

**SOLUPRICK SQ TREE POLLEN *BETULA VERRUCOSA* (SILVER BIRCH) 10 HEP SOLUTION FOR SKIN PRICK TEST 2ML PER VIAL**

*(Betula verrucosa)*

**PL 10085/0032**

**UKPAR**

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# **SOLUPRICK SQ TREE POLLEN *BETULA VERRUCOSA* (SILVER BIRCH) 10 HEP SOLUTION FOR SKIN PRICK TEST 2ML PER VIAL**

*(Betula verrucosa)*

**PL 10085/0032**

## **LAY SUMMARY**

The MHRA today granted ALK-Abelló A/S a Marketing Authorisation (licence) for the medicinal product Soluprick SQ Tree Pollen *Betula verrucosa* (PL 10085/0032), which is a tree pollen. Soluprick SQ Tree Pollen *Betula verrucosa* are glycerinated preparations containing standardised allergen extracts dissolved in equal parts of buffered saline and sterile glycerol. The active ingredient is a partly purified pollen allergen extract which contains the relevant allergens. The Soluprick SQ Tree Pollen species is *Betula verrucosa* (Silver Birch). This medicine is prescription only and may be administered to children

Soluprick SQ Tree Pollen *Betula verrucosa* are used in the diagnosis of specific IgE mediated allergic diseases via a skin prick test which is usually performed on the forearm but also sometimes on the back of the patient. A droplet of Soluprick SQ Tree Pollen *Betula verrucosa* is applied to the skin along with a droplet of a reference preparation and a droplet of a control preparation. The skin is pierced with a lancet through each of the droplets and any skin reactions are observed after 15 minutes. If the patient is allergic to any of the substances in the droplets, then a visible inflammatory reaction will usually occur.

Persons with IgE-mediated diseases, or atopy, have a hereditary predisposition to produce IgE antibodies against common environmental allergens such as plant pollens, mould spores, drugs (i.e. penicillins), foods, insect stings and animal products. Hayfever is an example of a common allergy whose symptoms are caused by airborne pollen.

The clinical data presented to the MHRA demonstrated that Soluprick SQ Tree Pollen *Betula verrucosa* accurately diagnoses adults and children with specific IgE mediated allergic diseases via the skin prick test and there were no unexpected safety concerns. It was therefore judged that the benefits of using this product outweigh the risks; hence a Marketing Authorisation has been granted.

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*(Betula verrucosa)*

**PL 10085/0032**

**SCIENTIFIC DISCUSSION**

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## **INTRODUCTION**

Based on the review of data on quality, safety and efficacy the UK granted a marketing authorisation for the medicinal product Soluprick SQ Tree Pollen *Betula verrucosa* (PL 10085/0032) to ALK-Abelló A/S on the 12<sup>th</sup> July 2007. The product is prescription only and intended for adults and children.

This was a simple abridged, national application for Soluprick SQ Tree Pollen *Betula verrucosa*, submitted under Article 10c of Directive 2001/83/EC. Soluprick SQ Tree Pollens are aqueous solutions containing a partially purified extract of grass pollen. There are four different solutions each containing a specific tree pollen extract.

Soluprick SQ Tree Pollen *Betula verrucosa* is used in the diagnosis of specific IgE mediated allergic diseases and may be used in adults and children.

Soluprick SQ Tree Pollen *Betula verrucosa* is for administration by the skin prick test only on the forearm or back of the patient.

# **PHARMACEUTICAL ASSESSMENT**

## **REQUESTS FOR INSPECTION ACTION PRIOR TO AUTHORISATION**

Manufacturing and batch release site: ALK-Abelló, S.A. Miguel Fleta 19,  
E 28037, Madrid, Spain

GMP authorisations dated 27/01/2003 and 03/05/2000 were provided for applications PL 10085/0014. ALK-Abelló S.A. was inspected by the Spanish authorities on 12 May 2005. The inspection concerned the Production Facilities Extension and the outcome of the inspection was given as positive.

The applicant has also provided a valid GMP certificate for ALK-Abello S.A at Miguel Fleta 19, Madrid. This company is registered with the Spanish Medicines Agency (No. 3.196-E) and authorised for manufacturing of medicines (small volume injectables and oral solutions) according to GMP. The certificate is dated 29 December 2004.

## **INTRODUCTION**

### **LEGAL BASIS**

These are simple abridged applications are submitted in accordance with Article 10c (informed consent application) in accordance with Directive 2001/83/EC as amended, as previously agreed with MHRA.

