# ATROPINE SULFATE- atropine sulfate injection, solution Hospira, Inc.

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HIGHLIGHTS OF PRESCRIBING INFORMATION These highlights do not include all the information needed to use ATROPINE SULFATE INJECTION safely and effectively. See full prescribing information for ATROPINE SULFATE INJECTION.
ATROPINE SULFATE INJECTION, for intravenous use Initial U.S. Approval: 1960
INDICATIONS AND USAGE
Atropine is a muscarinic antagonist indicated for temporary blockade of severe or life threatening muscarinic effects. (1)
DOSAGE AND ADMINISTRATION
<ul> <li>For intravenous administration (2.1)</li> <li>Titrate according to heart rate, PR interval, blood pressure and symptoms (2.1)</li> <li>Adult dosage</li> </ul>
<ul> <li>Antisialagogue or for antivagal effects: Initial single dose of 0.5 mg to 1 mg (2.2)</li> <li>Antidote for organophosphorus or muscarinic mushroom poisoning: Initial single dose of 2 mg to 3 mg, repeated every 20-30 minutes (2.2)</li> </ul>
- Bradyasystolic cardiac arrest: 1 mg dose, repeated every 3-5 minutes if asystole persists (2.2)
• Patients with Coronary Artery Disease: Limit the total dose to 0.03 mg/kg to 0.04 mg/kg (2.4)
DOSAGE FORMS AND STRENGTHS
<ul> <li>0.05 mg/mL injection in Ansyr<sup>™</sup> Plastic Syringe (3)</li> <li>0.1 mg/mL injection in Ansyr<sup>™</sup> Plastic Syringe (3)</li> <li>0.1 mg/mL injection in LifeShield<sup>™</sup> Abboject<sup>™</sup> Glass Syringe (3)</li> </ul>
CONTRAINDICATIONS
None. (4)
WARNINGS AND PRECAUTIONS
<ul> <li>Tachycardia (5.1)</li> <li>Glaucoma (5.2)</li> <li>Pyloric obstruction (5.3)</li> <li>Worsening urinary retention (5.4)</li> <li>Viscid bronchial plugs (5.5)</li> </ul>
ADVERSE REACTIONS
Most adverse reactions are directly related to atropine's antimuscarinic action. Dryness of the mouth, blurred vision, photophobia and tachycardia commonly occur with chronic administration of therapeutic doses. (6)
To report SUSPECTED ADVERSE REACTIONS, contact Hospira, Inc. at 1-800-441-4100, or FDA at 1-800-FDA-1088 or <i>www.fda.gov/medwatch</i> . DRUG INTERACTIONS
<i>Mexiletine:</i> Decreases rate of mexiletine absorption. (7.1)
Revised: 6/2020

## **1 INDICATIONS AND USAGE**

#### 2 DOSAGE AND ADMINISTRATION

- 2.1 General Administration
- 2.2 Adult Dosage
- 2.3 Pediatric Dosage
- 2.4 Dosing in Patients with Coronary Artery Disease

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#### **4 CONTRAINDICATIONS**

#### **5 WARNINGS AND PRECAUTIONS**

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- 5.2 Acute Glaucoma
- 5.3 Pyloric Obstruction
- 5.4 Complete Urinary Retention
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- 12.3 Pharmacokinetics

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\* Sections or subsections omitted from the full prescribing information are not listed.

## FULL PRESCRIBING INFORMATION

## **1 INDICATIONS AND USAGE**

Atropine Sulfate Injection, USP, is indicated for temporary blockade of severe or life threatening muscarinic effects, e.g., as an antisialagogue, an antivagal agent, an antidote for organophosphorus or muscarinic mushroom poisoning, and to treat bradyasystolic cardiac arrest.

# 2 DOSAGE AND ADMINISTRATION

#### 2.1 General Administration

Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit. Do not administer unless solution is clear and seal is intact. Each syringe is intended for single dose only. Discard unused portion.

For intravenous administration.

Titrate based on heart rate, PR interval, blood pressure and symptoms.

# 2.2 Adult Dosage

Use	Dose (adults)	Repeat
Antisialagogue or other antivagal	0.5 to 1 mg	1-2 hours
Organophosphorus or muscarinic mushroom poisoning	2 to 3 mg	20-30 minutes
Bradyasystolic cardiac arrest	1 mg	3-5 minutes; 3 mg maximum total dose

## Table 1: Recommended Dosage

## 2.3 Pediatric Dosage

Dosing in pediatric populations has not been well studied. Usual initial dose is 0.01 to 0.03 mg/kg.

# 2.4 Dosing in Patients with Coronary Artery Disease

Limit the total dose of atropine sulfate to 0.03 mg/kg to 0.04 mg/kg [see Warnings and Precautions (5.1)].

# **3 DOSAGE FORMS AND STRENGTHS**

Injection: 0.05 mg/mL and 0.1 mg/mL in Ansyr<sup>™</sup> Plastic Syringes.

Injection: 0.1 mg/mL in LifeShield<sup>™</sup> Abboject<sup>™</sup> Glass Syringes.

