Clinical Policy: Prademagene Zamikeracel (Zevaskyn)

Reference Number: PA.CP.PHAR.609
Effective Date: 08/2025
Last Review Date: 07/2025

Description
Prademagene zamikeracel (Zevaskyn™) is an autologous cell sheet-based gene therapy.

FDA Approved Indication(s)
Zevaskyn is indicated for the treatment of wounds in adults and pediatric patients with recessive dystrophic epidermolysis bullosa (RDEB).

Policy/Criteria
Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

All requests reviewed under this policy **require medical director review**.

It is the policy of PA Health & Wellness® that Zevaskyn is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Recessive Dystrophic Epidermolysis Bullosa (must meet all)**:**

1. Diagnosis of RDEB as evidenced by two copies of positive collagen type VII alpha 1 chain (COL7A1) gene mutation confirmed by genetic testing (*see Appendix E*);
2. Prescribed by or in consultation with a geneticist, dermatologist, or histopathologist;
3. Age ≥ 6 years;
4. Provider attestation that member is concomitantly receiving standard of care preventative or treatment therapies for wound care (e.g., polymeric membrane, super-absorbent dressings, soft-silicone foam, enzyme alginogel, protease; *see Appendix F)*;
5. Wound sites meet all of the following (a, b, c, and d; *see Appendix D*):
   a. Chronic and open (e.g., stage 2 chronic wound);
   b. Area of at least 20 cm^2;
   c. Present for at least 6 months;
   d. Have not previously been treated with Zevaskyn;
6. Member does not have current evidence or history of squamous cell carcinoma in the area that will undergo treatment;
7. Zevaskyn is not prescribed concurrently with Vyjuvek™ or Filsuvez®;
8. Dose does not exceed 12 sheets per one-time surgical application.

Approval duration: 3 months *(1 surgical application)*

B. Other diagnoses/indications

1. Refer to the off-label use policy if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): PA.CP.PMN.53

II. Continued Therapy

A. Recessive Dystrophic Epidermolysis Bullosa
1. Re-authorization is not permitted. Members must meet the initial approval criteria if request is for previously untreated or newly developed wounds.

Approval duration: Not applicable

B. Other diagnoses/indications (must meet 1 or 2)**:**
1. Currently receiving medication via PA Health & Wellness benefit and documentation supports positive response to therapy or the Continuity of Care policy (PA.PHARM.01) applies.
   Approval duration: Duration of request or 12 months (whichever is less); or
2. Refer to the off-label use policy if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): PA.CP.PMN.53

III. Diagnoses/Indications for which coverage is NOT authorized:

A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – PA.CP.PMN.53

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

DEB: dystrophic epidermolysis bullosa
EB: epidermolysis bullosa
FDA: Food and Drug Administration
RDEB: recessive dystrophic epidermolysis bullosa

Appendix B: Therapeutic Alternatives

Not applicable

Appendix C: Contraindications/Boxed Warnings

None reported

Appendix D: General Information

- RDEB is an ultra-rare epidermolysis bullosa (EB) subtype caused by mutations in the COL7A1 gene.
- Inherited EB has four main classifications relating to the affected layer of skin: EB simplex, junctional EB, dystrophic EB, and Kindler's EB.
- Wound staging:
  - Stage 1: Unbroken skin
  - Stage 2: Partial-thickness skin loss with exposed dermis
  - Stage 3: Full-thickness skin loss with exposed adipose
  - Stage 4: Full-thickness skin loss and tissue loss

Appendix E: Diagnosis Information

- Per 2020 Clinical Practice Guidelines for Laboratory Diagnosis of EB, genetic testing is always recommended for the diagnosis of EB.

- Per 2017 Best Practice Guidelines for Skin and Wound Care in EB, definitive diagnosis is most commonly made from analysis of a skin biopsy using positive immunofluorescence, antigenic mapping, and TEM.

Appendix F: Recommended Wound Care for DEB

- Wounds should be dressed with nonadherent silicone dressings, foam dressings that absorb exudates, and nonadherent silicone-based tape. Diluted bleach baths or compresses, topical antiseptics, and topic antibiotics are used as preventative measures against bacterial infections.
- Standard of Care for wound care per 2017 Best Practice Guidelines for skin and wound care in EB:
  - First choice of dressing when available:
    - Chronic or acute wounds – PolyMem
    - Super-absorbent – Cutimed Siltec
- Recommended dressings for DEB per 2017 Best Practice Guidelines for skin and wound care in epidermolysis bullosa:

Dressing Type	Brand	Indication/ Function	Contraindication/ Comments	Wear Time
Polymeric membrane	PolyMem	• Where cleansing is required • Chronic wounds	• Stimulates high levels of exudate • Distinct smell does not necessarily indicate infection • Can still be difficult to retain on vertical surfaces	• Change frequently until exudate reduces
Super-absorbent dressings	• Cutimed Siltec • Sorbion Sachet S • Filvasorb/ Vilwasorb Pro • Kerramax Care	• High exudate levels	• Can be cut between super-absorbent crystals, which appear in rows (as opposed to cutting across the crystal lattice)	
Soft silicone mesh	• Mepitel • Mepitel One • Adaptic Touch • Cuticell Contact	• Moist wound • Contact layer		
Lipido-colloid	• Urgo Tul	• Moist wound, drier wounds and protection of vulnerable healed areas	• Where retention is difficult (e.g., vertical surfaces)	

