

Clinical Policy: Interferon Gamma- 1b (Actimmune)

Reference Number: CP.PHAR.52

Effective Date: 06.01.10

Last Review Date: 02.19

Line of Business: Commercial, HIM, Medicaid

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

Interferon gamma-1b (Actimmune[®]) is a recombinant form of gamma interferon.

FDA Approved Indication(s)

Actimmune is indicated for:

- Reducing the frequency and severity of serious infections associated with chronic granulomatous disease (CGD)
- Delaying time to disease progression in patients with severe, malignant osteopetrosis (SMO)

Policy/Criteria

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

It is the policy of health plans affiliated with Centene Corporation[®] that Actimmune is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Chronic Granulomatous Disease (must meet all):

1. Diagnosis of CGD;
2. Age \geq 1 year;
3. Prescribed by or in consultation with a hematologist or infectious disease specialist;
4. Dose does not exceed one of the following (a or b):
 - a. Body surface area (BSA) $>$ 0.5 m²: 50 mcg/m² three times weekly;
 - b. BSA \leq 0.5 m²: 1.5 mcg/kg three times weekly.

Approval duration:

Medicaid/HIM – 6 months

Commercial – 6 months or member's renewal period, whichever is longer

B. Severe Malignant Osteopetrosis (must meet all):

1. Diagnosis of SMO (also known as autosomal recessive osteopetrosis);
2. Prescribed by or in consultation with an endocrinologist;
3. Age \geq 1 month;
4. Dose does not exceed one of the following (a or b):
 - a. BSA $>$ 0.5 m²: 50 mcg/m² three times weekly;
 - b. BSA \leq 0.5 m²: 1.5 mcg/kg three times weekly.

Approval duration:

Medicaid/HIM – 6 months

Commercial – 6 months or member’s renewal period, whichever is longer

C. Mycosis Fungoides, Sezary Syndrome (off-label) (must meet all):

1. Diagnosis of mycosis fungoides or Sezary syndrome;
2. Prescribed by or in consultation with an oncologist;
3. Age \geq 1 month;
4. Request meets one of the following (a, b, or c):
 - a. BSA $>$ 0.5 m²: Dose does not exceed 50 mcg/m² three times weekly;
 - b. BSA \leq 0.5 m²: Dose does not exceed 1.5 mcg/kg three times weekly;
 - c. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration:

Medicaid/HIM – 6 months

Commercial – 6 months or member’s renewal period, whichever is longer

D. Other diagnoses/indications

1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PHAR.21 for health insurance marketplace, and CP.PMN.53 for Medicaid.

II. Continued Therapy

A. All Indications in Section I (must meet all):

1. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
2. Member is responding positively to therapy;
3. If request is for a dose increase, request meets one of the following (a, b, or c):
 - a. BSA $>$ 0.5 m²: New dose does not exceed 50 mcg/m² three times weekly;
 - b. BSA \leq 0.5 m²: New dose does not exceed 1.5 mcg/kg three times weekly;
 - c. New dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration:

Medicaid/HIM – 6 months

Commercial – 6 months or member’s renewal period, whichever is longer

B. Other diagnoses/indications (must meet 1 or 2):

1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy.

Approval duration: Duration of request or 6 months (whichever is less); or

2. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PHAR.21 for health insurance marketplace, and CP.PMN.53 for Medicaid.

III. Diagnoses/Indications for which coverage is NOT authorized:

- A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – CP.CPA.09 for commercial, HIM.PHAR.21 for health insurance marketplace, and CP.PMN.53 for Medicaid or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

BSA: body surface area
CGD: chronic granulomatous disease
FDA: Food and Drug Administration
SMO: severe, malignant osteopetrosis

Appendix B: Therapeutic Alternatives

Not applicable

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s): hypersensitivity
- Boxed warning(s): none reported

Appendix D: General Information

- The manufacturer’s pivotal study for Actimmune showed the drug offered no benefit versus placebo for primary study endpoints for idiopathic pulmonary fibrosis. Analysis of secondary endpoints demonstrated a trend toward increased overall survival in patients treated with Actimmune with baseline forced vital capacity (FVC) > 70% of predicted. An analysis reported that patients with FVC > 55% also benefited. However, the subgroup with FVC > 60% of predicted did not. Therefore, use of baseline FVC to predict benefit is at best speculative at this time.
- A second post-hoc analysis also indicated no benefit in mortality if a dose of > 100 mcg/m² was administered. Additional clarification of appropriate dosing needs to occur. Detailed data on cause of death was not provided. It is currently impossible to speculate that Actimmune was the cause of reduced overall mortality. The absolute number of deaths differed by eight in the study.
- NCCN Compendium lists Actimmune with a category 2A recommendation for the treatment of mycosis fungoides and Sezary syndrome as primary therapy, treatment for refractory or progressive disease, or in combination with phototherapy, retinoids, or photopheresis.
- Positive response in CGD may include reduction in frequency and severity of serious infections associated with CGD or no disease progression while on therapy.

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
CGD, SMO	BSA > 0.5 m ² : 50 mcg/m ² SC TIW	See dosing regimen
	BSA ≤ 0.5 m ² : 1.5 mcg/kg/dose SC TIW	

VI. Product Availability

Single-use vial for injection: 100 mcg (2 million IU)/0.5 ml

VII. References

1. Actimmune Prescribing Information. Lake Forest, IL: Horizon Pharma USA, Inc.; May 2017. Available at: www.actimmune.com. Accessed October 25, 2018.
2. Stark Z, Savarirayan R. Osteopetrosis. *Orphanet J Rare Dis.* 2009; 4(5): 1-12.
3. Wilson CJ, Vellodi A. Autosomal recessive osteopetrosis: diagnosis, management, and outcome. *Arch Dis Child.* 2000; 83(5): 449-452.
4. Key LL Jr, Rodriguiz RM, Willi SM, et al. Long-term treatment of osteopetrosis with recombinant human interferon gamma. *N Engl J Med.* 1995; 332(24): 1594-1599.
5. Interferon Gamma-1b. In: National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at nccn.org. Accessed October 25, 2018.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J9216	Injection, interferon, gamma 1-b, 3 million units

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Added Background information. Added breast feeding to algorithm.	06.14	06.14
Included efficacy data for both indications. Added contraindication, caution and dose adjustment information. Updated “Figure 1. Actimmune Algorithm” by including hypersensitivity question and removing breastfeeding question. Added Appendix A: Safety Concerns. Reviewed references; added reference number 8 for RCT information.	04.15	04.15
Policy converted to new template. Age added per PI; diagnostic confirmation method supported by UptoDate. SMO: dosing and age added per PI; definition of SMO added (autosomal recessive osteopetrosis (ARO)); examples of “severe” added; confirmation by radiographic imaging added.	04.16	05.16
Hypersensitivity contraindication removed. NCCN compendial uses added. Approval duration added to “other indications” section under continuation of therapy.	04.17	05.17
1Q18 annual review: - Combined Medicaid and Commercial policies. - New policy for HIM line of business. - Removed diagnostic confirmatory tests and replaced with specialty prescriber requirement	11.10.17	02.18

Reviews, Revisions, and Approvals	Date	P&T Approval Date
- References reviewed and updated		
1Q 2019 annual review: no significant changes; references reviewed and updated.	10.25.18	02.19

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

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Note:

For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

For Health Insurance Marketplace members, when applicable, this policy applies only when the prescribed agent is on your health plan approved formulary. Request for non-formulary drugs must be reviewed using the formulary exception policy.

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