

EPIPEN- epinephrine injection
EPIPEN JR- epinephrine injection
TYA Pharmaceuticals

HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use safely and effectively. See full prescribing information for . Initial U.S. Approval: 1939 EPIPEN and EPIPEN Jr[®] EPIPEN and EPIPEN Jr

EPIPEN (epinephrine injection), Auto-Injector 0.3 mg, EPIPEN Jr (epinephrine injection) Auto-Injector 0.15 mg, for intramuscular or subcutaneous use[®]

INDICATIONS AND USAGE-----

EpiPen and EpiPen Jr contain epinephrine, a non-selective alpha and beta-adrenergic receptor agonist, indicated in the emergency treatment of allergic reactions (Type I) including anaphylaxis. () 1

DOSAGE AND ADMINISTRATION-----

- Patients greater than or equal to 30 kg (66 lbs): EpiPen 0.3 mg () 2
- Patients 15 to 30 kg (33 lbs to 66 lbs): EpiPen Jr 0.15 mg () 2

Inject EpiPen and EpiPen Jr intramuscularly or subcutaneously into the anterolateral aspect of the thigh, through clothing if necessary. Each device is a single-use injection () .2

DOSAGE FORMS AND STRENGTHS-----

- EpiPen: Injection, 0.3 mg: 0.3 mg/0.3 mL epinephrine, USP, pre-filled auto-injector () 3
- EpiPen Jr: Injection, 0.15 mg: 0.15 mg/0.3 mL epinephrine, USP, pre-filled auto-injector () 3

CONTRAINDICATIONS-----

None () 4

WARNINGS AND PRECAUTIONS-----

- In conjunction with use, seek immediate medical or hospital care. () 5.1
- Do not inject intravenously, into buttock, or into digits, hands, or feet. () 5.2
- The presence of a sulfite in this product should not deter use. () 5.3
- Administer with caution in patients with heart disease; may aggravate angina pectoris or produce ventricular arrhythmias. () 5.4

ADVERSE REACTIONS-----

Adverse reactions to epinephrine include anxiety, apprehensiveness, restlessness, tremor, weakness, dizziness, sweating, palpitations, pallor, nausea and vomiting, headache, and/or respiratory difficulties. () 6

To report SUSPECTED ADVERSE REACTIONS, contact Mylan Specialty, L.P. at 1-877-446-3679 (1-877-4-INFO-RX) or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

DRUG INTERACTIONS-----

- Cardiac glycosides or diuretics: observe for development of cardiac arrhythmias. () 7
- Tricyclic antidepressants, monoamine oxidase inhibitors, levothyroxine sodium, and certain antihistamines: potentiate effects of epinephrine. () 7
- Beta-adrenergic blocking drugs: antagonize cardiostimulating and bronchodilating effects of epinephrine. () 7
- Alpha-adrenergic blocking drugs: antagonize vasoconstricting and hypertensive effects of epinephrine. () 7
- Ergot alkaloids: may reverse the pressor effects of epinephrine. () 7

USE IN SPECIFIC POPULATIONS-----

- Elderly patients may be at greater risk of developing adverse reactions. (,) 5.48.5

See 17 for PATIENT COUNSELING INFORMATION and FDA-approved patient labeling.

Revised: 10/2014

FULL PRESCRIBING INFORMATION: CONTENTS*

1 INDICATIONS AND USAGE

2 DOSAGE AND ADMINISTRATION

3 DOSAGE FORMS AND STRENGTHS

4 CONTRAINDICATIONS

5 WARNINGS AND PRECAUTIONS

5.1 Emergency Treatment

5.2 Incorrect Locations of Injection

5.3 Allergic Reactions Associated With Sulfite

5.4 Disease Interactions

6 ADVERSE REACTIONS

7 DRUG INTERACTIONS

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

8.3 Nursing Mothers

8.4 Pediatric Use

8.5 Geriatric Use

10 OVERDOSAGE

11 DESCRIPTION

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

12.2 Pharmacodynamics

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

16 HOW SUPPLIED/STORAGE AND HANDLING

16.1 How Supplied

16.2 Storage and Handling

17 PATIENT COUNSELING INFORMATION

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

FULL PRESCRIBING INFORMATION

1 INDICATIONS AND USAGE

EpiPen and EpiPen Jr are indicated in the emergency treatment of allergic reactions (Type I) including anaphylaxis to stinging insects (e.g., order Hymenoptera, which include bees, wasps, hornets, yellow jackets and fire ants) and biting insects (e.g., triatoma, mosquitoes), allergen immunotherapy, foods, drugs, diagnostic testing substances (e.g., radiocontrast media) and other allergens, as well as idiopathic anaphylaxis or exercise-induced anaphylaxis.

EpiPen and EpiPen Jr are intended for immediate administration in patients who are determined to be at increased risk for anaphylaxis, including individuals with a history of anaphylactic reactions.

Anaphylactic reactions may occur within minutes after exposure and consist of flushing, apprehension, syncope, tachycardia, thready or unobtainable pulse associated with a fall in blood pressure, convulsions, vomiting, diarrhea and abdominal cramps, involuntary voiding, wheezing, dyspnea due to laryngeal spasm, pruritus, rashes, urticaria or angioedema.

EpiPen and EpiPen Jr are intended for immediate administration as emergency supportive therapy only and are not a substitute for immediate medical care.

2 DOSAGE AND ADMINISTRATION

Selection of the appropriate dosage strength (EpiPen 0.3 mg or EpiPen Jr 0.15 mg) is determined according to patient body weight.

- Patients greater than or equal to 30 kg (approximately 66 pounds or more): EpiPen 0.3 mg
- Patients 15 to 30 kg (33 pounds to 66 pounds): EpiPen Jr 0.15 mg

Inject EpiPen or EpiPen Jr intramuscularly or subcutaneously into the anterolateral aspect of the thigh, through clothing if necessary.

Each EpiPen or EpiPen Jr contains a single dose of epinephrine for single-use injection. Since the doses of epinephrine delivered from EpiPen or EpiPen Jr are fixed, consider using other forms of injectable epinephrine if doses lower than 0.15 mg are deemed necessary.