Dressing Type	Brand	Indication/ Function	Contraindication/ Comments	Wear Time
		• Used as an alternative to soft silicon (see above) in the presence of over-granulation		
Soft silicone foam	• Mepilex • Mepilex Lite • Mepilex Transfer	• Absorption of exudate • Protection • Lightly exuding wounds • To transfer exudate to absorbent dressing • Where conformability is required (e.g., digits, axillae)	• Over-heating • May need to apply over recommended atraumatic primary dressing	
Foam	• Allevyn • UrgoTul Absorb • Aquacel Foam	• Absorption and protection	• May adhere if placed directly on wound bed, use alternative contact layer	
Bordered foam dressings	• Mepilex Border/ Mepliex Border Lite • Biatain Silicone Border/ Biatain Border Lite • Allevyn Gentle Border • Allevyn Border Lite • Kerrafoam • UrgoTul Absorb Border	• Isolated wounds • DDEB and mild RDEB	• Bordered dressings may require removal with SMAR to avoid skin stripping • May require primary contact layer • Poor absorption of highly viscous exudate	• Up to 4 days depending on personal choice

Dressing Type	Brand	Indication/ Function	Contraindication/ Comments	Wear Time
Keratin	• Keragel	• Chronic wounds	• Dilute with blend emollient if stinging occurs	• Reapply with dressing changes

- First choice of treatment when available: PolyMem, Flaminal Hydro/Forte
- Treatment of choice for chronic wounds based on consensus opinion per 2017 Best Practice Guidelines for skin and wound care in epidermolysis bullosa:

Dressing Type	Brand	Indications	Contraindication/ Comments	Wear Time
Polymeric membrane	• PolyMem • PolyMem Max • PolyMem WIC (under a secondary dressing or further layer of PolyMem)	• Infected wounds • Recalitrant wounds	• Can provide initial increase in exudate resulting in further skin damage if not properly controlled • Distinct smell does not necessarily indicate infection • Protect periwound skin	• Change when wet to avoid hypothermia
Enzyme alginogel	• Flaminal Hydro • Flaminal Forte	• Low exudate • High exudate	• Debrides, de-sloughs and antimicrobial • Has some action in modulating excess proteases • Can be used on all wounds apart from third degree burns • Do not use if patient has sensitivity to alginates or polyethylene glycol	• Re-apply at each dressing change at least 2mm thick
Honey		• Sensitive wounds	• Can cause transient stinging or pain due to its acidity and high osmotic 'pull' • In turn this will contribute to high levels of exudate	
Protease modulator	• UrgoTul Start range • Promogran • Promogran Prisma (with silver)	• When excess protease may be present	• Promogran/Promogran Prisma may cause initial transient stinging • Excess product cannot be saved once opened	• Frequent dressing changes may be required to avoid maceration

Dressing Type	Brand	Indications	Contraindication/ Comments	Wear Time
			as it degrades on contact with air • A secondary dressing required and the product may provoke initial heavy exudate	

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
RDEB	1 to 12 sheets topically to wound(s) per surgical session. Dose is based on surface area of wound. One sheet covers an area of 41.25 cm^2.	12 sheets/surgical session

VI. Product Availability

Sheet: 41.25 cm^2 (5.5 cm x 7.5 cm) affixed on a rectangular gauze and placed in a clear, thermoformed protective case containing sterile transport media sealed in packaging consisting of 4 levels of protection

VII. References

1. Zevaskyn Prescribing Information. Cleveland, OH: Abeona Therapeutics Inc; April 2025. Available at: https://d1io3yog0oux5.cloudfront.net/_97c62242a52d17e584a3147d26ed2790/abeonatherapeutics/files/ZEVASKYN_Final_Label_30Apr2025.pdf. Accessed May 13, 2025.
2. Clinical Pharmacology [database online]. Tampa, FL: Gold Standard, Inc.; 2025. Available at: https://www.clinicalkey.com/pharmacology/. Accessed May 13, 2025.
3. Denyer J, Pillay E, Clapham J. Best practice guidelines for skin and wound care in epidermolysis bullosa. An International Consensus. Wounds International, 2017.
4. Mariath LM, Santin JT, Schuler-Faccini L, Kiszewski AE. Inherited epidermolysis bullosa: update on the clinical and genetic aspects. An Bras Dermatol. 2020;95:551---69.
5. ClinicalTrials.gov. Phase 3, open-label clinical trial of EB-101 for the treatment of recessive dystrophic epidermolysis bullosa (RDEB). Available at: https://clinicaltrials.gov/ct2/show/NCT04227106. Accessed May 13, 2025.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J3590	Unclassified biologics
C9399	Unclassified drugs or biologicals

Reviews, Revisions, and Approvals	Date
Policy created	07/2025