# **4 CONTRAINDICATIONS**

None.

# **5 WARNINGS AND PRECAUTIONS**

## 5.1 Tachycardia

When the recurrent use of atropine is essential in patients with coronary artery disease, the total dose should be restricted to 2 to 3 mg (maximum 0.03 to 0.04 mg/kg) to avoid the detrimental effects of atropine-induced tachycardia on myocardial oxygen demand.

## 5.2 Acute Glaucoma

Atropine may precipitate acute glaucoma.

## **5.3 Pyloric Obstruction**

Atropine may convert partial organic pyloric stenosis into complete obstruction.

## 5.4 Complete Urinary Retention

Atropine may lead to complete urinary retention in patients with prostatic hypertrophy.

## 5.5 Viscid Plugs

Atropine may cause inspissation of bronchial secretions and formation of viscid plugs in patients with chronic lung disease.

# **6 ADVERSE REACTIONS**

The following adverse reactions have been identified during post-approval use of atropine sulfate. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

Most of the side effects of atropine are directly related to its antimuscarinic action. Dryness of the mouth, blurred vision, photophobia and tachycardia commonly occur. Anhidrosis can produce heat intolerance. Constipation and difficulty in micturition may occur in elderly patients. Occasional hypersensitivity reactions have been observed, especially skin rashes which in some instances progressed to exfoliation.

# **7 DRUG INTERACTIONS**

## 7.1 Mexiletine

Atropine Sulfate Injection decreased the rate of mexiletine absorption without altering the relative oral bioavailability; this delay in mexiletine absorption was reversed by the combination of atropine and intravenous metoclopramide during pretreatment for anesthesia.

# **8 USE IN SPECIFIC POPULATIONS**

## 8.1 Pregnancy

Animal reproduction studies have not been conducted with atropine. It also is not known whether atropine can cause fetal harm when given to a pregnant woman or can affect reproduction capacity.

# 8.3 Nursing Mothers

Trace amounts of atropine was found in breast milk. The clinical impact of this is not known.

#### 8.4 Pediatric Use

Recommendations for use in pediatric patients are not based on clinical trials.

#### 8.5 Geriatric Use

An evaluation of current literature revealed no clinical experience identifying differences in response between elderly and younger patients. In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.

## **10 OVERDOSAGE**

Excessive dosing may cause palpitation, dilated pupils, difficulty in swallowing, hot dry skin, thirst, dizziness, restlessness, tremor, fatigue and ataxia. Toxic doses lead to restlessness and excitement, hallucinations, delirium and coma. Depression and circulatory collapse occur only with severe intoxication. In such cases, blood pressure declines and death due to respiratory failure may ensue following paralysis and coma.

The fatal adult dose of atropine is not known. In pediatric populations, 10 mg or less may be fatal.

In the event of toxic overdosage, a short acting barbiturate or diazepam may be given as needed to control marked excitement and convulsions. Large doses for sedation should be avoided because central depressant action may coincide with the depression occurring late in atropine poisoning. Central stimulants are not recommended.

Physostigmine, given as an atropine antidote by slow intravenous injection of 1 to 4 mg (0.5 to 1 mg in pediatric populations), rapidly abolishes delirium and coma caused by large doses of atropine. Since physostigmine is rapidly destroyed, the patient may again lapse into coma after one to two hours, and repeated doses may be required.

Artificial respiration with oxygen may be necessary. Ice bags and alcohol sponges help to reduce fever, especially in pediatric populations.

Atropine is not removed by dialysis.

# **11 DESCRIPTION**

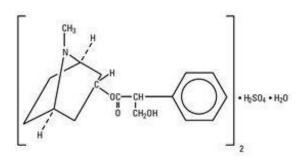
Atropine Sulfate Injection, USP is a sterile, nonpyrogenic isotonic solution of atropine sulfate monohydrate in water for injection with sodium chloride sufficient to render the solution isotonic. It is administered parenterally by intravenous injection.

Each milliliter (mL) contains 0.1 mg (adult strength) or 0.05 mg (pediatric strength) of atropine sulfate monohydrate equivalent to 0.083 mg (adult strength) or 0.042 mg (pediatric strength) of atropine, and sodium chloride, 9 mg. May contain sodium hydroxide and/or sulfuric acid for pH adjustment 0.308 mOsmol/mL (calc.). pH 3.0 to 6.5.

Sodium chloride added to render the solution isotonic for injection of the active ingredient is present in amounts insufficient to affect serum electrolyte balance of sodium (Na<sup>+</sup>) and chloride (Cl<sup>-</sup>) ions.

The solution contains no bacteriostat, antimicrobial agent or added buffer (except for pH adjustment) and is intended for use only as a single-dose injection. When smaller doses are required the unused portion should be discarded.