The prescriber should carefully assess each patient to determine the most appropriate dose of epinephrine, recognizing the life-threatening nature of the reactions for which this drug is indicated. With severe persistent anaphylaxis, repeat injections with an additional EpiPen or EpiPen Jr may be necessary. More than two sequential doses of epinephrine should only be administered under direct medical supervision []. *see Warnings and Precautions (5.1)*

The epinephrine solution in the clear window of the EpiPen Auto-Injector should be inspected visually for particulate matter and discoloration. Epinephrine is light sensitive and should be stored in the carrier tube provided to protect it from light [] *see How Supplied/Storage and Handling (16.2)*.

3 DOSAGE FORMS AND STRENGTHS

- EpiPen: Injection, 0.3 mg/0.3 mL (0.3 mL, 1:1000) epinephrine injection, USP, pre-filled auto-injector
- EpiPen Jr: Injection, 0.15 mg/0.3 mL, (0.3 mL 1:2000) epinephrine injection, USP, pre-filled auto-injector

4 CONTRAINDICATIONS

None

5 WARNINGS AND PRECAUTIONS

5.1 Emergency Treatment

EpiPen and EpiPen Jr are intended for immediate administration as emergency supportive therapy and are not intended as a substitute for immediate medical care. More than two sequential doses of epinephrine should only be administered under direct medical supervision []. **In conjunction with the administration of epinephrine, the patient should seek immediate medical or hospital care.** *see , and Indications and Usage (1) Dosage and Administration (2) Patient Counseling Information (17)*

5.2 Incorrect Locations of Injection

EpiPen and EpiPen Jr should be injected into the anterolateral aspect of the thigh []. **only** *see and Dosage and Administration (2) Patient Counseling Information (17)*

- Large doses or accidental intravenous injection of epinephrine may result in cerebral hemorrhage due to sharp rise in blood pressure. Rapidly acting vasodilators can counteract the marked pressor effects of epinephrine if there is such inadvertent administration. **Do not inject intravenously.**

- Injection into the buttock may not provide effective treatment of anaphylaxis. Advise the patient to go immediately to the nearest emergency room for further treatment of anaphylaxis. Additionally, injection into the buttock has been associated with gas gangrene. Cleansing with alcohol does not kill bacterial spores, and therefore, does not lower this risk. **Do not inject into buttock.**
- Since epinephrine is a strong vasoconstrictor, accidental injection into the digits, hands or feet may result in loss of blood flow to the affected area. Advise the patient to go immediately to the nearest emergency room and to inform the healthcare provider in the emergency room of the location of the accidental injection. Treatment of such inadvertent administration should consist of vasodilation, in addition to further appropriate treatment of anaphylaxis []. **Do not inject into digits, hands or feet.** *see Adverse Reactions (6)*

5.3 Allergic Reactions Associated With Sulfite

The presence of a sulfite in this product should not deter administration of the drug for treatment of serious allergic or other emergency situations even if the patient is sulfite-sensitive.

Epinephrine is the preferred treatment for serious allergic reactions or other emergency situations even though this product contains sodium metabisulfite, a sulfite that may, in other products, cause allergic-type reactions including anaphylactic symptoms or life-threatening or less severe asthmatic episodes in certain susceptible persons.

The alternatives to using epinephrine in a life-threatening situation may not be satisfactory.

5.4 Disease Interactions

Some patients may be at greater risk for developing adverse reactions after epinephrine administration. Despite these concerns, it should be recognized that the presence of these conditions is not a contraindication to epinephrine administration in an acute, life-threatening situation. Therefore, patients with these conditions, and/or any other person who might be in a position to administer EpiPen or EpiPen Jr to a patient experiencing anaphylaxis should be carefully instructed in regard to the circumstances under which epinephrine should be used.

- Patients with Heart Disease

Epinephrine should be administered with caution to patients who have heart disease, including patients with cardiac arrhythmias, coronary artery or organic heart disease, or hypertension. In such patients, or in patients who are on drugs that may sensitize the heart to arrhythmias epinephrine may precipitate or aggravate angina pectoris as well as produce ventricular arrhythmias []. *.,see and Drug Interactions (7)Adverse Reactions (6)*

- Other Patients and Diseases

Epinephrine should be administered with caution to patients with hyperthyroidism, diabetes, elderly individuals, and pregnant women. Patients with Parkinson's disease may notice a temporary worsening of symptoms.

6 ADVERSE REACTIONS

Due to the lack of randomized, controlled clinical trials of epinephrine for the treatment of anaphylaxis, the true incidence of adverse reactions associated with the systemic use of epinephrine is difficult to determine. Adverse reactions reported in observational trials, case reports, and studies are listed below.

Common adverse reactions to systemically administered epinephrine include anxiety; apprehensiveness; restlessness; tremor; weakness; dizziness; sweating; palpitations; pallor; nausea and vomiting; headache; and/or respiratory difficulties. These symptoms occur in some persons receiving therapeutic doses of epinephrine, but are more likely to occur in patients with hypertension or hyperthyroidism []. *see*

Warnings and Precautions (5.4)

Arrhythmias, including fatal ventricular fibrillation, have been reported, particularly in patients with underlying cardiac disease or those receiving certain drugs []. *see and Warnings and Precautions (5.4) Drug Interactions (7)*

Rapid rises in blood pressure have produced cerebral hemorrhage, particularly in elderly patients with cardiovascular disease []. *see Warnings and Precautions (5.4)*

Angina may occur in patients with coronary artery disease []. *see Warnings and Precautions (5.4)*

Accidental injection into the digits, hands or feet may result in loss of blood flow to the affected area []. *see Warnings and Precautions (5.2)*

Adverse events experienced as a result of accidental injections may include increased heart rate, local reactions including injection site pallor, coldness and hypoesthesia or injury at the injection site resulting in bruising, bleeding, discoloration, erythema or skeletal injury.

