Actimmune® (interferon gamma-1b)
(Subcutaneous)

Document Number: IC-0395

Last Review Date: 07/05/2023
Date of Origin: 10/02/2018
Dates Reviewed: 10/2018, 07/2019, 7/2020, 7/2021, 07/2022, 07/2023

I. Length of Authorization

Coverage will be provided for 6 months and may be renewed.

II. Dosing Limits

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

– Actimmune 100 mcg (2 million IU) single-dose vial: 12 vials daily

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

CGD/SMO

- 1 billable unit three times weekly

MF/SS

- 8 billable units daily

III. Initial Approval Criteria [1]

Coverage is provided in the following conditions:

Chronic Granulomatous Disease (CGD) † Φ [1,5,6,9,10]

- Patient is at least 1 year of age; **AND**
- Patient diagnosis is confirmed by the following biochemical and genetic tests:
  - Patient has a mutation in one or more of the phagocyte oxidase (PHOX) genes (e.g., gp91, p47, p22, p67, and p40 phox-genes) and/or a mutation in the CYBC1 gene; **AND**
  - Patient has abnormal dihydrorhodamine (DHR) neutrophil function as measured on a quantitative assay (i.e., DHR-123 oxidation test); **AND**
- Used to decrease the frequency and severity of serious infections, defined as a clinical event requiring hospitalization and the use of parenteral antibiotics; **AND**
- Patient is receiving antibiotic prophylaxis therapy

Severe Malignant Osteopetrosis (SMO) † Φ [1,7,8]

- Patient is between 1 month and 8 years of age; **AND**
- Patient diagnosis is confirmed by all of the following radiographic and genetic tests:
    - Classical radiographic presentation (e.g., bone-within-bone, club shaped long bones, generalized osteosclerosis, transverse bands, etc.) on a skeletal survey; **AND**
    - Identification of a pathogenic sub-type mutation in the CLCN7 gene or other gene variants; **AND**
- Patient has severe, malignant disease; **AND**
- Intent of treatment is to delay the progression of disease; **AND**
- Patient is receiving concurrent calcium and Vitamin D supplementation; **AND**
- Patient is receiving concurrent calcitriol

Mycosis Fungoides (MF)/Sezary Syndrome (SS) ‡ [2]

- Patient is at least 18 years of age; **AND**
- Patient has stage IA-IV disease

† FDA Approved Indication(s); ‡ Compendia Recommended Indication(s); Φ Orphan Drug

IV. Renewal Criteria [1]

Coverage can be renewed based upon the following criteria:

- Patient continues to meet indication-specific relevant criteria such as concomitant therapy requirements (not including prerequisite therapy), performance status, etc. identified in section III; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: cardiovascular disorder exacerbation, mental status changes, gait disturbances, dizziness, severe neutropenia and/or thrombocytopenia, severe elevations in liver enzymes (AST and/or ALT), severe hypersensitivity reactions, renal toxicity, etc.; **AND**

Chronic Granulomatous Disease (CGD) [1]

- Disease response with treatment as defined by all of the following:
    - Decrease in the frequency and severity of infection; **AND**
    - Decrease in the rate of hospitalizations and requirement for parenteral antibiotics

Severe Malignant Osteopetrosis (SMO) [1]

- Disease response with treatment as defined by stabilization or delayed progression of disease (disease progression is defined as any of the following: significant reduction in hemoglobin or platelet counts, a serious bacterial infection requiring antibiotics, or a 50 dB decrease in hearing or progressive optic atrophy); **AND**
- Patient is ≤ 8 years of age

Mycosis Fungoides (MF)/Sezary Syndrome (SS) [2]

- Disease response with treatment as defined by stabilization of disease or decrease in size of tumor or tumor spread

V. Dosage/Administration [1,3]

Indication	Dose
MF/SS	Administer 0.25 mg/m^2 subcutaneously daily for the first week of treatment. If tolerated, the dose may be escalated to 0.5 mg/m^2 daily (starting on day 8) for at least 8 weeks unless there are unacceptable toxicities or obvious tumor progression.

All other indications	• Body Surface Area (BSA) > 0.5 m^2
	  ○ Administer 50 mcg/m^2 (1 million IU/m^2) subcutaneously three times weekly
	• Body Surface Area (BSA) ≤ 0.5 m^2
	  ○ Administer 1.5 mcg/kg/dose subcutaneously three times weekly

May be self-administered	

VI. Billing Code/Availability Information

HCPCS Code:

- J9216 – Injection, interferon, gamma-1b, 3 million units; 1 billable unit = 3 million IU

NDC:

- Actimmune 100 mcg (2 million IU)/0.5 mL single-dose vial: 75987-0111-xx

VII. References

1. Actimmune [package insert], Dublin, Ireland; Horizon Therapeutics Ireland DAC; March 2021. Accessed May 2023.
2. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Interferon gamma-1b. National Comprehensive Cancer Network, 2023. 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 May 2023.
3. Kaplan EH, Rosen ST, Norris DB, et al. Phase II study of recombinant human interferon gamma for treatment of cutaneous T-cell lymphoma. J Natl Cancer Inst. 1990 Feb 7;82(3):208-12.
4. Bousfiha A, Jeddane L, Picard C, et al. The 2017 IUIS Phenotypic Classification for Primary Immunodeficiencies. J Clin Immunol (2018) 38:129–143.
5. Immune Deficiency Foundation (IDF): Diagnostic and clinical care guidelines for primary immunodeficiency, 3rd edition (2015). Available at:

https://primaryimmune.org/sites/default/files/publications/2015-Diagnostic-and-Clinical-Care-Guidelines-for-PI_1.pdf.

