



Policy:	210401	Initial Effective Date: 04/15/2021
Code(s):	HCPCS J3490, C9399	Annual Review Date: 05/21/2024
SUBJECT:	Nulibry TM (fosdenopterin)	Last Revised Date: 05/21/2024

Prior approval is required for some or all procedure codes listed in this Corporate Drug Policy.

I. Length of Authorization

Coverage will be provided initially for six months and may be renewed annually thereafter.

II. Dosing Limits

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

• Nulibry 9.5 mg vial for injection: 10 vials daily

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

• 95 mg daily

III. Initial Approval Criteria 1

Coverage is provided in the following conditions:

Universal Criteria 1,3

- Will not be used in combination with other substrate replacement therapy (e.g., recombinant cyclic pyranopterin monophosphate, etc.); **AND**
- Must be prescribed by, or in consultation with, a specialist in medical genetics or pediatric neurology; AND

Molybdenum Cofactor Deficiency Type A (MoCD Type A) † Φ ¹⁻³

- Patient meets one of the following scenarios:
 - Patient has a diagnosis of MoCD Type A confirmed by a mutation in the MOCS1 gene suggestive of disease as identified on molecular genetic testing; **OR**

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- Patient has biochemical features suggestive of MoCD Type A (i.e., elevated sulfites in urine, low serum uric
 acid, elevated urinary xanthine and hypoxanthine) and will be treated presumptively while awaiting genetic
 confirmation; AND
- Patient has a baseline value for the following:
 - o Urinary s-sulfocysteine (SSC) normalized to creatinine; AND
 - Clinical notes regarding signs and symptoms of disease which may include, but are not limited to, seizure frequency/duration, growth, and developmental milestones

† FDA approved indication(s); ‡ Compendia recommended indication(s); Φ Orphan Drug

IV. Renewal Criteria ¹

Authorizations can be renewed based on the following criteria:

- Patient continues to meet universal and other 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 severe phototoxicity, clinically significant infection, etc.; **AND**
 - O Disease response compared to pre-treatment baseline as evidenced by the following:
 - Reduction in urinary SSC normalized to creatinine; AND
 - Stabilization or improvement in one or more signs and symptoms of disease including, but not limited to, seizure frequency/duration, growth, achievement of developmental milestones; OR
 - O Patient initiated therapy as an inpatient based upon a presumptive diagnosis of MoCD Type A which was subsequently confirmed by genetic testing; **AND**
 - Patient is responding to therapy compared to one or more pre-treatment baseline parameters which prompted the workup for MoCD

V. Dosage/Administration ¹

Indication	Dose	
MoCD	Age less than 1 year (Pre-Term neonates - gestational age <37 weeks)	
Type A	 Initial dosage: 0.4 mg/kg once daily 	
	Dosage at 1 month: 0.7 mg/kg once daily	
	Dosage at 3 months: 0.9 mg/kg once daily	
	Age less than 1 year (Full-Term neonates - gestational age ≥37 weeks)	



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- Initial dosage: 0.55 mg/kg once daily
- Dosage at 1 month: 0.75 mg/kg once daily
- Dosage at 3 months: 0.9 mg/kg once daily

Age at least 1 year

The recommended dosage is 0.9 mg/kg administered as an IV infusion once daily.

*Note all weights are based on Actual Body Weight (ABW)

Nulibry is intended for intravenous administration by a healthcare provider. Nulibry may be administered at home by the patient's caregiver if deemed appropriate by a healthcare provider.

