



# birch triterpenes (Filsuvez®)

## EOCCO POLICY



**Policy Type: PA/SP**

**Pharmacy Coverage Policy: EOCCO300**

**Description**

Birch triterpenes (Filsuvez) is a topical gel made from an extract of birch tree bark.

**Length of Authorization**

- Initial: Three months
- Renewal: 12 months

**Quantity Limits**

Product Name	Indication	Dosage Form	Quantity Limit
birch triterpenes (Filsuvez)	Epidermolysis bullosa (EB)	10% (w/w) gel	702 grams/30 days

**Initial Evaluation**

- I. **Birch triterpenes (Filsuvez)** may be considered medically necessary when the following criteria are met:
  - A. Member is six months of age or older; **AND**
  - B. Medication is prescribed by, or in consultation with, a geneticist or dermatologist that specializes in epidermolysis bullosa (EB) management; **AND**
  - C. Medication will not be used in combination with beremagene geperpavec (Vyjuvek); **AND**
  - D. A diagnosis of **epidermolysis bullosa (EB)** when the following are met:
    1. Provider attestation of genetic mutation for junctional epidermolysis bullosa (JEB) or dystrophic epidermolysis bullosa (DEB), (e.g., *COL17A1*, *LAMB*); **AND**
    2. Provider attestation that documentation of size, length, depth of target wound has been recorded at baseline; **AND**
    3. Provider attestation to all of the following:
      - i. Target wounds are free from infection; **AND**
      - ii. Member is receiving standard of care preventative or treatment therapies for wound care (e.g., polymeric membrane, superabsorbent dressings, soft-silicone foam)
  
- II. Birch triterpenes (Filsuvez) is considered investigational when used for all other conditions, including but not limited to:
  - A. Treatment of epidermolysis bullosa simplex (EBS) wounds
  - B. Treatment of Kindler syndrome wounds (KEB)

### Renewal Evaluation

- I. Member has received a previous prior authorization approval for this agent through this health plan or has been established on therapy from a previous health plan; **AND**
- II. Member is not continuing therapy based off being established on therapy through samples, manufacturer coupons, or otherwise. If they have, initial policy criteria must be met for the member to qualify for renewal evaluation through this health plan; **AND**
- III. Medication is not used in combination with beremagene geperpavec (Vyjuvek); **AND**
- IV. Member has exhibited improvement or stability of disease symptoms [e.g., closure of wounds, decrease in size of wounds, decrease in pain or itch]

### Supporting Evidence

- I. Birch triterpenes (Filsuvez) is FDA-approved in those six months of age and older for the treatment of junctional epidermolysis bullosa (JEB) and dystrophic epidermolysis bullosa (DEB).
- II. As epidermolysis bullosa (EB) is a complex skin disease, it is recommended that patients receive care from a geneticist or dermatologist who specializes in EB, or at least in consultation with one. There are about 35 centers that specialize in EB over the nation; therefore, all patients should be seen in person at least yearly at one of these centers and can continue follow up visits at localized primary care providers or specialists.
- III. Epidermolysis bullosa is a rare, inherited connective tissue disorder that causes abnormalities in the structures that hold the skin together, resulting in blisters, non-healing ulceration, scars, and eventually fibrosis of the skin in response to friction or trauma. In severe forms of the disease, even the friction from clothes rubbing against the skin can trigger these reactions. Epidermolysis bullosa also has manifestations beyond the skin, such as blistering, ulcerations, and scarring in the lining of the gastrointestinal and respiratory tracks. Fusion of fingers and toes can occur with loss of limb function and the risk of squamous cell skin carcinoma is quite high.
- IV. Depending on the type of EB a patient has, symptoms and life expectancy can vary greatly. Epidermolysis bullosa should be considered in any neonate who presents with blisters and/or erosions in the absence of another plausible etiology (e.g., infection). Blistering or skin fragility may develop later in infancy or childhood, particularly related to diaper changing or crawling, and even in adulthood in milder EB subtypes. Clinical overlap of symptoms can make it difficult to distinguish between subtypes of EB, so genetic testing is important to confirm a diagnosis. A skin biopsy is usually the first step for newly suspected EB, followed by genetic testing to confirm the exact EB subtype diagnosis which is crucial for managing long term outcomes with EB. Currently, Dystrophic EB Research Association (DEBRA) (the internal EB center with a US chapter) offers free genetic testing for any suspected patients.
- V. Treatment of EB is largely supportive and includes wound care, control of infection, nutritional support, and prevention and treatment of complications. Care plans for patients with EB should be individualized according to age, severity, symptoms, complications, and patient priorities.