Injection into the buttock has resulted in cases of gas gangrene [] *see Warnings and Precautions (5.4).*

7 DRUG INTERACTIONS

Patients who receive epinephrine while concomitantly taking cardiac glycosides, diuretics, or anti-arrhythmics should be observed carefully for the development of cardiac arrhythmias []. *see Warnings and Precautions (5.4)*

The effects of epinephrine may be potentiated by tricyclic antidepressants, monoamine oxidase inhibitors, levothyroxine sodium, and certain antihistamines, notably chlorpheniramine, tripeleminamine, and diphenhydramine.

The cardiostimulating and bronchodilating effects of epinephrine are antagonized by beta- adrenergic blocking drugs, such as propranolol.

The vasoconstricting and hypertensive effects of epinephrine are antagonized by alpha- adrenergic blocking drugs, such as phentolamine.

Ergot alkaloids may also reverse the pressor effects of epinephrine.

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

Teratogenic Effects Pregnancy Category C. .

There are no adequate and well controlled studies of the acute effect of epinephrine in pregnant women.

Epinephrine was teratogenic in rabbits, mice and hamsters. Epinephrine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus (fetal anoxia, spontaneous abortion, or both).

Epinephrine has been shown to have teratogenic effects when administered subcutaneously in rabbits at approximately 30 times the maximum recommended daily subcutaneous or intramuscular dose (on a mg/m basis at a maternal dose of 1.2 mg/kg/day for two to three days), in mice at approximately 7 times the maximum daily subcutaneous or intramuscular dose (on a mg/m basis at a maternal subcutaneous dose of 1 mg/kg/day for 10 days), and in hamsters at approximately 5 times the maximum recommended daily subcutaneous or intramuscular dose (on a mg/m basis at a maternal subcutaneous dose of 0.5 mg/kg/day for 4 days).²²²

These effects were not seen in mice at approximately 3 times the maximum recommended daily subcutaneous or intramuscular dose (on a mg/m basis at a subcutaneous maternal dose of 0.5 mg/kg/day

for 10 days).²

8.3 Nursing Mothers

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

8.4 Pediatric Use

EpiPen or EpiPen Jr may be administered to pediatric patients at a dosage appropriate to body weight [] Clinical experience with the use of epinephrine suggests that the adverse reactions seen in children are similar in nature and extent to those both expected and reported in adults. Since the doses of epinephrine delivered from EpiPen and EpiPen Jr are fixed, consider using other forms of injectable epinephrine if doses lower than 0.15 mg are deemed necessary. *see Dosage and Administration (2).*

8.5 Geriatric Use

Clinical studies for the treatment of anaphylaxis have not been performed in subjects aged 65 and over to determine whether they respond differently from younger subjects. However, other reported clinical experience with use of epinephrine for the treatment of anaphylaxis has identified that geriatric patients may be particularly sensitive to the effects of epinephrine. Therefore, EpiPen should be administered with caution in elderly individuals, who may be at greater risk for developing adverse reactions after epinephrine administration []. *see , Warnings and Precautions (5.4)Overdosage (10)*

10 OVERDOSAGE

Overdosage of epinephrine may produce extremely elevated arterial pressure, which may result in cerebrovascular hemorrhage, particularly in elderly patients. Overdosage may also result in pulmonary edema because of peripheral vascular constriction together with cardiac stimulation. Treatment consists of rapidly acting vasodilators or alpha-adrenergic blocking drugs and/or respiratory support.

Epinephrine overdosage can also cause transient bradycardia followed by tachycardia, and these may be accompanied by potentially fatal cardiac arrhythmias. Premature ventricular contractions may appear within one minute after injection and may be followed by multifocal ventricular tachycardia (prefibrillation rhythm). Subsidence of the ventricular effects may be followed by atrial tachycardia and occasionally by atrioventricular block. Treatment of arrhythmias consists of administration of a beta-adrenergic blocking drug such as propranolol.

Overdosage sometimes results in extreme pallor and coldness of the skin, metabolic acidosis, and kidney failure. Suitable corrective measures must be taken in such situations.

11 DESCRIPTION

EpiPen (epinephrine injection, USP) 0.3 mg and EpiPen Jr (epinephrine injection, USP) 0.15 mg are auto-injectors and combination products containing drug and device components.

Each EpiPen Auto-Injector, 0.3 mg delivers a single dose of 0.3 mg epinephrine from epinephrine injection, USP 1:1000 (0.3 mL) in a sterile solution.

Each EpiPen Jr Auto-Injector, 0.15 mg delivers a single dose of 0.15 mg epinephrine from epinephrine injection, USP 1:2000 (0.3 mL) in a sterile solution.

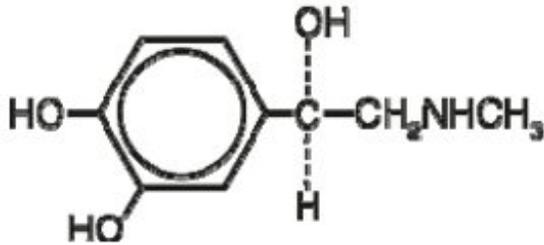
The EpiPen and EpiPen Jr each contain 2 mL epinephrine solution. Approximately 1.7 mL remains in the auto-injector after activation, but is not available for future use, and should be discarded.

Each 0.3 mL in the EpiPen Auto-Injector contains 0.3 mg epinephrine, 1.8 mg sodium chloride, 0.5 mg sodium metabisulfite, hydrochloric acid to adjust pH, and Water for Injection. The pH range is 2.2–5.0.

Each 0.3 mL in the EpiPen Jr Auto-Injector contains 0.15 mg epinephrine, 1.8 mg sodium chloride, 0.5

mg sodium metabisulfite, hydrochloric acid to adjust pH, and Water for Injection. The pH range is 2.2-5.0.

Epinephrine is a sympathomimetic catecholamine. Chemically, epinephrine is (-)-3,4- Dihydroxy- α -[(methylamino)methyl]benzyl alcohol with the following structure:



Epinephrine solution deteriorates rapidly on exposure to air or light, turning pink from oxidation to adrenochrome and brown from the formation of melanin. Replace EpiPen and EpiPen Jr if the epinephrine solution appears discolored (pinkish or brown color), cloudy, or contains particles.

