

Beovu® (brolucizumab-dbll) (Intravitreal)

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I. Length of Authorization

Coverage will be provided annually and may be renewed.

II. Dosing Limits

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

Neovascular age-related macular degeneration (AMD):

• 6 mg single-dose vial or pre-filled syringe for injection: 1 vial/syringe per eye every 25 days for three doses initially, then 1 vial/syringe every 8 weeks

Diabetic Macular Edema (DME):

• 6 mg single-dose vial or pre-filled syringe for injection: 1 vial/syringe per eye every 6 weeks for five doses initially, then 1 vial/syringe every 8 weeks

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

| Diagnosis | MU for Initial Dosing | MU for Maintenance Dosing |
|---------------------------------|-------------------------------------|------------------------------------|
| Neovascular age-related macular | 12 billable units every 25 days x 3 | 12 billable units every 56-84 days |
| degeneration (AMD) | doses | |
| Diabetic Macular Edema (DME) | 12 billable units every 6 weeks x 5 | 12 billable units every 56-84 days |
| | doses | |

(Max units are based on administration to both eyes)

III. Initial Approval Criteria ¹

Coverage is provided in the following conditions:

- Cimerli, Eylea, and Avastin are the preferred products. Patient must have failed, or have a contraindication, or intolerance to 2 of the 3 preferred products before consideration of any other VEGF-inhibitor product; **AND**
- Patient is at least 18 years of age; AND

Universal Criteria 1

• Patient is free of ocular and/or peri-ocular infections; AND



- Patient does not have active intraocular inflammation; AND
- Therapy will not be used with other ophthalmic VEGF inhibitors (i.e., aflibercept, ranibizumab, pegaptanib, bevacizumab, faricimab-svoa, etc.); **AND**
- Patient's best corrected visual acuity (BCVA) is measured at baseline and periodically during treatment; AND
- Patient has a definitive diagnosis of the following:

Neovascular (Wet) Age-Related Macular Degeneration (AMD) † 1

Diabetic Macular Edema (DME) † 1

† 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 the universal and indication-specific relevant criteria as identified in section III; AND
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity:
 endophthalmitis and retinal detachment, increase in intraocular pressure, arterial
 thromboembolic events, retinal vasculitis and/or retinal vascular occlusion, etc.; AND
- Continued administration is necessary for the maintenance treatment of the condition;
 AND

Neovascular (Wet) Age-Related Macular Degeneration (AMD) ²

- Patient has had a beneficial response to therapy (e.g., improvement in the baseline best corrected visual acuity (BCVA), etc.); **AND**
- Decreasing the interval of maintenance doses from 12-weeks to 8-weeks will be allowed if the patient has received all 3 loading doses and has evidence of disease activity, indicated by one of the following, at (or beyond) treatment-week 16:
 - o Decrease in BCVA of ≥ 5 letters compared to baseline; **OR**
 - O Decrease in BCVA of \geq 3 letters and central subfield thickness \geq 75 μm compared with week 12; **OR**
 - o Decrease in BCVA of \geq 5 letters due to neovascular AMD disease activity compared with week 12; **OR**
 - New or worsening intra-retinal cysts or fluid compared with week 12

Diabetic Macular Edema (DME) 10

• Patient has had a beneficial response to therapy (e.g., improvement in the baseline best corrected visual acuity (BCVA), etc.); **AND**



- Decreasing the interval of maintenance doses from 12-weeks to 8-weeks will be allowed if the patient has received all 5 loading doses and has evidence of disease activity, indicated by one of the following, at (or beyond) treatment-week 28:
 - o Decrease in BCVA of ≥ 5 letters compared to baseline; **AND**
 - o Increase in central subfield thickness compared to baseline

V. Dosage/Administration ^{1,2,10}

| Indication | Dose |
|------------|---|
| AMD | The recommended dose for Beovu is 6 mg (0.05 mL of 120 mg/mL solution) administered by intravitreal injection monthly (approximately every 25-31 days) for the first three doses, followed by 6 mg (0.05 mL) by intravitreal injection once every 8-12 weeks. – For many patients, dosing at the every 12 week frequency is sufficient. For some patients who show continued disease activity, increasing the frequency to every 8 weeks may be considered. |
| DME | The recommended dose for Beovu is 6 mg (0.05 mL of 120 mg/mL solution) administered by intravitreal injection every 6 weeks (approximately every 39-45 days) for the first five doses, followed by 6 mg (0.05 mL) by intravitreal injection once every 8-12 weeks. - For many patients, dosing at the every 12 week frequency is sufficient. For some patients who show continued disease activity, increasing the frequency to every 8 weeks may be considered. |

VI. Billing Code/Availability Information

HCPCS:

• J0179 – Injection, brolucizumab-dbll, 1 mg; 1 mg = 1 billable unit

NDC:

- Beovu 6 mg/0.05 mL single-dose vial kit with injection components: 00078-0827-xx
- Beovu 6 mg/0.05 mL single-dose pre-filled syringe: 00078-0827-xx

