ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS
1. NAME OF THE MEDICINAL PRODUCT

Filsuvez gel

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

1 g of gel contains 100 mg of extract (as dry extract, refined) from *Betula pendula* Roth, *Betula pubescens* Ehrh. as well as hybrids of both species, cortex (equivalent to 0.5-1.0 g birch bark), including 84-95 mg triterpenes calculated as the sum of betulin, betulinic acid, erythrodiol, lupeol and oleanolic acid. Extraction solvent: n-Heptane.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Gel

Colourless to slightly yellowish, opalescent, non-aqueous gel.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Treatment of partial thickness wounds associated with dystrophic and junctional epidermolysis bullosa (EB) in patients 6 months and older.

4.2 Posology and method of administration

**Posology**

The gel should be applied to the wound surface at a thickness of approximately 1 mm and covered by a sterile non-adhesive wound dressing or applied to the dressing so that the gel is in direct contact with the wound. The gel should not be applied sparingly. It should not be rubbed in. The gel should be re-applied at each wound dressing change. The maximum total wound area treated in clinical studies was 5,300 cm² with a median total wound area of 735 cm². If symptoms persist or worsen after use, or if wound complications occur, the patient’s condition should be fully clinically assessed prior to continuation of treatment, and regularly re-evaluated thereafter.

**Special populations**

*Renal or hepatic impairment*

No studies have been conducted with Filsuvez in patients with renal or hepatic impairment. No dose adjustment or special considerations are anticipated for patients with renal or hepatic impairment (see section 5.2).

*Elderly*

No dose adjustment is required.

*Paediatric population*

The posology in paediatric patients (6 months and older) is the same as in adults. The safety and efficacy of Filsuvez in children aged less than 6 months have not been established. No data are available.
Method of administration

For cutaneous application only. Filsuvez should be applied to cleansed wounds. This medicinal product is not for ophthalmic use and should not be applied to mucous membranes.

Each tube is for single use only. The tube should be discarded after use.

4.3 Contraindications

Hypersensitivity to the active substance or to the excipient listed in section 6.1.

4.4 Special warnings and precautions for use

Hypersensitivity

Hypersensitivity has occurred in patients treated with Filsuvez (see section 4.8). If signs and symptoms of local or systemic hypersensitivity occur, Filsuvez should be discontinued immediately and appropriate therapy should be initiated.

Wound infection

The gel is sterile. However, wound infection is an important and serious complication that can occur during wound healing. In the case of infection, it is recommended to interrupt treatment. Additional standard treatment may be required (see section 4.5). Treatment may be re-initiated once the infection has resolved.

Squamous cell carcinoma and other skin malignancies

Patients with dystrophic EB (DEB) and junctional EB (JEB) may be at increased risk of development of squamous cell carcinoma. While there has been no increased risk of skin malignancies associated with Filsuvez to date, a theoretical increased risk of skin malignancies associated with use of Filsuvez cannot be ruled out. In the case of diagnosis of squamous cell carcinoma or other skin malignancies, treatment to the affected area should be discontinued.

Use in dominant dystrophic EB (DDEB) and junctional EB (JEB)

The quantity of clinical data from use of Filsuvez in patients with DDEB and JEB is limited (see section 5.1). The patient’s condition should be regularly evaluated to assess the benefit of continued treatment.

Birch pollen allergy

Filsuvez is safe to use for people who are allergic to birch pollen, as these allergens are not present in this medicinal product.

Accidental eye exposure

In the case of exposure to eyes product should be removed by eye irrigation.

4.5 Interaction with other medicinal products and other forms of interaction

No interaction studies have been performed. Since the systemic exposure of the main component betulin following cutaneous application is negligible no interaction with systemic treatments is expected. Interactions with topical products have not been investigated in clinical trials. Other topical products should not be concomitantly used together with Filsuvez but rather sequentially or alternatively depending on the clinical need.
4.6 Fertility, pregnancy and lactation

Pregnancy

There are no data from the use of Filsuvez in pregnant women. Animal studies do not indicate direct or indirect harmful effects with respect to reproductive toxicity (see section 5.3). No effects during pregnancy are anticipated, since systemic exposure to Filsuvez is negligible. Filsuvez can be used during pregnancy.

