IRISH MEDICINES BOARD ACTS 1995 AND 2006

MEDICINAL PRODUCTS(CONTROL OF PLACING ON THE MARKET)REGULATIONS,2007

(S.I. No.540 of 2007)

PPA0465/187/004
Case No: 2054664

The Irish Medicines Board in exercise of the powers conferred on it by the above mentioned Regulations hereby grants to

PCO Manufacturing Limited

Unit 10, Ashbourne Business Park, **Rath**, **Ashbourne**, **Co. Meath**, **Ireland**

an authorisation, subject to the provisions of the said Regulations, in respect of the product

Nicorette Mint 4mg Medicated Chewing Gum

The particulars of which are set out in Part I and Part II of the attached Schedule. The authorisation is also subject to the general conditions as may be specified in the said Regulations as listed on the reverse of this document.

This authorisation, unless previously revoked, shall continue in force from **20/10/2008** until **21/09/2011**.

Signed on behalf of the Irish Medicines Board this

_____

A person authorised in that behalf by the said Board.

Part II

Summary of Product Characteristics

1 NAME OF THE MEDICINAL PRODUCT

Nicorette Mint 4mg Medicated Chewing Gum

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each medicated chewing gum contains 4mg nicotine as a resin complex.
For a full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Medicated chewing gum.

Product imported from the UK:
Square, cream coloured, coated chewing gum.

4 CLINICAL PARTICULARS

4.1 Therapeutic Indications

For the treatment of tobacco dependence by relieving nicotine craving and withdrawal symptoms
- thereby facilitating smoking cessation in smokers motivated to quit
- helping smokers temporarily abstain from smoking.

4.2 Posology and method of administration

Nicorette Gum should be chewed slowly.
Smoking cessation
Adults
The strength of gum to be used will depend on the smoking habit of the individual. In general, if the patient smokes fewer than 20 cigarettes a day, Nicorette 2mg Gum is indicated. If more than 20 cigarettes per day are smoked Nicorette 4mg Gum will be needed to meet the withdrawal of the high serum nicotine levels from heavy smoking. The patient should be urged to stop smoking completely when initiating therapy with Nicorette Gum.
The chewing gum should be used whenever there is an urge to smoke according to the “chew and rest” technique described on the pack. After about 30 minutes of such use, the gum will be exhausted. Not more that 15 pieces of the chewing gum may be used each day. Absorption of nicotine is through the buccal mucosa, any nicotine which is swallowed being destroyed by the liver.
Nicorette 2mg Gum may be used for up to 3 months during which time the habits associated with smoking will be lost. For those using the 4mg Gum, the 2mg will be helpful during withdrawal.
If not successful after 12 weeks the patient should be encouraged to make a fresh attempt to stop smoking. This may necessitate full or partial re-treatment with an NRT programme.
Temporary Abstinence
During periods of temporary abstinence, the patient should use Nicorette Gum when required to relieve nicotine cravings and withdrawal symptoms.
The strength of gum to be used will depend on the smoking habits of the individual. In general, if the patient smokes fewer than 20 cigarettes a day, Nicorette 2mg Gum is indicated. If more that 20 per day are smoked Nicorette 4mg Gum is indicated.
Not more than 15 pieces of the gum should be used per day.
A minor reduction in total clearance of nicotine has been demonstrated in healthy elderly patients, however, not justifying adjustment of dosage.

4.3 Contraindications

• Use in non-smokers
• Use in persons hypersensitive to nicotine or any ingredients in Nicorette Gum.

4.4 Special warnings and precautions for use

Nicotine in any dose form is capable of inducing a dependence syndrome after chronic use and is highly toxic after acute use. However, dependence with Nicorette Gum is a rare side-effect and is both less harmful and easier to break than smoking dependence.
Nicorette should be used with caution in patients with cardiovascular disease, severe/moderate hepatic impairment, severe renal impairment, active and duodenal ulcers.
Nicotine, both from NRT and smoking, causes the release of catecholamines from the adrenal medulla. Therefore, Nicorette Gum should be used with caution in patients with hyperthyroidism or pheochromocytoma.
Patients with diabetes mellitus may require lower doses of insulin as a result of smoking cessation.
Smokers who wear dentures may experience difficulties in chewing Nicorette Gum.