Atropine Sulfate, USP is chemically designated  $1\alpha$  H,  $5\alpha$  H-Tropan-3- $\alpha$ -ol (±)-tropate (ester), sulfate (2:1) (salt) monohydrate,  $(C_{17}H_{23}NO_3)_2$  H<sub>2</sub>SO<sub>4</sub> H<sub>2</sub>O, colorless crystals or white crystalline powder very soluble in water. It has the following structural formula:



Atropine, a naturally occurring belladonna alkaloid, is a racemic mixture of equal parts of d- and 1-hyocyamine, whose activity is due almost entirely to the levo isomer of the drug.

Sodium Chloride, USP is chemically designated NaCl, a white crystalline powder freely soluble in water.

The Ansyr<sup>™</sup> syringe is molded from a specially formulated polypropylene. Water permeates from inside the container at an extremely slow rate which will have an insignificant effect on solution concentration over the expected shelf life. Solutions in contact with the plastic container may leach out certain chemical components from the plastic in very small amounts; however, biological testing was supportive of the safety of the syringe material.

# **12 CLINICAL PHARMACOLOGY**

# 12.1 Mechanism of Action

Atropine is an antimuscarinic agent since it antagonizes the muscarine-like actions of acetylcholine and other choline esters.

Atropine inhibits the muscarinic actions of acetylcholine on structures innervated by postganglionic cholinergic nerves, and on smooth muscles which respond to endogenous acetylcholine but are not so innervated. As with other antimuscarinic agents, the major action of atropine is a competitive or surmountable antagonism which can be overcome by increasing the concentration of acetylcholine at receptor sites of the effector organ (e.g., by using anticholinesterase agents which inhibit the enzymatic destruction of acetylcholine). The receptors antagonized by atropine are the peripheral structures that are stimulated or inhibited by muscarine (i.e., exocrine glands and smooth and cardiac muscle). Responses to postganglionic cholinergic nerve stimulation also may be inhibited by atropine but this occurs less readily than with responses to injected (exogenous) choline esters.

## **12.2 Pharmacodynamics**

Atropine-induced parasympathetic inhibition may be preceded by a transient phase of stimulation, especially on the heart where small doses first slow the rate before characteristic tachycardia develops due to paralysis of vagal control. Atropine exerts a more potent and prolonged effect on heart, intestine and bronchial muscle than scopolamine, but its action on the iris, ciliary body and certain secretory glands is weaker than that of scopolamine. Unlike the latter, atropine in clinical doses does not depress the central nervous system but may stimulate the medulla and higher cerebral centers. Although mild vagal excitation occurs, the increased respiratory rate and (sometimes) increased depth of respiration produced by atropine are more probably the result of bronchiolar dilatation. Accordingly, atropine is an unreliable respiratory stimulant and large or repeated doses may depress respiration.

Adequate doses of atropine abolish various types of reflex vagal cardiac slowing or asystole. The drug also prevents or abolishes bradycardia or asystole produced by injection of choline esters, anticholinesterase agents or other parasympathomimetic drugs, and cardiac arrest produced by stimulation of the vagus. Atropine also may lessen the degree of partial heart block when vagal activity is an etiologic factor. In some patients with complete heart block, the idioventricular rate may be accelerated by atropine; in others, the rate is stabilized. Occasionally a large dose may cause atrioventricular (A-V) block and nodal rhythm.

Atropine Sulfate Injection, USP in clinical doses counteracts the peripheral dilatation and abrupt decrease in blood pressure produced by choline esters. However, when given by itself, atropine does not exert a striking or uniform effect on blood vessels or blood pressure. Systemic doses slightly raise systolic and lower diastolic pressures and can produce significant postural hypotension. Such doses also slightly increase cardiac output and decrease central venous pressure. Occasionally, therapeutic doses dilate cutaneous blood vessels, particularly in the "blush" area (atropine flush), and may cause atropine "fever" due to suppression of sweat gland activity in infants and small children.

The effects of intravenous atropine on heart rate (maximum heart rate) and saliva flow (minimum flow) after intravenous administration (rapid, constant infusion over 3 min.) are delayed by 7 to 8 minutes after drug administration and both effects are non-linearly related to the amount of drug in the peripheral compartment. Changes in plasma atropine levels following intramuscular administration (0.5 to 4 mg doses) and heart rate are closely overlapped but the time course of the changes in atropine levels and behavioral impairment indicates that pharmacokinetics is not the primary rate-limiting mechanism for the central nervous system effect of atropine.

# 12.3 Pharmacokinetics

Atropine disappears rapidly from the blood following injection and is distributed throughout the body. Exercise, both prior to and immediately following intramuscular administration of atropine, significantly increases the absorption of atropine due to increased perfusion in the muscle and significantly decreases the clearance of atropine. The pharmacokinetics of atropine is nonlinear after intravenous administration of 0.5 to 4 mg. Atropine's plasma protein binding is about 44% and saturable in the 2-20 µg/mL concentration range. Atropine readily crosses the placental barrier and enters the fetal circulation, but is not found in amniotic fluid. Much of the drug is destroyed by enzymatic hydrolysis, particularly in the liver; from 13 to 50% is excreted unchanged in

the urine. Traces are found in various secretions, including milk. The major metabolites of atropine are noratropine, atropin-n-oxide, tropine, and tropic acid. The metabolism of atropine is inhibited by organophosphate pesticides.