### **USE**

Soluprick SQ Tree Pollens are aqueous solutions containing a partially purified extract of tree pollen. There are four different solutions each containing a specific tree pollen extract (listed under the Drug Substance Specifications section in this report).

Soluprick SQ Tree Pollens are intended for skin prick testing (SPT) in the diagnosis of specific IgE mediated allergic diseases.

The Pharmacotherapeutic group ATC code is V 04 CL: Tests for allergic diseases.  
Pharmaceutical form and strength: Solution for skin prick test, 10 HEP

Route of administration: Epicutaneous use.

### **SCIENTIFIC ADVICE**

None given.

### **LEGAL STATUS**

On 28 October 2005 the marketing authorisations for Soluprick Tree Pollen kit (PL 10085/0014) was granted by the MHRA. These kits contain the individual pollen extracts for skin prick testing. The current application is for individual license applications for each of the components of the pollen kits covered by PL 10085/0014.

The documentation consists of Module 1 and expert statements from quality, preclinical and clinical experts that the application made is identical to corresponding products authorised under PL 10085/0014.

The products are also authorised in the Czech Republic, Denmark, Finland, Germany, Iceland, The Netherlands, Poland, Slovak Republic, Sweden and Switzerland.

## **DRUG SUBSTANCE**

### **GENERAL INFORMATION**

Soluprick SQ Tree Pollens are aqueous solutions of containing a partially purified extract of tree pollen. There are four different solutions each containing a specific tree pollen extract, as follows:

Soluprick SQ European Alder (*Alnus glutinosa*), PL 10085/0034

Soluprick SQ Grey Alder (*Alnus incana*), PL 10085/0036

Soluprick SQ Silver Birch (*Betula verrucosa*), PL 10085/0032

Soluprick SQ Hazel (*Corylus avellana*), PL 10085/0035

Soluprick SQ Tree Pollens are intended for skin prick testing (SPT) in the diagnosis of specific IgE mediated allergic diseases.

The active ingredient is standardised with respect to the content of major allergens and the biological activity is controlled by a total potency assay. The potency is expressed as HEP (histamine equivalent in prick testing).

### **MANUFACTURE**

Manufacturing of Soluprick is performed in ALK-Abelló S.A. in Madrid.

### **CHARACTERISATION**

Not applicable.

## **CONTROL OF DRUG SUBSTANCE**

### Drug Substance Specifications

The specifications of the following drug substances (pollens) have been submitted and are acceptable.

- *Betula verrucosa*
- *Alnus glutinosa*
- *Alnus incana*
- *Corylus avellana*

### **Suitability of the BP/Ph Eur Monograph**

Pollen requirements are based on current NfG on Allergen Products (CPMP/BWP/243/96) and Ph. Eur. monograph, Allergen Products 01/2005:1063.

## **REFERENCE STANDARDS OR MATERIALS**

No change.

## **CONTAINER CLOSURE SYSTEM**

No change.

## **STABILITY**

The applicant has provided data to support the 5 year shelf life at  $-20^{\circ} \pm 5^{\circ}\text{C}$  for the tree pollens. This shelf life can be accepted.

## **Drug Product**

### **DESCRIPTION AND COMPOSITION OF THE DRUG PRODUCT**

The Drug Product in these simple abridged applications has the same qualitative and quantitative composition in terms of active substances, excipients and the same pharmaceutical form as the currently approved Soluprick kit (PL 10085/0014).

The drug products is a phosphate-buffered, glycerol-containing solutions of tree pollen extracts, preserved with phenol, intended for diagnosis of tree pollen allergy by skin prick test (SPT).

Each preparation presented in a multi-dose container consisting of a clear, hydrolytic Type I glass bottle closed with a halobutyl rubber stopper and a white polypropylene screw cap. The device for administration is supplied separately, and consists of either a pipette applicator or dropper applicator complying with Dir 93/42/EEC on Medical Devices.

Each bottle contains 2 ml of solution

<b>INGREDIENT</b>	<b>Function</b>	<b>Ref Standard</b>
<b>Drug Substance; Allergen Extract</b>		
<i>Betula verrucosa</i>		In-House Reference
<i>Alnus glutinosa</i>		
<i>Alnus incana</i>		
<i>Corylus avellana</i>		
3-Tree <sup>1</sup>		
<b>Excipients</b>		
Sodium chloride	Isotonicity	Ph. Eur.
Phenol	Preservative	Ph. Eur.
Glycerol	Stabiliser/Viscosity	Ph. Eur.
Disodium phosphate 2H <sub>2</sub> O	pH buffer	Ph. Eur.
Sodium dihydrogen phosphate 2H <sub>2</sub> O	pH buffer	Ph. Eur.
Sodium hydroxide &/ hydrochloric acid	pH adjustment	Ph. Eur.
Water for injections (in bulk)	Solvent	Ph. Eur.