Thoroughly review the patient instructions and operation of EpiPen or EpiPen Jr with patients and caregivers prior to use. []. see *Patient Counseling Information (17)*

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

Epinephrine acts on both alpha- and beta-adrenergic receptors.

12.2 Pharmacodynamics

Through its action on alpha-adrenergic receptors, epinephrine lessens the vasodilation and increased vascular permeability that occurs during anaphylaxis, which can lead to loss of intravascular fluid volume and hypotension.

Through its action on beta-adrenergic receptors, epinephrine causes bronchial smooth muscle relaxation and helps alleviate bronchospasm, wheezing and dyspnea that may occur during anaphylaxis.

Epinephrine also alleviates pruritus, urticaria, and angioedema and may relieve gastrointestinal and genitourinary symptoms associated with anaphylaxis because of its relaxer effects on the smooth muscle of the stomach, intestine, uterus and urinary bladder.

When given subcutaneously or intramuscularly, epinephrine has a rapid onset and short duration of action.

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Long-term studies to evaluate the carcinogenic potential of epinephrine have not been conducted.

Epinephrine and other catecholamines have been shown to have mutagenic potential and to be an oxidative mutagen in a bacterial reverse mutation assay. *in vitro* WP2

Epinephrine was positive in the DNA Repair test with (REC) assay, but was not mutagenic in the bacterial reverse mutation assay. *B. subtilis* *Salmonella*

The potential for epinephrine to impair fertility has not been evaluated.

This should not prevent the use of epinephrine under the conditions noted under . *Indications and Usage*

(1)

16 HOW SUPPLIED/STORAGE AND HANDLING

NDC:64725-0500-1 in a CARTON of 1 INJECTIONS

16.1 How Supplied

EpiPen Auto-Injectors (epinephrine injections, USP, 1:1000, 0.3 mL) are available as EpiPen 2-Pak, NDC 49502-500-02, a pack that contains two EpiPen Auto-Injectors (epinephrine injections, USP, 1:1000, 0.3 mL) and one EpiPen Auto-Injector trainer device. ®

EpiPen Jr Auto-Injectors (epinephrine injections, USP, 1:2000, 0.3 mL) are available as EpiPen Jr 2-Pak, NDC 49502-501-02, a pack that contains two EpiPen Jr Auto-Injectors (epinephrine injections, USP, 1:2000, 0.3 mL) and one EpiPen Auto-Injector trainer device. ®

EpiPen 2-Pak and EpiPen Jr 2-Pak also includes an S-clip to clip two carrier tubes together. ®®

Rx only

16.2 Storage and Handling

Protect from light. Epinephrine is light sensitive and should be stored in the carrier tube provided to protect it from light. Store at 20° to 25°C (68° to 77°F); excursions permitted to 15° to 30°C (59° to 86°F) (See USP Controlled Room Temperature). Do not refrigerate. Before using, check to make sure the solution in the auto-injector is clear and colorless. Replace the auto-injector if the solution is discolored (pinkish or brown color), cloudy, or contains particles.

17 PATIENT COUNSELING INFORMATION

[] see *FDA-Approved Patient Labeling () Patient Information and Instructions for Use*

A healthcare provider should review the patient instructions and operation of EpiPen and EpiPen Jr in detail, with the patient or caregiver.

Epinephrine is essential for the treatment of anaphylaxis. Patients who are at risk of or with a history of severe allergic reactions (anaphylaxis) to insect stings or bites, foods, drugs, and other allergens, as well as idiopathic and exercise-induced anaphylaxis, should be carefully instructed about the circumstances under which epinephrine should be used.

Administration and Training

Patients and/or caregivers should be instructed in the appropriate use of EpiPen and EpiPen Jr. EpiPen should be injected into the middle of the outer thigh (through clothing, if necessary). Each device is a single-use injection. Advise patients to seek immediate medical care in conjunction with administration of EpiPen.

Complete patient information, including dosage, directions for proper administration and precautions can be found inside each EpiPen or EpiPen Jr carton. A printed label on the surface of EpiPen shows instructions for use and a diagram depicting the injection process.

Patients and/or caregivers should be instructed to use the Trainer to familiarize themselves with the use of EpiPen in an allergic emergency. The Trainer may be used multiple times. A Trainer device is provided in 2-Pak cartons.

Adverse Reactions

Epinephrine may produce symptoms and signs that include an increase in heart rate, the sensation of a more forceful heartbeat, palpitations, sweating, nausea and vomiting, difficulty breathing, pallor, dizziness, weakness or shakiness, headache, apprehension, nervousness, or anxiety. These signs and

symptoms usually subside rapidly, especially with rest, quiet and recumbency. Patients with hypertension or hyperthyroidism may develop more severe or persistent effects, and patients with coronary artery disease could experience angina. Patients with diabetes may develop increased blood glucose levels following epinephrine administration. Patients with Parkinson's disease may notice a temporary worsening of symptoms [] *see Warnings and Precautions (5.4).*

Accidental Injection

Advise patients to seek immediate medical care in the case of accidental injection. Since epinephrine is a strong vasoconstrictor when injected into the digits, hands, or feet, treatment should be directed at vasodilatation if there is such an accidental injection to these areas []. *see Warnings and Precautions (5.2)*

Storage and Handling

Instruct patients to inspect the epinephrine solution visually through the clear window of the auto-injector periodically. EpiPen and EpiPen Jr should be replaced if the epinephrine solution appears discolored (pinkish or brown color), cloudy, or contains particles. Epinephrine is light sensitive and should be stored in the carrier tube provided to protect it from light. The carrier tube is not waterproof. Patients should be instructed that EpiPen and EpiPen Jr must be used or properly disposed once the blue safety release is removed or after use []. *see Storage and Handling (16.2)*

Complete patient information, including dosage, directions for proper administration and precautions can be found inside each EpiPen Auto-Injector carton.

