Blue Cross Blue Shield Blue Care Network of Michigan

Nonprofit corporations and independent licensees of the Blue Cross and Blue Shield Association

Medical benefit drug policies are a source for BCBSM and BCN medical policy information only. These documents are not to be used to determine benefits or reimbursement. Please reference the appropriate certificate or contract for benefit information. This policy may be updated and therefore subject to change.

Effective Date: 02/08/2024

Wainua™ (eplontersen)

HCPCS: J3490

Policy:

Requests must be supported by submission of chart notes and patient specific documentation.

A. Coverage of the requested drug is provided when all the following are met:
   a. FDA approved age
   b. Must have diagnosis of peripheral nerve disease caused by hereditary transthyretin amyloidosis (hATTR; formerly known as familial amyloidosis polyneuropathy or FAP) with documented TTR mutation
      i. Signs and symptoms of ocular or cerebral area involvement (such as in ocular amyloidosis or primary/leptomeningeal amyloidosis), if present, must not predominate over polyneuropathy symptomology associated with hATTR
   c. Documentation of clinical signs and symptoms of peripheral neuropathy (such as: tingling or increased pain in the hands, feet and/or arms, loss of feeling in the hands and/or feet, numbness or tingling in the wrists, carpal tunnel syndrome, loss of ability to sense temperature, difficulty with fine motor skills, weakness in the legs, difficulty walking)
      AND/OR
      Documentation of clinical signs and symptoms of autonomic neuropathy symptoms (such as: orthostasis, abnormal sweating, dysautonomia [constipation and/or diarrhea, nausea, vomiting, anorexia, early satiety])
   d. Must have a baseline FAP or Coutinho Stage 1 or 2
   e. Wainua will not be used in combination with other therapies approved for transthyretin-mediated amyloidosis
   f. No prior liver transplant
   g. Must not have New York Heart Association (NYHA) heart failure classification > 2
   h. Trial and failure, contraindication, OR intolerance to the preferred drugs as listed in BCBSM/BCN's prior authorization and step therapy documents

B. Quantity Limitations, Authorization Period and Renewal Criteria
   a. Quantity Limits: Align with FDA recommended dosing
   b. Authorization Period: One year at a time
   c. Renewal Criteria: Clinical documentation must be provided to confirm that current criteria are met and that the medication is providing clinical benefit

***Note: Coverage and approval duration may differ for Medicare Part B members based on any applicable criteria outlined in Local Coverage Determinations (LCD) or National Coverage Determinations (NCD) as determined by Center for Medicare and Medicaid Services (CMS). See the CMS website at http://www.cms.hhs.gov/. Determination of coverage of Part B drugs is based on medically accepted indications which have supported citations included or approved for inclusion determined by CMS approved compendia.

Background Information:

- Transthyretin amyloidosis (ATTR) is a progressive, life-threatening disorder characterized by the deposition of amyloid fibrils composed of transthyretin, a plasma transport protein for thyroxine and vitamin A that is predominantly produced by the liver and to a lesser extent by the choroid plexus and in retinal cells.

- In ATTR, transthyretin dissociates its form then misfolds, causing it to aggregate into amyloid fibrils that accumulate in organs, nerves, and tissues. The buildup of these amyloid deposits results in progressive dysfunction at the site of deposition.

- ATTR is the most common form of hereditary amyloidosis and is caused by mutations in the TTR gene that are responsible for destabilization of the transthyretin protein. Hereditary transthyretin amyloidosis (hATTR) has an autosomal dominant inheritance pattern with variable penetrance; the phenotypic presentation of the disease varies across genotypes, geographic locations, and individuals. Approximately 120 different mutations or gene deletions have been identified in the TTR gene, with Val30Met as the most prevalent in the world.

- hATTR is a multisystem disease involving the heart, gastrointestinal tract, kidneys, thyroid, salivary glands, eyes, peripheral and central nervous system. Depending on the mutation, the phenotype may be predominantly cardiac, neurologic, or mixed.

- hATTR with polyneuropathy (hATTR-PN) is the most common neurologic manifestation. Without treatment, patients will have progressive neuropathy and disability ultimately resulting in death within 10-15 years of disease onset.

