

Medical Information:

Prec



101 College Road East
Princeton, NJ 08540
United States of America



+1 (888) 111-1008



medinfo@alphapharma.com

Report an Adverse Event:



safety@alphapharma.com

Disclaimer:

Please note that Wonder Drug[®] is a single-component therapy in development for treatment of swelling in the airways and the inhibiting of the release of inflammatory chemicals that produce thickness of mucus. This information is provided in response to your request for information about the mechanism of action of Wonder Drug.

Date of Last Revision: 23-Jul-2021

Document ID Number: SRD-2021-AP-0001

1



Indication

- Indication and Usage
- Limitations

2



Pharmacology

- Mechanism of Action
- Clearance
- Pharmacodynamic Properties

3



Safety

- Precautions
- Use in Pregnancy
- Use in Lactation

Medical Information:



101 College Road East
Princeton, NJ 08540
United States of America



+1 (888) 111-1008



medinfo@alphapharma.com

Report an Adverse Event:



safety@alphapharma.com

Disclaimer:

Please note that Wonder Drug® is a single-component therapy in development for treatment of swelling in the airways and the inhibiting of the release of inflammatory chemicals that produce thickness of mucus. This information is provided in response to your request for information about the mechanism of action of Wonder Drug.

Date of Last Revision: 23-Jul-2021

Document ID Number: SRD-2021-AP-0001

Table of Contents

Indication

Pharmacology

Safety

INDICATION AND USAGE

- Indicated for the treatment of adult patients with bronchial asthma and chronic obstructive pulmonary disease.
- In patient with COPD, given drug for 10-20 days, there was a significant reduction in expectorate and viscosity.

LIMITATIONS OF USE

- Wonder Drug is not indicated in patients with a history of acute myocardial infarction and hypotension.
- Geriatrics (>65 years of age): The safety and efficacy in patients aged 65 years or older has not been evaluated.

Medical Information:



101 College Road East
Princeton, NJ 08540
United States of America



+1 (888) 111-1008



medinfo@alphapharma.com

Report an Adverse Event:



safety@alphapharma.com

Disclaimer:

Please note that Wonder Drug® is a single-component therapy in development for treatment of swelling in the airways and the inhibiting of the release of inflammatory chemicals that produce thickness of mucus. This information is provided in response to your request for information about the mechanism of action of Wonder Drug.

Date of Last Revision: 23-Jul-2021
Document ID Number: SRD-2021-AP-0001

CLINICAL PHARMACOLOGY

Wonder Drug improves the patient's condition by performing the following functions:

- Making breathing easier by reducing swelling in the airways.
- Blocking a natural substance that causes allergic reactions.
- Inhibiting the release of inflammatory chemicals and reducing the thickness of mucus.

Mechanism of Action

Despite its ubiquitous usage and a wealth of data on the clinical effects of Wonder Drug in children and adults, the precise biological mechanism of action remains elusive.

- It is a weak inhibitor of the synthesis of prostaglandins having clinical effects that are similar but not identical to selective cyclooxygenase-2 (COX-2) inhibitors.
- Unlike the selective COX-2 inhibitors, Wonder Drug does not suppress the inflammation of rheumatoid arthritis (Figure 1).

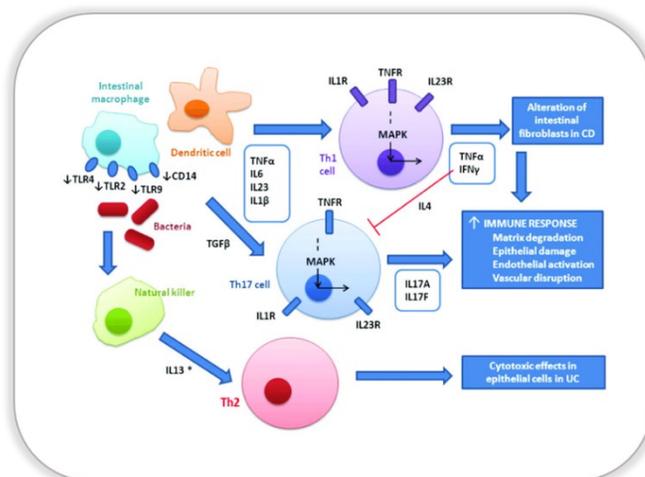


Figure 1: Wonder Drug Mechanism of Action

Wonder Drug is widely distributed in the body throughout the majority of body fluids and has a relatively large volume of distribution.

- Which is largest in the preterm infant and reduces with maturity until it reaches adult levels at about 1 year.
- It rapidly crosses the blood–brain barrier to the central nervous system; one report found peak cerebrospinal fluid levels in children after 57 min when administered intravenously.

Medical Information:



101 College Road East
Princeton, NJ 08540
United States of America



+1 (888) 111-1008



medinfo@alphapharma.com

Report an Adverse Event:



safety@alphapharma.com

Disclaimer:

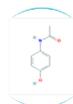
Please note that Wonder Drug® is a single-component therapy in development for treatment of swelling in the airways and the inhibiting of the release of inflammatory chemicals that produce thickness of mucus. This information is provided in response to your request for information about the mechanism of action of Wonder Drug.