Breast-feeding

It is unknown whether birch bark extract/metabolites are excreted in human milk. No effects on the breastfed newborn/infant are anticipated since the systemic exposure of the breastfeeding woman to Filsuvez is negligible. Filsuvez can be used during breast-feeding, unless the chest area is subject to treatment.

Fertility

No adverse effects on fertility were observed in male and female rats administered birch bark extract. No effects on human fertility are anticipated, since the systemic exposure is negligible.

4.7 Effects on ability to drive and use machines

Filsuvez has no or negligible influence on the ability to drive and use machines.

4.8 Undesirable effects

Summary of the safety profile

The most frequently observed adverse reactions were wound complication (in 11.6% of EB patients and 2.9% of patients with other partial thickness wounds (PTW)), application site reaction (in 5.8% of EB patients), wound infections (in 4.0% of EB patients), pruritus (in 3.1% of EB patients and 1.3% of patients with other PTW), pain of skin (in 2.5% of patients with other PTW) and hypersensitivity reactions (in 1.3% of EB patients). There were no clinically relevant differences in the reactions reported in EB patients compared to patients with other PTW.

Tabulated list of adverse reactions

In the following table, adverse reactions are listed by MedDRA system organ class and preferred term. Within each frequency grouping, adverse reactions are presented in order of decreasing seriousness.

The frequency of adverse reactions is defined as follows: very common (≥ 1/10); common (≥ 1/100 to < 1/10); uncommon (≥ 1/1,000 to < 1/100); rare (≥ 1/10,000 to < 1/1,000); very rare (< 1/10,000), not known (cannot be estimated from the available data).

Table 1 lists all adverse reactions reported across clinical studies.
Table 1: Adverse reactions

<table>
<thead>
<tr>
<th>System organ class</th>
<th>Very common</th>
<th>Common</th>
<th>Uncommon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infections and infestations</td>
<td>Wound infections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immune system disorders</td>
<td>Hypersensitivity reactions*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin and subcutaneous tissue disorders</td>
<td>Wound complication*</td>
<td>Pruritis</td>
<td>Dermatitis(^a)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rash pruritic(^a)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Purpura(^a)</td>
</tr>
<tr>
<td>General disorders and administration site conditions</td>
<td>Application site reactions*</td>
<td>(e.g. application site pain and application site pruritis)</td>
<td>Pain(^a)</td>
</tr>
<tr>
<td>Injury, poisoning and procedural complications</td>
<td>Wound complication(^a)</td>
<td></td>
<td>Wound secretion</td>
</tr>
</tbody>
</table>

* see Description of selected adverse reactions

\(^a\) adverse reactions observed in studies of patients with grade 2a burn wounds or split-thickness skin grafts

Description of selected adverse reactions

**Hypersensitivity**
Common cases of hypersensitivity-like reactions have been observed during clinical trials in EB patients. These reactions include rash, urticaria and eczema which were mild in 1.3% of patients and severe in 0.4% of patients. For specific recommendations, see section 4.4.

**Application site reactions**
Mild or moderate application site reactions are common and include application site pain and application site pruritis.

**Wound complication**
In studies with EB patients, wound complication comprised different kinds of local complications such as increase in wound size, wound re-opening and wound pain.

In studies in patients with burn wounds or split-thickness skin grafts, wound complications comprised different kinds of local complications such as post-procedural complications, wound necrosis, wound secretion, impaired healing, or inflammation of wound.

**Paediatric population**
70% (\(n = 156\)) of patients randomised in the pivotal study (see section 5.1) were under the age of 18 with a median age of 12 years. 8% (\(n = 17\)) of patients were below 4 years of age and 2 patients were under 1 year of age. The adverse reactions observed in the overall population were similar to those observed in the paediatric population.

**Reporting of suspected adverse reactions**

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in Appendix V.

4.9 Overdose

Overdosing with Filsuvez is unlikely. No case of overdose has been reported when a maximum amount of 69 g was used on a daily basis for more than 90 days.
No data have been generated to establish the effect of accidental ingestion of Filsuvez. Further management should be as clinically indicated.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Preparations for treatment of wounds and ulcers, other cicatrizants; ATC code: D03AX13.