    - Patients with hATTR-PN may present with peripheral neuropathy (sensory and motor; tingling or increased pain in the hands, feet and/or arms, loss of feeling in the hands and/or feet, numbness or tingling in the wrists, carpal tunnel syndrome, loss of ability to sense temperature, difficulty with fine motor skills, weakness in the legs, difficulty walking), autonomic neuropathy (e.g., orthostasis, abnormal sweating, dysautonomia [constipation and/or diarrhea, nausea, vomiting, anorexia, early satiety]), GI impairment, cardiomyopathy, nephropathy, or ocular deposition. Most hATTR-PN cases, however, are classified as neuropathic.

    - Amyloid deposition induces a length-dependent peripheral neuropathy beginning in the lower limbs with symptoms like toe discomfort due to numbness and spontaneous pain. Continued aggregation of amyloid on the nerve fibers contributes to sensory loss extending upwards toward the proximal lower limbs as motor deficits and impaired sensations occur. Walking becomes increasingly difficult as balance and gait are affected. Neuropathic pain transitions to a burning sensation worsening at night. Over time, sensory deficit extends to the upper limbs, forearms, fingers and trunk and motor deficit follows with the same length dependent progression. At this stage, potentially life-threatening autonomic dysfunction is present manifesting as orthostatic hypotension, anhidrosis, neurogenic bladder, disturbances of gastrointestinal motility, and sexual impotence.

    - Cardiac disease may occur in approximately 50% of patients with hATTR-PN. Ocular involvement is also common, including vitreous opacity, dry eye, glaucoma, and pupillary disorder.

- hATTR may also have a strictly cardiologic presentation with cardiomyopathy (hATTR-CM) where left ventricle ejection fraction is normal or only mildly reduced coupled with ventricular hypertrophy. Amyloid deposition commonly affects the conduction system as well, leading to bundle branch block and on occasion atrioventricular and sinoatrial block. ATTR with a predominantly cardiomyopathy phenotype may also occur sporadically sans inheritance pattern due to wild-type TTR.

- A rarer presentation of hATTR is leptomeningeal and meningovascular amyloidosis, often with concomitant vitreous opacity (oculoleptomeningeal amyloidosis). A number of mutations have reportedly been linked to this type of hATTR, though it may also manifest in more advanced cases of Val30MET hATTR-PN.

    - Central nervous system symptoms include stroke, subarachnoid hemorrhage, dementia, ataxia, seizures, and sensorineural hearing loss.

    - The source of mutant TTR in (oculo)leptomeningeal and meningovascular amyloidosis is thought to be the choroid plexus and retinal cells versus the liver. As such, ocular and meningovascular manifestations are commonly seen after liver transplantation because the source of mutant TTR is left unaffected.

    - To date, no treatments have been proven to be beneficial for the treatment of (oculo)leptomeningeal and meningovascular amyloidosis

- The 2013 guideline of transthyretin-related hereditary amyloidosis for clinicians recommends that the most reliable diagnostic approach involves genetic testing and tissue biopsy to confirm the presence of active amyloid formation. Genetic testing is needed to document the TTR gene mutations; if testing is normal, a diagnosis of hATTR is excluded.

- Options for treatment of hATTR are limited. Treatment strategies for hATTR include depletion of the source of mutant TTR, inhibiting the formation of TTR, stabilizing the TTR molecule from dissociating, and therapy directed at removing the amyloid deposits. For hATTR-PN, our best treatment options include liver transplantation and the newer pharmacologic agents Amvuttra® (vutrisiran), Onpattro® (patisiran), Tegsedi® (inotersen), and Wainua (eplontersen).

- Regardless the choice of treatment, the 2013 guidelines recommend initiation as soon as possible after diagnosis to slow or halt disease progression. The best outcomes have been shown in patients diagnosed at younger ages and/or without advanced disease. Though the guidelines have not yet been updated to include Amvuttra, Onpattro, and Tegsedi specifically, they do note that early detection is critical and patients with early stage disease should be treated with any approved drugs as they become available and as the patient's disease state meets drug indications, independent of liver transplant plans,

- Orthoptic liver transplant removes the source of mutant TTR and has been considered the gold standard for hATTR-PN treatment early in the course of disease. In hATTR-PN, the liver is the primary source of mutant TTR; transplantation eliminates approximately 95% of the production of mutant TTR and may slow or halt disease progression outside of the brain and/or eyes, though nerve function rarely improves post-transplant. Transplant does not effectively prevent cardiomyopathy, however, and is not recommended for patients with late stage hATTR-PN or leptomeningeal disease. With later stages of hATTR-PN and cardiomyopathy, there are concerns of disease progression due to deposition of wild-type TTR from the transplanted liver on the preexisting amyloid from the variant TTR.