VI. Billing Code/Availability Information

HCPCS Code:

- J3490 Unclassified drugs
- C9399 Unclassified drugs or biologicals (hospital outpatient use)

NDC

- Nulibry 9.5 mg single-dose vial as a lyophilized powder for injection: 73129-0001-xx
- Nulibry 9.5 mg single-dose vial as a lyophilized powder for injection: 42358-0295-xx

VII. References

- 1. Nulibry [package insert]. Boston, MA; Origin Biosciences, Inc.; February 2021. Accessed March 2021.
- 2. Origin Biosciences. A Phase 2, Multicenter, Multinational, Open-Label, Dose-Escalation Study to Evaluate the Safety and Efficacy of ORGN001 (Formerly ALXN1101) in Pediatric Patients With Molybdenum Cofactor Deficiency (MoCD) Type A Currently Treated With Recombinant Escherichia Coli-derived Cyclic Pyranopterin Monophosphate (rcPMP). Available from: https://clinicaltrials.gov/ct2/show/NCT02047461?term=NCT02047461&draw=2&rank=1. NLM identifier:
 - https://clinicaltrials.gov/ct2/show/NCT02047461?term=NCT02047461&draw=2&rank=1. NLM identifier: NCT02047461. Accessed Marche 3, 2021.
- 3. Origin Biosciences. A Phase 2/3, Multicenter, Multinational, Open Label Study to Evaluate the Efficacy and Safety of ORGN001 (Formerly ALXN1101) in Neonates, Infants and Children With Molybdenum Cofactor Deficiency (MOCD) Type A. Available from:
 - https://clinicaltrials.gov/ct2/show/NCT02629393?term=NCT02629393&draw=2&rank=1. NLM identifier: NCT02629393. Accessed March 3, 2021.
- 4. Reiss J, Hahnewald R. Molybdenum cofactor deficiency: Mutations in GPHN, MOCS1, and MOCS2. Hum Mutat. 2011 Jan;32(1):10-8.



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5. Veldman A, Santamaria-Araujo JA, Sollazzo S, Pitt J, Gianello R, Yaplito-Lee J, Wong F, Ramsden CA, Reiss J, Cook I, Fairweather J, Schwarz G. Successful treatment of molybdenum cofactor deficiency type A with cPMP. Pediatrics. 2010 May;125(5):e1249-54. doi: 10.1542/peds.2009-2192. Epub 2010 Apr 12.

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
E61.5	Molybdenum deficiency
E72.19	Other disorders of sulfur-bearing amino-acid metabolism

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: 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/LCA): N/A

Medicare Part B Administrative Contractor (MAC) Jurisdictions				
Jurisdictio	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,	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 &	Novitas Solutions, Inc.		
	Fairfax counties and the city of Alexandria in			
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)		
15	KY, OH	CGS Administrators, LLC		





Documentation Requirements:

The Company reserves the right to request additional documentation as part of its coverage determination process. The Company may deny reimbursement when it has determined that the drug provided or services performed were not medically necessary, investigational or experimental, not within the scope of benefits afforded to the member and/or a pattern of billing or other practice has been found to be either inappropriate or excessive. Additional documentation supporting medical necessity for the services provided must be made available upon request to the Company. Documentation requested may include patient records, test results and/or credentials of the provider ordering or performing a service. The Company also reserves the right to modify, revise, change, apply and interpret this policy at its sole discretion, and the exercise of this discretion shall be final and binding.

FOR MEDICAL BENEFIT COVERAGE REQUESTS:

Prior approval is required for HCPCS Codes J3490 and C9399

[†]When unclassified drugs (J3490) or unclassified drugs or biologics [hospital outpatient use] (C9399) is determined to be Nulibry

Edits and Denials:

Prior approval: Prior approval is required for Nulibry (**HCPCS Codes J3490, C9399**). Requests for prior approval will be authorized by a nurse reviewer if submitted documentation meets criteria outlined within the Corporate Medical Policy.

Requests for prior approval will be forwarded to a qualified physician reviewer if submitted documentation does not meet criteria outlined within Corporate Medical Policy.

TOPPS: Claims received with **HCPCS Codes J3490, C9399**will pend with **Remark Code M3M or M4M** and will be adjudicated in accordance with the Corporate Medical Policy.

Liability: A participating provider will be required to write off charges denied as not medically necessary.