

DISCLAIMER

This Molina Clinical Policy (MCP) is intended to facilitate the Utilization Management process. Policies are not a supplementation or recommendation for treatment; Providers are solely responsible for the diagnosis, treatment, and clinical recommendations for the Member. It expresses Molina's determination as to whether certain services or supplies are medically necessary, experimental, investigational, or cosmetic for purposes of determining appropriateness of payment. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered (e.g., will be paid for by Molina) for a particular Member. The Member's benefit plan determines coverage – each benefit plan defines which services are covered, which are excluded, and which are subject to dollar caps or other limits. Members and their Providers will need to consult the Member's benefit plan to determine if there are any exclusion(s) or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and a Member's plan of benefits, the benefits plan will govern. In addition, coverage may be mandated by applicable legal requirements of a State, the Federal government or CMS for Medicare and Medicaid Members. CMS's Coverage Database can be found on the CMS website. The coverage directive(s) and criteria from an existing National Coverage Determination (NCD) or Local Coverage Determination (LCD) will supersede the contents of this MCP and provide the directive for all Medicare members. References included were accurate at the time of policy approval and publication.

OVERVIEW

This policy reviews the use of Encelto (revakinagene taroretcel-lwey) in non-neovascular macular telangiectasia type 2. Macular telangiectasia (MT) is an uncommon cause of progressive, central vision loss. Vision loss begins with difficulties in reading after the age of 40 but becomes more extensive over time. The disorder has been attributed to a disturbance of vascular growth and neurodegeneration in the central portion of the retina (macula). The macula is responsible for central, color vision and high acuity vision. Neurodegeneration results from dysfunction of Muller cells that provide nutrition and trophic factors to neuronal cells. It is now thought that MT results from primary neurodegeneration secondary to loss of trophic factor support from Muller cells. This is followed by disorganized retinal vessel formation and vessel dysfunction. There are multiple subtypes of MT and it is important to know the subtype of MT that revakinagene treats. MT is divided broadly into two subtypes, macular telangiectasia type 1 (MT-1) and macular telangiectasia type 2 (MT-2). There is a further subdivision of MT-2 into neovascular and non-neovascular types. Revakinagene treats the MT-2, non-neovascular type by supplying a trophic factor called ciliary neurotrophic factor to the retinal region.

Revakinagene is an encapsulated, cell-based gene therapy that is surgically implanted in the eye. The manufacturer's proprietary cell line is genetically engineered to produce the CNTF trophic factor within an encapsulation that allows CNTF to diffuse out to retinal cells. CNTF is neuroprotective and helps maintain photoreceptors and retinal ganglion cells. This therapy slows the progression of MT-2 but is not a cure. Each implant houses 200,000 to 440,000 allogeneic retinal pigment epithelial cells with the recombinant human CNTF gene. Implants are removable should problems arise.

Regulatory Status

Encelto was FDA approved March 5, 2025. Prior to Encelto, there was no known treatment for MT-2 (Chew 2019).

COVERAGE POLICY

Revakinagene taroretcel-lwey may be **considered medically necessary** when ALL the following criteria are met:

1. Member must have a diagnosis of macular telangiectasia type 2 with evidence of fluorescein leakage typical of macular telangiectasia or other features including retinal opacification, crystalline deposits, right angle vessels, inner lamellar cavities or hyperpigmentation not involving the center of the fovea, but no evidence of intraretinal/subretinal neovascularization
2. Member is between 21 years and 80 years of age
3. Member must be medically able to undergo ophthalmic surgery for the ocular implant
4. In the eye (s) to be treated, member must have an ellipsoid zone break (inner segment to outer segment)

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photoreceptor break), and en face lesion size (lesion viewed from a top-down perspective) as measured by Optical Coherence Tomography (OCT) of at least 0.16 mm² – 4.00 mm²

5. Member has not received steroid intravitreal therapy for non-neovascular macular telangiectasia within the last 3 months or intravitreal anti-VEGF therapy in the eye to be treated or anti-VEGF in the untreated eye within the last 3 months.
6. Member does not have evidence of ocular disease (other than macular telangiectasia) that may be vision threatening
7. Member does not have evidence of intraretinal/subretinal neovascularization in either eye
8. Member does not have evidence of central serous chorio-retinopathy (CSCR) in either eye
9. Member does not have evidence of pathologic myopia in either eye
10. Member does not have significant corneal or media opacities in either eye
11. Member does not have a vitrectomy, penetrating keratoplasty, trabeculectomy or trabeculoplasty
12. Member does not have any of the following lens opacities: cortical opacity > standard 3, posterior subcapsular opacity > standard 2, or a nuclear opacity > standard 3 as measured on the AREDS clinical lens grading system (Age-Related Eye Disease Study); Member has not undergone lens removal in the study eye(s) in the previous 3 months or YAG laser within 4 weeks
13. Member is not on chemotherapy
14. Member is not pregnant or breastfeeding
15. Member is not on immunosuppressive therapy
16. Member is not immunodeficient
17. Member does not have a known history of HIV
18. Member does not have a history of ocular Herpes virus
19. Member does not have Active or suspected ocular or periocular infections
20. Member does not have a known hypersensitivity to Endothelial Serum Free Media (Endo-SFM)

Limitations and Exclusions

QUANTITY LIMITATIONS: The recommended dose is one ENCELTO implant per affected eye. Additional implants of Encelto will not be authorized.

