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| <b>Clinical Policy Title:</b>              | dimethyl fumarate     |
| <b>Policy Number:</b>                      | RxA.505               |
| <b>Drug(s) Applied:</b>                    | Tecfidera®            |
| <b>Original Policy Date:</b>               | 01/2020               |
| <b>Last Review Date:</b>                   | 12/07/2020            |
| <b>Line of Business Policy Applies to:</b> | All lines of business |

## Background

Dimethyl fumarate (Tecfidera®) is a nuclear factor-like 2 activator. It is indicated for the treatment of patients with relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults.

## Dosing Information

| Drug Name                      | Indication   | Dosing Regimen   | Maximum Dose |
|--------------------------------|--------------|--|--------------|
| dimethyl fumarate (Tecfidera®) | Relapsing MS | Starting: 120 mg PO BID for 7 days<br>Maintenance: 240 mg PO BID | 480 mg/day   |

## Dosage Forms

- Delayed-release capsules: 120 mg, 240 mg

## Clinical Policy

Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

### I. Initial Approval Criteria

#### A. Multiple Sclerosis (must meet all):

1. Diagnosis of one of the following (a, b, or c):
  - a) Clinically isolated syndrome;
  - b) Relapsing-remitting Multiple Sclerosis ;
  - c) Secondary progressive Multiple Sclerosis ;
2. Trial and failure of at least two (2) preferred disease modifying therapies, at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced.
  - \*Prior authorization is required for all disease modifying therapies for Multiple Sclerosis.
3. Age 18 years of age or older;
4. Prescribed by or in consultation with a neurologist;
5. Dimethyl fumarate is not prescribed concurrently with other disease modifying therapies for MS (*see Appendix B*);

This clinical policy has been developed to authorize, modify, or determine coverage for individuals with similar conditions. Specific care and treatment may vary depending on individual need and benefits covered by the plan. This policy is not intended to dictate to providers how to practice medicine, nor does it constitute a contract or guarantee regarding payment or results. This document may contain prescription brand name drugs that are trademarks of pharmaceutical manufacturers that are not affiliated with RxAdvance.

6. Dose does not exceed:
  - a. Starting dose: 240 mg (2 capsules) per day for 7 days;
  - b. Maintenance dose: 480 mg (2 capsules) per day.

**Approval Duration**

**Commercial:** 6 months

**Medicaid:** 6 months

**II. Continued Therapy Approval**

**A. Multiple Sclerosis (must meet all):**

1. Member is currently receiving the medication that has been authorized by RxAdvance or the member has met initial approval criteria listed in this policy;
2. Member is responding positively to therapy (i.e. reduction in the number of acute attacks, no new brain lesions, disease stabilization);
3. Dimethyl fumarate is not prescribed concurrently with other disease modifying therapies for MS (see *Appendix B*);
4. If request is for a dose increase, new dose does not exceed 480 mg per day.

**Approval Duration**

**Commercial:** 12 months

**Medicaid:** 12 months

**III. Appendices**

**APPENDIX A: Abbreviation/Acronym Key**

FDA: Food and Drug Administration

IM: Intramuscular/intramuscularly

IV: Intravenous/intravenously

MS: Multiple Sclerosis

PO: By mouth

SC: Subcutaneous/subcutaneously

**APPENDIX B: Therapeutic Alternatives**

This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.

| Drug Name                 | Dosing Regimen   | Dose Limit/ Maximum Dose                            |
|---------------------------|--|---|
| <b>Infusion Therapies</b> |  |   |
| natalizumab (Tysabri®)    | 300 mg IV every 4 weeks  | 300 mg/4 weeks                                      |
| mitoxantrone              | 12 mg/m <sup>2</sup> given as a short (approximately 5 to 15 minutes) IV infusion every 3 months   | Cumulative lifetime dose of ≥ 140 mg/m <sup>2</sup> |
| ocrelizumab (Ocrevus™)    | Initial 300 mg IV infusion with a second 300 mg IV infusion two weeks later, followed by subsequent doses of 600 mg via IV infusion every 6 months | 600 mg/6 months                                     |
| alemtuzumab (Lemtrada®)   | IV infusion for 2 or more treatment courses:   | See regimen   |