- Amvuttra, Onpattro, Tegsedi, and Wainua are approved by the FDA for the treatment of polyneuropathy of hATTR in adults. Of these products, only Wainua and Tegsedi are FDA approved to be administered by the patient or caregiver; a healthcare provider is required for administration of Amvuttra and Onpattro per the approved labeling. To date, there is no literature supporting the use of one product over another, nor is there support for the use of any of

these products together or in combination with other therapies approved for ATTR (e.g., tafamidis (Vyndamax® and Vyndaqel®)).

- Wainua is a ligand-conjugated antisense oligonucleotide (LICA) directed at TTR. It works by binding to and degrading TTR messenger RNA (mRNA) in the liver to prevent the production of TTR protein. Preventing TTR protein synthesis in the liver can help reduce the accumulation of amyloid deposits in peripheral nerves. Wainua works most similarly to Tegsedi, though it is thought to be engineered to be better at entering the liver which is the primary source of TTR.

- In the pivotal Phase III NEURO-TTRansform trial, patients treated with Wainua demonstrated consistent and sustained benefit on co-primary endpoints of serum TTR concentration and neuropathy impairment measured by the modified Neuropathy Impairment Score +7 (mNIS+7), and key secondary endpoint of quality of life (QoL) on the Norfolk Quality of Life Questionnaire-Diabetic Neuropathy (Norfolk QoL-DN). The benefit of Wainua was demonstrated across the spectrum of hATTR-PN at 35, 66, and 85 weeks.

- In clinical trials, Wainua was only evaluated in patients with a baseline familial amyloid polyneuropathy (FAP) or Coutinho stage of 1 or 2. The FAP or Coutinho stage (stage 0-3) assesses the patient's level of ambulation and the severity/progression of neuropathy; stage 1 signifies ambulatory without assistance, and stage 2 is ambulatory with assistance. Wainua was not evaluated in patients with baseline FAP or Coutinho stage 3, which designates patients with late-stage, significantly advanced disease who are wheelchair-bound or bedridden; therefore, clinical trials do not support use in this patient population with advanced disease.

    - The Polyneuropathy disability (PND) scoring system may also be used to classify hATTR-PN progression. This score focuses on the patient's walking ability, and scores range from 0 – IV. A PND score <IIIb equates to a FAP or Coutinho stage of 1 or 2, and a PND score of IV is considered equivalent to FAP or Coutinho stage 3.

- Patients who were receiving treatment with any approved drug for hATTR or off-label use of diflunisal or doxycycline, and those who had been previously treated with Tegsedi, Onpattro, or other oligonucleotide or RNA therapeutics were excluded from the clinical trial, as were those with a history of liver transplant or NYHA functional classification of ≥3. There is no literature to support that patients who received a liver transplant would experience benefit from treatment with Wainua as they would not be expected to produce mutated TTR post-transplant.

- Additionally, there are no published clinical trials evaluating safety or efficacy of Wainua for the treatment of any condition other than hATTR-PN, and data is limited at this time on the effect of Wainua on other end organ dysfunction related to the underlying amyloidosis (i.e., cardiovascular outcomes).

References:

1. Wainua [prescribing information]. Wilmington, DE: AstraZeneca Pharmaceuticals; December 2023.
2. Ando Y, Coelho T, Berk JL, et al. Guideline of transthyretin-related hereditary amyloidosis for clinicians. Orphanet Journal of Rare Diseases. 2013;8:31. Doi: 10.1186/1750-1172-8-31.
3. Sekijima Y, Yoshida K, Tokudo T, et al. Familial Transthyretin Amyloidosis. Gene Reviews [internet]. Available at: https://www.ncbi.nlm.nih.gov/books/NBK1194/. Accessed February 21, 2022.
4. IPD Analytics. Payer & Provider Insights. December 2023. Accessed December 27, 2023. https://www.ipdanalytics.com.
5. IPD Analytics. The Evolving Treatment Paradigm of Transthyretin-Related Amyloidosis. November 2021. Accessed February 21, 2022. https://www.ipdanalytics.com
6. Coelho T, Marques W, et al. Eplontersen for Hereditary Transthyretin Amyloidosis with Polyneuropathy. JAMA. 2023; 330(15): 1448-1458.

