Extended Half-life Factor VIII Products: Altuviiio, Adynovate, Eloctate, Esperoct and Jivi

Date of Origin: 01/22/2020 **Last Review Date: 03/25/2020** **Effective Date: 04/01/2020**

Dates Reviewed: 01/22/2020; 03/25/2020

Developed By: Medical Criteria Committee

I. Length of Authorization

- Initial: 6 months (for on-demand and prophylaxis); 1 month (for perioperative)
- Renewal: 12 months (for prophylaxis); 12 months (for on-demand)

II. Dosing Limits

Product Name	Dosage Form	Indication/ FDA Labeled Dosing	Quantity Limit‡
Altuviiio, antihemophilic factor (recombinant), fc-vwf-xten fusion protein-ehtl	250, 500, 750, 1000, 2000, 3000, 4000 IU	**On-demand Treatment:** • Up to 50 IU/kg every 2 to 3 days until bleeding is resolved **Routine Prophylaxis:** • 50 IU/kg once a week **Perioperative Management:** • *Minor* (e.g., tooth extraction): single dose of 50 IU/kg followed by additional doses of 30 to 50 IU/kg after 2 to 3 days as needed until bleeding is resolved • *Major* (e.g., intracranial, intra-abdominal, or intrathoracic, or joint- replacement): Single dose of 50 IU/kg followed by additional doses of 30 to 50 IU/kg every 2 to 3 days as needed for perioperative management	**On-demand Treatment:** Up to the number of doses requested every 28 days **Routine Prophylaxis:** 200 IU/kg every 28 days **Perioperative Management:** Up to the number of doses requested for 28 days
Adynovate, antihemophilic factor (recombinant), PEGylated	250, 500, 750, 1000, 1500, 2000, 3000 IU	**On-demand Treatment:** Up to 50 IU/kg every 8 to 24 hours until bleeding is resolved **Routine Prophylaxis:**	**On-demand Treatment:** Up to the number of doses requested every 28 days

		• ≥12 years: Up to 50 IU/kg two times per week • <12 years: 55 IU/kg two times per week with a maximum of 70 IU/kg **Perioperative Management:** • *Minor* (e.g. tooth extraction): Up to 50 IU/kg within one hour before surgery; Repeat after 24 hours as needed until bleeding is resolved *Major* (e.g. intracranial, intra-abdominal, or intrathoracic, or joint-replacement): Up to 60 IU/kg within one hour before operation; Repeat every 8-24 hours (6 to 24 hours for patients <12 years of age) until adequate round healing	**Routine Prophylaxis:** • ≥12 years: Up to 420 IU/kg every 28 days • <12 years: Up to 590 IU/kg every 28 days **Perioperative Management:** Up to the number of doses requested for 28 days
Eloctate, antihemophilic factor (recombinant), Fc fusion protein	250, 500, 750, 1000, 1500, 2000, 3000, 4000, 5000, 6000 IU	**On-demand Treatment:** Up to 50 IU/kg every 12 to 24 hours (every 8 to 24 hours in patients <6 years of age) until bleeding is resolved **Routine Prophylaxis:** • ≥6 years: Up to 65 IU/kg every three to five days • <6 years: Up to 65 IU/kg every three to five days. More frequent or higher doses (up to 80 IU/kg) may be required **Perioperative Management:** • *Minor* (e.g. tooth extraction): Up to 40 IU/kg every 24 hours (every 12-24 hours for patients <6 years of age) for at least 1 day until healing is achieved *Major* (e.g. intracranial, intra-abdominal, or intrathoracic, or joint-replacement): Preoperative dose of up to 60 IU/kg followed by a repeat dose of up to 50 IU/kg after 8-24 hours (6-24 for patients <6 years of age) and then every 24 hours until adequate wound healing (at least 7 days)	**On-demand Treatment:** Up to the number of doses requested every 28 days **Routine Prophylaxis:** • ≥6 years: Up to 820 IU/kg every 28 days • <6 years: Up to 1,010 IU/kg every 28 days **Perioperative Management:** Up to the number of doses requested for 28 days

Esperoct, antihemophilic factor (recombinant), glycopegylated	500, 1000, 1500, 2000, 3000 IU	**On-demand Treatment:** • ≥12 years: Up to 50 IU/kg per dose • <12 years: Up to 65 IU/kg per dose **Routine Prophylaxis:** • ≥12 years: Up to 50 IU/kg every four days • <12 years: Up to 65 IU/kg twice weekly **Perioperative Management:** *Minor and Major surgery:* Up to 50 IU/kg for those ≥12 years of age and up to 65IU/kg for those < 12 years of age	**On-demand Treatment:** Up to the number of doses requested every 28 days **Routine Prophylaxis:** • ≥12 years: Up to 368 IU/kg every 28 days • <12 years: Up to 546 IU/kg every 28 days P**erioperative Management:** Up to the number of doses requested for 28 days
Jivi, antihemophilic factor (recombinant), PEGylated	500, 1000, 2000, 3000 IU	**On-demand Treatment:** Up to 50 IU/kg every 8 to 24 hours until bleeding is resolved **Routine Prophylaxis:** • ≥12 years: Up to 40 IU/kg two times per week • <12 years: Not FDA approved **Perioperative Management:** • *Minor* (e.g. tooth extraction): Up to 30 IU/kg within every 24 hours for at least 1 day until healing as achieved *Major* (e.g. intracranial, intra-abdominal, or intrathoracic, or joint-replacement): Up to 50 IU/kg every 12-24 hours until adequate wound healing is complete, then continue therapy for at least another 7 days	**On-demand Treatment:** Up to the number of doses requested every 28 days **Routine Prophylaxis:** • ≥12 years: Up to 340 IU/kg every 28 days • <12 years: Not FDA approved **Perioperative Management:** Up to the number of doses requested for 28 days

