NON-DROWSY SUDAFED DECONGESTANT TABLETS
PL 15513/0183

UKPAR

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LAY SUMMARY

The Medicines and Healthcare products Regulatory Agency (MHRA) granted McNeil Products Limited a Marketing Authorisation for the medicinal product Non-Drowsy Sudafed Decongestant Tablets (PL 15513/0183) on 20th February 2008. This prescription-only medicine (POM) is as a decongestant used to provide relief from cold, flu and allergy symptoms such as blocked sinuses, stuffy nose and catarrh.

The active ingredient, pseudoephedrine hydrochloride is a decongestant. It works by stimulating receptors (alpha-receptors) in certain areas of the body, particularly in the lining of the nose and sinuses. Alpha-receptors are present on the muscles in the walls of blood vessels. When these receptors are stimulated by pseudoephedrine, the muscle contracts, which causes the blood vessel to narrow. This allows less fluid to travel through these blood vessels. In the lining of the nose and sinuses, this results in less fluid being pushed out of the blood vessels into these linings. This reduces the production of mucus, thereby relieving the symptoms of nasal congestion.

This application is identical to a previously granted application for Non-Drowsy Decongestant Tablets (PL 15513/0024), currently granted to the same Marketing Authorisation Holder following a change of ownership on 14th February 2008 from Pfizer Consumer Healthcare. This product was originally authorised on the 28th March 1997 to Warner-Lambert Consumer Healthcare.

No new or unexpected safety concerns arose from this simple application and it was, therefore, judged that the benefits of taking Non-Drowsy Sudafed Decongestant Tablets outweigh the risks; hence a Marketing Authorisation has been granted.
NON-DROWSY SUDAFED DECONGESTANT TABLETS
PL 15513/0183

SCIENTIFIC DISCUSSION

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INTRODUCTION

The UK granted a marketing authorisation for the medicinal product Non-Drowsy Decongestant Tablets (PL 15513/0183) to McNeil Products Limited on 20th February 2008. The product is a prescription-only medicine.

The application was submitted as a simple abridged application according to Article 10c of Directive 2001/83/EC, cross-referring to Non-Drowsy Decongestant Tablets, (PL 15513/0024) currently authorised to the same Marketing Authorisation Holder granted on the 14th February 2008.

No new data were submitted nor was it necessary for this simple application, as the data are identical to that of the previously granted cross-reference product. As the cross-reference product was granted prior to the introduction of current legislation, no Public Assessment Report (PAR) has been generated for it.

The product contains the active ingredient pseudoephedrine hydrochloride which is a decongestant used to relief symptoms such as blocked nose, blocked sinuses and catarrh, in conditions such as colds, flu and nasal allergies, e.g. hayfever.
1. INTRODUCTION
This is a simple, informed consent application for Pseudoephedrine Hydrochloride submitted under Article 10c (formerly Article 10.1(a)(i)) of Directive 2001/83/EC. The proposed MA holder is McNeil Products Limited, Foundation Park, Roxborough Way, Maidenhead, Berkshire, SL6 3UG, UK.

The application cross-refers to Non-Drowsy Sudafed Decongestant Tablets (PL 15513/0024), approved on 14th February 2008 to the same marketing authorisation holder McNeil Products Limited. The current application is considered valid.

2. MARKETING AUTHORISATION APPLICATION FORM
2.1 Name(s)
The proposed name of the product is Non-Drowsy Sudafed Decongestant Tablets. The product has been named in line with current requirements.

2.2 Strength, pharmaceutical form, route of administration, container and pack sizes
The product contains pseudoephedrine hydrochloride, equivalent to 60mg. It is to be stored in either aluminium, polyvinylchloride (PVC) and polyvinylidene(PVdC) blister packs (24 and 100 tablets only) or in high density polyethylene containers (HDPE) with low density polyethylene (LDPE) tamper-evident snap-on lids (pack size of 100 tablets). Only the pack size of 100 tablets is currently marketed; the Marketing Authorisation Holder has provided a commitment to submit patient information leaflets and label mock-ups before they market the other pack size. The proposed shelf-life (24 months) and storage conditions (“Store below 30°C and Store in the original package”) are consistent with the details registered for the cross-reference product.