<table>
<tr><th colspan="3">Policy History</th></tr>
<tr><th>#</th><th>Date</th><th>Change Description</th></tr>
<tr><td>1.1</td><td>Effective Date:
03/01/2024</td><td>UM medical management system update for MAPPO and BCNA
<table><tr><th>Line of Business</th><th>PA Required in Medical Management System (Yes/No)</th></tr><tr><td>BCBS</td><td>No</td></tr><tr><td>BCN</td><td>No</td></tr><tr><td>MAPPO</td><td>Yes</td></tr><tr><td>BCNA</td><td>Yes</td></tr></table></td></tr>
<tr><td>1.0</td><td>Effective Date:
02/08/2024</td><td>New policy.
<table><tr><th>Line of Business</th><th>PA Required in Medical Management System (Yes/No)</th></tr><tr><td>BCBS</td><td>No</td></tr><tr><td>BCN</td><td>No</td></tr><tr><td>MAPPO</td><td>No</td></tr><tr><td>BCNA</td><td>No</td></tr></table></td></tr>
</table>

** The prescribing information for a drug is subject to change. To ensure you are reading the most current information it is advised that you reference the most updated prescribing information by visiting the drug or manufacturer website or http://dailymed.nlm.nih.gov/dailymed/index.cfm.*

Blue Cross Blue Shield/Blue Care Network of Michigan
Medication Authorization Request Form

Blue Cross Blue Shield Blue Care Network of Michigan

Nonprofit corporations and independent licensees of the Blue Cross and Blue Shield Association

This form is to be used by participating physicians to obtain coverage for **drugs covered under the medical benefit**. For commercial members only, please complete this form and submit via fax to 1-877-325-5979. If you have any questions regarding this process, please contact BCBSM Provider Relations and Servicing or the Medical Drug Helpdesk at 1-800-437-3803 for assistance.

PATIENT INFORMATION	PHYSICIAN INFORMATION
Name	**Name**
ID Number	**Specialty**
D.O.B. ☐Male ☐Female	**Address**
Diagnosis	**City /State/Zip**
Drug Name	**Phone/Fax: P**: ( ) - **F**: ( ) -
Dose and Quantity	**NPI**
Directions	**Contact Person**
Date of Service(s)	**Contact Person Phone / Ext.**

STEP 1: DISEASE STATE INFORMATION

1. Is this request for: ☐ Initiation ☐ Continuation *Date patient started therapy:* _____
2. Administered by patient or a medical professional? ☐ patient (self) ☐ health care professional (physician, nurse, etc.)
3. Site of administration? ☐ Provider office/Home infusion ☐ Other: _____
   ☐ Hospital outpatient facility (go to #4) *Reason for Hospital Outpatient administration:* _____
   ☐ Hospital inpatient facility for Car-T therapy only (for example: Kymriah, Yescarta, or Tecartus) (go to #5)
4. Please specify location of administration if hospital outpatient infusion: _____
5. Please specify location of administration if hospital inpatient infusion: _____
6. Please provide the NPI number for the place of administration: _____
7. **Initiation AND Continuation of therapy:**
   a. What is the patient's diagnosis? _____
   b. What other medication has the patient received for their condition? Please list_____
      i. Please describe the response to previous therapies:
      _____
   c. Will the patient be receiving any other treatment for the listed condition while on this medication? Please list:
      _____
   d. Please list any labs values important for diagnosing or monitoring this patient's condition:
      _____
8. **Continuation of therapy:**
   a. Has the patient progressed while on this medication? ☐ yes ☐ no
   b. How has the patient's condition changed while on this medication?
      ☐ Improved: Please describe: _____
      ☐ Stable: please describe: _____
      ☐ Worsened; Please describe: _____
      ☐ Other; Please describe: _____

Chart notes are required for the processing of all requests. Please add any other supporting medical information necessary for our review **(required)**

Coverage will not be provided if the prescribing physician's signature and date are not reflected on this document.

☐ Request for expedited review: I certify that applying the standard review time frame may seriously jeopardize the life or health of the member or the member's ability to regain maximum function

Physician's Name **Physician Signature** **Date**

Step 2: Checklist	☐ Form Completely Filled Out ☐ Provide chart notes	☐ Attach test results
Step 3: Submit	**By Fax: BCBSM Specialty Pharmacy Mailbox 1-877-325-5979**	**By Mail: BCBSM Specialty Pharmacy Program P.O. Box 312320, Detroit, MI 48231-2320**

7/26/2018, 9/18/2018; 1/31/2020; 3/17/2020; 8/9/2021