Manufactured for Mylan Specialty L.P., Morgantown, WV 26505, U.S.A. by Meridian Medical Technologies, Inc., Columbia, MD 21046, U.S.A., a Pfizer company

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PATIENT INFORMATION and INSTRUCTIONS FOR USE

EPIPEN (epinephrine) Auto-Injector 0.3 mg Epipen = one dose of 0.30 mg epinephrine (USP, 1:1000, 0.3 mL) EPIPEN JR (epinephrine) Auto-Injector 0.15 mg Epipen Jr = one dose of 0.15 mg epinephrine (USP, 1:2000, 0.3 mL) ®

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For allergic emergencies (anaphylaxis)

Patient Information

Read this Patient Information Leaflet carefully before using the EpiPen or EpiPen Jr Auto-Injector and each time you get a refill. There may be new information. You, your parent, caregiver, or others who may be in a position to administer EpiPen or EpiPen Jr Auto-Injector, should know how to use it before you have an allergic emergency. ®®

This information does not take the place of talking with your healthcare provider about your medical condition or your treatment.

What is the most important information I should know about the EpiPen and EpiPen Jr?

1. EpiPen and EpiPen Jr contain, a medicine used to treat allergic emergencies (anaphylaxis).

Anaphylaxis can be life threatening, can happen with minutes, and can be caused by stinging and biting insects, allergy injections, foods, medicines, exercise, or unknown causes.

Symptoms of anaphylaxis may include:

- trouble breathing
- wheezing
- hoarseness (changes in the way your voice sounds)
- hives (raised reddened rash that may itch)
- severe itching
- swelling of your face, lips, mouth, or tongue
- skin rash, redness, or swelling
- fast heartbeat
- weak pulse
- feeling very anxious
- confusion
- stomach pain
- losing control of urine or bowel movements (incontinence)
- diarrhea or stomach cramps
- dizziness, fainting, or “passing out” (unconsciousness)

2. **Always carry your EpiPen or EpiPen Jr with you because you may not know when anaphylaxis may happen.**

Talk to your healthcare provider if you need additional units to keep at work, school, or other locations. Tell your family members, caregivers, and others where you keep your EpiPen or EpiPen Jr and how to use it before you need it. You may be unable to speak in an allergic emergency.

3. **When you have an allergic emergency (anaphylaxis)**

- **Use EpiPen or EpiPen Jr right away.**
- You may need further medical attention. You may need to use a second EpiPen or EpiPen Jr if symptoms continue or recur. Only a healthcare provider should give additional doses of epinephrine if you need more than 2 injections for a single anaphylaxis episode. **Get emergency medical help right away.**

What are EpiPen and EpiPen Jr?

- EpiPen and EpiPen Jr are disposable, prefilled automatic injection devices (auto-injectors) used to treat life-threatening, allergic emergencies including anaphylaxis in people who are at risk for or have a history of serious allergic emergencies. Each device contains a single dose of epinephrine.
- EpiPen and EpiPen Jr are for immediate self (or caregiver) administration and do not take the place of emergency medical care. You should get emergency help right away after using EpiPen and EpiPen Jr.
- EpiPen and EpiPen Jr are for people who have been prescribed this medicine by their healthcare provider.
- The EpiPen Auto-Injector (0.3 mg) is for patients who weigh 66 pounds or more (30 kilograms or more).
- The EpiPen Jr Auto-Injector (0.15 mg) is for patients who weigh about 33 to 66 pounds (15 to 30 kilograms).
- It is not known if EpiPen and EpiPen Jr are safe and effective in children who weigh less than 33

pounds (15 kilograms).

What should I tell my healthcare provider before using the EpiPen or EpiPen Jr?

Before you use EpiPen or EpiPen Jr, tell your healthcare provider about all your medical conditions, but especially if you:

- have heart problems or high blood pressure
- have diabetes
- have thyroid problems
- have asthma
- have a history of depression
- have Parkinson's disease
- have any other medical conditions
- are pregnant or plan to become pregnant. It is not known if epinephrine will harm your unborn baby.
- are breastfeeding or plan to breastfeed. It is not known if epinephrine passes into your breast milk.

, including prescription and over-the-counter medicines, vitamins, and herbal supplements. Tell your healthcare provider of all known allergies. **Tell your healthcare provider about all the medicines you take**

Especially tell your healthcare provider if you take certain asthma medicines.

EpiPen or EpiPen Jr and other medicines may affect each other, causing side effects. EpiPen or EpiPen Jr may affect the way other medicines work, and other medicines may affect how EpiPen or EpiPen Jr works.

Know the medicines you take. Keep a list of them to show your healthcare provider and pharmacist when you get a new medicine.

Use your EpiPen or EpiPen Jr for treatment of anaphylaxis as prescribed by your healthcare provider, regardless of your medical conditions or the medicines you take.

How should I use EpiPen and EpiPen Jr?

- Each EpiPen or EpiPen Jr Auto-Injector contains only 1 dose of medicine.
- EpiPen or EpiPen Jr should be injected into the middle of your outer thigh (upper leg). It can be injected through your clothing if needed.
- Read the Instructions for Use at the end of this Patient Information Leaflet about the right way to use EpiPen and EpiPen Jr.
- Your healthcare provider will show you how to safely use the EpiPen or EpiPen Jr Auto-Injector.
- Use your EpiPen or EpiPen Jr exactly as your healthcare provider tells you to use it. You may need to use a second EpiPen or EpiPen Jr if symptoms continue or recur. Only a healthcare provider should give additional doses of epinephrine if you need more than 2 injections for a single anaphylaxis episode.
- The needle comes out of the orange tip. Accidental injection into finger, hands or feet may cause a loss of blood flow to these areas. Tell the healthcare provider where on your body you received the accidental injection. **Caution: Never put your thumb, fingers, or hand over the orange tip. Never press or push the orange tip with your thumb, fingers, or hand. If this happens, go immediately to the nearest emergency room.**
- Your EpiPen and EpiPen Jr Auto-Injector may come packaged with an EpiPen Trainer and separate Trainer Instructions for Use. Periodically practice with your EpiPen Trainer before an allergic emergency happens to make sure you are able to safely use the real EpiPen and EpiPen Jr Auto-

Injector in an emergency. Always carry your real EpiPen or EpiPen Jr Auto-Injector with you in case of an allergic emergency. Additional training resources are available at www.epipen.com. **The EpiPen Trainer has a grey color. The grey EpiPen Trainer contains no medicine and no needle.**

- Do not drop the carrier tube or auto-injector. If the carrier tube or auto-injector is dropped, check for damage and leakage. Dispose of the auto-injector and carrier tube, and replace if damage or leakage is noticed or suspected.