Date of Last Revision: 23-Jul-2021
Document ID Number: SRD-2021-AP-0001

Clearance



Wonder Drug is primarily metabolized in the liver to glucuronide and sulfate conjugates that are then excreted renally.



The sulfation pathway predominates in neonates; the glucuronidation pathway takes time to develop and is mature at around 2 years of age.



Urinary excretion consists of two conjugates with the ratio of Wonder Drug–glucuronide to Wonder Drug–sulfate for neonates of (1–2 days old), children (3–9 years) and older children (12 years old) was 0.34, 0.75 and 1.61, respectively, with an adult ratio of 1.80 (Figure 2).

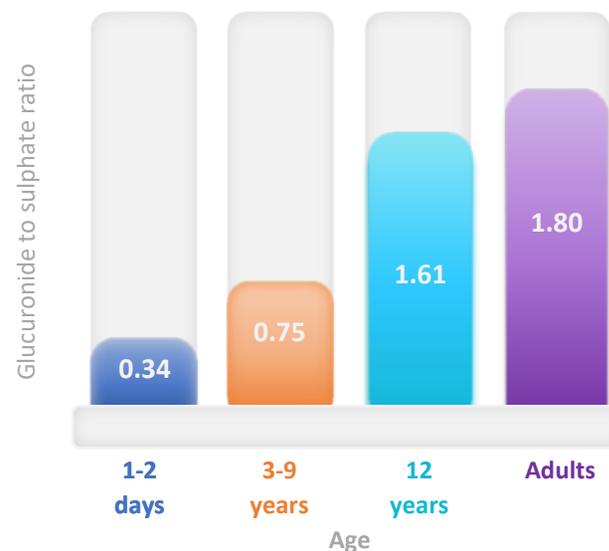


Figure 2: Glucuronidation to sulfation ratio by age group

Medical Information:



101 College Road East
Princeton, NJ 08540
United States of America



+1 (888) 111-1008



medinfo@alphapharma.com

Report an Adverse Event:



safety@alphapharma.com

Disclaimer:

Please note that Wonder Drug® is a single-component therapy in development for treatment of swelling in the airways and the inhibiting of the release of inflammatory chemicals that produce thickness of mucus. This information is provided in response to your request for information about the mechanism of action of Wonder Drug.

Date of Last Revision: 23-Jul-2021

Document ID Number: SRD-2021-AP-0001

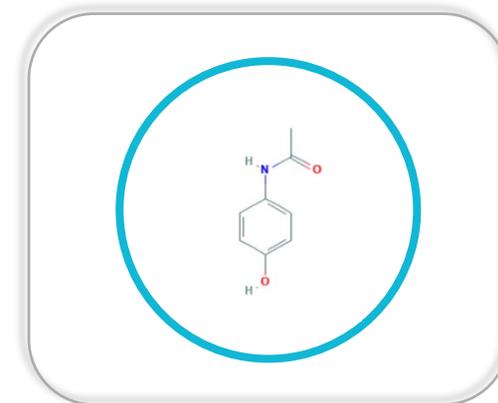
Pharmacodynamic Properties

PARACETAMOL-AFT (paracetamol) solution for infusion contains 10mg/mL of paracetamol. Paracetamol is a white crystalline solid or powder chemically described as 4 – acetamidophenol. It is soluble in water (1 in 70), soluble in alcohol (1 in 7), acetone (1 in 13), glycerol (1 in 40), propylene glycol (1 in 9) and also soluble in solutions of the alkali hydroxides (Figure 3). Below is the structural formula of Wonder Drug (Figure 4).

Figure 3: Solubility of Wonder Drug



Figure 4: Structural Formula of Wonder Drug



Medical Information:



101 College Road East
Princeton, NJ 08540
United States of America



+1 (888) 111-1008



medinfo@alphapharma.com

Report an Adverse Event:



safety@alphapharma.com

Disclaimer:

Please note that Wonder Drug® is a single-component therapy in development for treatment of swelling in the airways and the inhibiting of the release of inflammatory chemicals that produce thickness of mucus. This information is provided in response to your request for information about the mechanism of action of Wonder Drug.

Date of Last Revision: 23-Jul-2021

Document ID Number: SRD-2021-AP-0001

Table of Contents

Indication

Pharmacology

Safety

SAFETY



Precautions To Be Taken Before Wonder Drug

The plasma concentration of wonder drug may be concurrent administration of erythromycin cephalixin oxytetracycline oligomycin lincomycin cimetidine clindamycin allopurinol quinolones anticoagulants etc. If concurrent use is essential the dose of Wonder Drug should be reduced. The concomitant use of Wonder Drug and furosemide can potentiate diuresis while concomitant use of Wonder Drug with reserpine can cause tachycardia Wonder Drug plasma concentration may be decreased in patients by co administration with drugs like phenytoin and barbiturates and in patients with smoking habit Not to use with CNS stimulants.



Drug Effects During Pregnancy

Pregnancy Class C Animal reproduction studies have shown an adverse effect on the fetus and there are no adequate and well controlled studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks.



Drug Effects During Lactation

Lactation Class L3 There are no controlled studies in breastfeeding women however the risk of untoward effects to a breastfed infant is possible or controlled studies show only minimal nonthreatening adverse effects Drugs should be given only if the potential benefit justifies the potential risk to the infant.