The 2017 International Consensus from DEBRA (Dystrophic EB Research Association) gives detailed recommendations for all aspects of EB care and helpful advice for caregivers. Recommendations for skin and wound care include bathing in saline water and using appropriate bandage or dressing types such as silicone and foam dressings. In May 2023, a gene therapy called beremagene geperpavec (Vyjuvek) was approved for use in patients with DEB only to promote wound healing by expressing collagen. In December 2023, birch triterpenes (Filsuvez) received approval in DEB and JEB patients to assist with wound closure in these patients.

- VI. The safety and efficacy of birch triterpenes (Filsuvez) was studied in a Phase 3, randomized, double-blind, placebo-controlled trial (EASE). During the 90-day trial, patients of at least 21 days of age (n=223) with DEB, JEB, or Kindler EB (KEB) were randomized 1:1 to receive birch triterpenes (n=109) or the control gel (n=114). No patients with KEB were enrolled. Patients were not allowed to receive systemic antibiotics or have chronic wounds (wounds present over three weeks) older than nine months of age or that were infected. All wounds were treated at least every four days with application to the wound or the dressing at each change with one target wound was designated as being measured for the primary endpoint. This wound was defined as an EB partial-thickness wound, involving both the epidermis and the dermis layers of the skin, of 10 cm<sup>2</sup> to 50 cm<sup>2</sup> in size; if multiple wounds met this description, the wound of the largest size, maximum depth, and oldest was chosen. The primary endpoint was the number of patients with first complete closure of the EB target wound, within 45 (± seven days) of treatment.

Primary Outcome	Birch Triterpenes (n=109)	Control Gel (n=114)
Proportion of patients (%) with first complete closure of EB target wound within day 45	41.3	28.9
	Risk Ratio: 1.44 (95% CI: 1.01, 2.05, p=0.013)	

- VII. While the primary endpoint was statistically significant, the subgroup analysis was only significant in those with recessive DEB as this was the largest group reflected in the study patient population. Secondary endpoints were time to first complete closure of the EB target wound and proportion of patients with first target wound closure in 90 days (± seven days), incidence and severity of wound infections, procedural pain scores, and patient quality of life measurements. While all of these trended to favor birch triterpenes (Filsuvez), none reached a statistically significant difference. A post-hoc analysis did show statistical significance in the weekly frequency of dressing changes for birch triterpenes (Filsuvez) with there being three fewer changes every two weeks versus placebo.
- VIII. Overall, the quality of evidence is moderate. Complete wound closure represents a clinically meaningful outcome and substantially more patients treated with birch triterpenes (Filsuvez) were able to achieve this endpoint vs control gel. Secondary endpoints also favored birch triterpenes (Filsuvez) and while not statistically significant, all showed positive trends in treating those with EB.
- IX. Birch triterpenes (Filsuvez) is available as a 23.4-gram sterile tube, each tube to be used as single use for one wound dressing change applied as one millimeter per wound. Multiple wounds can

be treated with each tube. Quantity limit of one tube per day is set based on the average amount used in the clinical trial as well as practical knowledge about the frequency of wound dressing changes by caregivers, which can occur daily. The monthly quantity required will depend on the on the surface area being treated and is expected to vary from patient to patient. Quantity exceptions may be allowed if the medical necessity for higher quantity is supported by documentation from the treating physician.

### Investigational or Not Medically Necessary Uses

- I. Birch triterpenes (Filsuvez) has not been FDA-approved, or sufficiently studied for safety and efficacy for the conditions or settings listed below:
  - A. Treatment of epidermolysis bullosa simplex (EBS) wounds
  - B. Treatment of Kindler syndrome wounds (KEB)

### References

1. Filsuvez. Package Insert. Lichtenheldt GmbH; December 2023.
2. Kern JS, Sprecher E, Fernandez MF, et al. Efficacy and safety of Oleogel-S10 (birch triterpenes) for epidermolysis bullosa: results from the phase III randomized double-blind phase of the EASE study. Br J Dermatol. 2023;188(1):12-21.
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. Birch triterpenes preapproval product dossier. Chiesi Pharmaceuticals. December 2023.
5. Chiesi USA. Clinical outreach. February 29, 2024.

### Related Policies

Currently there are no related policies.

### Policy Implementation/Update:

Action and Summary of Changes	Date
Policy created	05/2024