What are the possible side effects of the EpiPen and EpiPen Jr?

EpiPen and EpiPen Jr may cause serious side effects.

- inject the EpiPen or EpiPen Jr into your: **The EpiPen or EpiPen Jr should only be injected into the middle of your outer thigh (upper leg). Do not**
 - veins
 - buttocks
 - fingers, toes, hands, or feet

If you accidentally inject EpiPen or EpiPen Jr into any other part of your body, go to the nearest emergency room right away. Tell the healthcare provider where on your body you received the accidental injection.

- Talk to your healthcare provider about all your medical conditions. **If you have certain medical conditions, or take certain medicines, your condition may get worse or you may have longer lasting side effects when you use your EpiPen or EpiPen Jr.**

Common side effects of EpiPen and EpiPen Jr include:

- fast, irregular or “pounding” heartbeat
- sweating
- headache
- weakness
- shakiness
- paleness
- feelings of over excitement, nervousness or anxiety
- dizziness
- nausea or vomiting
- breathing problems

These side effects may go away with rest. **Tell your healthcare provider if you have any side effect that bothers you or that does not go away.**

These are not all the possible side effects of the EpiPen or EpiPen Jr. For more information, ask your healthcare provider or pharmacist.

Call your healthcare provider for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

How should I store EpiPen and EpiPen Jr?

- Store EpiPen and EpiPen Jr at room temperature between 68° to 77° F (20° to 25° C).
- Protect from light.
- expose to extreme cold or heat. For example, store in your vehicle’s glove box and store in the

refrigerator or freezer. **Do not do not do not**

- Examine the contents in the clear window of your auto-injector periodically. The solution should be clear. If the solution is discolored (pinkish or brown color) or contains solid particles, replace the unit.
- Always keep your EpiPen or EpiPen Jr Auto-Injector in the carrier tube to protect it from damage; however, the carrier tube is not waterproof.
- The blue safety release helps to prevent accidental injection. Keep the blue safety release on until you need to use EpiPen or EpiPen Jr.
- Your EpiPen or EpiPen Jr has an expiration date. Replace it before the expiration date.

Keep EpiPen and EpiPen Jr and all medicines out of the reach of children.

General information about the safe and effective use of EpiPen and EpiPen Jr:

Medicines are sometimes prescribed for purposes other than those listed in a Patient Information Leaflet. Do not use the EpiPen or EpiPen Jr for a condition for which it was not prescribed. Do not give your EpiPen or EpiPen Jr to other people.

This Patient Information Leaflet summarizes the most important information about EpiPen and EpiPen Jr. If you would like more information, talk to your healthcare provider. You can ask your pharmacist or healthcare provider for information about EpiPen and EpiPen Jr that is written for health professionals.

For more information and video instructions on the use of EpiPen and EpiPen Jr, go to or call 1-800-395-3376. www.epipen.com

What are the ingredients in EpiPen and EpiPen Jr?

Epinephrine **Active Ingredients:**

sodium chloride, sodium metabisulfite, hydrochloric acid, and water. **Inactive Ingredients:**

Important Information

- **The EpiPen Auto-Injector has a yellow colored label.**
- **The EpiPen Jr Auto-Injector has a green colored label.**
- **The EpiPen Trainer has a grey color and contains no medicine and no needle.**
- **Your auto-injector is designed to work through clothing.**
- **The blue safety release on the EpiPen and EpiPen Jr Auto-Injector helps to prevent accidental injection of the device. Do not remove the blue safety release until you are ready to use it.**
- **Only inject into the middle of the outer thigh (upper leg). Never inject into any other part of the body.**
- **Never put your thumb, fingers, or your hand over the orange tip. The needle comes out of the orange tip.**
- **If an accidental injection happens, get medical help right away.**
- **Do not place patient information or any other foreign objects in the carrier tube with the Auto-Injector, as this may prevent you from removing the Auto-Injector for use.**

Instructions for Use

EPIPEN (epinephrine) Auto-Injector 0.3 mg Epipen = one dose of 0.30 mg epinephrine (USP, 1:1000, 0.3 mL) EPIPEN JR (epinephrine) Auto-Injector 0.15 mg Epipen Jr = one dose of 0.15 mg epinephrine (USP, 1:2000, 0.3 mL) ®