Mechanism of action and pharmacodynamic effects

Cell culture assays with human primary keratinocytes and fibroblasts and ex vivo studies with porcine skin show that the extract including the main component betulin modulate inflammatory mediators and are associated with activation of intracellular pathways known to be involved in keratinocyte differentiation and migration, wound healing and closure.

The precise mechanism of action of Filsuvez in wound healing is not known.

Clinical efficacy and safety

The efficacy and safety of Filsuvez in the treatment of partial thickness wounds associated with inherited EB were evaluated in a pivotal global Phase 3, randomised, double blind, controlled study in adults and children (Study BEB-13; EASE). Patients with DEB and JEB were randomised 1:1 to receive Filsuvez (n = 109) or a blinded control gel (consisting of sunflower oil, refined; beeswax, yellow and carnauba wax) (n = 114) and instructed to apply the investigational product at a thickness of approximately 1 mm to all their wounds at each dressing change (every 1 to 4 days) for 90 days. At randomisation, 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 10-50 cm² in surface area and present for 21 days to 9 months prior to screening. The primary endpoint was the proportion of patients with first complete closure of the target wound by day 45 of the 90-day double blind phase (DBP) of the study. Following completion of the DBP, patients entered a 24-month open label phase (OLP) of the study during which all wounds were treated with Filsuvez.

Of the 223 patients randomised, the median age was 12 years (range: 6 months to 81 years), 70% were under 18 years of age and 8% of patients were below 4 years of age. 60% of patients randomised were male. Of these 223 patients, 195 had DEB of which 175 patients had recessive DEB (RDEB), 20 had dominant DEB (DDEB); in addition, there were 26 patients with JEB. In the DBP the majority of patients applied the study treatment to all wounds either daily or every 2 days (between 70% and 78%). Limited data are available for Black and Asian patients.

The results, including the primary endpoint, are presented in Table 2.
Table 2: Efficacy results (study BEB-13; 90-day double-blind phase, full analysis set)

<table>
<thead>
<tr>
<th>Efficacy parameter</th>
<th>Filsuvez n = 109</th>
<th>Control gel n = 114</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of patients with first complete closure of target wound within 45 days</td>
<td>41.3%</td>
<td>28.9%</td>
<td>0.013</td>
</tr>
<tr>
<td><strong>By EB subtype</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RDEB (n = 175)</td>
<td>44.0%</td>
<td>26.2%</td>
<td>0.008</td>
</tr>
<tr>
<td>DDEB (n = 20)</td>
<td>50.0%</td>
<td>50.0%</td>
<td>0.844</td>
</tr>
<tr>
<td>JEB (n = 26)</td>
<td>18.2%</td>
<td>26.7%</td>
<td>0.522</td>
</tr>
<tr>
<td>Proportion of patients with first complete closure of target wound within 90 days*</td>
<td>50.5%</td>
<td>43.9%</td>
<td>0.296</td>
</tr>
</tbody>
</table>

* key secondary endpoint

The median daily extent of exposure for all patients in DBP and OLP combined are presented in Table 3. The median duration of Filsuvez treatment for all patients in the DBP and OLP is 695 days with a maximum of 924 days.

Table 3: Median daily and cumulative extent of exposure for DBP and OLP combined - all patients and by age category

<table>
<thead>
<tr>
<th>Median daily extent of exposure (grams per day)</th>
<th>All patients</th>
<th>0 - &lt; 4 years</th>
<th>4 - &lt; 12 years</th>
<th>12 - &lt; 18 years</th>
<th>≥ 18 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median daily extent of exposure</td>
<td>10</td>
<td>12</td>
<td>10</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Median cumulative extent of exposure (grams)</td>
<td>1835</td>
<td>1218</td>
<td>2180</td>
<td>2446</td>
<td>1353</td>
</tr>
</tbody>
</table>

The European Medicines Agency has deferred the obligation to submit the results of studies with Filsuvez in one or more subsets of the paediatric population in the treatment of epidermolysis bullosa (see section 4.2 for information on paediatric use).

