# berdazimer (Zelsuvmi™)

EOCCO POLICY

## Policy Type:PA/SP Pharmacy Coverage Policy: EOCCO305

### Description

Berdazimer (Zelsuvmi) is a nitric oxide (NO) releasing agent.

### Length of Authorization

- Initial: Three months
- Renewal: Not eligible/cannot be renewed

### Quantity Limits

| Product Name | Indication | Dosage Form | Quantity Limit |
|---|---|---|---|
| berdazimer (Zelsuvmi) | Molluscum contagiosum (MC) infection | 10.3% Gel | 31 g/30 days |

### Initial Evaluation

If the condition is a covered line according to the Oregon Health Plan Prioritized List of Healthcare Services OR the condition is not a covered line, but the member has a comorbid condition that would be improved if the non-covered indication is treated, the following applies:

I. **Berdazimer (Zelsuvmi)** may be considered medically necessary when the following criteria are met:
   A. Member is one year of age or older; **AND**
   B. Not used in combination with other interventions used to treat Molluscum contagiosum (MC); **AND**
   C. A diagnosis of **Molluscum contagiosum** when the following are met:
      1. Provider attestation that the member meets one of the following:
         i. Extremely bothersome itching or pain
         ii. Concomitant secondary infection or atopic dermatitis
         iii. Affected areas pose a high risk for disease spread and are not coverable with clothing or bandages; **AND**
      2. Treatment with at least two of the following conventional therapies have been ineffective or not tolerated, or all are contraindicated:
         i. podofilox 0.5% solution
         ii. tretinoin 0.05% cream*
         iii. Over-the-counter (OTC) therapies* (potassium hydroxide solution, salicylic acid, povidone-iodine)

II. Berdazimer (Zelsuvmi) is considered investigational when used for all other conditions, including but not limited to:
   A. Dermatitis not associated with Molluscum contagiosum
   B. Genital warts
   C. Tinea pedis

**Supporting Evidence**

I. Molluscum contagiosum (MC) is a highly contagious, predominantly pediatric, skin infection caused by the molluscipoxvirus. It is common, affecting approximately six million people annually in the U.S. and is spread via skin to skin or contact with contaminated items. Molluscum contagiosum (MC) manifests as small, raised lesions that are usually skin colored with an umbilication. Lesions may become itchy, sore, red, or swollen. Atopic dermatitis is a common comorbidity which may be exacerbated, sometimes leading to bacterial skin infections. The infection is usually self-limited but may persist for months to years, impacting quality of life and may be associated with discomfort, psychosocial stigma, and scarring.

II. Berdazimer (Zelsuvmi) is FDA approved for use in ages one year and older for the treatment of Molluscum contagiosum. It is administered topically as a thin layer once daily for up to 12 weeks and intended to be used as monotherapy. Berdazimer (Zelsuvmi) has not been adequately studied in infants younger than one year of age or in combination with other therapies for the treatment of MC, therefore, there's insufficient safety and efficacy data to support such use at this time.

III. Berdazimer (Zelsuvmi) was studied in three Phase 3, multicenter, randomized, double-blind, vehicle-controlled trials in patients with MC. The primary efficacy outcome was the percentage of patients who achieved complete clearance of all treatable MC lesions at week 12. In the B-SIMPLE4 trial, 32.4% of patients in the berdazimer (Zelsuvmi) group achieved complete clearance at week 12 as compared to 19.7% in the vehicle group, representing a treatment difference of 12.7%. The B-SIMPLE1 and B-SIMPLE2 trials also showed a positive treatment effect, favoring berdazimer (Zelsuvmi) but treatment differences against the vehicle gel were not statistically significant. The most common adverse effects reported were mild to moderate application site reactions and include pain (18.7%), erythema (11.7%), pruritus (5.7%), exfoliation (5%), and dermatitis (4.9%). The overall confidence that the product provides a meaningful benefit relative to comparable treatment options is low due to lack of statistically significant findings in two out of the three clinical trials and modest efficacy seen in one trial (B-SIMPLE4) with statistically significant results.

IV. There are currently no clinical practice guidelines for the management of MC. The American Academy of Dermatology Association (AAD) suggests treatment should be initiated when the patient is immunocompromised, has genital area involvement, has a comorbidity of atopic dermatitis, or has extremely bothersome symptoms. The goals of therapy are to alleviate discomfort such as itching, limit transmission to close contacts, and prevent secondary infections.

V. The Centers for Disease Control and Prevention (CDC) notes several topical treatment options including podophyllotoxin, potassium hydroxide, tretinoin, salicylic acid, and iodine, which are self-administered. Podophyllotoxin is associated with clearance rates of up 92% but its efficacy in children less than 10 years old is not established. Potassium hydroxide 10% is associated with clearance rates ranging from 55% to 86% but may be associated with stinging, burning, and pigmentation. When compared to potassium hydroxide, tretinoin also has efficacy in reducing the number of MC lesions with less side effects but with a slower response. Salicylic acid and iodine also show some efficacy with minor side effects. The evidence for other therapies including imiquimod and cimetidine is inconclusive. Treatment with berdazimer (Zelsuvmi) may be medically necessary when standard therapies have been ineffective, not tolerated, or all contraindicated. Engagement with at least two of the following therapies is required: podofilox, tretinoin, or OTC ailments (e.g., potassium hydroxide), as these agents represent highly effective and safe lower cost alternatives supported by years of clinical practice experience as well as recommendations by the CDC and the AAD.