## **Specific Populations**

The elimination half-life of atropine is more than doubled in children under two years and the elderly (>65 years old) compared to other age groups. There is no gender effect on the pharmacokinetics and pharmacodynamics (heart rate changes) of atropine.

# **13 NONCLINICAL TOXICOLOGY**

## 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Studies have not been performed to evaluate the carcinogenic or mutagenic potential of atropine or its potential to affect fertility adversely.

## **16 HOW SUPPLIED/STORAGE AND HANDLING**

Atropine Sulfate Injection, USP is supplied in single-dose syringes as follows:

Syringes	Concentration (mg/mL)	Fill Volume	Total Atropine Content	NDC# (Unit of Sale)
Ansyr™ Plastic Syringe	0.1 mg/mL	10 mL	1 mg	0409-1630-10 (Bundle of 10)
Ansyr™ Plastic Syringe	0.05 mg/mL	5 mL	0.25 mg	0409-9630-05 (Bundle of 10)
LifeShield™ Abboject™ Glass Syringe	0.1 mg/mL	5 mL	0.5 mg	0409-4910-34 (Bundle of 10)
LifeShield™ Abboject™ Glass Syringe	0.1 mg/mL	10 mL	1 mg	0409-4911-34 (Bundle of 10)

Store at 20°C to 25°C (68°F to 77°F); excursions permitted between 15°C and 30°C (59°F and 86°F). [See USP Controlled Room Temperature.]

Distributed by Hospira, Inc., Lake Forest, IL 60045 USA



Abboject<sup>™</sup> is a trademark of the Abbott group of companies.

LifeShield<sup>™</sup> is the trademark of ICU Medical, Inc. and is used under license.

LAB-1041-4.0

## PRINCIPAL DISPLAY PANEL - 10 mL Syringe Label

## Atropine Sulfate 1 mg/10 mL (0.1 mg/mL)

10 mL Single-Dose Syringe

NDC 0409-1630-15 Rx only

Atropine Sulfate Injection, USP 1 mg/10 mL (0.1 mg/mL)

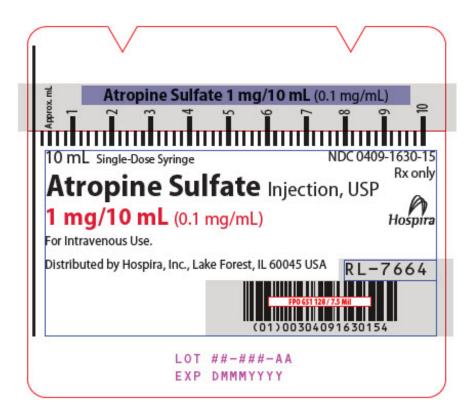
## Hospira

For Intravenous Use.

Distributed by Hospira, Inc., Lake Forest, IL 60045 USA

# RL-7664

LOT ##-###-AA EXP DMMMYYYY



# **PRINCIPAL DISPLAY PANEL - 10 mL Syringe Carton**

NDC 0409-1630-15 Rx only

10 mL

Atropine Sulfate Injection, USP

1 mg/10 mL (0.1 mg/mL)

For Intravenous Use

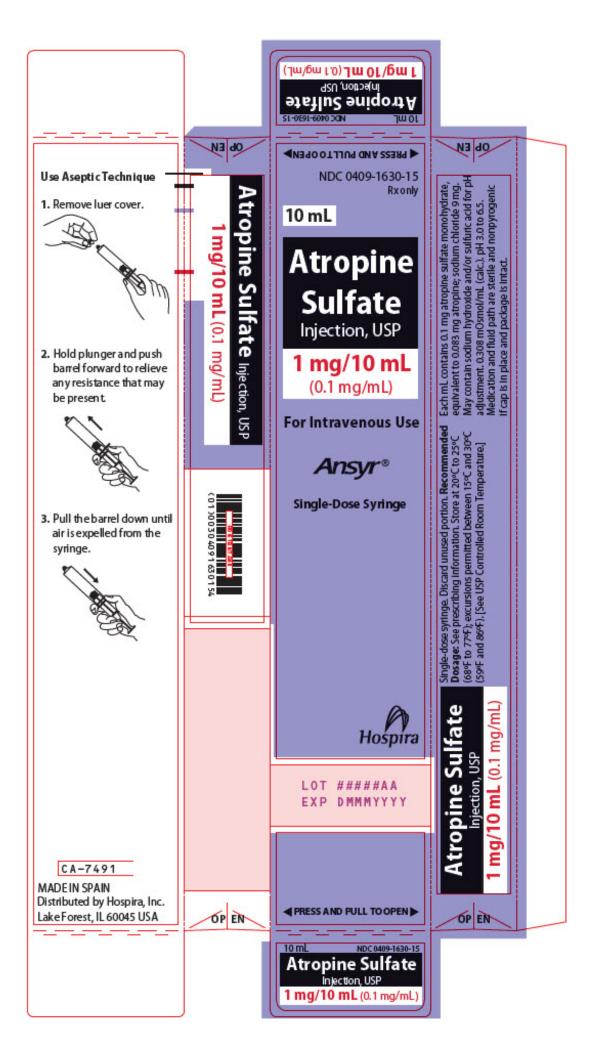
Ansyr®

Single-Dose Syringe

Hospira

LOT #####AA EXP DMMMYYYY

◄ PRESS AND PULL TO OPEN ►



## PRINCIPAL DISPLAY PANEL - 5 mL Syringe Label

Atropine Sulfate 0.25 mg/5 mL (0.05 mg/mL)