<sup>1</sup> 3-Tree: equal parts: *Betula verrucosa* 5µg, *Alnus glutinosa* 3.33 HEP, and *Corylus avellana* 3.33 HEP.

## **PHARMACEUTICAL DEVELOPMENT**

No change.

## **MANUFACTURE**

Flowcharts have been provided for summary of manufacturing processes for tree pollens. No changes have been made to the manufacturing process.

## **CONTROL OF EXCIPIENTS**

No change.

## **CONTROL OF DRUG PRODUCT**

The drug product specification has been set in accordance Ph. Eur. monograph and the EU NfG on Allergen Products. Tests described in the monograph are sterility, protein profile, total allergenic activity and determination of individual allergens.

The drug product specifications of the following skin prick test diagnostics have been submitted and are satisfactory:



### Tree pollens:

- *Betula verrucosa*
- *Alnus glutinosa*
- *Alnus incana*
- *Corylus avellana*
- *3-Trees: Betula verrucosa, Alnus glutinosa, Corylus avellana*

As indicated in the specifications, the recommended storage conditions for the drug product are 2°C-8°C and the proposed expiry date is 3 years from the date of analysis.

### **REFERENCE STANDARDS OR MATERIALS**

No change.

### **CONTAINER CLOSURE SYSTEM**

Each preparation is presented in a multi-dose container consisting of a clear, hydrolytic Type I glass bottle closed with a halobutyl rubber stopper and a white polypropylene screw cap. Each package contains one vial with 2ml solution for skin prick test. The device for administration is supplied separately, and consists of either a pipette applicator or dropper applicator complying with Dir 93/42/EEC on Medical Devices.

### **STABILITY**

No change.

The proposed shelf life is 36 months with an in-use shelf life of 6 months after first opening the vial without exceeding the expiry date when stored at 2°-8°C with periodic excursions to 25°C ± 2°C when in use. The proposed shelf life and storage conditions are accepted.

### **BIOEQUIVALENCE / BIOAVAILABILITY**

Not applicable.

### **ESSENTIAL SIMILARITY**

Not applicable

### **APPENDICES**

### **FACILITIES AND EQUIPMENT**

No change

### **ADVENTITIOUS AGENTS SAFETY EVALUATION**

Not applicable

### **NOVEL EXCIPIENTS**

Not applicable

## **REGIONAL INFORMATION**

### **PROCESS VALIDATION SCHEME FOR THE DRUG PRODUCT**

Not applicable.

### **MEDICAL DEVICE ISSUES**

Dropper applicator and pipette applicator are CE marked in compliance with Dir 93/42/EEC, certificates provided for original applications PL 10085/0014.

### **TSE ISSUES**

The glycerol is certified of non-animal origin in original applications. No other TSE issues identified.

## **ASSESSOR'S COMMENTS ON Module I**

### **NAME AND APPEARANCE (IF APPLICABLE)**

#### **SPC**

Satisfactory.

### **PATIENT INFORMATION LEAFLET**

#### **LABEL**

These have been agreed with the applicant.

### **APPLICATION FORM**

#### **Assessor's Overall Conclusions**

These new National product applications are to allow the Company to market the individual components of the Soluprick SQ Tree Pollens which are currently licensed as kits for skin prick testing (SPT). This current series of applications covers four tree pollens. The products are partially purified extracts of tree pollens in a 50% solution of glycerol, intended for use in the diagnosis of specific IgE-mediated allergic diseases. This application for Soluprick SQ Tree Pollen *Betula Verrucosa* is approvable.

Date: 21 November 2006

# **CLINICAL ASSESSMENT**

## **INTRODUCTION**

### **TYPE OF APPLICATION AND REGULATORY BACKGROUND**

This is a national marketing authorisation application.

This application is submitted in accordance with the Article 10c, informed consent application, in Directive 2001/83/EC.

### **CLINICAL BACKGROUND**

On 28 October 2005 the marketing authorisations for Soluprick Tree pollen kit (PL 10085/0014) was granted by the MHRA. Each pollen kit consists of individual vials of pollen.

