PROFESSIONAL INFORMATION

SCHEDULING STATUS

S1 (1)

1 NAME OF THE MEDICINE

MUCOTRIN 200 mg effervescent tablet.

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each effervescent tablet contains 200 mg of acetylcysteine.

Sugar: saccharin sodium dehydrate

For full list of excipients, see section 6.1

3 PHARMACEUTICAL FORM

Effervescent tablet.

White to off white round, flat effervescent tablet

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

Acetylcysteine is used as a mucolytic in non-infective secretions of patients with respiratory conditions and in cystic fibrosis.

4.2 Posology and method of administration

Posology

Do not use continuously for more than 14 days without consulting a doctor.

Adults and adolescents from 14 years of age:

Take one tablet two to three times a day (equivalent to 400 to 600 mg N-acetylcysteine/day).

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Paediatric population

Children from 2 to 5 years of age: ½ effervescent tablet 2 to 3 times daily (equivalent to 200 to 300 mg N-acetylcysteine/day)

Children from 6 to 14 years of age: One tablet twice daily (equivalent to 400 mg N-acetylcysteine/day).

Method of administration

Tablet must be dissolved in a glass of water. The solution should be drunk immediately.

4.3 Contraindications

Hypersensitivity to acetylcysteine or to any of the excipients (see section 6.1)

Pregnancy and lactation (see section 4.6).

Children under 2 years of age.

4.4 Special warnings and precautions for use

Acetylcysteine may cause bronchospasms to occur. If bronchospasm does occur, **MUCOTRIN** should be discontinued immediately. Asthmatic patients and elderly patients with respiratory insufficiency should take caution with **MUCOTRIN**.

Patients with a history of peptic ulcer should use **MUCOTRIN** with caution as it may affect the mucous membrane of the gastrointestinal tract.

Toxic epidermal necrolysis and Stevens-Johnson syndrome have been reported with the use of **MUCOTRIN**. Immediate medical advice is required if mucosal or cutaneous alterations occur, and the treatment with **MUCOTRIN** should be discontinued immediately.

At the start of the treatment with acetylcysteine, bronchial secretions may become more fluid and increase in volume. Postural drainage and bronchoaspiration should be performed when a patient is unable to cough up the secretions effectively.

MUCOTRIN should be used with caution in the long-term treatment of patients with histamine intolerance, as acetylcysteine may slightly affect the metabolism of histamine. Symptoms of intolerance like: headache, vasomotor rhinitis and itching may occur.

A mild sulphurous smell is not indicative of product alterations but is a characteristic of the active ingredient contained in this preparation.

Paediatric population

Due to the physiological characteristics of the airways in children under 2 years of age, mucolytic medicines may obstruct the airways as the ability to cough may be limited. (See section 4.3)

4.5 Interaction with other medicines and other forms of interaction

Nitroglycerin's vasodilatory effects may be enhanced by **MUCOTRIN**.

Antitussive medicines should not be used concomitantly with **MUCOTRIN** as congestion of secretions may occur as a result of the impaired cough reflex.

Activated charcoal reduces the absorption of **MUCOTRIN** which will decrease its effect.

If tetracycline hydrochloride (with the exception of doxycycline) and other oral antibiotics are required, it is advised that these should be taken two hours before or after **MUCOTRIN**; due to the fact that in-vitro tests have reported the inactivation of antibiotics if the products are directly mixed with each other.

Simultaneous solution of **MUCOTRIN** with any other medicinal products is not

recommended.

Interactions with laboratory tests

Colorimetric analysis: Acetylcysteine may have an effect on the values of salicylates.

4.6 Fertility, pregnancy and lactation

Pregnancy

Safety and/or efficacy in pregnancy has not been established. **MUCOTRIN** is contraindicated during pregnancy (See section 4.3)

Breastfeeding

It is not known whether acetylcysteine or its metabolites passes into human milk. Safety and /or efficacy in lactation has not been established. Mothers on **MUCOTRIN** should not breastfeed their babies (See section 4.3).

Fertility

There are no indications for possible effects of the use of acetylcysteine on fertility.

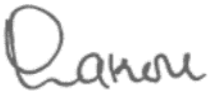
4.7 Effects on ability to drive and use machines

MUCOTRIN should have no effect on the ability to drive.

