# MECLIZINE HYDROCHLORIDE- meclizine hydrochloride tablet Unit Dose Services

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# Meclizine Hydrochloride Tablets USP, 12.5 mg and 25 mg $Rx\ Only$

## **DESCRIPTION**

Chemically, meclizine hydrochloride is  $1-(p-\text{chloro}-\alpha-\text{phenylbenzyl})-4-(m-\text{methylbenzyl})$  piperazine dihydrochloride monohydrate.

## C<sub>25</sub>H<sub>27</sub>CIN<sub>2</sub>·2HCl·H<sub>2</sub>0 M.W. 481.89

Meclizine hydrochloride tablets, USP are available in two different strengths, 12.5 mg and 25 mg. Inactive ingredients: microcrystalline cellulose, lactose monohydrate, croscarmellose sodium and magnesium stearate. The 12.5 mg tablet also contains FD&C Blue #1 Aluminum Lake.

## CLINICAL PHARMACOLOGY

Meclizine hydrochloride is an antihistamine that shows marked protective activity against nebulized histamine and lethal doses of intravenously injected histamine in guinea pigs. It has a marked effect in blocking the vasodepressor response to histamine, but only a slight blocking action against acetylcholine. Its activity is relatively weak in inhibiting the spasmogenic action of histamine on isolated guinea pig ileum.

## **Pharmacokinetics**

The available pharmacokinetic information for meclizine following oral administration has been summarized from published literature.

## **Absorption**

Meclizine is absorbed after oral administration with maximum plasma concentrations reaching at a median  $T_{max}$  value of 3 hours post-dose (range: 1.5 to 6 hours) for the tablet dosage form.

#### Distribution

Drug distribution characteristics for meclizine in humans are unknown.

## **Metabolism**

The metabolic fate of meclizine in humans is unknown. In an in vitro metabolic study using human hepatic microsome and recombinant CYP enzyme, CYP 2D6 was found to be the dominant enzyme for

metabolism of meclizine.

The genetic polymorphism of CYP2D6 that results in extensive-, poor-, intermediate- and ultrarapid metabolizer phenotypes could contribute to large inter-individual variability in meclizine exposure.

#### **Elimination**

Meclizine has a plasma elimination half-life of about 5-6 hours in humans.

#### INDICATIONS

Based on a review of this drug by the National Academy of Sciences - National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting, and dizziness associated with motion sickness.

Final classification of the less than effective indications requires further investigation.

## **CONTRAINDICATIONS**

Meclizine hydrochloride is contraindicated in individuals who have shown a previous hypersensitivity to it.

#### WARNINGS

Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Patients should avoid alcoholic beverages while taking this drug.

Due to its potential anticholinergic action, this drug should be used with caution in patients with asthma, glaucoma, or enlargement of the prostate gland.

## Usage in Children

Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in children under 12 years of age.

## **Usage in Pregnancy**

Pregnancy Category B. Reproduction studies in rats have shown cleft palates at 25-50 times the human dose. Epidemiological studies in pregnant women, however, do not indicate that meclizine increases the risk of abnormalities when administered during pregnancy. Despite the animal findings, it would appear that the possibility of fetal harm is remote. Nevertheless, meclizine, or any other medication, should be used during pregnancy only if clearly necessary.

## **PRECAUTIONS**

## **Nursing Mothers**

It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when meclizine is administered to a nursing woman.

## **Hepatic Impairment**

The effect of hepatic impairment on the pharmacokinetics of meclizine has not been evaluated. As meclizine undergoes metabolism, hepatic impairment may result in increased systemic exposure of the

drug. Treatment with meclizine should be administered with caution in patients with hepatic impairment.

## **Renal Impairment**

The effect of renal impairment on the pharmacokinetics of meclizine has not been evaluated. Due to a potential drug/metabolite accumulation, meclizine should be administered with caution in patients with renal impairment and in the elderly as renal function generally declines with age.

## **Drug Interactions**

There may be increased CNS depression when meclizine is administered concurrently with other CNS depressants, including alcohol, tranquilizers, and sedatives. (see WARNINGS)

Based on in-vitro evaluation, meclizine is metabolized by CYP2D6. Therefore there is a possibility for a drug interaction between meclizine and CYP2D6 inhibitors.