2.3 Legal status
On approval, the product will be available as a prescription-only medicine (POM).

2.4 Marketing authorisation holder/Contact Persons/Company
McNeil Products Limited, Foundation Park, Roxborough Way, Maidenhead, Berkshire, SL6 3UG, UK.

The QP responsible for pharmacovigilance is stated and her CV is included.

2.5 Manufacturers
The proposed manufacturing sites are consistent with those registered for the cross-reference product and evidence of GMP compliance has been provided.
2.6 **Qualitative and quantitative composition**
The proposed composition is consistent with the details registered for the cross-reference product.

2.7 **Manufacturing process**
The proposed manufacturing process is consistent with the details registered for the cross-reference product and the maximum batch size is stated.

2.8 **Finished product/shelf-life specification**
The proposed finished product specification is in line with the details registered for the cross-reference product with the exception of an additional test for moisture.

2.9 **Drug substance specification**
The proposed drug substance specification is consistent with the details registered for the cross-reference product.

2.10 **TSE Compliance**
With the exception of lactose monohydrate, no materials of animal or human origin are included in the product. This is consistent with the cross-reference product.

A declaration has been provided that lactose used in lactose monohydrate is sourced from healthy animals under the same conditions as that for human consumption.

3. **EXPERT REPORTS**
The applicant has included expert reports in Module 2 of the application. Signed declarations and copies of the experts’ CVs are enclosed in Module 1.4 for the quality, non-clinical and clinical experts. All are considered to have sufficient experience for their responsibilities.

4. **PRODUCT NAME & APPEARANCE**
See 2.1 for details of the proposed product name. The appearance of the product is identical to the cross-reference product.

5. **SUMMARY OF PRODUCT CHARACTERISTICS**
The proposed summary is consistent with the details registered for the cross-reference product.

6. **PATIENT INFORMATION LEAFLET/CARTON**
PIL
The patient information leaflet has been prepared in-line with the details registered for the cross-reference product.

A package leaflet has been submitted to the MHRA along with results of consultations with target patient groups ("user testing"), in accordance with Article 59 of Council Directive 2001/83/EC. The results indicate that the package leaflet is well-structured and organised, easy to understand and written in a comprehensive manner. The test shows that the patients/users are able to act upon the information that it contains.
Labelling
The proposed artwork is comparable to the artwork registered for the cross-reference product and complies with statutory requirements.

7. CONCLUSIONS
The data submitted with the application are acceptable. A Marketing Authorisation should be granted.
PRECLINICAL ASSESSMENT

No new preclinical data have been supplied with this application and none are required for an application of this type.
CLINICAL ASSESSMENT

No new clinical data have been supplied with this application and none are required for an application of this type.
OVERALL CONCLUSION AND RISK BENEFIT ASSESSMENT

QUALITY
The data for this application is consistent with that previously assessed for the cross-reference product and as such has been judged to be satisfactory.

PRECLINICAL
No new preclinical data were submitted and none are required for an application of this type.

EFFICACY
Pseudoephedrine hydrochloride is a well known drug and has been used as a decongestant for many years. This application is identical to previously granted application for Non-Drowsy Decongestant Tablets (PL 15513/0024).

No new or unexpected safety concerns arise from this application.

The SPC, PIL and labelling are satisfactory and consistent with that for the cross-reference product.

RISK BENEFIT ASSESSMENT
The quality of the product is acceptable and no new preclinical or clinical safety concerns have been identified. The applicant’s product is identical to the cross-reference product, Non-Drowsy Sudafed Decongestant Tablets (PL 15513/0024). Extensive clinical experience with pseudoephedrine hydrochloride is considered to have demonstrated the therapeutic value of the compound. The risk benefit is therefore considered to be positive.
### STEPS TAKEN FOR ASSESSMENT

<table>
<thead>
<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>The MHRA received the marketing authorisation application on 14\textsuperscript{th} November 2007.</td>
</tr>
<tr>
<td>2</td>
<td>Following standard checks and communication with the applicant the MHRA considered the application valid on 27\textsuperscript{th} November 2007.</td>
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<tr>
<td>3</td>
<td>The application was determined on 20\textsuperscript{th} February 2008.</td>
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## STEPS TAKEN AFTER ASSESSMENT