‡Allows for +5% to account for assay and vial availability

III. Initial Approval Criteria

I. Extended half-life factor VIII products may be considered medically necessary when the following criteria below are met:

A. Member has a confirmed diagnosis of **hemophilia A (congenital factor VIII deficiency)** and the following are met:

1. Treatment is prescribed by or in consultation with a hematologist; **AND**

2. Use of extended half-life factor VIII is planned for one of the following indications:
    i. On-demand treatment and control of bleeding episodes **AND** the number of factor VIII units requested does **not** exceed those outlined in the Quantity Limits table above for routine prophylaxis; **OR**
    ii. Perioperative management of bleeding; **OR**
    iii. Routine prophylaxis to reduce the frequency of bleeding episodes when one of the following is met:
        a. Member has severe hemophilia A (defined as factor VIII level of <1%); **OR**
        b. Member has had more than one documented episode of spontaneous bleeding; **AND**
    iv. Dose and frequency does not exceed those outlined in the Quantity Limit Table above, unless documented clinical reasoning for higher dosing and/or frequency is supported by a half-life study to determine the appropriate dose and dosing interval; **AND**
        a.
3. Prior treatment with a standard half-life factor VIII product administered at the FDA approved dose for at least 50 exposure days was ineffective for the treatment or prevention of bleeding episodes; **OR**
4. There is clinical documentation that all available standard half-life factor VIII products are inappropriate; **AND**
5. Documentation that inhibitor testing has been performed within the last 12 months; **AND**
    i. if inhibitor titers are high (≥5 Bethesda units), there is a documented plan to address inhibitors; **AND**
6. If the request is for Jivi, the member is 12 years of age or older and has been previously treated with another factor VIII product

II. Extended half-life factor VIII products are considered investigational when used for all other conditions.

III. Renewal Criteria

I. For **on-demand treatment** and **routine prophylaxis**:
    i. Documentation of clinical benefit, including decreased incidence of bleeding episodes or stability of bleeding episodes relative to baseline; **AND**
    ii. Documentation that inhibitor testing has been performed within the last 12 months AND if inhibitor titers are high (≥5 Bethesda units), there is documented plan to address inhibitors; **AND**
    iii. *For **on-demand treatment only***, the dose and frequency is not greater than the routine prophylactic dose outlined in the Quantity Limit Table above

VI. Billing Code/Availability Information

Drug	Manufacturer	J-Code	1 Billable Unit Equiv.	Vial Size	NDC
Eloctate	Biogen Idec Inc	J7205	1 IU	250 units	64406-0801-01
				500 units	64406-0802-01
				750 units	64406-0803-01
				1000 units	64406-0804-01
				1500 units	64406-0805-01
				2000 units	64406-0806-01
				3000 units	64406-0807-01
				4000 units	64406-0808-01
				5000 units	64406-0809-01
				6000 units	64406-0810-01
Adynovate	Baxalta US Inc	J7207	1 IU	250 units	00944-4622-01
				500 units	00944-4623-01
				750 units	00944-4626-01
				1000 units	00944-4624-01
				1500 units	00944-4627-01
				2000 units	00944-4625-01
				3000 units	00944-4628-01
Jivi	Bayer	J7208	1 IU	500 units	00026-3942-25
				1000 units	00026-3944-25
				2000 units	00026-3946-25
				3000 units	00026-3948-25
Altuviiio	Sanofi	J7214	1 IU	250 units	71104-978-01
				500 units	71104-979-01
				750 units	71104-980-01
				1000 units	7114-981-01
				2000 units	71104-982-01
				3000 units	71104-983-01
				4000 units	71104-984-01

VII. References

1. Adynovate® [Prescribing Information]. Westlake Village, CA: Shire; May 2018
2. Afstyla® [Prescribing Information]. Kankakee, IL: CSL Behring; September 2017
3. Eloctate® [Prescribing Information]. Waltham, MA: Bioverativ Therapeutics; December 2017
4. Jivi® [Prescribing Information]. Whippany, NJ: Bayer; August 2018
5. National Hemophilia Foundation. Hemophilia A. Available from: https://www.hemophilia.org/Bleeding-Disorders/Types-of-Bleeding-Disorders/Hemophilia-A. Accessed July 5, 2019.
6. National Hemophilia Foundation. MASAC Recommendations Concerning products Licensed for the Treatment of Hemophilia and Other Bleeding Disorders. Available from: https://www.hemophilia.org/Researchers-Healthcare-Providers/Medical-and-Scientific-Advisory-Council-MASAC/MASAC-Recommendations. Accessed July 5, 2019.

7. UpToDate, Inc. Hemophilia A and B: Routine management including prophylaxisHemophilia A and B: Routine management including prophylaxis. UpToDate [database online]. Last updated February 11, 2019.

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
D66	Hereditary factor VIII deficiency

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

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/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 Corporation (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 Corporation (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Cahaba Government Benefit Administrators, 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