ALK Abelló is applying for four abridged applications to launch vials of the individual pollens. These four abridged applications are submitted in accordance with article 10c (informed consent application) in accordance with directive 2001/83C.

As per applicant the drug product possesses the same qualitative and quantitative composition in terms of active substances, excipients and the same pharmaceutical form as the Soluprick kit.

The individually packed vials are supported by the already submitted quality, non-clinical and the clinical documentation. As per applicant the products are in relation to quality, non-clinic and clinic documentation identical to the corresponding product authorised under PL 10085/0014. The Marketing Authorisation holder is the same.

### **INDICATIONS**

Soluprick SQ Tree Pollens are used in the diagnosis of specific IgE mediated allergic diseases.

### **DOSE AND DOSE REGIMEN**

Soluprick SQ Tree Pollens 10 HEP are recommended as the optimal biological potency of the allergen when taking into account the meaning of high sensitivity related to high specificity. The potency is expressed in HEP (Histamine Equivalent in Prick testing) which is related to the allergenic activity of the allergen product in the skin of the allergic patient.

ALK Positive control (histamine dihydrochloride 10 mg/ml) is used as reference and ALK Negative control (Saline solution) is used to evaluate unspecific reactions.

When performing SPT the amount of solution introduced into the superficial layer of the skin is extremely low, approximately  $3 \times 10^{-3} \mu\text{l}$  (S. Dreborg, Allergy no. 10, Vol 44, 1989).

### **GCP ASPECTS**

NA

## **ORPHAN MEDICINAL PRODUCTS**

NA

## **PAEDIATRIC DEVELOPMENT PROGRAMME**

NA

## **SCIENTIFIC ADVICE**

Not given.

## **LEGAL STATUS**

On 28 October 2005 the marketing authorisations for Soluprick Tree pollen kit (PL 10085/0014) was granted by the MHRA. Each pollen kit consists of individual vials of pollen.

ALK Abelló is applying for four abridged applications to launch vials of the individual pollens. These four abridged applications are submitted in accordance with article 10c (informed consent application) in accordance with directive 2001/83C.

As per applicant the drug product possesses the same qualitative and quantitative composition in terms of active substances, excipients and the same pharmaceutical form as the Soluprick kit.

The individually packed vials are supported by the already submitted quality, non-clinical and the clinical documentation. As per applicant the product is in relation to quality, non-clinic and clinic documentation identical to the corresponding product authorised under PL 10085/0014. The Marketing Authorisation holder is the same.

## **CLINICAL PHARMACOLOGY**

NA

## **CLINICAL EFFICACY**

The applicant has not enclosed any new data. The individually packed vials are supported by the already submitted quality, non-clinical and the clinical documentation. As per applicant the product is in relation to quality, non-clinic and clinic documentation identical to the corresponding product authorised under PL 10085/0014.

## **ASSESSORS' OVERALL CONCLUSIONS ON CLINICAL EFFICACY**

No new data has been enclosed.

## **CLINICAL SAFETY**

The applicant has not enclosed any new data and as per applicant the clinical documentation is identical to the corresponding product authorised under PL 10085/0014.

## **ASSESSOR'S OVERALL CONCLUSIONS ON CLINICAL SAFETY**

No new data has been enclosed.

## **EXPERT REPORTS**

Clinical expert report is written by Medical Doctor Ea Dige, Head of Pharmacovigilance in ALK-Abelló, Hørsholm Denmark.

## **PRODUCT LITERATURE**

Not enclosed

## **SPC**

## **PATIENT INFORMATION LEAFLET**

## **LABEL**

## **APPLICATION FORM**

## **OVERALL CONCLUSION**

### **PHARMACOKINETICS**

NA

### **PHARMACODYNAMICS**

NA

### **EFFICACY**

No new data has been enclosed. As per applicant the drug product possesses the same qualitative and quantitative composition in terms of active substances, excipients and the same pharmaceutical form as the Soluprick kit.

The individually packed vials are supported by the already submitted quality, non-clinical and the clinical documentation. As per applicant the product is in relation to quality, non-clinic and clinic documentation identical to the corresponding product authorised under PL 10085/0014.

### **SAFETY**

No new data has been enclosed. As per applicant the drug product possesses the same qualitative and quantitative composition in terms of active substances, excipients and the same pharmaceutical form as the Soluprick kit.