5 mL Single-Dose Syringe Rx only NDC 0409-9630-15

**PEDIATRIC 0.25 mg/5 mL** (0.05 mg/mL) **Atropine Sulfate** Injection, USP

## Hospira

For Intravenous Use.

Dist. by Hospira, Inc., Lake Forest, IL 60045 USA

## RL-7665

LOT ##-###-AA EXP DMMMYYYY



#### **PRINCIPAL DISPLAY PANEL - 5 mL Syringe Carton**

NDC 0409-9630-15 Rx only

5 mL

Pediatric Atropine Sulfate Injection, USP

0.25 mg/5 mL (0.05 mg/mL)

For Intravenous Use

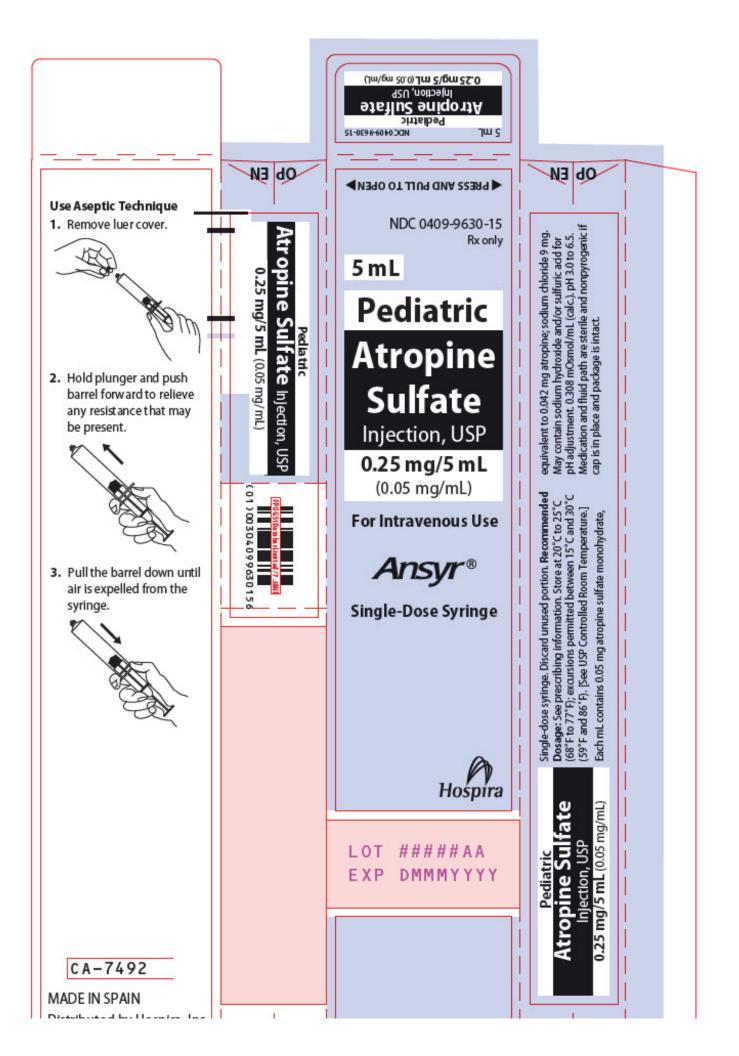
Ansyr®

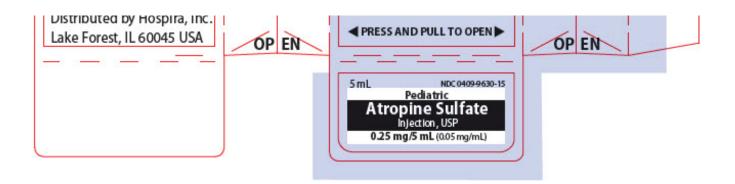
Single-Dose Syringe

Hospira

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◄ PRESS AND PULL TO OPEN ►





## PRINCIPAL DISPLAY PANEL - 5 mL Syringe Label - 0409-4910

5 mL Single-dose syringe

NDC 0409-4910-11 Rx only

Atropine Sulfate Inj., USP 0.5 mg/5 mL (0.1 mg/mL)

For intravenous use.