6. Bonilla FA, Khan DA, Ballas ZK, et al. Practice parameter for the diagnosis and management of primary immunodeficiency J Allergy Clin Immunol. 2015 Nov;136(5):1186-205.e1-78. doi: 10.1016/j.jaci.2015.04.049.
7. Wu CC, Econs MJ, DiMeglio LA, et al. Diagnosis and Management of Osteopetrosis: Consensus Guidelines From the Osteopetrosis Working Group. J Clin Endocrinol Metab. 2017 Sep 1;102(9):3111-3123.
8. Sobacchi C, Villa A, Schulz A, et al. CLCN7-Related Osteopetrosis. GeneReviews® [Internet]. Initial Posting: February 12, 2007; Last Update: January 20, 2022; Accessed on May 15, 2023. Available at: https://www.ncbi.nlm.nih.gov/books/NBK1127/.
9. Bousfiha A, Jeddane L, Picard C, et al. Human Inborn Errors of Immunity: 2019 Update of the IUIS Phenotypical Classification. J Clin Immunol. 2020;40(1):66-81. doi:10.1007/s10875-020-00758-x.
10. Tangye SG, Al-Herz W, Bousfiha A, et al. Human Inborn Errors of Immunity: 2022 Update on the Classification from the International Union of Immunological Societies Expert Committee. J Clin Immunol. 2022 Oct;42(7):1473-1507. doi: 10.1007/s10875-022-01289-3.

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
C84.00	Mycosis fungoides, unspecified site
C84.01	Mycosis fungoides, lymph nodes of head, face, and neck
C84.02	Mycosis fungoides, intrathoracic lymph nodes
C84.03	Mycosis fungoides, intra-abdominal lymph nodes
C84.04	Mycosis fungoides, lymph nodes of axilla and upper limb
C84.05	Mycosis fungoides, lymph nodes of inguinal region and lower limb
C84.06	Mycosis fungoides, intrapelvic lymph nodes
C84.07	Mycosis fungoides, spleen
C84.08	Mycosis fungoides, lymph nodes of multiple sites
C84.09	Mycosis fungoides, extranodal and solid organ sites
C84.10	Sézary disease, unspecified site
C84.11	Sézary disease, lymph nodes of head, face, and neck
C84.12	Sézary disease, intrathoracic lymph nodes
C84.13	Sézary disease, intra-abdominal lymph nodes
C84.14	Sézary disease, lymph nodes of axilla and upper limb
C84.15	Sézary disease, lymph nodes of inguinal region and lower limb
C84.16	Sézary disease, intrapelvic lymph nodes
C84.17	Sézary disease, spleen
C84.18	Sézary disease, lymph nodes of multiple sites
C84.19	Sézary disease, extranodal and solid organ sites
D71	Functional disorders of polymorphonuclear neutrophils

ICD-10	ICD-10 Description
Q78.2	Osteopetrosis

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 Articles (LCAs) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: https://www.cms.gov/medicare-coverage-database/search.aspx. Additional indications may be covered at the discretion of the health plan.

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

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	**Applicable State/US Territory**	**Contractor**
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA, LLC
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA, LLC
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC

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- Qualified sign language interpreters
- Written information in other formats (large print, audio, accessible electronic formats, other formats)

Provides free language services to people whose primary language is not English, such as:

- Qualified interpreters
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If you need these services, contact a Grievance Specialist.

If you believe that PCHP has failed to provide these services or discriminated in another way on the basis of race, color, national origin, age, disability, or sex, you can file a grievance with:

Grievance Specialist
PreferredOne Community Health Plan
PO Box 59052
Minneapolis, MN 55459-0052
Phone: 1.800.940.5049 (TTY: 763.847.4013)
Fax: 763.847.4010
customerservice@preferredone.com

You can file a grievance in person or by mail, fax, or email. If you need help filing a grievance, a Grievance Specialist is available to help you.

You can also file a civil rights complaint with the U.S. Department of Health and Human Services, Office for Civil Rights, electronically through the Office for Civil Rights Complaint Portal, available at https://ocrportal.hhs.gov/ocr/portal/lobby.jsf, or by mail or phone at:

U.S. Department of Health and Human Services
200 Independence Avenue, SW
Room 509F, HHH Building
Washington, D.C. 20201
1-800-368-1019, 800-537-7697 (TDD)

Complaint forms are available at http://www.hhs.gov/ocr/office/file/index.html.

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PreferredOne Insurance Company
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Fax: 763.847.4010
customerservice@preferredone.com

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U.S. Department of Health and Human Services
200 Independence Avenue, SW
Room 509F, HHH Building
Washington, D.C. 20201
1-800-368-1019, 800-537-7697 (TDD)

Complaint forms are available at http://www.hhs.gov/ocr/office/file/index.html.

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