**SUBJECT:** Encelto (revakinagene taroretcel-lwey) Implant **POLICY NUMBER: PHARMACY-133 EFFECTIVE DATE: 10/2025 LAST REVIEW DATE: 10/01/2025** If the member's subscriber contract excludes coverage for a specific service or prescription drug, it is not covered under that contract. In such cases, medical or drug policy criteria are not applied. This drug policy applies to the following line/s of business: **Policy Application** Category: □ Commercial Group (e.g., EPO, HMO, POS, PPO) ☐ Medicare Part D □ Off Exchange Direct Pay □ Child Health Plus (CHP) ☐ Federal Employee Program (FEP) ☐ Ancillary Services □ Dual Eligible Special Needs Plan (D-SNP)

#### **DESCRIPTION**:

Macular Telangiectasia (MacTel) Type 2 is a rare, slowly progressive eye disease that affects the macula, the central part of the retina responsible for sharp, detailed vision. It usually affects both eyes, though one may be more severely impacted. Type 2 is the most common form of MacTel and is typically diagnosed in middle age.<sup>1</sup>

In early stages, MacTel Type 2 may have no noticeable symptoms, but it gradually leads to blurred or distorted central vision, difficulty reading, and trouble recognizing faces. Peripheral vision remains intact, and the disease rarely causes total blindness. Symptoms tend to progress over 10 to 20 years.<sup>1</sup>

The condition affects about 0.1% of the population.<sup>2</sup> Risk factors may include smoking, high blood pressure, diabetes, and a possible genetic component, though the exact cause remains unclear.<sup>3</sup> The disease results from abnormal blood vessels around the fovea, which may leak fluid or bleed. In some cases, new abnormal vessels form under the retina, a complication known as macular neovascularization, leading to swelling, scarring, and further vision loss.<sup>2,3</sup>

Diagnosis relies on retinal imaging, including optical coherence tomography (OCT) and fluorescein angiography, along with a clinical evaluation. There are no established treatment guidelines. Management is primarily observational. In cases involving macular neovascularization, anti-VEGF injections may be used, though their effectiveness is often limited.<sup>1-3</sup>

## Encelto™ (revakinagene taroretcel-lwey) implant, for intravitreal use

On March 6, 2025, the FDA approved Encelto<sup>™</sup>, a novel, encapsulated cell-based gene therapy for adults with idiopathic MacTel Type 2.<sup>4</sup> It is the first approved treatment specifically for this condition. Encelto <sup>™</sup> delivers recombinant human ciliary neurotrophic factor (rhCNTF), a protein thought to support photoreceptor survival by activating Müller glial cells and triggering protective signaling pathways.<sup>4,5</sup>

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Encelto™ was evaluated in two Phase III pivotal, multicenter, double-masked, sham-controlled studies: Study NTMT-03-A (Study 1) and Study NTMT-03-B (Study 2).<sup>5</sup> In both studies, adults with idiopathic Macular Telangiectasia Type 2 (MacTel) were randomized 1:1 to receive either Encelto™ or a sham procedure. The primary endpoint in both trials was the rate of change in the ellipsoid zone (EZ) area loss over 24 months, measured by spectral-domain optical coherence tomography (SD-OCT). Key secondary endpoint was the change in aggregate retinal sensitivity within the EZ break area, measured by microperimetry at 24 months.

#### Results

Study 1 met its primary endpoint. Encelto<sup>™</sup> significantly reduced the rate of EZ area loss (0.075 mm² vs. 0.166 mm²; difference: -0.091 mm², p<0.0001) compared to sham. A statistically significant smaller loss in retinal sensitivity was also observed in the Encelto<sup>™</sup> group (25.27 decibels [dB] vs. 43.02 dB, respectively [P = 0.02]). Study 2 also met its primary endpoint. Encelto<sup>™</sup> reduced the rate of EZ area loss (0.111 mm² vs. 0.160 mm²; difference: -0.049 mm², p=0.0186). However, there was no statistically significant difference in retinal sensitivity loss between groups (p=0.83).

### Safety

In clinical trials, Encelto<sup>™</sup> was associated with several adverse reactions occurring more frequently than in the sham group (Encelto<sup>™</sup> vs sham). The most common adverse reactions (incidence ≥2%) included conjunctival hemorrhage (31% vs 26%), delayed dark adaptation (23.1% vs 1%), foreign body sensation (15% vs 13.5%), eye pain (15% vs 9%), suture-related complications (15.4% vs 2.7%), and miosis (15.4% vs 0%).<sup>4</sup>