5.2 Pharmacokinetic properties

Absorption

Systemic exposure to the main component betulin was assessed at baseline and periodically during BEB-13 using a dried blood spot bioanalytical method. Betulin venous blood concentrations were below quantitation limits (10 ng/mL) in the large majority of subjects. In a minority of subjects, measurable venous blood concentrations of betulin were observed, suggesting that there is minimal absorption of topically administered betulin. These venous blood concentrations, no greater than 207 ng/mL, were similar to those observed with ingestion of food sources containing betulin.

Distribution

The plasma protein binding of betulin is > 99.9%.

Metabolism

The in vitro metabolism of betulin was assessed in a suspension of human hepatocytes, where 99% were completely metabolised in five hours. The most abundant metabolite in vitro was formed through oxidation, methylation, and sulfation. Three other metabolites were formed by sulfation or glucuronidation. Non-CYP enzymatic pathways are expected to play the predominant role in the
overall hepatic metabolism of betulin (75%), while the CYP mediated pathways (25%) are mainly
driven by CYP3A4/5 isoenzyme.

Betulin showed a direct inhibition of CYP2C8 (test substrate amodiaquine) and CYP3A (test
substrates testosterone and midazolam) with IC₅₀ values of 0.60 µM (266 ng/mL), 0.17 µM
(75 ng/mL) and 0.62 µM (275 ng/mL), respectively in human hepatocytes. In addition, betulin caused
a very slight induction of CYP3A4 mRNA (2.7-fold). However given the negligible systemic
exposure, no interaction with systemic treatments is expected.

Elimination

No in vivo elimination studies have been performed.

5.3 Preclinical safety data

Non clinical data reveal no special hazard for humans based on conventional studies of safety
pharmacology, repeated dose toxicity, toxicity to reproduction and development, and phototoxicity.
After a 4-week topical treatment with Filsuvez gel, several reactions are observed at the site of
administration in minipigs, including inflammatory effects, lympho-histiocytic inflammatory cell
infiltration and epithelial hyperplasia. Following a 9-month dermal treatment in minipigs, epidermal
hyperplasia, orthokeratotic hyperkeratosis, dermal lymphocytic and/or neutrophilic infiltration, and
pustules in the stratum corneum were observed in some animals.

In vitro genotoxicity studies were negative. Further studies on genotoxicity or carcinogenicity have not
been performed.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients
Sunflower oil, refined.

6.2 Incompatibilities
Not applicable.

6.3 Shelf life
4 years.

Once opened, the product should be used immediately and be discarded after use.

6.4 Special precautions for storage
Store below 30 °C.

6.5 Nature and contents of container

White collapsible aluminium tube, interior lacquered with epoxy phenolic coating, and with a sealing
compound in the fold. The tube is closed with a tamper-evident aluminium membrane and fitted with a
white polypropylene screw cap. The tube is packed in a carton.

Pack sizes:
1 and 30 tubes of 9.4 g or
1, 10 and 30 tubes of 23.4 g gel.
Not all pack sizes may be marketed.

6.6 Special precautions for disposal

No special requirements.

7. MARKETING AUTHORISATION HOLDER

Amryt Pharmaceuticals DAC
45 Mespl Road
Dublin 4
Ireland
tel: 00 800 4447 4447 (toll free)
tel: +44 1604 549 952
e-mail: medinfo@amrytpharma.com

8. MARKETING AUTHORISATION NUMBER(S)

Filsuvez gel, 9.4 g tube
EU/1/22/1652/001
EU/1/22/1652/003

Filsuvez gel, 23.4 g tube
EU/1/22/1652/002
EU/1/22/1652/004
EU/1/22/1652/005

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 21 June 2022

10. DATE OF REVISION OF THE TEXT

Detailed information on this medicinal product is available on the website of the European Medicines Agency http://www.ema.europa.eu.
ANNEX II

A. MANUFACTURER RESPONSIBLE FOR BATCH RELEASE

B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT
A. MANUFACTURER RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer(s) responsible for batch release

Amryt GmbH
Streiflingsweg 11
75223 Niefern-Öschelbronn
GERMANY

B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

Medicinal product subject to medical prescription.