4.8 Undesirable effects

Tabulated summary of adverse reactions

MedDRA system organ class	**Frequency**	**Adverse reactions**
Immune system disorders	Less frequent	Hypersensitivity, allergic reactions (pruritis, urticarial, exanthema, rash, bronchospasm, angioedema, tachycardia, hypotension and hypertension), anaphylactic shock, anaphylactic reactions, Stevens-Johnson syndrome, toxic epidermal necrolysis (see section 4.4)
Nervous system disorders	Less frequent	Headache
	Frequency unknown	Syncope, convulsions
Eye disorders	Less frequent	Blurred vision
Ear and labyrinth disorders	Less frequent	Tinnitus
Cardiac disorders	Frequency unknown	Cardiac arrest
Vascular disorders	Less frequent	Haemorrhages
	Frequency unknown	Flushing, sweating
Respiratory,	Less	Rhinorrhoea, bronchospasm, dyspnoea

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MedDRA system organ class	**Frequency**	**Adverse reactions**
thoracic and mediastinal disorders	frequent	
	Frequency unknown	Haemoptysis, respiratory arrest
Gastrointestinal disorders	Less frequent	Vomiting, nausea, stomatitis, abdominal pain, diarrhoea, dyspepsia, heartburn
Hepato-biliary disorders	Frequency unknown	Disturbances of liver function
Skin and subcutaneous tissue disorders	Less frequent	Urticaria
	Frequency unknown	Facial oedema
Musculoskeletal and connective tissue disorders	Frequency unknown	arthralgia
General disorders and administration site conditions	Less frequent	Pyrexia, chills
Investigations	Less frequent	Low blood pressure
	Frequency unknown	Acidosis

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Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Health care providers are asked to report any suspected adverse reactions to SAHPRA via the "**6.04 Adverse Drug Reactions Reporting Form**", found online under SAHPRA's publications:

https://www.sahpra.org.za/Publications/Index/8

4.9 Overdose

Overdoses may lead to gastrointestinal effects such as vomiting, diarrhoea and nausea.

Treatment will be symptomatic and supportive.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

N-acetylcysteine is a mucolytic medicine that reduces the viscosity of non-infected bronchial secretions probably by the splitting of disulphide bonds in mucoproteins.

5.2 Pharmacokinetic properties

Absorption

Acetylcysteine is almost completely and rapidly absorbed, following oral administration. The bioavailability of orally administered acetylcysteine is very low (approx. 10%) due to the high first pass effect.

Distribution

The liver, lungs and kidney receive the highest tissue concentration.

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Biotransformation

The liver rapidly metabolises acetylcysteine in the liver to cysteine, which is the pharmacologically active metabolite. It is also metabolised to diacetylcysteine and further mixed disulphides.

Elimination

Renal clearance is approximately around 30% of the total body clearance.

The terminal half-life of total acetylcysteine is 6.25 (4.59-10.6) hours, following oral administration. High doses are excreted by the kidneys as it is largely converted to inactive metabolites like inorganic sulfate.

Linearity/non-linearity

The pharmacokinetics of acetylcysteine is dose proportional in the dose range of 200-3 200 mg/m^2 for C_{max} and AUC.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Maltodextrin

Citric acid anhydrous

Sodium hydrogen carbonate

Saccharin sodium dihydrate

Orange Flavour

Leucine

6.2 Incompatibilities

Acetylcysteine can react with metal (e.g. iron, nickel, copper) and rubber. Use of glass and/or plastic delivery systems is recommended when administering via

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nasointestinal or nasogastric tube. Do not mix acetylcysteine and antibiotics prior to administration.

6.3 Shelf life

3 years

6.4 Special precautions for storage

Considering that an effervescent product is sensitive to moisture the tube should be closed tightly and not stored near moisture.

6.5 Nature and contents of container

20 tablets in a polypropylene tube closed with a polyethylene stoppers equipped with silica gel as drying agent.

6.6 Special precautions for disposal

No special requirements. Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7 HOLDER OF CERTIFICATE OF REGISTRATION

Trinity Pharma

106 16th Road

Midrand

1686

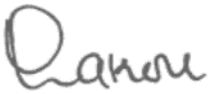
8 REGISTRATION NUMBER(S)

Tsiane Makou:  dated: 15 June 2021

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

10 DATE OF REVISION OF THE TEXT

30 April 2021

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