Other reactions observed more frequently in the Encelto<sup>™</sup> group (vs sham) were conjunctival hyperemia (11% vs 8%), eye pruritus (9% vs 3.6%), ocular discomfort (9% vs 1%), vitreous hemorrhage (8.5% vs 0%), blurred vision (7% vs 4%), headache (7% vs 1%), dry eye (6% vs 2%), and eye irritation (5.1% vs 2%). Less common but still more frequent in the Encelto<sup>™</sup> group (vs sham) were cataract formation or progression (5% vs 0%), vitreous floaters (5% vs 0%), severe vision loss of more than 15 letters (3% vs 0%), eye discharge (3.4% vs 0.9%), anterior chamber cell (3.4% vs 0%), and iridocyclitis (2.6% vs 0%). Serious adverse reactions occurred in 5% of Encelto<sup>™</sup> patients, including suture-related complications and one case of implant extrusion.<sup>4</sup>

## **RATIONALE:**

Encelto<sup>TM</sup> met its primary endpoints in both Phase III pivotal trials, resulting in a significant reduction in the rate of EZ area loss from baseline over 24 months compared with sham. Slowing the rate of EZ loss has been correlated to photoreceptor preservation.<sup>6-9</sup> Aggregate retinal sensitivity loss, as detected by microperimetry, was observed in both the Encelto and sham groups, but the magnitude of loss was statistically significantly smaller in the Encelto group for Study 1. However, Study 2 did not meet statistical significance in mean change in aggregate retinal sensitivity loss, measure by microperimetry. Therefore, while structural improvement (reduction in EZ area loss) was demonstrated in both studies, the impact of Encelto<sup>TM</sup> on functional vision (aggregate retinal sensitivity loss) was inconsistent between the two trials.

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#### **POLICY:**

## **Encelto (revakinagene taroretcel-lwey)-Medical**

Encelto coverage varies by line of business as below:

#### Commercial/ Essential/Child Health Plus:

 Based upon our criteria and assessment of the peer-reviewed evidence, the use of Encelto (revakinagene taroretcel-lwey) has not been medically proven to be effective and, therefore, is considered experimental/investigational for the treatment of adults with idiopathic macular telangiectasia type 2 (MacTel).

The justification for Encelto (revakinagene taroretcel-lwey) to be considered investigational is as follows:

- a. Based upon our assessment of the peer-reviewed medical literature, there is inconclusive evidence that the drug has a definite positive effect on health outcomes.
- b. Based upon our assessment of the peer-reviewed medical literature, there is inconclusive evidence that the drug, over time, leads to improvement in health outcomes (e.g., the beneficial effects of the service outweigh any harmful effects).
- Based upon our assessment of the peer-reviewed medical literature, there is inconclusive
  evidence that the drug provides improvement in health outcomes in standard conditions of
  medical practice, outside the clinical investigatory settings

Refer to Corporate Medical Policy #11.01.03 Experimental or Investigational Services

#### **Medicare Advantage/Medicaid/HARP:**

- 1. Must be 18 years of age or older AND
- 2. Must be prescribed by and administered by an ophthalmologist AND
- 3. Must have a diagnosis of idiopathic macular telangiectasia type 2 (MacTel) AND
- 4. Provider must indicate which eye(s) will be treated AND
- 5. For the eye(s) being treated, the following must be true (a, b, c, and d):
  - a. Must have evidence of fluorescein leakage typical of MacTel on fluorescein angiography AND
  - b. Must have at least **one** of the following features (i, ii, iii, iv, or v):
    - i. Hyperpigmentation that is outside of a 500-micron radius from the center of the fovea
    - ii. Retinal opacification
    - iii. Crystalline deposits
    - iv. Right-angle vessels
    - v. Inner/outer lamellar cavities AND
  - c. Must have an Inner Segment Outer Segment (IS/OS) Photo Receptor (PR) break (area of IS/OS loss) in ellipsoid zone (EZ) between 0.16 mm² and 2.00 mm² as measured by spectral-domain optical coherence tomography (SD-OCT) AND
  - d. Must have best corrected visual acuity (BCVA) of 54-letter score or better as measured by the Early Treatment Diabetic Retinopathy Study (ETDRS) chart **OR** have a BCVA of 20/80 or better as measured by the Snellen Chart.
    - i. Documentation within the last 6 months must be provided. AND
- 6. Must not have evidence of intraretinal neovascularization or subretinal neovascularization (SRNV), as evidenced by hemorrhage, hard exudate, subretinal fluid or intraretinal fluid in either eye AND
- 7. Encelto will not be authorized in patients with MacTel type 1 AND
- 8. Encelto will not be authorized for any non-FDA approved indication **AND**
- 9. Encelto will be limited to a single implant per eye per lifetime. Approval duration will be for 6 months to allow time for procedure to take place.