C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

- Periodic safety update reports (PSURs)

The requirements for submission of PSURs for this medicinal product are set out in the list of Union reference dates (EURD list) provided for under Article 107c(7) of Directive 2001/83/EC and any subsequent updates published on the European medicines web-portal.

The marketing authorisation holder (MAH) shall submit the first PSUR for this product within 6 months following authorisation.

D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT

- Risk management plan (RMP)

The marketing authorisation holder (MAH) shall perform the required pharmacovigilance activities and interventions detailed in the agreed RMP presented in Module 1.8.2 of the marketing authorisation and any agreed subsequent updates of the RMP.

An updated RMP should be submitted:

- At the request of the European Medicines Agency;
- Whenever the risk management system is modified, especially as the result of new information being received that may lead to a significant change to the benefit/risk profile or as the result of an important (pharmacovigilance or risk minimisation) milestone being reached.
ANNEX III

LABELLING AND PACKAGE LEAFLET
A. LABELLING
PARTICULARS TO APPEAR ON THE OUTER PACKAGING

OUTER CARTON

1. NAME OF THE MEDICINAL PRODUCT

Filsuvez gel
birch bark extract

2. STATEMENT OF ACTIVE SUBSTANCE(S)

1 g gel contains: 100 mg birch bark extract (as dry extract, refined) from Betula pendula/Betula pubescens (equivalent to 0.5-1.0 g birch bark), including 84-95 mg triterpenes.

3. LIST OF EXCIPIENTS

Excipient: Sunflower oil, refined.

4. PHARMACEUTICAL FORM AND CONTENTS

Gel
23.4 g
9.4 g
1 tube
10 tubes
30 tubes

5. METHOD AND ROUTE(S) OF ADMINISTRATION

Cutaneous use.
Read the package leaflet before use.
For single use only. Discard after use.

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

8. EXPIRY DATE

EXP
9. **SPECIAL STORAGE CONDITIONS**

Store below 30 °C.

10. **SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE**

11. **NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER**

Amryt Pharmaceuticals DAC
45 Mespil Road
Dublin 4
Ireland

12. **MARKETING AUTHORISATION NUMBER(S)**

EU/1/22/1652/001 9.4 g tube – 1 tube
EU/1/22/1652/003 9.4 g tube – 30 tubes
EU/1/22/1652/002 23.4 g tube – 1 tube
EU/1/22/1652/004 23.4 g tube – 10 tubes
EU/1/22/1652/005 23.4 g tube – 30 tubes

13. **BATCH NUMBER**

Lot

14. **GENERAL CLASSIFICATION FOR SUPPLY**

15. **INSTRUCTIONS ON USE**

16. **INFORMATION IN BRAILLE**

filsuvez

17. **UNIQUE IDENTIFIER – 2D BARCODE**

2D barcode carrying the unique identifier included.

18. **UNIQUE IDENTIFIER - HUMAN READABLE DATA**

PC
SN
NN
1. NAME OF THE MEDICINAL PRODUCT

Filsuvez gel
birch bark extract

2. STATEMENT OF ACTIVE SUBSTANCE(S)

1 g gel contains: 100 mg birch bark extract (as dry extract, refined) from *Betula pendula*/*Betula pubescens*.

3. LIST OF EXCIPIENTS

Excipient: Sunflower oil, refined.

4. PHARMACEUTICAL FORM AND CONTENTS

**Gel**
23.4 g

5. METHOD AND ROUTE(S) OF ADMINISTRATION

Cutaneous use.
Read the package leaflet before use.
For single use only. Discard after use.

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

8. EXPIRY DATE

**EXP**

9. SPECIAL STORAGE CONDITIONS

Store below 30 °C.
10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE

11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Amryt Pharmaceuticals DAC
45 Mespil Road
Dublin 4
Ireland

12. MARKETING AUTHORISATION NUMBER(S)

EU/1/22/1652/002
EU/1/22/1652/004
EU/1/22/1652/005

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

17. UNIQUE IDENTIFIER – 2D BARCODE

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA
### 1. NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION

Filsuvez gel  
birch bark extract  
Cutaneous use.