The individually packed vials are supported by the already submitted quality, non-clinical and the clinical documentation. As per applicant the product is in relation to quality, non-clinic and clinic documentation identical to the corresponding product authorised under PL 10085/0014.

### **RISK BENEFIT**

Benefit risk remains positive as no new data is demonstrated. The marketing authorisation for Soluprick Tree pollen kit (PL 10085/0014) was granted by the MHRA.

As per applicant in this submitted abridged application for Soluprick SQ Tree Pollen *Betula verrucosa*, the products are in relation to quality, non-clinic and clinic documentation identical to the corresponding product authorised under PL 10085/0014.

**RECOMMENDED CONDITIONS FOR MARKETING AUTHORISATION**

None

28<sup>th</sup> November, 2006

MHRA

## **PRE-CLINICAL ASSESSMENT**

No pre clinical assessment was performed nor was any required for an application of this type.

## **OVERALL CONCLUSION AND RISK BENEFIT ASSESSMENT**

### **QUALITY**

The important quality characteristics of Soluprick SQ Tree Pollen *Betula verrucosa* are well defined and controlled. The specifications and batch analytical results indicate consistency from batch to batch. There are no outstanding quality issues that would have a negative impact on the benefit/risk balance.

### **EFFICACY**

Soluprick SQ Tree Pollen *Betula verrucosa* used in the diagnosis of specific IgE mediated allergic diseases via a skin prick test. No new or unexpected safety concerns arose from this application.

The SPC, PIL and labelling are satisfactory.

### **RISK BENEFIT ASSESSMENT**

The quality of the product is acceptable, no significant clinical safety concerns were identified, and some benefit has been shown to be associated with Soluprick SQ Tree Pollen *Betula verrucosa*. The risk benefit is therefore considered to be positive.



**SOLUPRICK SQ TREE POLLEN *BETULA VERRUCOSA* (SILVER BIRCH) 10 HEP SOLUTION FOR SKIN PRICK TEST 2ML PER VIAL**

*(Betula verrucosa)*

**PL 10085/0032**

**STEPS TAKEN FOR ASSESSMENT**

- 1 The MHRA received the marketing authorisation application on 16<sup>th</sup> January 2006.
- 2 Following assessment, a request for supplementary information was sent to the applicant on the 21<sup>st</sup> November 2006.
- 3 The applicant submitted its responses to supplementary information request in a letter dated 25<sup>th</sup> January 2007.
- 4 The MHRA completed its assessment of the application on 25<sup>th</sup> May 2007.
- 5 The application was determined on 12<sup>th</sup> July 2007. .

**SOLUPRICK SQ TREE POLLEN *BETULA VERRUCOSA* (SILVER BIRCH) 10 HEP SOLUTION FOR SKIN PRICK TEST 2ML PER VIAL**

*(Betula verrucosa)*

**PL 10085/0032**

**STEPS TAKEN AFTER AUTHORISATION - SUMMARY**

<b>Date submitted</b>	<b>Application type</b>	<b>Scope</b>	<b>Outcome</b>

## **SUMMARY OF PRODUCT CHARACTERISTICS**

### **1 NAME OF THE MEDICINAL PRODUCT**

Soluprick SQ Tree Pollen *Betula verrucosa* (Silver Birch), 10 HEP, Solution for skin prick test, 2 ml per vial

### **2 QUALITATIVE AND QUANTITATIVE COMPOSITION**

Soluprick SQ Tree Pollen is a glycerinated preparation containing standardised allergen extracts dissolved in equal parts of buffered saline and sterile glycerol.

Active ingredients:

The active ingredient is a partly purified pollen allergen extract which contains the relevant allergen. The active ingredient is standardised with respect to the content of major allergen and the biological activity is controlled by a total potency assay. The potency is expressed in HEP (Histamine Equivalent in Prick testing). The biological activity of Soluprick SQ Tree Pollen is related to the reaction in the skin of an allergic patient measured relative to a histamine dihydrochloride solution.

For a full list of excipients, see section 6.1

### **3 PHARMACEUTICAL FORM**

Solution for a skin prick test (SPT)

### **4 CLINICAL PARTICULARS**

#### **4.1 Therapeutic indications**

Soluprick SQ Tree Pollen is used in the diagnosis of specific IgE mediated allergic diseases.

#### **4.2 Posology and method of administration**

Dosage:

Soluprick SQ Tree Pollen 10 HEP is recommended as the optimal biological potency of the allergen when taking into account the meaning of high sensitivity related to high specificity. The potency is expressed in HEP (Histamine Equivalent in Prick testing) which is related to the allergenic activity of the allergen product in the skin of the allergic patient.

