Lemtrada® (alemtuzumab)
(Intravenous)

Last Review Date: 10/03/2022
Date of Origin: 12/16/2014

I. Length of Authorization

- Multiple Sclerosis: Coverage will be approved initially for 5 doses and may be renewed for 3 doses annually thereafter.
- GVHD: Coverage will be approved for 5 doses only and may not be renewed.

II. Dosing Limits

A. Quantity Limit (max daily dose) [NDC Unit]:

**Multiple Sclerosis**

First Course
- Lemtrada 12 mg/1.2 mL single-dose vial: 5 vials per 365 days (1 vial daily x 5 days per year)

Second/Subsequent Courses
- Lemtrada 12 mg/1.2 mL single-dose vial: 3 vials per 365 days (1 vial daily x 3 days per year)

**GVHD**
- Lemtrada 12 mg/1.2 mL single-dose vial: 5 vials (1 vial daily x 5 days)

B. Max Units (per dose and over time) [HCPCS Unit]:

**Multiple Sclerosis**

- First Course
  - 60 billable units (1 dose daily x 5 days) during the first 12 months
- Second/Subsequent Courses
  - 36 billable units (1 dose daily x 3 days) every 12 months thereafter

**GVHD**
- 10 billable units daily for 5 days

III. Initial Approval Criteria

Coverage is provided in the following conditions:

- Patient is at least 18 years of age: **AND**
• Patient has been evaluated and screened for the presence of varicella zoster virus (VZV) and vaccinated, if required, prior to initiating treatment; AND

• Patient has a baseline electrocardiogram (ECG); AND

**Universal Criteria 1**

• Patient does not have human immunodeficiency virus (HIV) infection; AND

• Patient has been evaluated and screened for the presence of tuberculosis (TB) prior to initiating treatment and will receive ongoing monitoring for the presence of TB during treatment; AND

• Patient does not have an active infection; AND

• Patient will not receive live vaccines while on therapy or within 6 weeks prior to initiation of treatment; AND

• Patient has received a baseline skin exam for melanoma and will receive yearly skin exams while on therapy; AND

• Patient has a baseline urine protein to creatinine ratio AND thyroid-stimulating hormone (TSH) level prior to initiation of treatment and will receive ongoing laboratory monitoring during treatment; AND

• Patient will receive anti-viral prophylaxis for herpetic viral infections initiated on the first day of treatment and continued for two months following treatment (or until the CD4+ lymphocyte count is ≥ 200 cells/mcL); AND

• Prescriber and patient must be enrolled in and meet the conditions of the LEMTRADA REMS program; AND

**Multiple Sclerosis † 1,10,14**

• Patient has been diagnosed with a relapsing form of multiple sclerosis [i.e., relapsing-remitting disease (RRMS)* or active secondary progressive MS (SPMS)**]; AND

• Confirmed diagnosis of MS as documented by laboratory report (i.e., MRI); AND

• Must be used as single agent therapy; AND

• Patient must have had an inadequate response to an adequate trial of two or more drugs indicated for the treatment of MS; AND

• Will not be used for the treatment of clinically isolated syndrome (CIS)

**Graft Versus Host Disease (GVHD) ‡ 19**

• Patient has received a hematopoietic stem cell transplant; AND

• Used for steroid-refractory acute or chronic GVHD; AND

• Used in combination with systemic corticosteroids as additional therapy following no response to first-line therapy options

† FDA Approved Indication(s); ‡ Compendium Recommended Indication(s); Ф Orphan Drug
**Definitive diagnosis of MS with a relapsing-remitting course is based upon BOTH dissemination in time and space. Unless contraindicated, MRI should be obtained (even if criteria are met).**

<table>
<thead>
<tr>
<th>Dissemination in time (Development/appearance of new CNS lesions over time)</th>
<th>Dissemination in space (Development of lesions in distinct anatomical locations within the CNS: multifocal)</th>
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</thead>
</table>
| • ≥ 2 clinical attacks: **OR**  
  • 1 clinical attack **AND** one of the following:  
  o MRI indicating simultaneous presence of gadolinium-enhancing and non-enhancing lesions at any time or by a new T2-hyperintense or gadolinium-enhancing lesion on follow-up MRI compared to baseline scan  
  o CSF-specific oligoclonal bands | • ≥ 2 lesions: **OR**  
  • 1 lesion **AND** one of the following:  
  o Clear-cut historical evidence of a previous attack involving a lesion in a distinct anatomical location  
  o MRI indicating ≥ 1 T2-hyperintense lesions characteristic of MS in ≥ 2 of 4 areas of the CNS (periventricular, cortical or juxtacortical, infratentorial, or spinal cord) |

