency (LSCD) can develop in traumatic, immunologic, or genetic diseases that affect the ocular surface. LSCD leads to conjunctivalization, with corneal vascularization and opacification and subsequent loss of vision. Limbal stem cell transplantation is a surgical treatment to address LSCD and restore a corneal epithelial phenotype. Based on the source of cells, limbal transplant can be autologous or allogenic. An autograft from the individual’s undamaged eye may be used, or an allograft from a donor’s eye may be used.

POLICY
Amniotic membrane OR limbal stem cell transplantation for ocular indications does not require prior authorization.

HMO, PPO, Individual Marketplace, Elite, Advantage
Amniotic membrane OR limbal stem cell transplantation is medical necessity for the treatment of any of the following conditions when medical management (e.g., lubricants, artificial tears, steroids, antibiotics, eyelid taping, patching) has failed, is contraindicated or is not tolerated:
- Bullous keratopathy
- Corneal ulceration or defect
- Chemical or thermal ocular injury
- Pterygium, pseudopterygium
- Stevens-Johnson syndrome
- Neurotrophic keratopathy
- Hereditary aniridia, ectodermal dysplasia or dominantly inherited keratitis

CODING/BILLING INFORMATION
The appearance of a code in this section does not necessarily indicate coverage. Codes that are covered may have selection criteria that must be met. Payment for supplies may be included in payment for other services rendered.

HPCPCS CODES
- V2790  Amniotic membrane for surgical reconstruction, per procedure

CPT CODES
- 65778  Placement of amniotic membrane on the ocular surface; without sutures
- 65779  Placement of amniotic membrane on the ocular surface; single layer, sutured
- 65780  Ocular surface reconstruction; amniotic membrane transplantation, multiple layers
- 65781  Ocular surface reconstruction; limbal stem cell allograft (eg, cadaveric or living donor)
- 65782  Ocular surface reconstruction; limbal conjunctival autograft (includes obtaining graft)
REVISION HISTORY EXPLANATION
02/09/16: Title changed from Amniotic Tissue Graft to Treatment of Ocular Conditions with Amniotic Membrane or Limbal Stem Cell Transplantation. Removed codes L8699 and 65450 from policy. Policy reviewed and updated to reflect most current clinical evidence per Medical Policy Steering Committee.

REFERENCES/RESOURCES
Centers for Medicare and Medicaid Services, CMS Manual System and other CMS publications and services
Ohio Department of Medicaid http://jfs.ohio.gov/
American Medical Association, Current Procedural Terminology (CPT®) and associated publications and services
Centers for Medicare and Medicaid Services, Healthcare Common Procedure Coding System, HCPCS Release and Code Sets
Industry Standard Review
Hayes, Inc.