Distributed by Hospira, Inc., Lake Forest, IL 60045 USA

Hospira

RL-5314

Atrop	ine Sulf	fate 0.5 r	ng/5 m	L (0.1	mg/mL)
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<b>0.5 I</b> For intr Distribu	mg/5 ravenous ited by	ne S mL (C use. e Forest, I	).1 mç	g/mL	
				RL	- 5314

#### **PRINCIPAL DISPLAY PANEL - 5 mL Syringe Carton - 0409-4910**

5 mL NDC 0409-4910-11 Rx only

Atropine Sulfate Injection, USP 0.5 mg/5 mL (0.1 mg/mL)

For intravenous use

with male luer lock adapter and 20-Gauge protected needle

Glass LIFESHIELD<sup>®</sup> ABBOJECT<sup>®</sup> Unit of Use Syringe

Single-dose syringe Discard unused portion

LOT #####AA

Hospira

# ◄ PRESS AND PULL TO OPEN



# PRINCIPAL DISPLAY PANEL - 10 mL Syringe Label - 0409-4911

10 mL Single-dose syringe

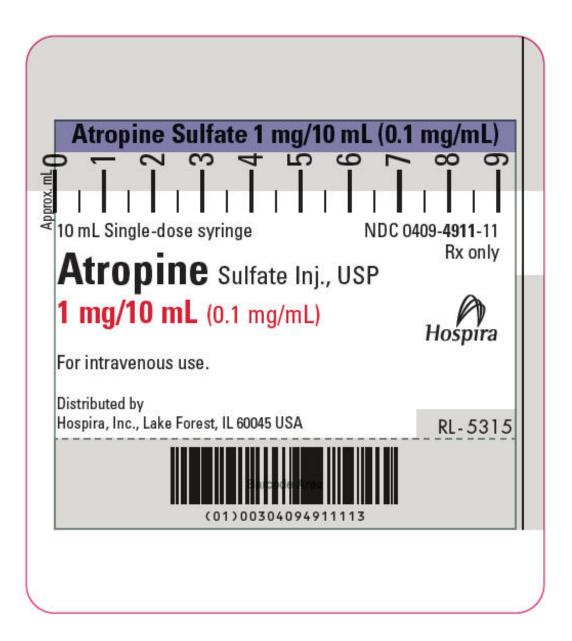
NDC 0409-4911-11 Rx only

Atropine Sulfate Inj., USP 1 mg/10 mL (0.1 mg/mL) For intravenous use.

Distributed by Hospira, Inc., Lake Forest, IL 60045 USA

Hospira

RL-5315



**PRINCIPAL DISPLAY PANEL - 10 mL Syringe Carton - 0409-4911** 

10 mL NDC 0409-4911-11 Rx only

Atropine Sulfate Injection, USP 1 mg/10 mL (0.1 mg/mL) For intravenous use

with male luer lock adapter and 20-Gauge protected needle

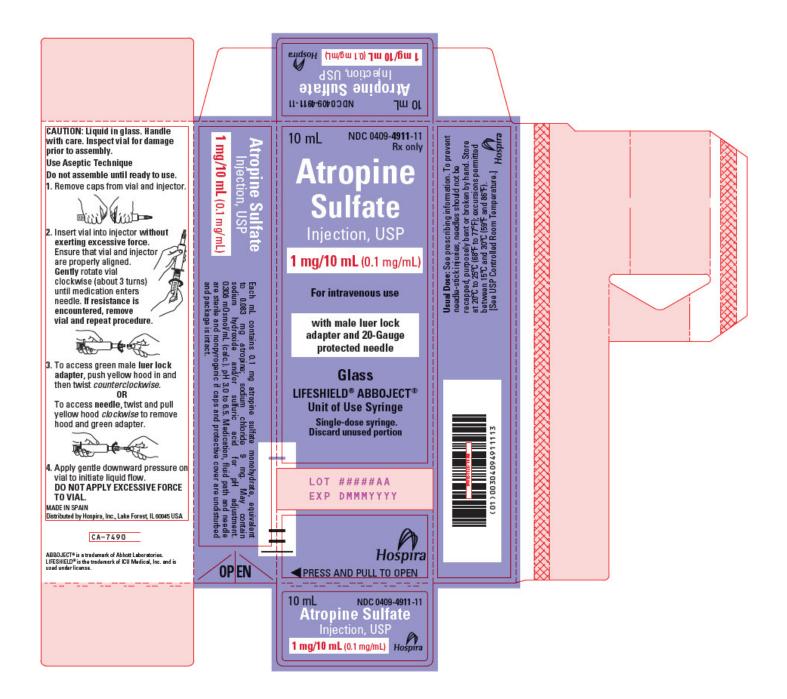
Glass LIFESHIELD<sup>®</sup> ABBOJECT<sup>®</sup> Unit of Use Syringe

Single-dose syringe. Discard unused portion

LOT #####AA EXP DMMMYYYY

Hospira

◄ PRESS AND PULL TO OPEN



ATROPINE SULFATE						
atropine sulfate injection, solu	ution					
Product Information						
Product Type	HUMAN PRESCRIPTION DRUG	ltem	Code (Source)	NDC:0409-1630		
Route of Administration	INTRAVENOUS					
Active Ingredient/Active	Moiety					
	lient Name		Basis of Strength	Strength		
ATROPINE SULFATE (UNII: 03J5Z		<b>9</b> 1)	ATROPINE SULFATE	0.1 mg in 1 ml		