4.5 Interaction with other medicinal products and other forms of interaction

Smoking (but not nicotine) is associated with an increase in CYP1A2 activity. After cessation of smoking, reduced clearance of substrates for this enzyme may occur. This may lead to an increase in plasma levels for some medicinal products of potential clinical importance and for products with a narrow therapeutic window, e.g. theophylline, tacrine and clozapine.
The plasma concentration of other drugs metabolised in part by CYP1A2 e.g. imipramine, olanzapin, clonipramine and fluvoxamine may also increase on cessation of smoking, although data to support this are lacking and the possible clinical significance of this effect is unknown.
Limited data indicate the metabolism of flecainide and pentazocine may also be induced by smoking

4.6 Pregnancy and lactation

Pregnancy:
Nicotine passes freely to the foetus and affects its breathing movements and circulation. The effect on the circulation is dose-dependent.
Therefore, the pregnant smoker should always be advised to stop smoking completely without the use of nicotine replacement therapy. The risk of continued smoking may pose a greater hazard to the foetus as compared with the use of nicotine replacement therapy products in a supervised cessation programme. Use of Nicorette Gum should only be initiated after advice from a physician.

Lactation:
Nicotine passes freely into breast milk in quantities that may affect the child even in therapeutic dose. Nicorette Gum should therefore not be used during breast-feeding.

4.7 Effects on ability to drive and use machines

Not applicable

4.8 Undesirable effects

Nicorette Gum may cause adverse reactions similar to those associated with nicotine administered by other means and are dose dependent.

Common >1/100)

CNS: Headache
Gastrointestinal: Nausea, GI discomfort, hiccups, vomiting

Local: Irritation of the mouth or throat, jaw muscle ache

Less common (1/100-1/1000)

Circulation: Palpitations
Skin: Erythema, urticaria

Rare (<1/1000)

Cardiovascular: Reversible atrial fibrillation
Other: Allergic reactions such as angioedema
Symptoms such as dizziness, headache and sleeplessness may be related to withdrawal symptoms associated with smoking cessation. Increased incidence of aphthous ulcer may occur after smoking cessation. The causality is unclear.

4.9 Overdose

Excessive use of nicotine from either NRT and/or smoking might cause symptoms of an overdose. Symptoms of an overdose are those of acute nicotine poisoning and include nausea, salivation, abdominal pain, diarrhoea, sweating, headache, dizziness, disturbed hearing and marked weakness. At high doses, these symptoms may be followed by hypotension, weak and irregular pulse, breathing difficulties, prostration, circulatory collapse and general convulsions. Doses of nicotine that are tolerated by adult smokers during treatment may produce severe symptoms of poisoning in small children and may prove fatal.

Management of overdose:

The administration of nicotine must be stopped immediately and the patient should be treated symptomatically. Tachycardia causing circulatory impairment may require treatment with a β-blocker. Excitation and convulsions may be treated with diazepam. Mechanically assisted ventilation should be instituted if necessary.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

The pharmacological effects of nicotine are well documented. Those resulting from chewing Nicorette Gum are comparatively small. The response at any one time represents a summation of stimulation and depressant actions from direct, reflex and chemical mediator influences on several organs. The main pharmacological actions are central stimulation and/or depression; transient hyperpnoea; peripheral vasoconstriction (usually associated with a rise in systolic pressure); suppression of appetite and stimulation of peristalsis.

5.2 Pharmacokinetic properties

Nicotine administered in chewing gums is readily absorbed from the buccal mucous membranes. Demonstrable blood levels are obtained within 5 – 7 minutes and reach a maximum about 30 minutes after the start of chewing.
Blood levels are roughly proportioned to the amount of nicotine chewed and are unlikely to exceed those obtained from smoking cigarettes.

5.3 Preclinical safety data

There are no findings derived from preclinical testing of relevance to the prescriber in determining the safety of the product which have not been considered in other relevant sections of this Summary of Product Characteristics.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Chewing gum base containing E321 (butylated hydroxytoluene)
Xylitol
Sodium carbonate
Peppermint oil
Polarcrilin
Menthol
Magnesium oxide
Quinoline yellow (yellow colour)
Talc

6.2 Incompatibilities

Not applicable.

6.3 Shelf Life

The shelf-life expiry date of this product is the date shown on the container and outer package of the product on the market in the country of origin.

6.4 Special precautions for storage

Do not store above 25°C.

6.5 Nature and contents of container

Blister (PVC/PVDC/A1) packed strips each containing 15 pieces supplied in packs 105 pieces.

6.6 Special precautions for disposal of a used medicinal product or waste materials derived from such medicinal product and other handling of the product

No special requirements.

7 Parallel Product Authorisation Holder

PCO Manufacturing limited
Unit 10, Ashbourne Business Park
Rath
Ashbourne
Co. Meath

8 Parallel Product Authorisation Number

PPA 465/187/4

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of First Authorisation 22nd September 2006

10 DATE OF REVISION OF THE TEXT

October 2008