ALK Positive control (histamine dihydrochloride 10 mg/ml) is used as reference and ALK Negative control (Saline solution) is used to evaluate unspecific reactions.

When performing a SPT the amount of solution introduced into the superficial layer of the skin is extremely low, approximately  $3 \times 10^{-3}$   $\mu\text{l}$ . (S. Dreborg, Allergy no. 10, Vol 44, 1989)

#### Skin prick test technique

- The SPT is preferably performed on the volar side of the forearm. Alternatively the test can be performed on the back of the patient.
- The skin must be dry and clean and may be disinfected with 70% alcohol.
- Each test preparation and the controls are applied in droplets on the skin in an appropriate distance from each other (a numbered tape can be used).
- The superficial layer of the skin is pierced with an ALK Lancet perpendicular to the skin through the droplet. Hold it for 1 second and draw back the lancet. For each test preparation and control a new sterile, disposable ALK Lancet is used. The positive control is applied last.
- The droplets are wiped off with a tissue. Do not mix the preparations by sweeping!
- Start to read the reaction of the preparations after 15 minutes beginning with the positive control. A positive reaction is a pale weal (oedema) with a red flare (erythema). To record the weal in the patient's report: mark the contour of the weal with a pen, stick transparent tape over the weal. Press and transfer the tape to the report. The flare can be recorded likewise.

#### **Size of the weal**

The mean weal diameter of the allergen product ( $D_a$ ) and of the histamine control ( $D_h$ ) is calculated as  $D = (D_l + d_p)/2$ , where  $D_l$  is the longest diameter and  $d_p$  is the diameter mid-orthogonal to  $D_l$ .

#### Interpretation of results

- Reactions of the allergen product can be graded in relation to the histamine control reaction. This relation is called the skin index (SI).

$$SI = D_a/D_h$$

0	: negative reaction
+	: $SI \leq 0.5$
++	: $0.5 < SI \leq 1.0$
+++	: $1.0 < SI \leq 2.0$
++++	: $2.0 < SI$

- By use of a biological standardised allergen product a mean weal diameter  $\geq 3$  mm indicates that the patient is sensitized to the respective allergen source.

### **4.3 Contraindications**

In extremely rare cases allergic reactions may occur and therefore, a SPT should be avoided when patients are treated with beta-blockers. Recovery from an anaphylactic reaction through the action of adrenaline may be hindered by beta-blockers since these drugs might influence an effective anti-anaphylactic treatment. Therapy with beta-blockers has to be considered an absolute contra-indication.

#### 4.4 Special warnings and precautions for use

Any diseases seriously affecting the patient's general condition; skin lesions in the area used for the testing; dermatographism; dermatitis. Atopic eczema may hamper the reliability of the test.

#### 4.5 Interaction with other medicinal products and other forms of interaction

Concomitant treatment with antiallergic symptomatics may affect the result of the test.

It is recommended that patients who are going to have a skin prick test performed discontinue treatment with:

Therapeutic agent	Interval between last given dose and the SPT
Short-acting antihistamines	2-3 days
Long-acting antihistamines	8 weeks
Hydroxyzine	2 weeks
Ketotifen	2 weeks
Tricyclic antidepressants	2 weeks
Local application of potent steroid ointment	2-3 weeks

Corticosteroids in doses lower than 30 mg of prednisone/prednisolone per day for up to one week do not reduce the response to skin tests.

Oral low dose glucocorticoids (doses less than 10 mg of prednisolone per day) need not to be discontinued prior to skin testing.

#### 4.6 Pregnancy and lactation

Pregnancy is not an absolute contraindication for skin testing. Skin prick testing with Soluprick may be performed during lactation.

#### 4.7 Effects on ability to drive and use machines

None

#### 4.8 Undesirable effects

Undesirable effects occurring are related to the fact allergenic material is applied. The local reaction is an integrated part of the diagnosis, and the following type of reactions related directly to the patient's allergy might occur.

#### Local reactions

The weal is continuously spreading and pseudopodia may be formed during the first 15-20 minutes after application. Note that in some cases a late reaction (6-24 hours after) may occur after application of the allergen in the form of a diffuse swelling.

#### Systemic reaction

In rare cases a general reaction may develop which can be treated with relevant symptomatics.

