**09-J4000-87**

**Original Effective Date: 06/15/24**

**Reviewed: 05/08/24**

**Revised: 00/00/00**

# Subject: Birch Triterpenes (Filsuvez®)

**THIS MEDICAL COVERAGE GUIDELINE IS NOT AN AUTHORIZATION, CERTIFICATION, EXPLANATION OF BENEFITS, OR A GUARANTEE OF PAYMENT, NOR DOES IT SUBSTITUTE FOR OR CONSTITUTE MEDICAL ADVICE. ALL MEDICAL DECISIONS ARE SOLELY THE RESPONSIBILITY OF THE PATIENT AND PHYSICIAN. BENEFITS ARE DETERMINED BY THE GROUP CONTRACT, MEMBER BENEFIT BOOKLET, AND/OR INDIVIDUAL SUBSCRIBER CERTIFICATE IN EFFECT AT THE TIME SERVICES WERE RENDERED. THIS MEDICAL COVERAGE GUIDELINE APPLIES TO ALL LINES OF BUSINESS UNLESS OTHERWISE NOTED IN THE PROGRAM EXCEPTIONS SECTION.**


| | | | | | |
|---|---|---|---|---|---|
| Dosage/ Administration | Position Statement | Billing/Coding | Reimbursement | Program Exceptions | Definitions |
| Related Guidelines | Other | References | Updates | | |


## DESCRIPTION

Birch triterpenes topical gel (Filsuvez) is FDA-approved for the treatment of wounds associated with dystrophic and junctional epidermolysis bullosa in adult and pediatric patients 6 months of age and older. Dystrophic EB (DEB) and Junctional EB (JEB) are two types of epidermolysis bullosa, a rare genetic skin disorder characterized by the formation of painful blisters after friction on the skin.

Dystrophic epidermolysis bullosa (DEB) is caused by mutations in the collagen type VII alpha 1 chain (COL7A1) gene which results in reduced or absent levels of human type VII collagen (COL7) protein. The COL7 molecule arranges into bungles that form anchoring fibrils. The anchoring fibrils hold the epidermis and dermis together to maintain the integrity of the skin. Patients with autosomal dominant DEB (DDEB) have lower than normal functional anchoring fibrils and patients with recessive DEB (RDEB) have no functional anchoring fibrils which manifests as a more severe form the disease. Clinical manifestations of severe disease include fragility of the skin and mucosal surfaces which result in recurrent blisters, chronic wounds, and/or erosions of the skin and/or oral mucosa that result in severe scarring, deformities (e.g. fusion of skin, loss of nails, contractures, hair loss), and infection. Pruritis is common which makes healing difficult if there is trauma from scratching. Esophageal erosions and strictures are a common feature which lead to painful dysphagia and subsequent nutritional deficiencies, electrolyte abnormalities, and anemia. Genitourinary erosions may result in urinary retention and scarring of ocular mucosal membranes can result in vision loss. Patients with the recessive form of DEB are at higher risk of developing aggressive squamous cell carcinomas (SCC) at chronic wound sites and mortality from SCC has been estimated at 84% by 40 years of age. Treatment of DEB is supportive and includes wound care, control of pruritis and pain, preventing infection, nutritional support, and control of any additional presenting symptoms.

JEB is most commonly caused by autosomal recessive mutations in the LAMA3, LAMB3, LAMC2, and

COL17A1 genes, which result in a structural defect of the anchoring filaments located in the lamina lucida and superior lamina densa of the basement membrane zone. Certain subtypes of JEB tend to be the most life-limiting forms of EB.

The efficacy of birch triterpenes topical gel was evaluated in a randomized, double-blind, placebo-controlled study over 90 days which enrolled 223 with DEB or JEB. A target wound was identified and defined as a partial thickness wound of 10 $cm^2$ to 50 $cm^2$ in size that had been present for at least 21 days, but not more than 9 months. Birch triterpenes or placebo gel was applied with wound dressing changes at least every 4 days.

The primary endpoint of the trial was met, with 41.3% of patients in the birch triterpenes group achieving first complete closure of the target wound within 45 days of treatment compared with 28.9% in the control group ($p$= 0.013). When the primary endpoint was analyzed by EB subtype, the result was only statistically significant in the recessive DEB (RDEB) population. The proportion of patients with RDEB with first complete closure of EB target wound within 45 days was 44.0% in the birch triterpenes group and 26.2% in the control group ($p$= 0.008). The closure rate in patients with dominant DEB (DDEB) was 50% in patients receiving birch triterpenes versus 50% with placebo. The closure rate in patients with JEB was 18.2% in patients receiving birch triterpenes versus 26.7% with placebo.

The secondary endpoints measured at the end of the study did not achieve statistical significance. These included time to wound healing, total body wound burden, total body surface area affected, and pain associated with dressing changes. The proportion of completely closed target wounds within the 90-day treatment period was 50.5% in the birch triterpenes group compared with 43.9% in the control group ($p$= 0.296). The most common adverse reactions associated with birch triterpenes included pruritus and pain at the application site. There were four subjects with recessive DEB who reported one squamous cell carcinoma of the skin.

## POSITION STATEMENT:

**Comparative Effectiveness**

The FDA has deemed the drug(s) or biological product(s) in this coverage policy to be appropriate for self-administration or administration by a caregiver (i.e., not a healthcare professional). Therefore, coverage (i.e., administration) in a provider-administered setting such as an outpatient hospital, ambulatory surgical suite, physician office, or emergency facility is not considered medically necessary.