### 2. METHOD OF ADMINISTRATION

Read the package leaflet before use.  
For single use only. Discard after use.

### 3. EXPIRY DATE

EXP

### 4. BATCH NUMBER

Lot

### 5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT

9.4 g

### 6. OTHER
B. PACKAGE LEAFLET
Package leaflet: Information for the patient

Filsuvez gel
birch bark extract

Read all of this leaflet carefully before you start using this medicine because it contains important information for you.
- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet
1. What Filsuvez is and what it is used for
2. What you need to know before you use Filsuvez
3. How to use Filsuvez
4. Possible side effects
5. How to store Filsuvez
6. Contents of the pack and other information

1. What Filsuvez is and what it is used for

Filsuvez gel is a herbal medicinal product which contains dry extract from birch bark.

It is used to treat wounds in adults and children (age 6 months and older) who have a type of the condition “epidermolysis bullosa” (EB) called “dystrophic” (DEB) or “junctional” (JEB). This is a condition where the outer layer of the skin separates from the inner layer, making the skin very fragile and causing wounds to appear.

2. What you need to know before you use Filsuvez

Do not use Filsuvez
- if you are allergic to birch bark or any of the other ingredients of this medicine (listed in section 6).

Warnings and precautions
Talk to your doctor, pharmacist or nurse before using Filsuvez.

If you get an allergic reaction, stop using Filsuvez immediately and see your doctor, pharmacist or nurse. Signs of an allergic reaction include:
- itching, swelling and redness of the skin that is more severe on the area where the medicine has been applied.

Wound infection is a serious complication that can occur during the healing process. Possible signs of a wound infection are:
- yellow or greenish fluid (pus) draining from the wound,
- red, warm, swollen, or increasingly painful skin around the wound.

If you have a wound infection, you may need to stop using Filsuvez and another treatment may be required. Your doctor, pharmacist or nurse will let you know if treatment with Filsuvez can be restarted once the infection has gone.
People with EB are more likely to develop a type of skin cancer called “squamous cell carcinoma” (SCC). If you are diagnosed with a skin cancer while using Filsuvez you should talk with your doctor, pharmacist or nurse and stop using Filsuvez on that part of your skin.

Filsuvez does not contain birch pollen, so it may be used by people with a birch pollen allergy.

Avoid getting Filsuvez in your eyes. If this does happen, rinse your eyes well with clean water. Contact your doctor, pharmacist or nurse if any discomfort continues.

**Children**
Do not give this medicine to children below 6 months.

**Other medicines and Filsuvez**
Tell your doctor, pharmacist or nurse if you are using, have recently used or might use any other medicines.

There is no information on how Filsuvez could react with other medicines applied to the skin, taken by mouth or injected. Do not apply other products to the wound area at the same time as applying Filsuvez. If you need to use more than one product talk to your doctor, pharmacist or nurse.

**Pregnancy, breast-feeding and fertility**
No studies have been done on the effects of Filsuvez on pregnant women, but since the absorption of this medicine into the body is extremely low, the risk to the unborn baby is negligible. Filsuvez can be used during pregnancy.

It is not known whether Filsuvez passes into human breast milk, but since the absorption of this medicine into the body is extremely low, the risk to the baby is negligible. Filsuvez can be used during breast-feeding, unless the chest area is being treated.

Since the absorption of this medicine into the body is extremely low, it is not expected to affect fertility.

**Driving and using machines**
Your ability to drive and use machines will not be affected by this medicine.

3. **How to use Filsuvez**

Always use this medicine exactly as your doctor, pharmacist or nurse has told you. Check with your doctor, pharmacist or nurse if you are not sure.

**Methods of administration**
- **Clean the wound before applying Filsuvez.**
- You can apply Filsuvez in 2 ways:
  1. Apply directly to the wound
     - Apply a thick layer (approximately 1 mm thick) of Filsuvez to the wound (Step 1).
     - Spread plenty of gel and cover the whole area of the wound with a clean or gloved hand (Step 2). **Do not** rub in the gel.
     - Cover with a sterile non-adhesive wound dressing (Step 3).
2. Apply onto a sterile non-adhesive dressing
   o Apply a thick layer (approximately 1 mm thick) of Filsuvez to the wound dressing (Step 1).
   o Spread plenty of gel on the area that will have direct contact with the wound with a clean or gloved hand (Step 2).
   o Cover the wound with the dressing (Step 3).

