LÄKEMEDELSVERKET
MEDICAL PRODUCTS AGENCY

Public Assessment Report
Scientific discussion

Vicks Sinex
(oxymetazoline hydrochloride)

SE/H/196/01/E02

This module reflects the scientific discussion for the approval of Vicks Sinex. The procedure was finalised at 2010-06-16. For information on changes after this date please refer to the module 'Update'.

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I. INTRODUCTION

WICK Pharma Zweigniederlassung der Procter & Gamble GmbH has applied for a marketing authorisation for Vicks Sinex nasal spray, solution 0.5 mg/ml. The product contains oxymetazoline hydrochloride as active substance. For approved indications see the Summary of Product Characteristics.

II. QUALITY ASPECTS

II.1 Introduction

Vicks Sinex is presented in the form of nasal spray, solution containing 0.5 mg/ml of oxymetazoline hydrochloride. The excipients are sorbitol, sodium citrate dihydrate (for pH adjustment), tyloxapol, chlorhexidine digluconate solution, anhydrous citric acid (for pH-adjustment), benzalkonium chloride solution, acesulfame potassium, menthol, cineole, disodium edetate dihydrate, aloe dry extract, carvone, sodium hydroxide (for pH-adjustment) and purified water. The product solution is filled in glass bottles with metering pump.

II.2 Drug Substance

Oxymetazoline hydrochloride has a monograph in the Ph Eur.

The structure of oxymetazoline hydrochloride has been adequately proven and its physico-chemical properties sufficiently described. The route of synthesis has been adequately described.

The active substance specification includes relevant tests and the limits for impurities/degradation products have been justified. The analytical methods applied are suitably described and validated.

Stability studies under ICH conditions have been conducted and the data provided are sufficient to confirm the retest period.

II.3 Medicinal Product

Vicks Sinex nasal spray, solution is formulated using excipients described in the current Ph Eur, except for tyloxapol which is controlled according to USP and aloe vera and carvone which are controlled according to acceptable in house specifications. No excipient of human or animal origin is used in the manufacture.

The product development has taken into consideration the physico-chemical characteristics of the active substance, such as stability.

The manufacturing process has been sufficiently described and critical steps identified. Results from the process validation studies confirm that the process is under control and ensure both batch to batch reproducibility and compliance with the product specification.

The tests and limits in the specification are considered appropriate to control the quality of the finished product in relation to its intended purpose.

Stability studies under ICH conditions have been performed and data presented support the shelf life claimed in the SPC, when stored below 25°C.

III. NON-CLINICAL ASPECTS

III.1 Discussion on the non-clinical aspects

The Toxicological and Pharmacological Expert Report written by Dr. Kim J Rich, dated on 28th February 2000, gives an adequate overview of the pharmacodynamics, pharmacokinetics and toxicity of oxymetazoline hydrochloride. No preclinical safety issues have been identified which could obstruct the proposed clinical use of Vicks Sinex.

An environmental risk assessment has not been provided according to the "Guideline on the Environmental Risk Assessment of Medicinal Products of Human Use (EMEA/CHMP/SWP/4447/00)". However, the applicant has submitted a justification. This is acceptable since this application is essentially for a generic product it is reasonable to assume that there will not be an increase in the overall level of the active gaining access to the environment.

IV. CLINICAL ASPECTS

Essential similarity has been demonstrated to the currently marketed Iliadin nasal spray, thus, no new clinical efficacy and safety documentation is demanded. The Expert report, signed by Dr Feldschreiber and co-signed by Dr Pavesi, which has been appended, allows for an overview of the clinical efficacy and safety documentation of Vicks sinex and oxymetazoline. Similar clinical efficacy based on nasal airway resistance (NAR) has been demonstrated compared with Iliadin. Additionally, evaluation of the current low-pH, citrate-buffered Vicks and original phosphate-buffered formulation with higher pH, showed similar safety profiles. No pharmacokinetic studies were performed with Vicks Sinex as it is intended to act locally and the amounts absorbed systemically are small.

Side-effects associated with the use of Vicks sinex are mostly local and include nose and throat soreness or irritiation, rebound congestion, headache, nasal burning, nosebleed, nasal dryness, throat dryness, watery eyes, sneezing, itching and rhinorrhoea. Recently, it has been demonstrated that rebound swelling following oxymethazoline use containing bensalkonchloride occured after 10 days use t.i.d, thus the duration of administration of Vicks sinex has been limited to seven days. Vicks sinex do not significantly modify normal cilial function. Systemic side effects at prescribed doses are rare, but may appear, which is a result of absorption of topical oxymetazoline and subsequent adrenergic stimulation. This is more common in children, thus oxymetazoline should be administered with caution to children. Therefore, Vicks sinex should not be used by patients taking monoamine oxidase inhibitors (MAOIs) or by patients who have taken MAOIs in the previous two weeks. Additionally, Vicks Sinex should not be used in patients with narrow-angle glaucoma. Due to changed anatomy after trans-sphenoidal hypophysectomy, Vicks Sinex should not be used by such patients.

V. OVERALL CONCLUSION, BENEFIT/RISK ASSESSMENT AND RECOMMENDATION

User consultation
The package leaflet has been evaluated via a user consultation study in accordance with the requirements of Articles 59(3) and 61(1) of Directive 2001/83/E, in the previous MRP SE/H/196/01/II/14.
The results show that the package leaflet meets the criteria for readability as set out in the Guideline on the readability of the label and package leaflet of medicinal products for human use.

The risk/benefit ratio is considered positive and Vicks Sinex nasal spray, solution is recommended for approval.

Stability commitment for 10 ml fill volume:
At the moment there is no plan to introduce the 10 ml fill on the market, however Procter & Gamble commits to generate confirmatory stability data (25°/65% RH only) on commercial samples of 10 ml fill volume if the 10 ml fill volume ever will be marketed.

VI. APPROVAL

The Mutual recognition for Vicks Sinex 0.5 mg/ml nasal spray, solution was successfully finalised on 2010-06-16.

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Public Assessment Report – Update

Scope	Procedure number	Product Information affected	Date of start of the procedure	Date of end of procedure	Approval/ non approval	Assessment report attached
						Y/N (version)

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