		Ingredient Name			St	rength			
50		RIDE (	UNII: 451W47IQ8X)		9 mg ii	n 1 n	nL		
50		ROXIDE	(UNII: 55X04QC32I)						
51	JLFURIC ACI	<b>D</b> (UNII	: O40UQP6WCF)						
N	ATER (UNII: (	)59QF0	KO0R)						
P	ackaging								
#	ltem Code						Marketing End Date		
L	NDC:0409- 1630-10	10 in 3	10 in 1 PACKAGE 01/19/				9/2006		
L		1 in 1	CARTON						
1	NDC:0409- 1630-15		in 1 SYRINGE, PLASTIC; Type 2: Prefilled Drug E //System (syringe, patch, etc.)	Delivery					
Ν	larketir	ng In	formation						
	Marketir Categor		Application Number or Monograph Citation		ting Start Date	Marketing End Date			
١Ľ	DA		NDA021146	01/19/200	)6				

ATROPINE SULFATE						
atropine sulfate injection, sol	ution					
Product Information						
Product Type	HUMAN PRESCRIPTION DRUG	lten	n Code (So	urce)	NDC:0409	-9630
Route of Administration	INTRAVENOUS					
	Malaka					
Active Ingredient/Active						
Ingred	lient Name		Basis of S	Strength	Strer	ngth
ATROPINE SULFATE (UNII: 03J5Z	E7KA5) (ATROPINE - UNII:7C0697DR9	91)	ATROPINE SU	JLFATE	0.05 mg	in 1 mL
Inactive Ingredients						
l	ngredient Name			S	trength	
SODIUM CHLORIDE (UNII: 451W4	7IQ8X)			9 mg in 1	mL	
SODIUM HYDROXIDE (UNII: 55X0	4QC32I)					
SULFURIC ACID (UNII: O40UQP6V	VCF)					
WATER (UNII: 059QF0K00R)						
Packaging						
lite us			N4-	ul ca blue er	Ma ala	<b></b>

#	Code		Package Description	Start Date			
1	NDC:0409- 9630-05	10 in 1	L PACKAGE	12/31/2004			
1		1 in 1 (	ARTON				
1	NDC:0409- 9630-15	5 mL in 1 SYRINGE, PLASTIC; Type 2: Prefilled Drug Delivery Device/System (syringe, patch, etc.)					
M	larketir	ng In	formation				
	Marketing Category		Application Number or Monograp Citation		eting Start Date	Marketing End Date	
NE	A		NDA021146	12/31/20	04		

Product Info	ormation				
Product Type		HUMAN PRESCRIPTION DRUG	ltem Code (Sou	urce)	NDC:0409-4910
Route of Admi	nistration	INTRAVENOUS			
Active Ingre	dient/Active	Moiety			
	Ingred	lient Name	Basis of	Strength	Strength
ATROPINE SULF	ATE (UNII: 03J5ZI	E7KA5) (ATROPINE - UNII:7C0697DR9I	) ATROPINE S	ULFATE	0.1 mg in 1 m
Inactive Ing					
		ngredient Name			rength
				9 mg in 1 r	nL
SULFURIC ACID		CF)			
Packaging					
	P	ackage Description	Marketing Date		larketing End Date
# Item Code	<b>P</b> 10 in 1 PACKAG				
<ul> <li># Item Code</li> <li>NDC:0409- 4910-34</li> </ul>			Date		
<ul> <li># Item Code</li> <li>NDC:0409- 4910-34</li> </ul>	10 in 1 PACKAG 1 in 1 CARTON		<b>Date</b> 08/25/2005		
<ul> <li># Item Code</li> <li>NDC:0409- 4910-34</li> <li>NDC:0409-</li> <li>NDC:0409-</li> </ul>	10 in 1 PACKAG 1 in 1 CARTON 5 mL in 1 SYRIN	E	<b>Date</b> 08/25/2005		larketing End Date
NDC:0409- 4910-34 NDC:0409-	10 in 1 PACKAG 1 in 1 CARTON 5 mL in 1 SYRIN of Co-Package	E IGE, GLASS; Type 1: Convenience Kit	<b>Date</b> 08/25/2005		