• Re-apply the gel each time your dressing is changed, until the wound is healed.
• Filsuvez is not for internal use. Avoid contact with the eyes, mouth or nostrils. If accidental contact does occur, immediately wash with clean water.
• This tube of sterile gel is for a single application. Once opened, the gel should be used immediately and the tube thrown away, even if there is some gel left. A new tube should be used at each dressing change.

Duration of use
Your doctor, pharmacist or nurse will tell you for how long you should use the gel. If symptoms continue or worsen after use, or if wound complications occur, speak to your doctor, pharmacist or nurse.

If you use more Filsuvez than you should
Filsuvez is applied to the skin and the absorption into the body is extremely low. This makes overdose very unlikely, even if applied to large skin areas and for a long period of time.

If you forget to use Filsuvez
Apply Filsuvez at the next planned change of wound dressing, continuing with your normal routine.

If you stop using Filsuvez
Filsuvez should be used as advised by your doctor, pharmacist or nurse. Do not stop using it without consulting your doctor, pharmacist or nurse.

If you have any further questions on the use of this medicine, ask your doctor, pharmacist or nurse.
4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them. Tell your
doctor, pharmacist or nurse straight away if you notice any side effects including those listed below.

**Very common** (may affect more than 1 in 10 people)
- wound complication (e.g. increase in wound size, wound re-opening, wound pain)

**Common** (may affect up to 1 in 10 people)
- wound infection
- allergic reaction (hypersensitivity)
- itchy skin
- pain and itching where the medicine is applied
- complications of wound healing

**Uncommon** (may affect up to 1 in 100 people)
- wound secretion
- skin irritation (dermatitis)
- itchy rash
- purple coloured rash
- pain

**Reporting of side effects**
If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side
effects not listed in this leaflet. You can also report side effects directly via the national reporting
system listed in Appendix V. By reporting side effects, you can help provide more information on the
safety of this medicine.

5. How to store Filsuvez

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the carton and tube after ‘EXP’. The
expiry date refers to the last day of that month.

Store below 30 °C.

This tube of sterile gel is for a single application. Once opened, the gel should be used immediately
and the tube thrown away, even if there is some gel left. A new tube should be used at each dressing
change.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to
throw away medicines you no longer use. These measures will help protect the environment.

6. Contents of the pack and other information

**What Filsuvez contains**
The active substance is a dry extract from birch bark.
1 g of gel contains: 100 mg extract (as a refined dry extract) from *Betula pendula* Roth, *Betula
pubescens* Ehrh. as well as hybrids of both species, cortex (equivalent to 0.5-1.0 g birch bark),
including 84-95 mg triterpenes calculated as the sum of betulin, betulinic acid, erythrodiol, lupeol and
oleanolic acid. Extraction solvent: n-Heptane.

The other ingredient is refined sunflower oil.
What Filsuvez looks like and contents of the pack
Filsuvez is a colourless to slightly yellowish, opalescent non-aqueous gel.

Filsuvez gel is packed in white collapsible aluminium tubes. The tubes are closed with a tamper-evident aluminium membrane and fitted with a white polypropylene screw cap. The tube is packed in a carton.

Pack sizes:
1 and 30 tubes of 9.4 g or
1, 10 and 30 tubes of 23.4 g gel.

Not all pack sizes may be marketed.

Marketing Authorisation Holder
Amryt Pharmaceuticals DAC
45 Mespil Road
Dublin 4
Ireland
tel: 00 800 4447 4447 (toll free)
tel: +44 1604 549 952
e-mail: medinfo@amrytpharma.com

Manufacturer
Amryt GmbH
Streiflingsweg 11
75223 Niefern-Öschelbronn
Germany

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Detailed information on this medicine is available on the European Medicines Agency web site:
http://www.ema.europa.eu. There are also links to other websites about rare diseases and treatments.