Clinical Policy: Sebelipase Alfa (Kanuma)

Reference Number: PA.CP.PHAR.159
Effective Date: 01/2018
Last Review Date: 04/2024

Description
Sebelipase alfa (Kanuma®) is a hydrolytic lysosomal cholesteryl ester and triacylglycerol-specific enzyme.

FDA Approved Indication(s)
Kanuma is indicated for the treatment of patients with a diagnosis of Lysosomal Acid Lipase (LAL) deficiency.

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 PA Health & Wellness that Kanuma is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Lysosomal Acid Lipase Deficiency (must meet all):

1. Diagnosis of lysosomal acid lipase (LAL) deficiency confirmed by one of the following:
   a. Enzyme assay demonstrating a deficiency of LAL activity;
   b. Lipase A - lysosomal acid type (LIPA) gene mutation;
2. Age ≥ 1 month;
3. Documentation of member's current weight (in kg);
4. Request meets one of the following (a or b):
   a. Dose does not exceed 3 mg/kg every other week;
   b. For members with rapidly progressive disease presenting within the first 6 months of life: Dose does not exceed any of the following (i or ii):
      i. 3 mg/kg per week;
      ii. 5 mg/kg per week, upon documentation of suboptimal clinical response to 3 mg/kg per week*.
      * *Suboptimal clinical response is defined as any of the following: poor growth, deteriorating biochemical markers, or persistent or worsening organomegaly*

Approval duration: 6 months

B. Other diagnoses/indications: Refer to PA.CP.PMN.53

II. Continued Approval

A. Lysosomal Acid Lipase Deficiency (must meet all)**:**

1. Currently receiving medication via PA Health & Wellness benefit or member has previously met all initial approval criteria; or the Continuity of Care policy (PA.LTSS.PHAR.01) applies;

2. Member is responding positively to therapy as evidenced by documentation of clinical response which may include, but is not limited to:
   a. For members with rapidly progressive disease presenting within first 6 months of life: continued survival;
   b. For all other members: decrease in low-density lipoprotein cholesterol [LDL-c], non-high-density lipoprotein cholesterol [non-HDL-c], or triglycerides; increase in HDL-c; normalization of alanine aminotransferase [ALT] or aspartate aminotransferase [AST]; reduction in hepatic fat content, steatosis, or liver volume;
3. Documentation of member's current weight (in kg);
4. If request is for a dose increase, new dose does not exceed any of the following (a or b):
   a. 3 mg/kg every other week;
   b. For members with rapidly progressive disease presenting within the first 6 months of life: Dose does not exceed any of the following (i or ii):
      i. 3 mg/kg per week;
      ii. 5 mg/kg per week, upon documentation of suboptimal clinical response to 3 mg/kg per week*..

         * *Suboptimal clinical response is defined as any of the following: poor growth, deteriorating biochemical markers, or persistent or worsening organomegaly*

Approval duration: 12 months

B. Other diagnoses/indications (must meet 1 or 2)**:**
1. Currently receiving medication via PA Health & Wellness benefit and documentation supports positive response to therapy; or the Continuity of Care policy (PA.LTSS.PHAR.01) applies; or
2. Refer to PA.CP.PMN.53

III. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

ALT: alanine aminotransferase
AST: aspartate aminotransferase
FDA: Food and Drug Administration
HDL-c: non-high-density lipoprotein cholesterol
LAL: lysosomal acid lipase
LDL-c: low-density lipoprotein cholesterol
LIPA: lipase A – lysosomal acid type

Appendix B: Therapeutic Alternatives

Not applicable

Appendix C: Contraindications/Boxed Warnings

None reported

Appendix D: Measures of Therapeutic Response

- LAL normally causes the breakdown of lipid particles, including LDL-c. A lack of LAL results in accumulation of cholesteryl esters and triglycerides. Therefore, LDL-c, non-

HDL-c, triglycerides, and HDL-c are clinical parameters that can indicate therapeutic response to Kanuma. In clinical trials, there were initial increases in LDL-c and triglycerides within the first 2-4 weeks of treatment; however, this was followed by a decrease to below pre-treatment values within 8 weeks of treatment.

- In addition, the lipid accumulation seen in LAL deficiency can occur in multiple organs, including the liver. This results in increased liver fat content and progression of liver disease, including fibrosis and cirrhosis. In clinical trials, patients receiving Kanuma had normalization of ALT and AST levels, reduction in hepatic fat content and steatosis (defined as the absolute decrease of ≥ 5% from baseline in assessment of hepatic fat content)*, and decrease in baseline liver volume* when compared to patients receiving placebo. As such, improvement in these areas may also indicate positive response to Kanuma.

Not statistically significant

IV. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
LAL deficiency: rapidly progressive disease presenting within first 6 months of life	1 mg/kg IV once weekly For patients with a suboptimal clinical response, increase the dosage to 3 mg/kg once weekly. For patients with continued suboptimal clinical response, further increase the dosage to 5 mg/kg once weekly.* * *Suboptimal clinical response is defined as any of the following: poor growth, deteriorating biochemical markers, or persistent or worsening organomegaly*	5 mg/kg/week
LAL deficiency	1 mg/kg IV every other week For patients with a suboptimal clinical response, increase the dosage to 3 mg/kg once every other week.** ** *Suboptimal clinical response is defined as any of the following: poor growth, deteriorating biochemical markers [e.g., alanine aminotransferase (ALT), aspartate aminotransferase (AST)], and/or parameters of lipid metabolism [e.g., low-density lipoprotein cholesterol (LDL-c), triglycerides (TG)].*	3 mg/kg every other week

V. Product Availability

Single-use vial: 20 mg/10 mL

VI. References

1. Kanuma Prescribing Information. Cheshire, CT: Alexion Pharmaceuticals, Inc.; Cambridge, MA: Genzyme Corporation; November 2021. Available at http://www.kanuma.com/. Accessed January 9, 2024.

2. Zhang B, Porto AF. Cholesteryl ester storage disease: protean presentations of lysosomal acid lipase deficiency. J Pediatr Gastroenterol Nutr. 2013;56(6):682.
3. Kohli R, Ratziu V, Fiel MI, et al. Initial assessment and ongoing monitoring of lysosomal acid lipase deficiency in children and adults: consensus recommendations from an international collaborative working group. Molecular Genetics and Metabolism. 2020;129:59-66.

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
J2840	Injection, sebelipase alfa, 1 mg

Reviews, Revisions, and Approvals	Date
2Q 2018 annual review: Added age restriction and max dose criteria. Added examples of what may constitute positive response to therapy; references reviewed and updated.	02/2018
2Q 2019 annual review: references reviewed and updated.	04/2019
2Q 2020 annual review: references reviewed and updated.	04/2020
2Q 2021 annual review: references reviewed and updated.	04/2021
2Q 2022 annual review: no significant changes; added requirement for documentation of member's current weight for dose calculation purposes; updated max recommended dose for members with rapidly progressive disease presenting within the first 6 months of life per the Prescribing Information and clarified documentation requirements for max dose requests for this population; references reviewed and updated.	04/2022
2Q 2023 annual review: no significant changes; added definition of "suboptimal clinical response" for determining the need for further dose increases; references reviewed and updated.	04/2023
2Q 2024 annual review: updated IV. Dosage and Administration note for LAL deficiency; references reviewed and updated.	04/2024