<table>
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<tr>
<th>Date submitted</th>
<th>Application type</th>
<th>Scope</th>
<th>Outcome</th>
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<tr>
<td>4th February 2008</td>
<td>Legal Status Type II variation</td>
<td>Following a public consultation (MLX 337) the MAH were informed to reclassify the larger pack sizes of the product, 24 and 100 tablets, from a pharmacy-only (P) product to a prescription-only medicine (POM) product.</td>
<td>Approved on 9th April 2008</td>
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SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE MEDICINAL PRODUCT
Non-Drowsy Sudafed Decongestant Tablets

2 QUALITATIVE AND QUANTITATIVE COMPOSITION
Non-Drowsy Sudafed Decongestant Tablets contain Pseudoephedrine hydrochloride 60.00 mg.
For full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM
Film-coated tablets.
Reddish-brown, round, biconvex film-coated tablets, with ‘Sudafed’ on one side.

4 CLINICAL PARTICULARS
4.1 Therapeutic indications
Non-Drowsy Sudafed Decongestant Tablets is a decongestant of the mucous membranes of the upper respiratory tract, especially the nasal mucosa and sinuses and is indicated for the symptomatic relief of conditions such as allergic rhinitis, vasomotor rhinitis, the common cold and influenza.

4.2 Posology and method of administration
For oral use.
Adults and Children over 12 years
1 tablet every 4 - 6 hours up to 4 times a day.

Use in the Elderly
There have been no specific studies of Non-Drowsy Sudafed Decongestant Tablets in the elderly. Experience has indicated that normal adult dosage is appropriate.

Hepatic Dysfunction
Caution should be exercised when administering Non-Drowsy Sudafed Decongestant Tablets to patients with severe hepatic impairment.

Renal Dysfunction
Caution should be exercised when administering Non-Drowsy Sudafed Decongestant Tablets to patients with moderate to severe renal impairment.

4.3 Contraindications
Non-Drowsy Sudafed Decongestant Tablets is contraindicated in individuals with known hypersensitivity to the product or any of its excipients.
Non-Drowsy Sudafed Decongestant Tablets is contraindicated in individuals with severe hypertension or coronary artery disease.
Non-Drowsy Sudafed Decongestant Tablets is contraindicated in individuals who are taking or have taken monoamine oxidase inhibitors within the preceding two weeks. The concomitant use of pseudoephedrine and this type of product may occasionally cause a rise in blood pressure.

4.4 Special warnings and precautions for use
Although pseudoephedrine has virtually no pressor effects in normotensive patients, Non-Drowsy Sudafed Decongestant Tablets should be used with caution in patients suffering mild to moderate hypertension. As with other sympathomimetic agents, Non-Drowsy Sudafed Decongestant Tablets should be used with caution in patients with hypertension, heart disease, diabetes, hyperthyroidism, elevated intraocular pressure and prostatic enlargement.
Caution should be exercised when using the product in the presence of severe hepatic impairment or moderate to severe renal impairment (particularly if accompanied by cardiovascular disease).
This product contains lactose. Patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption should not take this medicine.

The following statements will appear on packs of this product:
- Store below 30°C.
- Store in the original package.
- Warning: Do not exceed the stated dose.
- Keep out of the reach and sight of children.
- As with all medicines, if you are pregnant or currently taking any other medicine, consult your doctor or pharmacist before taking this product.
- If symptoms persist consult your doctor.
- Causes no drowsiness.

4.5 Interaction with other medicinal products and other forms of interaction
Concomitant use of Non-Drowsy Sudafed Decongestant Tablets with tricyclic antidepressants, sympathomimetic agents (such as decongestants, appetite suppressants and amphetamine-like psychostimulants) or with monoamine oxidase inhibitors, which interfere with the catabolism of sympathomimetic amines, may occasionally cause a rise in blood pressure.