VII. References

- 1. Beovu [package insert]. East Hanover, NJ; Novartis Pharmaceuticals, Inc.; May 2022. Accessed September 2022.
- 2. Dugel PU, Koh A, Ogura Y, et al. HAWK and HARRIER: Phase 3, Multicenter, Randomized, Double-Masked Trials of Brolucizumab for Neovascular Age-Related Macular Degeneration. Ophthalmology. 2019 Apr 12. pii: S0161-6420(18)33018-5.
- 3. Dugel PU, Jaffe GJ, Sallstig P, et al. Brolucizumab versus aflibercept in participants with neovascular age-related macular degeneration: a randomized trial. Ophthalmology. 2017;124:1296e1304.
- 4. Solomon SD, Chew E, Duh EJ, et al. Diabetic Retinopathy: A Position Statement by the American Diabetes Association. Diabetes Care. 2017 Mar; 40(3):412-418.



- 5. American Academy of Ophthalmology-Preferred Practice Patterns (AAO-PPP)
 Retina/Vitreous Committee, Hoskins Center for Quality Eye Care. Diabetic Retinopathy
 PPP Update 2019. Oct 2019.
- 6. American Academy of Ophthalmology-Preferred Practice Patterns (AAO-PPP)
 Retina/Vitreous Committee, Hoskins Center for Quality Eye Care. Retinal Vein Occlusions
 PPP Update 2019. Oct 2019.
- 7. American Academy of Ophthalmology-Preferred Practice Patterns (AAO-PPP)
 Retina/Vitreous Committee, Hoskins Center for Quality Eye Care. Age-Related Macular
 Degeneration PPP Update 2019. Oct 2019.
- 8. Royal College of Ophthalmologists. Clinical Guidelines Retinal Vein Occlusion (RVO) Guidelines July 2015. Accessed at https://www.rcophth.ac.uk/standards-publications-research/clinical-guidelines.
- 9. Garweg J. A Randomized, Double-Masked, Multicenter, Phase III Study Assessing the Efficacy and Safety of Brolucizumab versus Aflibercept in Patients with Visual Impairment due to Diabetic Macular Edema (KITE). Klin Monbl Augenheilkd. 2020 Apr;237(4):450-453. doi: 10.1055/a-1101-9126. Epub 2020 Mar 4.
- 10. Brown D, Emanuelli A, Bandello F, et al. KESTREL and KITE: 52-Week Results From Two Phase III Pivotal Trials of Brolucizumab for Diabetic Macular Edema. Am J Ophthalmol 2022 Jun;238:157-172. doi: 10.1016/j.ajo.2022.01.004. Epub 2022 Jan 14.
- 11. National Government Services, Inc. Local Coverage Article: Billing and Coding: Ranibizumab, Aflibercept and Brolucizumab-dbll and Faricimab-svoa (A52451). Centers for Medicare & Medicaid Services, Inc. Updated on 06/24/2022 with effective date of 07/01/2022. Accessed September 2022.

Appendix 1 – Covered Diagnosis Codes

| ICD-10 | ICD-10 Description |
|----------|---|
| E08.311 | Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy with macular edema |
| E08.3211 | Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, right eye |
| E08.3212 | Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, left eye |
| E08.3213 | Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, bilateral |
| E08.3219 | Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E08.3311 | Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, right eye |
| E08.3312 | Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, left eye |
| E08.3313 | Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, bilateral |
| E08.3319 | Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye |



| ICD-10 | ICD-10 Description |
|-----------|---|
| E08.3411 | Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy |
| 200.0111 | with macular edema, right eye |
| E08.3412 | Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy |
| | with macular edema, left eye |
| E08.3413 | Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy |
| | with macular edema, bilateral |
| E08.3419 | Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy |
| | with macular edema, unspecified eye |
| E08.3511 | Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with |
| | macular edema, right eye |
| E08.3512 | Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with |
| | macular edema, left eye |
| E08.3513 | Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with |
| | macular edema, bilateral |
| E08.3519 | Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with |
| | macular edema, unspecified eye |
| E09.311 | Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy with macular |
| | edema |
| E09.3211 | Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy |
| | with macular edema, right eye |
| E09.3212 | Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy |
| | with macular edema, left eye |
| E09.3213 | Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy |
| | with macular edema, bilateral |
| E09.3219 | Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy |
| | with macular edema, unspecified eye |
| E09.3311 | Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic |
| | retinopathy with macular edema, right eye |
| E09.3312 | Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic |
| | retinopathy with macular edema, left eye |
| E09.3313 | Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic |
| | retinopathy with macular edema, bilateral |
| E09.3319 | Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic |
| 7 | retinopathy with macular edema, unspecified eye |
| E09.3411 | Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy |
| F00.0440 | with macular edema, right eye |
| E09.3412 | Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy |
| E00.0410 | with macular edema, left eye |
| E09.3413 | Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy |
| E00.0410 | with macular edema, bilateral |
| E09.3419 | Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy |
| E09.3511 | with macular edema, unspecified eye |
| E09.3511 | Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with |
| E00 2519 | macular edema, right eye Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with |
| E09.3512 | |
| E09.3513 | macular edema, left eye Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with |
| \$166.60T | macular edema, bilateral |
| E09.3519 | Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with |
| E00.0018 | macular edema, unspecified eye |
| E10 911 | - |
| E10.311 | Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema |
| E10.3211 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, |
| | right eye |