#### Anaphylactic reaction

Although never reported a theoretical possibility exists of development of an anaphylactic reaction after a few seconds or minutes. For this reason an emergency kit with a ready for use adrenaline syringe must always be available.

### **4.9 Overdose**

Not relevant

## **5 PHARMACOLOGICAL PROPERTIES**

### **5.1 Pharmacodynamic properties**

Soluprick SQ Tree Pollen is used for specific diagnosis by skin prick testing. The preparation is mixtures of molecules with high molecular weight compounds.

The allergenic substance of the preparation can react with the immune system of an allergic patient provided IgE antibodies to the corresponding allergen are released. An immediate allergic reaction will occur within 10-20 minutes, characterised by a weal and flare.

This reaction is mainly caused by binding the allergen to specific IgE attached to mast cells, resulting in release of vaso-active agents like histamine. Some patients also develop a late phase reaction, i.e. a diffuse swelling and redness, starting 2 to 3 hours after the allergen piercing, peaking at 6-12 hours and disappearing within 12-24 hours.

Lymphocytes are involved in the late phase response; the exact mechanism has not yet been elucidated.

### **5.2 Pharmacokinetic properties**

Neither the doses applied in a SPT - in terms of weight less than 0.1 µg - nor the route of administration indicate that Soluprick SQ Tree Pollen is used to acquire a clinical effect after systemic absorption.

No attempt has been made to account for the fate of the individual components.

### **5.3 Preclinical safety data**

No toxicological studies have been performed. However, long term clinical experience confirms that non- allergic reactions are hardly of any significance.

## **6 PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Disodium phosphate, dihydrate  
Sodium dihydrogen phosphate, dihydrate  
Phenol  
Sodium chloride  
Glycerol  
Water for Injections

The sodium content of Soluprick SQ Tree Pollen is less than 1 mmol sodium (23 mg) per dose; therefore it is essentially “sodium free”

### **6.2 Incompatibilities**

None known. In the absence of compatibility studies, this medicinal product must not be mixed with other medicinal products.

### **6.3 Shelf life**

Shelf life of medicinal product as packaged for sale: 3 years  
Shelf life after opening the container: 6 months

### **6.4 Special precautions for storage**

Store in a refrigerator at 2-8 °C  
Do not freeze. Store in original packaging in order to protect from light.

### **6.5 Nature and contents of container**

Vial (type I glass) with a halobutyl rubber stopper and a screw cap (polypropylene).

### **6.6 Special precautions for disposal**

No special requirements.

## **7 MARKETING AUTHORISATION HOLDER**

ALK-Abelló A/S  
Bøge Allé 6-8

DK-2970 Hørsholm  
Denmark

**8      MARKETING AUTHORISATION NUMBER**

PL 10085/32

**9      DATE OF FIRST AUTHORISATION/RENEWAL OF THE  
AUTHORISATION**

09/07/2007

**10     DATE OF REVISION OF THE TEXT**

09/07/2007



## Patient Information Leaflet

**SOLUPRICK SQ TREE POLLEN *BETULA VERRUCOSA* (SILVER  
BIRCH) 10 HEP SOLUTION FOR SKIN PRICK TEST 2ML PER  
VIAL**

*(Betula verrucosa)*

**PL 10085/0032**

## PATIENT INFORMATION LEAFLET

### **SOLUPRICK SQ 10 HEP** **Solution for skin prick testing**

Tree Pollen, Tree Pollen, Weed Pollen, Animal Hair and Dander and House  
Dust Mites

#### **1. WHAT YOU SHOULD KNOW ABOUT SOLUPRICK SQ**

Please read this leaflet carefully before you start treatment with Soluprick SQ. Soluprick SQ is a solution for skin prick testing (SPT). It is used in the diagnosis of specific allergenic diseases. If you have any questions or are in any doubt about anything, please ask your doctor or nurse.

#### **2. WHAT IS THE SKIN PRICK TESTING FOR?**

Soluprick SQ is used to check if you have an allergy to one of the following groups of allergens:

Grass pollen  
Tree pollen  
Weed pollen  
Animal hair and dander  
House dust mites

See section number 7

#### **3. BEFORE YOU ARE GIVEN YOUR SKIN PRICK TEST**

- Are you regularly taking Beta-blockers to control your blood pressure?
- Have you any skin problems in the area to be used for testing?
- Are you allergic to any of the ingredients in Soluprick SQ?
- Are you taking, antihistamines, hydroxyzine, ketotifen, tricyclic antidepressants or using steroid ointment?
- If the answer to any or all of the above questions is YES, TELL YOUR DOCTOR/NURSE BEFORE HE/SHE GIVES YOU SOLUPRICK SQ