Because of its pseudoephedrine content, Non-Drowsy Sudafed Decongestant Tablets may partially reverse the hypotensive action of drugs which interfere with sympathetic activity including bretylium, betanidine, guanethidine, debrisoquine, methyldopa, alpha- and beta-adrenergic blocking agents.

4.6 Pregnancy and lactation
Although pseudoephedrine has been in widespread use for many years without apparent ill consequence, there are no specific data on its use during pregnancy. Caution should therefore be exercised by balancing the potential benefit of treatment to the mother against any possible hazards to the developing foetus.

Systemic administration of pseudoephedrine, up to 50 times the human daily dosage in rats and up to 35 times the human daily dosage in rabbits, did not produce teratogenic effects.

Pseudoephedrine is excreted in breast milk in small amounts, but the effect of this on breast-fed infants is not known. It has been estimated that 0.5 - 0.7% of a single dose of pseudoephedrine ingested by a mother will be excreted in the breast milk over 24 hours.

4.7 Effects on ability to drive and use machines
None known.

4.8 Undesirable effects
Serious adverse effects associated with the use of pseudoephedrine are rare. Symptoms of central nervous system excitation may occur, including sleep disturbances and rarely hallucinations have been reported.

Skin rashes with or without irritation have occasionally been reported. Urinary retention has been reported occasionally in men receiving pseudoephedrine, prostatic enlargement could have been an important predisposing factor.

4.9 Overdose
As with other sympathomimetic agents. Symptoms of overdose include irritability, restlessness, tremor, convulsions, palpitations, hypertension and difficulty in micturition.

Necessary measures should be taken to maintain and support respiration and control convulsions. Gastric lavage should be performed if indicated. Catheterisation of the bladder may be necessary. If desired, the elimination of pseudoephedrine can be accelerated by acid diuresis or by dialysis.

5 PHARMACOLOGICAL PROPERTIES
5.1 Pharmacodynamic properties
ATC code: R01BA.
Pseudoephedrine has direct and indirect sympathomimetic activity and is an orally effective upper respiratory tract decongestant.

Pseudoephedrine is substantially less potent than ephedrine in producing both tachycardia and elevation in systolic blood pressure and considerably less potent in causing stimulation of the central nervous system.
5.2 Pharmacokinetic properties
Pseudoephedrine is rapidly and completely absorbed after oral administration. After an oral dose of 180 mg to man, peak plasma concentrations of 500-900 ng/ml were obtained about 2 hours post dose. The plasma half-life was about 5.5 hours and was increased in subjects with alkaline urine and decreased in subjects with acid urine. The only metabolism was N-demethylation which occurred to a small extent. Excretion was mainly via the urine.

5.3 Preclinical safety data
The active ingredient of Non-Drowsy Sudafed Decongestant Tablets is a well-known constituent of medicinal products and its safety is well documented. The results of pre-clinical studies do not add anything of relevance for therapeutic purposes.

6 PHARMACEUTICAL PARTICULARS
6.1 List of excipients
Lactose monohydrate
Pregelatinised maize starch
Cellulose microcrystalline
Magnesium Stearate
Silica colloidal

Film Coat:
Opadry OY-S-9473

Opadry OY-S-9473 contains:
Hypromellose
Red iron oxide (E172)
Talc
Polyethylene glycol 400

6.2 Incompatibilities
None known.

6.3 Shelf life
24 months unopened.

6.4 Special precautions for storage
Store below 30°C.
Store in the original package to protect from moisture.

6.5 Nature and contents of container
24 tablets in PVC/PVDC/Aluminium foil blister packs.
100 tablets in high density polyethylene containers with low density polyethylene tamper-evident snap-on lids.

6.6 Special precautions for disposal
Not applicable.

7 MARKETING AUTHORISATION HOLDER
McNeil Products Limited
Foundation Park
Roxborough Way
Maidenhead
Berkshire
SL6 3UG
United Kingdom

8 MARKETING AUTHORISATION NUMBER(S)
PL 15513/0183
DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION
20/02/2008

DATE OF REVISION OF THE TEXT
09/04/2008
NON-DROWSY SUDAFED DECONGESTANT TABLETS
PL 15513/0183
PATIENT INFORMATION LEAFLET & LABELLING