| ICD-10 | ICD-10 Description |
|----------|--|
| E10.3212 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, |
| | left eye |
| E10.3213 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, |
| | bilateral |
| E10.3219 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, |
| | unspecified eye |
| E10.3311 | Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular |
| 7 | edema, right eye |
| E10.3312 | Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular |
| E10 0010 | edema, left eye |
| E10.3313 | Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral |
| E10.3319 | Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular |
| | edema, unspecified eye |
| E10.3411 | Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular |
| | edema, right eye |
| E10.3412 | Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular |
| | edema, left eye |
| E10.3413 | Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular |
| E10.3419 | edema, bilateral Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular |
| E10.5419 | edema, unspecified eye |
| E10.3511 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye |
| | |
| E10.3512 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye |
| E10.3513 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral |
| E10.3519 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, |
| | unspecified eye |
| E11.311 | Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema |
| E11.3211 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, |
| | right eye |
| E11.3212 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, |
| P11 0010 | left eye |
| E11.3213 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, |
| E11 2010 | bilateral |
| E11.3219 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E11.3311 | Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular |
| TIT.0011 | edema, right eye |
| E11.3312 | Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular |
| | edema, left eye |
| E11.3313 | Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular |
| | edema, bilateral |
| E11.3319 | Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular |
| | edema, unspecified eye |
| E11.3411 | Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular |
| | edema, right eye |
| E11.3412 | Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular |
| D11 0410 | edema, left eye |
| E11.3413 | Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular |
| E11.3419 | edema, bilateral Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular |
| ш11.5419 | edema, unspecified eye |
| | eucina, unopecineu eye |



| ICD-10 | ICD-10 Description |
|----------|---|
| E11.3511 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye |
| E11.3512 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye |
| E11.3513 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral |
| E11.3519 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, |
| 211.0010 | unspecified eye |
| E13.311 | Other specified diabetes mellitus with unspecified diabetic retinopathy with macular edema |
| E13.3211 | Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye |
| E13.3212 | Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye |
| E13.3213 | Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral |
| E13.3219 | Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E13.3311 | Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye |
| E13.3312 | Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye |
| E13.3313 | Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral |
| E13.3319 | Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E13.3411 | Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye |
| E13.3412 | Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye |
| E13.3413 | Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral |
| E13.3419 | Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E13.3511 | Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye |
| E13.3512 | Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye |
| E13.3513 | Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral |
| E13.3519 | Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye |
| H35.3210 | Exudative age-related macular degeneration, right eye, stage unspecified |
| H35.3211 | Exudative age-related macular degeneration, right eye, with active choroidal neovascularization |
| H35.3212 | Exudative age-related macular degeneration, right eye, with inactive choroidal neovascularization |
| H35.3213 | Exudative age-related macular degeneration, right eye, with inactive scar |
| H35.3220 | Exudative age-related macular degeneration, left eye, stage unspecified |
| H35.3221 | Exudative age-related macular degeneration, left eye, with active choroidal neovascularization |
| H35.3222 | Exudative age-related macular degeneration, left eye, with inactive choroidal neovascularization |
| H35.3223 | Exudative age-related macular degeneration, left eye, with inactive scar |
| H35.3230 | Exudative age-related macular degeneration, bilateral, stage unspecified |
| | L |



| ICD-10 | ICD-10 Description |
|----------|---|
| H35.3231 | Exudative age-related macular degeneration, bilateral, with active choroidal neovascularization |
| H35.3232 | Exudative age-related macular degeneration, bilateral, with inactive choroidal neovascularization |
| H35.3233 | Exudative age-related macular degeneration, bilateral, with inactive scar |
| H35.3290 | Exudative age-related macular degeneration, unspecified eye, stage unspecified |
| H35.3291 | Exudative age-related macular degeneration, unspecified eye, with active choroidal neovascularization |
| H35.3292 | Exudative age-related macular degeneration, unspecified eye, with inactive choroidal neovascularization |
| H35.3293 | Exudative age-related macular degeneration, unspecified eye, with inactive scar |

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 Determinations (LCDs), and Local Coverage Articles (LCAs) 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/LCD/LCA):

| Jurisdiction(s): 6, K | NCD/LCD Document (s): A52451 | |
|---|------------------------------|--|
| https://www.cms.gov/medicare-coverage-database/new-search/search- | | |
| results.aspx?keyword=a52451&areaId=all&docType=NCA%2CCAL%2CNCD%2CMEDCAC%2CTA%2CMC | | |
| D%2C6%2C3%2C5%2C1%2CF%2CP | | |

| 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 |

