Abbreviated Drug Review

Zelsuvmi™ (berdazimer)[1,2]

Indications

- For the topical treatment of molluscum contagiosum in patients ≥ 1 year old.

Dosage

- Supplied as two tubes (A and B) plus 1 Dosing Guide: Tube A with blue label contains 14 grams of berdazimer gel and Tube B with yellow label contains 17 grams of hydrogel.
- Dispense equal amounts (0.5 mL) of gel from Tube A and Tube B on the provided Dosing Guide. Immediately put the caps back on Tube A and Tube B tightly. Mix on the Dosing Guide.
- Apply a thin even layer once daily to each lesion for up to 12 weeks.

Background

- Molluscum contagiosum (MC) is a highly transmissible, self-limiting viral skin lesion that presents as an asymptomatic, smooth, flesh-colored 3-5 mm diameter papule.
- Berdazimer gel mixed with a proton-donating hydrogel is a nitric oxide releasing agent. The mechanism of action for berdazimer gel in the treatment of MC is unknown.
- Pharmacologic treatments for MC are not funded for adults or children (Oregon Prioritized List Line 606)[3]

Efficacy

Approval by the FDA was obtained with data from three phase 3, randomized, double-blind, vehicle-controlled trials in patients with MC (Trials NI-MC304/-302/-301). The trials included patients of at least 6 months of age with 3 to 70 raised MC lesions at baseline. A total of 1,598 patients were enrolled (Trial 304: N=891, Trial 302: N=355; Trial 301: N=352). Subjects were randomized 1:1 in Trial 304 and 2:1 in Trials 302 and 301 to receive berdazimer or placebo vehicle applied to MC lesions once daily for up to 12 weeks. Those with sexually transmitted MC, MC limited to the periocular area only were excluded. Over the 3 studies, 84-89% of subjects in the berdazimer group completed 12 weeks of therapy compared to 88-97% in the vehicle group (88-97%). Overall, the subjects had equal representation of males and females, over 90% were between 2 and 12 years of age, and most were White (85-93%). Ethnicity information collected revealed about 20% identified as Hispanic or Latino. The mean MC lesion count at baseline was 21.8 in Trial 304, 18.3 in Trial 302, and 18.1 in Trial 301. The primary endpoint was the difference in the percentage of berdazimer and vehicle patients who achieved complete clearance of all treatable MC lesions (lesion count = 0) at week 12. A key secondary endpoint included complete clearance of MC lesions at week 8. The efficacy analysis was performed on the intention-to-treat (ITT) set which included all randomized patients.

	Trial NI-MC-304:				**Trial NI-MC-302:**				**Trial NI-MC-301:**			
	Berdazimer (N=444)	**Vehicle (N=447)**	**Treatment Difference*; NNT**	**95% CI; P-value**	**Berdazimer (N=237)**	**Vehicle (N=118)**	**Treatment Difference*; NNT**	**95% CI; P-value**	**Berdazimer (N=236)**	**Vehicle (N=116)**	**Treatment Difference*; NNT**	**95% CI; P-value**
Proportion with complete MC clearance at week 12 from baseline	32.4%	19.7%	12.8% NNT = 8	(7.1% to 18.6%) P<0.0001	30.0%	20.3%	9.2%	(-0.04% to18.4%) P=0.0510*	25.8%	21.6%	4.3%	(-5% to 14%) P=0.3637*
Proportion with complete MC clearance at week 8 from baseline	19.6%	11.6%	7.5% NNT = 13	(3.0% to 12.0%) P=0.0012	13.9%	5.9%	7.8% NNT = 13	(1.8% to 13.8%) P=0.0114*	15.3%	10.3%	4.7%	(-2.2% to 11.5%) P=0.1801*

*=FDA review analysis Abbreviations: CI = confidence interval; NNT = number needed-to-treat.

Safety

Common adverse reactions (Berdazimer gel vs. vehicle, respectively)**:** Application site reactions: pain (18.7% vs. 4.9%), erythema (11.7% vs. 1.3%), pruritus (5.7% vs. 1.0%), exfoliation (5.0% vs. 0), dermatitis (4.9% vs. 0.7%), swelling (3.5% vs. 0.6%), erosion (1.6% vs. 0.1%), discoloration (1.5% vs. 0.1%), vesicles (1.5% vs. 0.1%), irritation (1.2% vs. 0), and infection (1.1% vs. 0.4%); Additional adverse events: pyrexia (2.2% vs. 1.0%), upper respiratory tract infection (1.2% vs. 0.7%), nasopharyngitis (1.0% vs. 0.9%), streptococcal pharyngitis (1.0% vs. 0.9%), and vomiting (1.3% vs. 0.1%).
Contraindications: None.
Warnings and precautions: Application site reactions, including allergic contact dermatitis, occurred.
Special Populations: Teratogenicity/Adverse Effects in Pregnancy and Breastfeeding: risk cannot be ruled out; Older Adults: clinical trials included only one subject age ≥75 years of age, and none between 65 to 74 years of age, therefore, data are insufficient to determine if safety or efficacy of berdazimer differs between younger and older adults.

Evidence Gaps/Limitations

- No studies found to support evidence for use in the treatment of Oregon Health Plan (OHP) funded conditions.

Recommendation

- Apply Drugs for Non-funded Conditions prior authorization criteria to limit use to funded indications.

References

1. Zelsuvmi (berdazimer) Prescribing Information. EPIH SPV, LLC. Wilmington, Delaware. Jan 2024.

2. FDA Center for Drug Evaluation and Research. NDA 217424 Zelsuvmi (berdazimer) Multi-discipline Review. Version October 12, 2018. Review completed January 4, 2024. Available at https://www.accessdata.fda.gov/drugsatfda_docs/nda/2024/217424Orig1s000TOC.cfm. Accessed: April 18, 2024.
3. Oregon Health Authority Health Evidence Review Commission. 1-1-2024 Prioritized List of Health Services. Available at: https://www.oregon.gov/oha/HPA/DSI-HERC/PrioritizedList/1-1-2024%20Prioritized%20List%20of%20Health%20Services.pdf. Accessed April 18, 2024

Drugs for Non-funded Conditions

Goal:

- Restrict use of drugs reviewed by the Oregon Pharmacy & Therapeutics (P&T) Committee without evidence for use in Oregon Health Plan (OHP)-funded conditions. Allow case-by-case review for members covered under the EPSDT program.

Length of Authorization:

- Up to 6 months.

Requires PA:

- A drug restricted by the P&T Committee due to lack of evidence for conditions funded by the OHP.

Approval Criteria		
1. What diagnosis is being treated?	Record ICD10 code	
2. Is the drug being used to treat an OHP-funded condition?	**Yes:** Go to #4	**No:** For current age ≥ 21 years: Pass to RPh. Deny; not funded by the OHP. For current age < 21 years: Go to #3
3. Is there documentation that the condition is of sufficient severity that it impacts the patient's health (e.g., quality of life, function, growth, development, ability to participate in school, perform activities of daily living, etc)?	**Yes:** Approve for 6 months, or for length of the prescription, whichever is less	**No:** Pass to RPh; Deny; medical necessity.
4. Pass to RPh. The prescriber must provide documentation of therapeutic failure, adverse event, or contraindication alternative drugs approved by FDA for the funded condition. Otherwise, the prescriber must provide medical literature supporting use for the funded condition. RPh may use clinical judgement to approve drug for up to 6 months or deny request based on documentation provided by prescriber.		