# PDL DRUG REVIEW

## Proprietary Name: Filsuvez®
## Common Name: birch triterpenes gel
## PDL Category: Topical Wound Care

**Pharmacology/Usage:** Filsuvez® topical gel is a sterile botanical drug product that contains birch triterpenes in an oil base. Birch triterpenes is a botanical drug substance composed of a mixture of pentacyclic triterpenes. The mechanism of action for its approved indication is not known.

**Indication:** For the treatment of wounds associated with dystrophic and junctional epidermolysis bullosa (EB) in adult and pediatric patients 6 months of age and older.

There is no pregnancy category for this medication; however, the risk summary indicates that there are no available data with use in pregnant women to assess for drug-associated risk of major birth defects, miscarriage, or adverse maternal or fetal outcomes. Systemic absorption of Filsuvez® in humans is low following topical administration, and maternal use is not expected to result in fetal exposure to the drug. The safety and efficacy of use in the pediatric population younger than 6 months of age have not been established.

**Dosage Form:** Topical Gel: 10% birch triterpenes w/w in a non-aqueous gel, supplied in 25ml sterile tubes.

**Recommended Dosage:** For topical use only. Wash hands before and after applying gel or wear gloves for application.

Apply a 1mm layer of gel to the affected wound surface only. Do not rub in the gel. Cover the wound with a sterile non-adhesive wound dressing. Alternatively, apply the gel directly to the dressing so that the topical gel is in direct contact with the wound. Apply to cleansed wounds with wound dressing changes until the wound is healed.

If a Filsuvez®-treated wound becomes infected, discontinue treatment to that wound until the infection has resolved.

Avoid contact of Filsuvez® with eyes and mucous membranes. In case of accidental contact, irrigate the area with water.

**Drug Interactions:** There are no drug interactions listed with this product.

**Box Warning:** There is no box warning listed with this product.

**Common Adverse Drug Reactions:** *Listed % incidence for adverse drug reactions= reported % incidence for drug (Filsuvez®) minus reported % incidence for placebo. Please note that an incidence of 0% means the incidence was the same as or less than placebo.* The most frequently reported adverse events included application site reaction (1.2%).

Squamous cell carcinoma of the skin (SCC) was reported as an adverse event in the double-blind and open-label periods of EASE. Four subjects with recessive dystrophic EB each reported one SCC: a 20-year old male on day 1 of the double-blind period; and three female subjects ages 22, 46, and 49 years during the open-label period. Two of the four subjects had applied Filsuvez® to the area which developed the SCC.

Local hypersensitivity and skin reactions have been reported in patients treated with Filsuvez®, including urticaria and dermatitis. If signs and symptoms of local or systemic hypersensitivity occur, discontinue Filsuvez® immediately and start appropriate therapy.

**Contraindications:** There are no contraindications listed with this product.

**Manufacturer:** Chiesi USA, Inc.

**Analysis:** The efficacy of Filsuvez® for the treatment of partial-thickness wounds associated with inherited EB was assessed in a randomized, double-blind, placebo-controlled study (EASE) that included adults and pediatric

patients 6 months of age and older with dystrophic EB (DEB) and junctional EB (JEB). Subjects were randomized to receive Filsuvez® (N=109) or placebo (N=114) topical gel and instructed to apply to all their wounds at each dressing change (every 1 to 4 days) for 90 days. At randomization, one wound was selected by the investigator as the target wound for the evaluation of the primary efficacy endpoint. The target wound was defined as a partial-thickness wound of 10-50cm$^2$ in surface area and present for 21 days to 9 months prior to screening.

The included subjects had a median age of 12 years (range 6 months to 81 years), while 70% were under 18 years of age. In addition, 60% were male, 83% were white, and 195 had DEB (of which 175 had recessive DEB [RDEB] and 20 had dominant DEB [DDEB]). There were 26 patients with JEB and 2 subjects with EB simplex.

The primary endpoint was the proportion of subjects with first complete closure of the target wound by day 45 of the 90-day double-blind phase of the study, based on clinical assessment by the investigator. Efficacy results are presented in the table below, which was adapted from the prescribing information.

| Efficacy parameter | Filsuvez® (N=109) | Placebo gel (N=114) | 95% CI for the Treatment difference |
|---|---|---|---|
| Proportion with first complete closure of target wound within 45 days | 41.3% | 28.9% | (0.8, 25.6) |
| NNT calculated by CHC | 9 | | |
| By EB Subtype: | | | |
| RDEB (N=175) | 44% | 26.2% | (3.9, 31.6) |
| DDEB (N=20) | 50% | 50% | (-47.8, 47.8) |
| JEB (N=26) | 18.2% | 26.7% | (-40.4, 23.5) |
| Proportion with first complete closure of target wound within 90 days | 50.5% | 43.9% | (-6.2, 20.0) |

**Place in Therapy:** Filsuvez® topical gel is indicated for the treatment of wounds associated with dystrophic and junctional epidermolysis bullosa (EB) in adult and pediatric patients 6 months of age and older. Its efficacy was assessed in a double-blind, placebo-controlled study that included subjects with dystrophic EB (DEB) and junctional EB (JEB). The primary endpoint was the proportion of subjects with first complete closure of the target wound by day 45 of the 90-day double-blind phase of the study, based on clinical assessment by the investigator. Results suggested that more in the Filsuvez® group obtained first complete closure of target wound within 45 days compared with the placebo group (NNT 9). This topical gel offers providers a treatment option for patients with either DEB or JEB.

## Summary

It is recommended that Filsuvez® should be non-preferred in order to confirm the appropriate diagnosis and clinical parameters for use.

**PDL Placement:** ☐ **Preferred**
☒ **Non-Preferred**

## References

[1] Filsuvez [package insert]. Germany: Lichtenheldt GmbH; 2024.