

Clinical Policy Title:	Interferon beta-1b
Policy Number:	RxA.652
Drug(s) Applied:	Betaseron
Original Policy Date:	8/2020
Last Review Date:	09/14/2020
Line of Business Policy Applies to:	All lines of business

Background

BETASERON is an interferon beta indicated for the treatment of relapsing forms of multiple sclerosis, to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults.

Dosing Information			
Drug Name	Indication	Dosing Regimen	Maximum Dose
Interferon beta-1b (Betaseron)	Relapsing forms of multiple sclerosis, to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults	The recommended dose is 0.25 mg every other day. Generally, start at 0.0625 mg (0.25 mL) every other day, and increase over a six-week period to 0.25 mg (1 mL) every other day	Dose of 0.25 mg (1 mL) every other day

Dosage Forms

For injection: 0.3 mg lyophilized powder in a single-use vial for reconstitution

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):

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.

- a. Relapsing-remitting MS (RRMS), and
 - b. Secondary progressive MS (SPMS);
 - c. Clinically isolated syndrome
2. Prescribed by or in consultation with a neurologist;
 3. Age ≥ 18 years;
 4. Betaseron is not prescribed concurrently with other disease modifying therapies for MS;
(see Appendix D)
 5. Does not exceed the following: Dose of 0.25 mg (1 mL) every other day

Approval Duration:

Commercial: 6 months

Medicaid/HIM: 6 months

II. Continued Therapy Approval

A. Multiple Sclerosis (must meet all):

1. Member is currently receiving 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;
3. Betaseron is not prescribed concurrently with other disease modifying therapies for MS
(see Appendix D)
4. Does not exceed the following: Dose of 0.25 mg (1 mL) every other day

Approval Duration:

Commercial: 12 months

Medicaid/HIM: 12 months

III. Appendices

APPENDIX A: Abbreviation/Acronym Key

CIS: clinically isolated syndrome

FDA: Food and Drug Administration

MS: Multiple Sclerosis

RRMS: relapsing-remitting multiple sclerosis

APPENDIX B: Therapeutic Alternatives

Below are suggested therapeutic alternatives based on clinical guidance. Please check drug formulary for preferred agents and utilization management requirements.

Disease-modifying therapies for MS include:

- Infusion therapies
 - natalizumab (Tysabri®)
 - mitoxantrone
 - ocrelizumab (Ocrevus™)
 - alemtuzumab (Lemtrada®)
- Injectable therapies
 - glatiramer (Copaxone®, Glatopa®)
 - interferon beta-1a (Avonex®, Rebif®)

- interferon beta-1b (Betaseron®, Extavia®)
- peginterferon beta-1a (Plegridy®)
- Oral therapies
 - dimethyl fumarate (Tecfidera®)
 - monomethyl fumarate (Bafiertam™)
 - diroximel fumarate (Vumerity®)
 - teriflunomide (Aubagio®)
 - fingolimod (Gilenya™)
 - siponimod (Mayzent®)
 - ozanimod (Zeposia®)
 - cladribine (Mavenclad®)
 - dalfampridine (Ampyra®)

APPENDIX C: Contraindications/Boxed Warnings

- Contraindication(s):
 - In patients with a history of hypersensitivity to natural or recombinant interferon beta, Albumin (Human), or any other component of the formulation
- Boxed Warning(s):
 - Not applicable

APPENDIX D: General Information

- Hepatic Injury: Monitor liver function tests and signs and symptoms of hepatic injury
- Depression and Suicide: Advise patients to immediately report any symptom of depression and/or suicidal ideation; consider discontinuation of BETASERON if depression occurs.
- Congestive Heart Failure (CHF): Monitor patients with CHF for worsening of cardiac symptoms; consider discontinuation of BETASERON if worsening of CHF occurs.
- Injection Site Necrosis and Reactions: Do not administer BETASERON into affected area until fully healed; if multiple lesions occur, discontinue BETASERON until healing of skin lesions.
- Leukopenia: Monitor complete blood count.
- Thrombotic Microangiopathy: Cases of thrombotic microangiopathy have been reported. Discontinue BETASERON if clinical symptoms and laboratory findings consistent with TMA occur.
- Flu-like Symptom Complex: Consider analgesics and/or antipyretics on injection days.
- Drug-induced Lupus Erythematosus: Cases of drug-induced lupus erythematosus have been reported. Discontinue Betaseron if patients develop new characteristic signs and symptoms.

References

1. Betaseron Prescribing Information. Whippany, NJ: Bayer Corporation.; August 2019. Available at: https://labeling.bayerhealthcare.com/html/products/pi/Betaseron_PI.pdf Accessed 8/28/2020.
2. Clinical Pharmacology [database online]. Tampa, FL: Gold Standard, Inc.; 2019. Available at <https://www.clinicalkey.com/pharmacology/>
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;90:777-788. doi:10.1212/WNL.0000000000005347.
4. Rae-Grant A, Day GS, Marrie RA, et al. Comprehensive systematic review 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;90:789-800.

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5. Costello K, Kalb R. The use of disease-modifying therapies in multiple sclerosis, principles and current evidence – a consensus paper by the Multiple Sclerosis Coalition. Revised September 2019. Available at http://www.nationalmssociety.org/getmedia/5ca284d3-fc7c-4ba5-b005-ab537d495c3c/DMT_Consensus_MS_Coalition_color. Accessed August 28,2020.

Review/Revision History	Review/Revised Date	P&T Approval Date
Policy established.	08/2020	9/14/2020