**Active secondary progressive MS (SPMS) is defined as the following:**

- Expanded Disability Status Scale (EDSS) score ≥ 3.0: **AND**
- Disease is progressive ≥ 3 months following an initial relapsing-remitting course (i.e., EDSS score increase by 1.0 in patients with EDSS ≤5.5 or increase by 0.5 in patients with EDSS ≥6): **AND**
  - ≥ 1 relapse within the previous 2 years: **OR**
  - Patient has gadolinium-enhancing activity or new and unequivocally enlarging T2 contrast-enhancing lesions as evidenced by MRI

**Renewal Criteria**

Authorizations can be renewed based upon the following criteria:

- Patient continues to meet the universal and other indication-specific relevant criteria identified in section III: **AND**
- Patient has not received a dose of alemtuzumab within the past 12 months: **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: immune thrombocytopenia, glomerular nephropathies including anti-glomerular basement membrane (anti-GBM) disease, thyroid disorders, autoimmune conditions (hepatitis, cytopenias [e.g., neutropenia, hemolytic anemia, and pancytopenia], encephalitis, etc.), severe infusion reactions including anaphylaxis, ischemic or hemorrhagic strokes, cervicocerebral (e.g., vertebral, carotid) arterial dissection, malignancies (e.g., thyroid cancer, melanoma, lymphoproliferative disorders/lymphoma, etc.), progressive multifocal encephalopathy, thrombotic thrombocytopenic purpura, hemophagocytic lymphohistiocytosis, Adult Onset Still's Disease (AOSD), acquired hemophilia A, acute acalculous cholecystitis, pneumonitis, etc.: **AND**

**Multiple Sclerosis**
Continuous monitoring of response to therapy indicates a beneficial response [manifestations of MS disease activity include, but are not limited to, an increase in annualized relapse rate (ARR), development of new/worsening T2 hyperintensities or enhancing lesions on brain/spinal MRI, and progression of sustained impairment as evidenced by EDSS, timed 25-foot walk (T25-FW), 9-hole peg test (9-HPT)].

- Inadequate response, in those who have been adherent and receiving therapy for sufficient time to realize the full treatment effect, is defined as ≥ 1 relapse, ≥ 2 unequivocally new MRI-detected lesions, or increased disability on examination over a one-year period

**Graft Versus Host Disease (GVHD) † 19-23**

- Coverage may not be renewed. *(Note: Requests for continued therapy beyond the maximum number of doses specified in Section V will be reviewed on a case-by-case basis.)*

### V. Dosage/Administration 1,20-23

<table>
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<tr>
<th>Indication</th>
<th>Dose</th>
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<tbody>
<tr>
<td>Multiple Sclerosis</td>
<td>Administer by intravenous (IV) infusion over 4 hours:</td>
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<td>- First course: 12 mg/day on 5 consecutive days (60 mg total dose)</td>
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<td>- Second course: 12 mg/day on 3 consecutive days (36 mg total dose), administered 12 months after the first treatment course.</td>
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<td>- Subsequent courses: 12 mg/day on 3 consecutive days (36 mg total dose) administered, as needed, at least 12 months after the last dose of any prior treatment course.</td>
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<tr>
<td>GVHD</td>
<td>Administer by intravenous (IV) infusion up to 10 mg daily for up to 5 doses.</td>
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### VI. Billing Code/Availability Information

**HCPCS Code:**
- J0202 · Injection, alemtuzumab, 1 mg: 1mg = 1 billable unit

**NDC:**
- Lemtrada 12 mg/1.2 mL single-dose vial: 58468-0200-xx

### VII. References


19. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) alemtuzumab. National Comprehensive Cancer Network, 2022. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed September 2022.


Appendix 1 – Covered Diagnosis Codes

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<tr>
<th>ICD-10</th>
<th>ICD-10 Description</th>
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<tr>
<td>G35</td>
<td>Multiple Sclerosis</td>
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Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD), Local Coverage Determinations (LCDs), and Local Coverage Articles (LCAs) may exist and compliance with these policies is required where applicable. They can be found at:
Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD/LCA):

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<tr>
<th>Medicare Part B Administrative Contractor (MAC) Jurisdictions</th>
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