#### **4. HOW WILL YOU BE GIVEN THE SKIN PRICK TEST?**

- The Skin Prick Test is usually carried out on the inner side of the forearm. Alternatively the test can be done on your back.
- Your skin must be dry and clean and may be disinfected with alcohol by the nurse or doctor
- Test preparations and the controls are applied in droplets on the skin at an appropriate distance from each other (a numbered tape may be used).
- The top layer of the skin is pierced by the doctor/nurse with an ALK lancet through the droplets.
- The reaction is read after 15 minutes. A positive reaction is a pale small raised swelling or weal with a red edge.

#### **5. AFTER YOU HAVE BEEN GIVEN THE SKIN PRICK TEST**

Normally a Skin Prick Test does not cause any problems but occasionally some people may get side effects such as:

- A continuously spreading weal may be formed at the site during the first 10-20 minutes after application of the allergen.
- Widespread swelling and redness may happen 6-24 hours after the application of the allergen.

If you experience any of these side effects, and they stay or become troublesome, tell your doctor or pharmacist.

If you get any other unusual or unexpected side effect, you should tell your doctor or pharmacist at once.

#### **Anaphylactic reaction**

In extremely rare cases an anaphylactic reaction (a severe reaction throughout the body that is recognised by difficulty in breathing, fainting, itching, and weals) may develop after a few seconds or minutes. For this reason an emergency kit with a 'ready for use' adrenalin syringe will always be available.

TELL YOUR DOCTOR/NURSE IMMEDIATELY IF YOU FEEL ANY OF THESE CHANGES. He or she will be able to give you the right treatment at once to make you feel well.

#### **6. HOW SHOULD THE SKIN PRICK TEST BE STORED?**

- The clinic/hospital will store the Skin Prick Test, solution.
- This medicine should be kept in a refrigerator (between 2°C and 8°C) out of the reach and sight of children, as the medicine could harm them.
- Do not freeze the solution.
- Keep the vials in the outer carton to protect it from light.
- Do not use the skin prick test solution after the expiry date, which is printed on the carton and label.

## 7. WHAT IS IN THE MEDICINE?

Soluprick SQ is a solution for skin prick testing that contains an extract of specific allergen. The allergen is the substance that causes the allergic disease. Soluprick SQ also contains the inactive ingredients, disodium phosphate, sodium dihydrogen phosphate, phenol, sodium chloride, glycerol and water for injections.

The following individual allergens are available:

**Grass pollen:** Meadow Foxtail, Cock's Foot, Meadow Fescue, Perennial Ryegrass, Timothy Grass, Kentucky Blue Grass, Cultivated Rye.

**Tree pollen:** European Alder, Grey Alder, Silver Birch, Hazel

**Weed pollen:** Mugwort, Pellitory of the Wall, Upright Pellitory.

**Animal hair and dander:** Horse Dander, Dog Hair, Cat Hair

**House dust mites:** Dermatophagoides farinae, Dermatophagoides pteronyssinus

Each single allergen is provided in a 2 ml glass vial.

The strength of the products is 10 HEP

The biological activity of Soluprick SQ is related to the reaction in the skin of an allergic patient measured relative to a histamine dihydrochloride solution.

## 8. MANUFACTURER AND PRODUCT LICENCE HOLDER

### Product Licence Holder:

ALK-Abelló A/S  
 Bøge Allé 6-8  
 DK-2970 Hørsholm  
 Denmark

**Manufacturer:**

ALK-Abelló S.A.  
Miguel Fleita 19  
E-28037 Madrid  
Spain

**9. DISTRIBUTOR**

ALK-Abelló Ltd.  
1 Tealgate  
Hungerford  
Berkshire RG17 OYT  
United Kingdom  
Tel: 01488 686 016

**10. DATE ON WHICH THE PACKAGE LEAFLET  
WAS LAST REVISED**

June 2007

**11. FURTHER INFORMATION**

Allergy UK  
Tel: 01322 619 898  
[www.allergyuk.org](http://www.allergyuk.org)

## Labelling

**SOLUPRICK SQ TREE POLLEN *BETULA VERRUCOSA* (SILVER  
BIRCH) 10 HEP SOLUTION FOR SKIN PRICK TEST 2ML PER  
VIAL**

*(Betula verrucosa)*

**PL 10085/0032**



## VIAL



## BOX