VI. Berdazimer (Zelsuvmi) is not eligible for renewal because use of berdazimer (Zelsuvmi) beyond 12 weeks of treatment has not been adequately studied, therefore, efficacy and safety beyond 12 weeks is not established. An authorization for a distinct engagement with therapy, such as for a new infection, may be allowed if initial criteria is met.

## Investigational or Not Medically Necessary Uses

I. Berdazimer (Zelsuvmi) has not been FDA-approved, or sufficiently studied for safety and efficacy for the conditions or settings listed below:
   A. Dermatitis not associated with Molluscum contagiosum
   B. Genital warts
   C. Tinea pedis

## References

1. Zelsuvmi. Package Insert. EPIH SPV, LLC. January 2024.
2. Berdazimer (Zelsuvmi) Product Dossier. Novan. February 2024.
3. Browning JC, Enloe C, Cartwright M, et al. Efficacy and Safety of Topical Nitric Oxide-Releasing Berdazimer Gel in Patients With Molluscum Contagiosum: A Phase 3 Randomized Clinical Trial. *JAMA Dermatol*. 2022;158(8):871-878. doi:10.1001/jamadermatol.2022.2721
4. American Academy of Dermatology Association. Molluscum Contagiosum: Diagnosis and Treatment. November 2023. Accessed on May 20, 2024. Molluscum contagiosum: Diagnosis and treatment (aad.org)
5. Centers for Disease Control. Clinical Overview of Molluscum Contagiosum. Cdc.gov. Updated on May 13, 2024. Accessed on May 20, 2024. https://www.cdc.gov/molluscum-contagiosum/hcp/clinical-overview/index.html
6. Chao YC, Ko MJ, Tsai WC, Hsu LY, Wu HY. Comparative efficacy of treatments for molluscum contagiosum: A systematic review and network meta-analysis. *J Dtsch Dermatol Ges*. 2023;21(6):587-597. doi:10.1111/ddg.15063
7. Syed TA, Lundin S, Ahmad M. Topical 0.3% and 0.5% podophyllotoxin cream for self-treatment of molluscum contagiosum in males. A placebo-controlled, double-blind study. *Dermatology*. 1994;189(1):65-68. doi:10.1159/000246787

8. Rajouria EA, Amatya A, Karn D. Comparative study of 5 % potassium hydroxide solution versus 0.05% tretinoin cream for Molluscum Contagiosum in children. *Kathmandu Univ Med J (KUMJ)*. 2011;9(36):291-294. doi:10.3126/kumj.v9i4.6347
9. Giner-Soriano M, Teixidó C, Marsal JR, et al. Randomized placebo-controlled clinical trial on efficacy and safety of topical 10% Potassium hydroxide for *molluscum contagiosum* treatment in children. *J Dermatolog Treat*. 2019;30(8):750-756. doi:10.1080/09546634.2019.1573305
10. Teixidó C, Díez O, Marsal JR, et al. Efficacy and safety of topical application of 15% and 10% potassium hydroxide for the treatment of Molluscum contagiosum. *Pediatr Dermatol*. 2018;35(3):336-342. doi:10.1111/pde.13438
11. Qureshi A, Zeb M, Jalal-Ud-Din M, Sheikh ZI, Alam MA, Anwar SA. Comparison Of Efficacy Of 10% Potassium Hydroxide Solution Versus Cryotherapy In Treatment Of Molluscum Contagiosum. *J Ayub Med Coll Abbottabad*. 2016;28(2):382-385.
12. Short KA, Fuller LC, Higgins EM. Double-blind, randomized, placebo-controlled trial of the use of topical 10% potassium hydroxide solution in the treatment of molluscum contagiosum. *Pediatr Dermatol*. 2006;23(3):279-281. doi:10.1111/j.1525-1470.2006.00235.x
13. Handjani F, Behazin E, Sadati MS. Comparison of 10% potassium hydroxide solution versus cryotherapy in the treatment of molluscum contagiosum: an open randomized clinical trial. *J Dermatolog Treat*. 2014;25(3):249-250. doi:10.3109/09546634.2013.832135
14. Hanna D, Hatami A, Powell J, et al. A prospective randomized trial comparing the efficacy and adverse effects of four recognized treatments of molluscum contagiosum in children. *Pediatr Dermatol*. 2006;23(6):574-579. doi:10.1111/j.1525-1470.2006.00313.x
15. Leslie KS, Dootson G, Sterling JC. Topical salicylic acid gel as a treatment for molluscum contagiosum in children. *J Dermatolog Treat*. 2005;16(5-6):336-340. doi:10.1080/09546630500430521
16. Capriotti K, Stewart K, Pelletier J, Capriotti J. Molluscum Contagiosum Treated with Dilute Povidone-Iodine: A Series of Cases. J Clin Aesthet Dermatol. 2017;10(3):41-45.

## Related Policies

*Currently there are no related policies.*

## Policy Implementation/Update:

| Action and Summary of Changes | Date |
|---|---|
| Policy created | 08/2024 |