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#### **POLICY GUIDELINES:**

- 1. Prior authorization is contract dependent.
- 2. Not all contracts cover all Medical Infusible drugs. Refer to specific contract/benefit plan language for exclusions of Injectable Medications.
- 3. Unless otherwise indicated within drug specific criteria, the drugs listed in this policy are administered by a healthcare professional and therefore are covered under the medical benefit.
- 4. Unless otherwise stated above within the individual drug criteria, the approval time-period will be for 6 months.
- 5. This policy does not apply to Medicare Part D and D-SNP pharmacy benefits. The drugs in this policy may apply to all other lines of business including Medicare Advantage.
- 6. For members with Medicare Advantage, medications with a National Coverage Determination (NCD) and/or Local Coverage Determination (LCD) will be covered pursuant to the criteria outlined by the NCD and/or LCD. NCDs/LCDs for applicable medications can be found on the CMS website at <a href="https://www.cms.gov/medicare-coverage-database/search.aspx">https://www.cms.gov/medicare-coverage-database/search.aspx</a>. Indications that have not been addressed by the applicable medication's LCD/NCD will be covered in accordance with criteria determined by the Health Plan (which may include review per the Health Plan's Off-Label Use of FDA Approved Drugs policy). Step therapy requirements may be imposed in addition to LCD/NCD requirements.
- 7. Clinical documentation must be submitted for each request unless otherwise specified (e.g., provider attestation required). Supporting documentation includes, but is not limited to, progress notes documenting previous treatments/treatment history, diagnostic testing, laboratory test results, genetic testing/biomarker results, and imaging.
- 8. All requests will be reviewed to ensure they are being used for an appropriate indication and may be subject to an off-label review in accordance with our Off-Label Use of FDA Approved Drugs Policy (Pharmacy-32). This includes any request that is made for drug(s) that was (were) previously tried (including in the same pharmacologic class or with the same mechanism of action) and such drug(s) was (were) discontinued due to a lack of efficacy.
- 9. All utilization management requirements outlined in this policy are compliant with applicable New York State insurance laws and regulations. Policies will be reviewed and updated as necessary to ensure ongoing compliance with all state and federally mandated coverage requirements.

### CODES:

Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.

CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.

Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.

Code Key:

Experimental/Investigational = (E/I), Not medically necessary/ appropriate = (NMN). Copyright © 2006 American Medical Association, Chicago, IL

**HCPCS**: J3403

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#### **UPDATES:**

Date	Revision
10/01/2025	Created and Implemented
08/14/2025	P&T Committee Approval

#### **REFERENCES:**

- 1. American Academy of Ophthalmology What is macular telangiectasia. Available at: https://www.aao.org/eye-health/diseases/macular-telangiectasia. Published on September 23, 2024. Accessed on June 16, 2025.
- Kedarisetti KC, Narayanan R, Stewart MW, Reddy Gurram N, Khanani AM. Macular Telangiectasia Type 2: A Comprehensive Review. Clin Ophthalmol. 2022;16:3297-3309. Published 2022 Oct 10. doi:10.2147/OPTH.S373538
- 3. Charbel Issa P, Gillies MC, Chew EY, et al. Macular telangiectasia type 2. Prog Retin Eye Res. 2013;34:49-77. doi:10.1016/j.preteyeres.2012.11.002
- 4. Encelto™ intravitreal implant [prescribing information]. Cumberland, RI: Neurotech; March 2025.
- Encelto FDA Clinical Review. Available at: <a href="https://www.fda.gov/vaccines-blood-biologics/center-biologics-evaluation-and-research-cber-product-approval-information/encelto">https://www.fda.gov/vaccines-blood-biologics/center-biologics-evaluation-and-research-cber-product-approval-information/encelto</a>.
   Accessed on June 16, 2025.
- 6. Heeren TF, Kitka D, Florea D, Clemons TE, Chew EY, Bird AC, et al. Longitudinal correlation of ellipsoid zone loss and functional loss in macular telangiectasia type 2. Retina. 2018;38:S20-S6.
- 7. Mukherjee D, Lad EM, Vann RR, Jaffe SJ, Clemons TE, Friedlander M, et al. Correlation between macular integrity assessment and optical coherence tomography imaging of ellipsoid zone in macular telangiectasia type 2. Investigative ophthalmology & visual science. 2017;58(6):BIO291-BIO9.
- 8. Peto T, Heeren TF, Clemons TE, Sallo FB, Leung I, Chew EY, et al. Correlation of clinical and structural progression with visual acuity loss in macular telangiectasia type 2: Mactel project report no. 6—the mactel research group. Retina. 2018;38:S8-S13.
- 9. Sallo FB, Peto T, Egan C, Wolf-Schnurrbusch UE, Clemons TE, Gillies MC, et al. The IS/OS junction layer in the natural history of type 2 idiopathic macular telangiectasia. Investigative ophthalmology & visual science. 2012;53(12):7889-95.