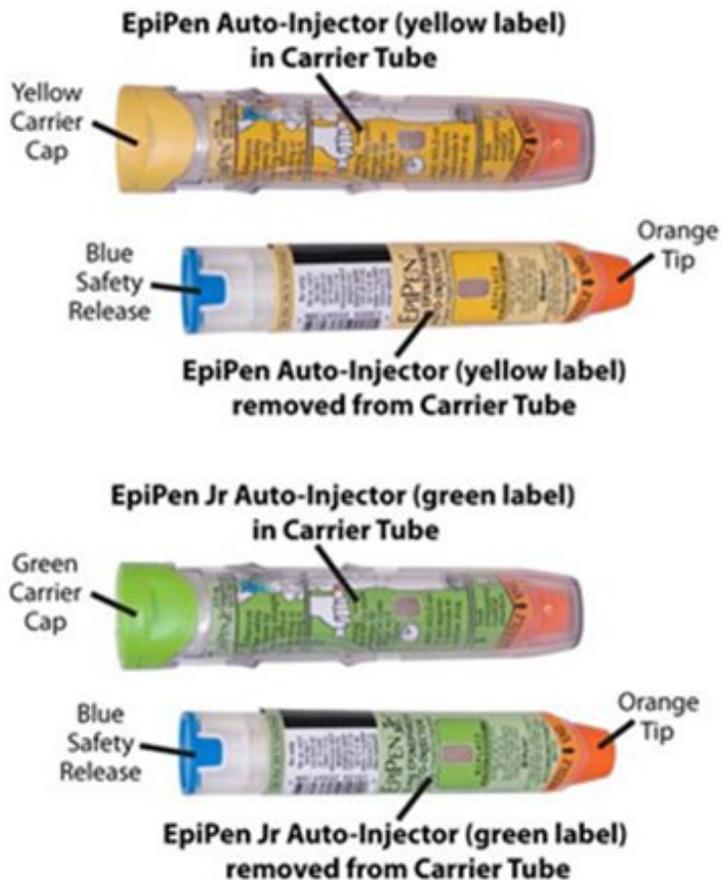
®

®

For allergic emergencies (anaphylaxis)

Read these Instructions for Use carefully before you use EpiPen or EpiPen Jr. Before you need to use your EpiPen or EpiPen Jr, make sure your healthcare provider shows you the right way to use it. Parents, caregivers, and others who may be in a position to administer EpiPen or EpiPen Jr Auto-Injector should also understand how to use it as well. If you have any questions, ask your healthcare provider.

Your EpiPen and EpiPen Jr Auto-Injector



A dose of EpiPen or EpiPen Jr requires 3 simple steps: Prepare, Administer and Get emergency medical help[®]

Step 1. Prepare EpiPen or EpiPen Jr for injection

Remove the EpiPen or EpiPen Jr from the clear carrier tube.



Flip open the yellow cap of your EpiPen or the green cap of your EpiPen Jr carrier tube.



Tip and slide the auto-injector out of the carrier tube.



Grasp the auto-injector in your fist with the orange tip pointing downward. With your other hand, without bending or twisting it **remove the blue safety release by pulling straight up.**

Note:

- The needle comes out of the orange tip.
- To avoid an accidental injection, never put your thumb, fingers or hand over the orange tip. If an accidental injection happens, get medical help right away

Step 2. Administer EpiPen or EpiPen Jr



Hold the auto-injector with orange tip near the middle of the outer thigh (upper leg), until it 'clicks'. Keep the auto-injector firmly pushed against the thigh at a 90° angle (perpendicular) to the thigh. **Swing and firmly push the orange tip against the middle of the outer thigh**



to deliver the medicine. The injection is now complete. **Hold firmly against the thigh for approximately 10 seconds**



The orange tip will extend to cover the needle. **Remove the auto-injector from the thigh.**



Massage the injection area for 10 seconds.

You may need further medical attention. You may need to use a second EpiPen or EpiPen Jr Auto-Injector if symptoms continue or recur. **Step 3. Get emergency medical help now.**

- Take your used auto-injector with you when you go to see a healthcare provider.
- Tell the healthcare provider that you have received an injection of epinephrine. Show the healthcare provider where you received the injection.
- Give your used EpiPen or EpiPen Jr Auto-Injector to the healthcare provider for inspection and proper disposal.
- Ask for a refill, if needed.

Note:

- The used auto-injector with extended needle cover will not fit in the carrier tube.
- EpiPen and EpiPen Jr are single-use injectable devices that deliver a fixed dose of epinephrine. The auto-injector cannot be reused. It is normal for most of the medicine to remain in the auto-injector after the dose is injected. The correct dose has been administered if the orange needle tip is extended and the window is blocked.
- Your EpiPen and EpiPen Jr Auto-Injector may come packaged with an EpiPen Trainer and separate Trainer Instructions for Use. The EpiPen Trainer has a grey color. The grey EpiPen Trainer contains no medicine and no needle. Practice with your EpiPen Trainer, but always carry your real EpiPen or EpiPen Jr Auto-Injector in case of an allergic emergency.
- Do not try to take the EpiPen or EpiPen Jr Auto-Injector apart.

This Patient Information and Instructions for Use has been approved by the U.S. Food and Drug Administration.

Manufactured for:

Mylan Specialty L.P., Morgantown, WV 26505, U.S.A. by Meridian Medical Technologies, Inc., Columbia, MD 21046, U.S.A., a Pfizer company

EpiPen and EpiPen Jr are registered trademarks of Mylan Inc. licensed exclusively to its wholly-owned affiliate, Mylan Specialty L.P. of, Morgantown, WV 26505, U.S.A. ®®

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Revised: April 2014

EPIP-N:R00

EpiPen (Epinephrine) Auto-Injector 0.3 mg ®

EpiPen Jr (Epinephrine) Auto-Injector 0.15 mg ®

MyEpiPen.com

Register your EpiPen or EpiPen Jr Auto-Injector at and find out more about: **MyEpiPen.com**

- Free EpiPen Auto-Injector . It is important to keep your auto-injector up-to-date. **Refill Reminder Program**

Register up to 6 EpiPen or EpiPen Jr Auto- Injectors and receive automatic . **Refill Reminder Alerts**

- Receive periodic information related to allergies and allergens.
- Instructional Video

For more information about EpiPen or EpiPen Jr Auto-Injectors and proper use of the product, call Mylan at 1-877-446-3679 or visit . www.epipen.com

EpiPen Trainer Instructions for Use

In an emergency: Do not use the grey Trainer. Use your real yellow EpiPen or green EpiPen Jr Auto-Injector. ®®

Important Information

- **The Trainer label has a grey color.**
- **The Trainer contains no medicine and no needle.**
- Periodically practice with the grey colored Trainer before an allergic emergency (anaphylaxis) happens to make sure you are able to safely use the real yellow EpiPen or green EpiPen Jr Auto-Injector in case of an emergency.
- Always carry your real yellow EpiPen or green EpiPen Jr Auto-Injector in case of an allergic emergency.

The EpiPen Trainer

Familiarize yourself with this grey Trainer. Practice until you are comfortable using it.