Category	Citation	Date	Date
NDA	NDA021146	08/25/2005	

auopine suilate	SULFATE injection, solu	ition				
Product Info	ormation					
Product Type		HUMAN PRESCRIPTION DRUG	ltem	Code (Sou	ırce)	NDC:0409-4911
Route of Admi	nistration	INTRAVENOUS				
Active Ingre	dient/Active	Moietv				
Active mgre		lient Name		Basis of	Strenati	h Strength
ATROPINE SULF	-	7KA5) (ATROPINE - UNII:7C0697DR9I)	)	ATROPINE SI	-	0.1 mg in 1 ml
Inactive Ing						
	In	gredient Name			S	Strength
	<b>IDE</b> (UNII: 451W47				9 mg in 1	mL
SODIUM HYDRO	IDE (UNII: 451W47 XIDE (UNII: 55X04	QC32I)			9 mg in 1	mL
SODIUM HYDRO SULFURIC ACID	IDE (UNII: 451W47 XIDE (UNII: 55X04 (UNII: 040UQP6W	QC32I)			9 mg in 1	mL
SODIUM HYDRO SULFURIC ACID	IDE (UNII: 451W47 XIDE (UNII: 55X04 (UNII: 040UQP6W	QC32I)			9 mg in 1	mL
SODIUM HYDRO SULFURIC ACID	IDE (UNII: 451W47 XIDE (UNII: 55X04 (UNII: 040UQP6W	QC32I)			9 mg in 1	mL
SODIUM HYDRO SULFURIC ACID WATER (UNII: 059	IDE (UNII: 451W47 XIDE (UNII: 55X04 (UNII: 040UQP6W	QC32I)			9 mg in 1	mL
SODIUM HYDRO SULFURIC ACID WATER (UNII: 059 Packaging	IDE (UNII: 451W47 XIDE (UNII: 55X04 (UNII: 040UQP6W 9QF0K00R)	QC32I)	Μ	1arketing Date	Start	
BODIUM HYDRO SULFURIC ACID WATER (UNII: 059 Packaging # Item Code	IDE (UNII: 451W47 XIDE (UNII: 55X04 (UNII: 040UQP6W 9QF0K00R)	QC32I) CF) ackage Description		<b>1arketing</b>	Start	Marketing Enc
SODIUM HYDRO SULFURIC ACID WATER (UNII: 059 Packaging # Item Code 1 NDC:0409- 4911-34	IDE (UNII: 451W47 XIDE (UNII: 55X04 (UNII: 040UQP6W 9QF0K00R) Pa	QC32I) CF) ackage Description		1arketing Date	Start	Marketing End
SODIUM HYDRO SULFURIC ACID WATER (UNII: 059 Packaging # Item Code 1 NDC:0409- 4911-34 1	IDE (UNII: 451W47 XIDE (UNII: 55X04 (UNII: 040UQP6W 9QF0K00R) Pa 10 in 1 PACKAGI 1 in 1 CARTON 10 mL in 1 SYRI	QC32I) CF) ackage Description	10	1arketing Date	Start	Marketing End
SODIUM HYDRO SULFURIC ACID WATER (UNII: 059 Packaging # Item Code 1 NDC:0409- 4911-34 1 NDC:0409-	IDE (UNII: 451W47 XIDE (UNII: 55X04 (UNII: 040UQP6W 9QF0K00R) Pa 10 in 1 PACKAGE 1 in 1 CARTON	QC32I) CF) ackage Description	10	1arketing Date	Start	Marketing Enc
SODIUM HYDRO         SULFURIC ACID         WATER (UNII: 059         Packaging         #       Item Code         1       NDC:0409- 4911-34         1       NDC:0409-         1       NDC:0409-	IDE (UNII: 451W47 XIDE (UNII: 55X04 (UNII: 040UQP6W 9QF0K00R) Pa 10 in 1 PACKAGI 1 in 1 CARTON 10 mL in 1 SYRI	QC32I) CF) ackage Description	10	1arketing Date	Start	Marketing End
SODIUM HYDRO         SULFURIC ACID         WATER (UNII: 059         Packaging         Item Code         NDC:0409- 4911-34         NDC:0409- 4911-11	IDE (UNII: 451W47 XIDE (UNII: 55X04 (UNII: O40UQP6W 9QF0KO0R) Particle Participation 10 in 1 PACKAGE 1 in 1 CARTON 10 mL in 1 SYRII of Co-Package	QC32I) CF) Ackage Description E NGE, GLASS; Type 1: Convenience K	10	1arketing Date	Start	Marketing End
1 NDC:0409- 4911-34 1 NDC:0409-	IDE (UNII: 451W47 XIDE (UNII: 55X04 (UNII: 040UQP6W 9QF0K00R) Particular 10 in 1 PACKAGE 1 in 1 CARTON 10 mL in 1 SYRII of Co-Package	QC32I) CF) Ackage Description E NGE, GLASS; Type 1: Convenience K	10 it	1arketing Date	Start	Marketing End

Labeler - Hospira, Inc. (141588017)

Estab	Establishment							
Name	Address	ID/FEI	Business Operations					
Hospira,			ANALYSIS(0409-1630, 0409-4910, 0409-4911, 0409-9630), MANUFACTURE(0409-1630, 0409-4910, 0409-4911, 0409-9630), PACK(0409-1630, 0409-4910, 0409-4911, 0409-					

Establishment			
Name	Address	ID/FEI	Business Operations
Hospira, Inc.		827731089	ANALYSIS(0409-1630, 0409-4910, 0409-4911, 0409-9630)

Revised: 1/2025

Hospira, Inc.