Continuation of Therapy

Encelto is indicated as a one-time implant. Repeat treatment or re-administration of an implant is not supported by labeling or compendia and is not considered medically necessary.

DOCUMENTATION REQUIREMENTS. Molina Healthcare reserves the right to require that additional documentation be made available as part of its coverage determination; quality improvement; and fraud; waste and abuse prevention processes. Documentation required may include, but is not limited to, patient records, test results and credentials of the provider ordering or performing a drug or service. Molina Healthcare may deny reimbursement or take additional appropriate action if the documentation provided does not support the initial determination that the drugs or services were medically necessary, not investigational, or experimental, and otherwise within the scope of benefits afforded to the member, and/or the documentation demonstrates a pattern of billing or other practice that is inappropriate or excessive.

SUMMARY OF MEDICAL EVIDENCE

Encelto's FDA approval was based on data from several studies. Although six clinical trials were completed only two have been published in peer reviewed journals. The most recent trial published in 2019 reported data from a phase 2 study (NCT01949324) looking at the safety & efficacy revakinagene therapy in subjects with bilateral macular telangiectasia type 2 (Chew et al. 2019).

This was a prospective, multi-center, single-masked sham-controlled study. There were 68 participants, but only sixty-five participants completed the study; two participants died (unrelated to treatment) and three participants eyes were ineligible (either because of neovascularization or lesion size). All remaining study members were 21 to 80 years of age, with at least one study eye having a diagnosis of MT-2 (99 study eyes). Participants also had an IS/OS PR break and en face ellipsoid zone between 0.16 mm² and 4.00 mm². Participants meeting inclusion criteria were randomized (1:1) to receive NT-501 implant or sham procedure. Study eyes received NT-501 implant or sham procedure on Day 0 and are assessed at Day 1, week 1, month 1, month 3, month 6, month 12, month 18, and 24 months.

The primary endpoint was the difference in the area of neurodegeneration as measured by the change in the ellipsoid zone (area of IS/OS loss) assessed by en face imaging by SDOCT (spectral domain OCT). This measurement was carried out in the study eye(s) at month 24 and compared to baseline.

Secondary outcomes included comparisons of visual function between treated and untreated groups. Comparative changes in the ellipsoid zone from baseline to month 12, retinal sensitivity, and reading speed from baseline to months 12 and 24 were part of secondary outcomes. Other outcomes not reported here were proportion of study eyes with a 35% or more increase in the ellipsoid zone, best corrected visual acuity, proportion of study eyes with 15 or more letter loss in BCVA, proportion of study eyes with 10 or more letter loss in BCVA.

Study results: There was a 31 percent greater progression of neurodegeneration in the sham treated eye as compared to Encelto treated eyes. The mean retinal sensitivity loss in the sham group was 45% greater than the treated group. Reading speed in the sham group also deteriorated as compared to the treated group by 13.9 words per minute.

Visual field testing and electroretinography suggested no major safety concerns. No implants required removal. Two adverse events likely related to CNTF were self-reported delayed dark adaptation (18.8%) and pupil miosis (18.8%).

The first clinical trial, NCT03316300, was a safety study of less than 10 patients as reported by Chew et al (2015). Key enrollment criteria were the presence of macular telangiectasia type 2 in adults ages 21 or older. The primary endpoint was ocular safety after Encelto implant. No implants required removal. Participants were evaluated by electroretinogram (ERG) and best corrected visual acuity. There were 4 participants with transient decrements in ERG parameters, but all returned to baselines by month 3. The study was not powered to answer questions about efficacy.

National and Specialty Organizations

This therapy is so recently approved that it does not appear in any guidelines to date.

CODING & BILLING INFORMATION

CPT (Current Procedural Terminology)

Code	Description
67027	Implantation of intravitreal drug delivery system (e.g., ganciclovir implant), includes concomitant removal of vitreous

HCPSCS (Healthcare Common Procedure Coding System)

Code	Description
C9399	Unclassified drugs or biologicals [when specified as ENCELTO (revakinagene taroretcel-lwey)]
J3590	Unclassified biologics [when specified as ENCELTO (revakinagene taroretcel-lwey)]

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APPROVAL HISTORY

04/09/2025 New policy. IRO Peer Review on April 7, 2025 by a practicing physician board-certified in ophthalmology.

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