Drugfield PHARMACEUTICALS LIMITED

SUMMARY OF PRODUCT CHARACTERISTICS

Coflax® Cough Syrup (Children)

1. NAME OF THE MEDICINAL PRODUCT
Coflax® Cough Syrup (Children)

2. QUALITATIVE AND QUANTITATIVE COMPOSITION
Each 5ml contains Diphenhydramine Hydrochloride 7mg, Ammonium Chloride 65mg, Sodium Citrate 28.5mg and Menthol 0.6mg.

(For a full list of excipients, see section 6.1).

3. PHARMACEUTICAL FORM
Liqud-Syrup

4. Clinical particulars

4.1 Therapeutic indications

For the relief of cough and symptoms associated with coughs and cold such as running nose, catarrh and nasal congestion.

4.2 Posology and method of administration

Children between ages 3months- 1year half teaspoon (2.5ml) every 3-4 hours:
1-5 years 1 teaspoonful (5ml) every 3-4 hours: Children 6-12 years: 2 teaspoonfuls (10ml) 3-4 hours

4.3 Contraindications

Coflax® Cough Syrup is contraindicated in patients with known allergy to any of the active ingredients; cardiac arrhythmias and angle-closure glaucoma.

4.4 Special warnings and precautions for use
Shake well before use.

4.5 Interaction with other medicinal products and other forms of interaction

None Known

4.6 Pregnancy and Lactation
Studies in animals have not shown that adverse effects are caused on the foetus, only with high doses and long term effects.

4.7 Effects on ability to drive and use machines
May cause drowsiness. Do not drive or operate machinery if affected. Avoid alcoholic drink with the preparation.

4.8 Undesirable effects

The preparation is usually well tolerated but occasionally, there may be drowsiness, headache, nausea, vomiting.

4.9 Overdose

No antidote was specified in the literature for the component of gripe mixture. However if these rare cases occur, treatment should be simply support with increased number of feed per day with administration of adsorbents.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamics properties

Diphenhydramine HCl

Diphenhydramine is a potent antihistamine and antitussive with concurrent anticholinergic and sedative properties. Experiments have shown that the antitussive action is discrete from H1-receptor blockage and is located in the brain stem. The sedative mechanism for diphenhydramine is thought to result from antagonism of central histamine and cholinergic receptors. The time course for sedation following a 50mg oral dose was associated with higher plasma concentrations, and was significantly different from place during the first three hours following administration. The pharmacodynamics of sedation was correlated with peak concentrations of drug occurring during absorption and the alpha distribution phase.

Sodium citrate

Sodium citrate has no relevant pharmacodynamic activity other than that caused by its alkalinity (e.g. its gastric acid neutralizing capacity).

Ammonium

Ammonium chloride has an irritant effect on mucous membranes and is considered to have expectorant properties.

Menthol

Menthol has mild local anaesthetic and decongestant properties.

5.2 Pharmacokinetic properties

Diphenhydramine

Absorption

Diphenhydramine is well absorbed from the gastro intestinal tract, reaching peak plasma concentrations from47 -153ng/mL between 1.5 and 4 hours after a single 50 -mg dose in adults. After multiple oral doses of 50mg diphenhydramine HCl four times during each day to four subjects, minimum diphenhydramine plasma concentrations at steady state on the third day ranged from 57 -150ng/mL

Distribution

Diphenhydramine is widely distributed throughout the body, including the central nervous system. The pharmacokinetics of diphenhydramine follows a two-compartment model in which the distribution or alpha phase is apparent over the first eight to ten hours. The volume of distribution adjusted by bodyweight is large for diphenhydramine at 14.0L/kg (38%) for adults, 16.0(32%) for adolescents, and19.5 (28%) for children. Diphenhydramine is highly protein bound, with free drug concentrations of 24.0± 1.9%ng/mL and 14.8± 1.5%ng/mL

measured in Asian and Caucasian plasma. In adults with liver disease, protein binding is lower, although the volume of distribution is comparable to healthy adults.

Metabolism

Diphenhydramine undergoes first-pass metabolism with an absolute bioavailability of 72%± 8%. It is extensively metabolized in the liver by demethylation to N-diethyl diphenhydramine (DMDP), and the extent of DMDP measured in plasma is highly correlated with the clearance of diphenhydramine. DMDP is subsequently demethylated to N, N-didemethyl diphenhydramine. Because only the latter, minor metabolic pathway of N, N-didemethylation appears to be mediated bycytochromeP4502D6, diphenhydramine disposition in humans is not determined by CYP2D6 activity. Rather, clinical pharmacokinetics data suggest that diphenhydramine may be aninhibitorofCYP2D6withoutbeingextensively metabolized by this cytochromeP450isozyme.N,N-didemethyldiphenhydramineis further metabolized by oxidative deamination to diphenylmethoxyacetic acid.

Elimination

Mean beta elimination half-life from 8.5 and 11.5hoursin adults have been reported in studies in which blood is sampled up to 24to 72hours.The half-life is increased to 13.6± 4.2h in the elderly and to15.2± 1.5h in adults with liver cirrhosis. Little un changed drug is excreted in the urine .Mean oral clearances for adults after a 25 – and 50 –mg dose are 1041 and 1029mL/min, respectively, having coefficients of variation of 40% and35%.Oral clearance is about 50% lower in elderly adults. Oral clearance is 691mL/min (32%) for children ages 2 to11years, and is 1251mL/min (43%) for adolescents' ages 12 to 17years.

Sodium citrate

Sodium citrate is systemically absorbed and renally eliminated, causing metabolic alkalosis and urine alkalization in sufficient doses.

Ammonium chloride

Ammonium chloride is effectively absorbed from the gastrointestinal tract. The ammonium ion is converted into urea in the liver; the anion thus liberated into the bloodstream and extracellular fluid causes a metabolic acidosis and decreases the pH of the urine, this is followed by a transient diuresis.

Menthol

Menthol is hydroxylated in the liver by microsomal enzymes to p-methane -3,8 diol. This is then conjugated with glucuronide and excreted both in urine and bile as the glucuronide.

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential, toxicity to reproduction and development.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium Citrate
Citric Acid
Sucrose
Aspartame
Methyl Paraben
Propyl Paraben
Sodium Carboxyl Methyl Cellulose (M.V)

Sodium Hydroxide
Alura Red
Strawberry Essence
Ethanol 96%
Purified Water

6.2 Incompatibilities
None.

6.3 Shell life
36 Months

6.4 Special precautions for storage
Store below 30^0C in tight container protected from light and moisture.

6.5 Nature and contents of container and special equipment for use, administration or implantation
Coflax® Cough Syrup is packaged and presented in 100ml amber bottles with content total volume of 100ml, capped with a metallic screw cap in chip hardboard containers with a graduated spoon enclosed.

6.6 Special precautions for disposal and other handling
Any unused product or waste material should be disposed of in accordance with local requirements.

7. APPLICANT/MANUFACTURER
Drugfield Pharmaceuticals Limited
Lynson Chemical Avenue Km38,
Lagos-Abeokuta Expressway
Sango-Otta, Ogun State, Nigeria
Tel: +2348033513989
Email:Info@drugfieldpharma.com