Initiation of birch triterpenes topical gel (Filsuvez) meets the definition of medical necessity when ALL of the indication- specific criteria are met:

1. Dystrophic Epidermolysis Bullosa (DEB) or Junctional Epidermolysis Bullosa (JEB)

    a. Member has a genetic mutation to confirm diagnosis - lab documentation must be provided

        i. DEB: COL7A1 gene

        ii.JEB: LAMA3, LAMB3, LAMC2, or COL17A1 gene

    b. Wound to be treated is open and clean with adequate granulation tissue, excellent vascularization, and no appearance of active infection – documentation must be provided

c. The member does not have current evidence or a history of squamous cell carcinoma in the area to be treated

d. Treatment is prescribed by or in consultation with a specialist (dermatologist, geneticist)

e. Treatment will not be used in combination with beremagene geperpavec-svdt (Vyjuvek)

f. The dose does not exceed one tube (containing 25 mL) daily

**Approval duration**: 6 months

Continuation of birch triterpenes topical gel (Filsuvez) meets the definition of medical necessity when ALL of the following criteria are met:

1. An authorization or reauthorization for birch triterpenes topical gel has been previously approved by Florida Blue or another health plan in the past 2 years for the treatment of dystrophic epidermolysis bullosa (DEB) or junctional epidermolysis bullosa (JEB) (if another health plan, documentation of a paid claim during the 90 days before the authorization request must be submitted), OR the member has previously met ALL indication-specific criteria.

2. Member has a genetic mutation to confirm diagnosis –documentation must be provided:

    i. DEB: COL7A1 gene

    ii.JEB: LAMA3, LAMB3, LAMC2, or COL17A1 gene

3. Wound to be treated is open and clean with adequate granulation tissue, excellent vascularization, and no appearance of active infection – documentation must be provided

4. The member had a beneficial response to treatment with evidence of improved wound healing (closure or reduction in wound area from baseline) – documentation must be submitted

5. The member does not have current evidence or a history of squamous cell carcinoma in the area to be treated

6. Treatment is prescribed by or in consultation with a specialist (dermatologist, geneticist)

7. Treatment will not be used in combination with beremagene geperpavec-svdt (Vyjuvek)

8. The dose does not exceed one tube (containing 25 mL) daily

**Approval duration**: 6 months

## DOSAGE/ADMINISTRATION:

**THIS INFORMATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE USED AS A SOURCE FOR MAKING PRESCRIBING OR OTHER MEDICAL DETERMINATIONS. PROVIDERS SHOULD REFER TO THE MANUFACTURER'S FULL PRESCRIBING INFORMATION FOR DOSAGE GUIDELINES AND OTHER INFORMATION RELATED TO THIS MEDICATION BEFORE MAKING ANY CLINICAL DECISIONS REGARDING ITS USAGE.**

**FDA-approved**

Birch triterpenes topical gel (Filsuvez) is FDA-approved for the treatment of wounds associated with

dystrophic and junctional epidermolysis bullosa in adult and pediatric patients 6 months of age and older.

## PRECAUTIONS:

**Boxed Warning** - none

**Contraindications -** none

**Precautions/Warnings**

- Local hypersensitivity and skin reactions have been reported, including urticaria and dermatitis.

## BILLING/CODING INFORMATION:

The following codes may be used to describe:

### HCPCS Coding

| | |
|---|---|
| J3490 | Unclassified drugs |

### ICD-10 Diagnosis Codes That Support Medical Necessity

| | |
|---|---|
| Q81.2 | Epidermolysis bullosa dystrophica |

## REIMBURSEMENT INFORMATION:

Refer to section entitled **POSITION STATEMENT**.

## PROGRAM EXCEPTIONS:

**Federal Employee Program (FEP):** Follow FEP guidelines.

**State Account Organization (SAO):** Follow SAO guidelines.

**Medicare Part D:** Florida Blue has delegated to Prime Therapeutics authority to make coverage determinations for the Medicare Part D services referenced in this guideline.

**Medicare Advantage:** No National Coverage Determination (NCD) and/or Local Coverage Determination (LCD) were found at the time of the last guideline review date.

## DEFINITIONS:

None

## RELATED GUIDELINES:

**Beremagene Geperpavec-svdt (Vyjuvek), 09-J4000-54**

## OTHER:

None

## REFERENCES:


1. Clinical Pharmacology [Internet]. Tampa (FL): Gold Standard, Inc. Accessed Apr 26, 2024.
2. DRUGDEX® System [Internet]. Greenwood Village (CO): Thomson Micromedex; Accessed Apr 26, 2024.
3. Has C, Hachem ME, Buckova H et al. Practical management of epidermolysis bullosa: consensus clinical position statement from the European Reference Network for Rare Skin Diseases. Journal of the European Academy of Dermatology and Venereology. 2021 (35); 2333-2467.
4. Mellerio JE, Hachem ME, Bellon N et al. Emergency management in epidermolysis bullosa: consensus clinical recommendations from the European reference network for rare skin diseases. Orphanet Journal of Rare Diseases. 2020; 15(142): 1-10.
5. Orphan Drug Designations and Approval [Internet]. Silver Spring (MD): US Food and Drug Administration; 2024 [cited Apr 26, 2024]. Available from: http://www.accessdata.fda.gov/scripts/opdlisting/oopd/index.cfm/.
6. Filsuvez (birch triterpenes) topical gel. Lichtenheldt GmbH. Wahlstedt Germany. January 2024.
7. Wounds International consensus guidelines: Skin and wound care in epidermolysis bullosa. 2017. Available at af13d6_01ed147ab87e49c584c20a917c47f19f.pdf (usrfiles.com).


## COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Pharmacy Policy Committee on 05/08/24.

## GUIDELINE UPDATE INFORMATION:

| | |
|---|---|
| 06/15/24 | New Medical Coverage Guideline. |