## ADVERSE REACTIONS

Anaphylactoid reaction, drowsiness, dry mouth, headache, fatigue, vomiting and, on rare occasions, blurred vision have been reported.

#### DOSAGE AND ADMINISTRATION

#### **Motion Sickness**

The initial dose of 25 to 50 mg of meclizine hydrochloride should be taken one hour prior to embarkation for protection against motion sickness. Thereafter, the dose may be repeated every 24 hours for the duration of the journey.

#### **HOW SUPPLIED**

Product: 50436-0014

NDC: 50436-0014-1 30 TABLET in a BOTTLE NDC: 50436-0014-3 90 TABLET in a BOTTLE

#### MECLIZINE HYDROCHLORIDE TABLET

NDC: 50436-0014-1 MECLIZINE HYDROCHLORIDE

25 MG / 30 TAB
Each tablet contains: Meclizine HCL USP 25mg
Dispense contents in a tight, light-resistant
container as defined in the USP, with a
child-resistant closure.

Keep tightly closed.
For institutional use only.
WARNING: KEEP OUT OF
REACH OF CHILDREN. STORE AT
20-25 ° C (68-77 ° F) CONTROLLED
ROOM TEMPERATURE. SEE PACKAGE
INSERT FOR DOSAGE INFORMATION.

MFG BY:

EPIC PHARMA, LLC LAURELTON, NY 11413

MFG NDC: 42806-014-10 MFG LOT: XXXXXX

LOT: XXXXX EXP: XX/XX/XX Pkg by: Unit Dose Services, LLC Dania, FL 33004

Rev.1 RX ONLY

NDC: 50436-0014-1 DRUG: MECLIZINE HYDROCHLORIDE LOT: XXXXX EXP:

YDROCHLORIDE #ERROR LOT: XXXXX EXP: XX/XX/XX NDC: 50436-0014-1

DRUG: MECLIZINE HYDROCHLORIDE

DROCHLORIDE #ERROR LOT: XXXXX EXP: XX/XX/XX

NDC: 50436-0014-1 DRUG: MECLIZINE IYDROCHLORIDE

HYDROCHLORIDE #ERROR LOT: XXXXXX EXP: XX/XX/XX

NDC: 50436-0014-1 DRUG: MECLIZINE

HYDROCHLORIDE #ERROR LOT: XXXXX EXP: XX/XX/XX meclizine hydrochloride tablet

Product Information				
Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:50436-0014(NDC:42806-014)	
Route of Administration	ORAL			

## Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
MECLIZINE HYDDOCHI ODIDE (LINII: HDD7W44CIO) (MECLIZINE LINII: 21 ETO 9 4570	MECLIZINE UVDDOCULODIDE	25 mg

MECLIZINE HYDRO CHLO RIDE (UNII: HDP7W44CIO) (MECLIZINE - UNII:3L5TQ84570) | MECLIZINE HYDRO CHLO RIDE | 25 mg

Inactive Ingredients		
Ingredient Name	Strength	
MICRO CRYSTALLINE CELLULO SE (UNII: OP1R32D61U)		
LACTOSE MONOHYDRATE (UNII: EWQ57Q8I5X)		
CROSCARMELLOSE SODIUM (UNII: M28 OL1HH48)		
MAGNESIUM STEARATE (UNII: 70097M6I30)		

Product Characteristics			
Color	WHITE	Score	no score
Shape	OVAL	Size	13mm
Flavor		Imprint Code	E14
Contains			

F	Packaging			
#	t Item Code	Package Description	Marketing Start Date	<b>Marketing End Date</b>
1	NDC:50436-0014-1	30 in 1 BOTTLE; Type 0: Not a Combination Product	10/12/2017	
2	NDC:50436-0014-3	90 in 1 BOTTLE; Type 0: Not a Combination Product	10/12/2017	

Marketing Information			
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA200294	04/30/2012	

# Labeler - Unit Dose Services (831995316)

Establishment			
Name	Address	ID/FEI	Business Operations
Unit Dose Services		831995316	REPACK(50436-0014), RELABEL(50436-0014)

Revised: 10/2017 Unit Dose Services