| Drug Name                                 | Dosing Regimen  | Dose Limit/ Maximum Dose                                    |
|---|---|---|
|   | <ul style="list-style-type: none"> <li>• First course: 12 mg/day on 5 consecutive days</li> <li>• Second course: 12 mg/day on 3 consecutive days 12 months after first course</li> <li>• Subsequent courses as needed: 12 mg/day on 3 consecutive days 12 months after any prior course</li> </ul>            |   |
| <b>Injectable therapies</b>               |   |   |
| glatiramer (Copaxone®, Glatopa®)          | 20 mg SC once daily or<br>40 mg SC three times weekly   | 20 mg/day or<br>40 mg three times per week                  |
| interferon beta-1a (Avonex®, Rebif®)      | Avonex®: 30 mcg IM weekly<br>Rebif®: 22 mcg or 44 mcg SC three times weekly   | Avonex®: 30 mcg/week<br>Rebif®: 44 mcg three times per week |
| interferon beta-1b (Betaseron®, Extavia®) | 250 mcg SC every other day  | 250 mg every other day                                      |
| peginterferon beta-1a (Plegridy®)         | 125 mcg SC every 2 weeks  | 125 mcg/2 weeks   |
| <b>Oral therapies</b>                     |   |   |
| monomethyl fumarate (Bafiertam™)          | Initial: 95 mg PO twice daily; after 7 days, increase to the maintenance dose of 190 mg PO twice daily.   | 380mg/day   |
| diroximel fumarate (Vumerity®)            | Starting:<br>231 mg PO twice daily for 7 days<br>Maintenance: 462 mg PO twice daily   | 924 mg/day  |
| teriflunomide (Aubagio®)                  | 7 mg or 14 mg PO daily  | 14 mg/day   |
| fingolimod (Gilenya™)                     | 0.5 mg PO daily   | 0.5 mg/day  |
| siponimod (Mayzent®)                      | Day 1 and 2: 0.25 mg PO once daily<br>Day 3: 0.5 mg PO once daily<br>Day 4: 0.75 mg PO once daily<br><br>For CYP2C9 genotypes *1/*1, *1/*2, or *2/*2:<br>Day 5: 1.25 mg PO once daily<br>Day 6 & onward: 2 mg PO once daily<br><br>For CYP2C9 genotypes *1/*3 or *2/*3:<br>Day 5 & onward: 1 mg PO once daily | 2 mg/day  |
| ozanimod (Zeposia®)                       | Days 1-4: 0.23 mg PO once daily<br>Days 5-7: 0.46 mg PO once daily  | 0.92 mg/day   |

| Drug Name               | Dosing Regimen  | Dose Limit/ Maximum Dose |
|-------------------------|---|--------------------------|
|                         | Day 8 & onward: 0.92 mg PO once daily   |                          |
| cladribine (Mavenclad®) | 3.5 mg/kg over 2-year treatment course, administered as 1.75 mg/kg in each year. Divide the 1.75 mg/kg dose over 2 cycles, each cycle lasting 4 to 5 consecutive days | 20mg/day                 |
| dalfampridine (Ampyra®) | 10 mg PO twice daily (approximately 12 hours apart)   | 20 mg/day                |

#### APPENDIX C: Contraindications/Boxed Warnings

- Contraindication(s):
  - Known hypersensitivity to dimethyl fumarate or any of the excipients of Tecfidera
- Boxed Warning(s):
  - None reported

#### APPENDIX D: General Information

##### Warnings and Precautions:

- Anaphylaxis and angioedema: Discontinue and do not restart Tecfidera if these occur.
- Progressive multifocal leukoencephalopathy (PML): Withhold Tecfidera at the first sign or symptom suggestive of PML.
- Herpes zoster and other serious opportunistic infections: Consider withholding Tecfidera in cases of serious infection until the infection has resolved.
- Lymphopenia: Obtain a CBC including lymphocyte count before initiating Tecfidera, after 6 months, and every 6 to 12 months thereafter. Consider interruption of Tecfidera if lymphocyte counts  $<0.5 \times 10^9/L$  persist for more than six months.
- Liver injury: Obtain serum aminotransferase, alkaline phosphatase, and total bilirubin levels before initiating Tecfidera and during treatment, as clinically indicated. Discontinue Tecfidera if clinically significant liver injury induced by Tecfidera is suspected.

#### References

1. Tecfidera Prescribing Information. Cambridge, MA: Biogen Inc.; February 2020. Available at <http://www.tecfidera.com> Accessed September 03, 2020.
2. Costello K, Halper J, Kalb R, Skutnik L, Rapp R. The use of disease-modifying therapies in multiple sclerosis, principles and current evidence – a consensus paper by the Multiple Sclerosis Coalition. March 2017. Accessed September 03, 2020.
3. Rae-Grant A, Day GS, Marrie RA, et al. Practice guideline recommendations summary: disease-modifying therapies for adults with multiple sclerosis: report of the Guideline Development, Dissemination, and Implementation Subcommittee of the American Academy of Neurology. *Neurology*. 2018; 90(17): 777-788. Full guideline available at: <https://www.aan.com/Guidelines/home/GetGuidelineContent/904>. Accessed September 03, 2020.
4. Clinical Pharmacology [database online] powered by ClinicalKey. Tampa, FL: Elsevier, 2020. Accessed with subscription at: <http://www.clinicalkey.com>. Accessed September 14, 2020.

| Review/Revision History  | Review/Revision Date | P&T Approval Date |
|--|----------------------|-------------------|
| Policy established.  | 01/01/2020           | 03/06/2020        |
| Policy updated. <ol style="list-style-type: none"> <li>Initial approval criteria updated to include – “Trial and failure of at least 2 preferred disease modifying therapies, at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced.”</li> <li>Approval length for commercial line of business from length of benefit to 6 months for initial and 12 months for continuation therapy.</li> <li>Appendix B and D updated.</li> </ol> | 8/27/2020            | 9/14/2020         |
| Policy updated. <ol style="list-style-type: none"> <li>Policy title table updated.</li> <li>Policy was updated to all lines of business</li> <li>Continued therapy criteria II.A.1 was rephrased to “Currently receiving medication that has been authorized by RxAdvance...”.</li> <li>Appendix B updated.</li> </ol>   | 09/14/2020           | 12/07/2020        |