Your grey colored Trainer:



- Never put your thumb, other fingers, or hand over the Orange Tip.
- The Orange Tip is where the needle comes out of your EpiPen or EpiPen Jr Auto-Injector.

Practice Instructions

the Trainer for Simulated Injection 1 Prepare



- **Grasp the grey Trainer in your fist with the orange tip pointing downward.**
- With your other hand, without bending or twisting it, **remove blue safety release by pulling straight up**
- Removing the blue safety release unlocks the Trainer.

2 Administer the Trainer Simulation



- Hold the Trainer with the orange tip near the middle of the outer thigh (upper leg).
- until it 'clicks.' Keep the Trainer firmly pushed against the thigh at a 90° angle (perpendicular) to the thigh. **Swing and firmly push the orange tip against the middle of the outer thigh**

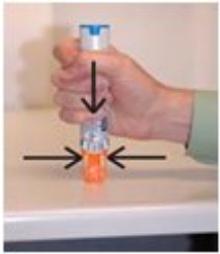


- **Hold firmly against the thigh for approximately 10 seconds.**
- and massage the injection area for 10 seconds. The orange tip automatically extends out after use. **Remove the Trainer from the thigh**

Note:

- In an actual emergency, you would need to seek medical help right away
- The actual auto-injector is made to work through clothing
- Do not inject into any other part of the body

3 To reset the Trainer



- Put the blue safety release back on the Trainer
- Place the orange tip on a hard surface
- Squeeze the sides of the orange tip and push down on the Trainer with the other hand

Note: With the real yellow EpiPen or green EpiPen Jr Auto-Injector, the orange tip covers the needle after self-injection to help protect you from accidentally sticking yourself or others.

Practice Session Information

In case of an allergic emergency, use the real yellow EpiPen or green EpiPen Jr Auto-Injector and not the grey Trainer.

Follow instructions above. Repeat as often as needed until you are able to self-inject quickly and correctly.

Reread:

- These Trainer Instructions for Use
- The “Patient Information” that comes with your EpiPen or EpiPen Jr Auto-Injector

Train others who could help you in an emergency:

- Your parents, caregivers, and others who may be in a position to administer EpiPen or EpiPen Jr should know how to help you during an allergic emergency (anaphylaxis). Before an emergency occurs, have them:
 - Practice activating the Trainer
 - Read these Trainer Instructions and the “Patient Information”

For more information about the EpiPen and EpiPen Jr Auto-Injector and the proper use of the products, go to www.epipen.com.

Caution:

Important differences between the Trainer and your real yellow EpiPen or green EpiPen Jr Auto-Injector



	TRAINER (Grey)	EpiPen (Yellow)	EpiPen Jr (Green)
Contains medication?	NO	YES	YES
Has needle?	NO	YES	YES
Comes in Carrier Tube?	NO	YES	YES
Color of Label	Grey	Yellow	Green
Has expiration date?	NO	YES	YES
Can be reused?	YES	NO (use only once)	NO (use only once)
Okay to remove and replace safety release?	YES	NO (remove just once before use)	NO (remove just once before use)
Pressure needed to hold against thigh?	Moderate	Strong	Strong

This Trainer Instructions for Use has been approved by the U.S. Food and Drug Administration.

Manufactured for Mylan Specialty L.P., Morgantown, WV 26505, U.S.A. by Meridian Medical Technologies, Inc., Columbia, MD 21046, U.S.A., a Pfizer company

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Revised: April 2014

EPIP-TN:R00

EPIPEN (EPINEPHRINE) INJECTION EPIPEN JR (EPINEPHRINE) INJECTION

EPIPEN 2-PAK 0.3MG AUTO-INJECTORS

RX ONLY 49502-500-02

LOT: XXXXX EXP: XX-XX-XX

MFR: MERIDIAN MEDICAL

REPACKAGED BY: T.Y.A. PHARMACEUTICALS
2930 CRESCENT DR.
TALLAHASSEE, FL 32301
(850) 385-0228



DOSE: SEE PACKAGE INSERT

EPIPEN (EPINEPHRINE) INJECTION EPIPEN JR (EPINEPHRINE) INJECTION

EPIPEN JR.2-PAK 0.15MG AUTO-INJECTORS

RX ONLY 49502-501-02

LOT: XXXXX EXP: XX-XX-XX

MFR: MERIDIAN MEDICAL

REPACKAGED BY: T.Y.A. PHARMACEUTICALS
2930 CRESCENT DR.
TALLAHASSEE, FL 32301
(850) 385-0228



DOSE: SEE PACKAGE INSERT

EPIPEN

epinephrine injection

Product Information

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:64725-0500(NDC:49502-500)
Route of Administration	INTRAMUSCULAR		

Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
EPINEPHRINE (UNII: YKH834O4BH) (EPINEPHRINE - UNII:YKH834O4BH)	EPINEPHRINE	0.3 mg in 0.3 mL

Inactive Ingredients

Ingredient Name	Strength
SODIUM CHLORIDE (UNII: 451W47IQ8X)	

SODIUM METABISULFITE (UNII: 4VON5FNS3C)

HYDROCHLORIC ACID (UNII: QTT17582CB)

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:64725-0500-1	1 mL in 1 CARTON		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA	NDA019430	12/22/1987	

EPIPEN JR

epinephrine injection

Product Information

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:64725-0501(NDC:49502-501)
Route of Administration	INTRAMUSCULAR		

Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
EPINEPHRINE (UNII: YKH834O4BH) (EPINEPHRINE - UNII: YKH834O4BH)	EPINEPHRINE	0.15 mg in 0.3 mL

Inactive Ingredients

Ingredient Name	Strength
SODIUM CHLORIDE (UNII: 451W47IQ8X)	
SODIUM METABISULFITE (UNII: 4VON5FNS3C)	
HYDROCHLORIC ACID (UNII: QTT17582CB)	

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:64725-0501-1	2 mL in 1 CARTON		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA	NDA019430	12/22/1987	

Labeler - TYA Pharmaceuticals (938389038)

Registrant - TYA Pharmaceuticals (938389038)**Establishment**

Name	Address	ID/FEI	Business Operations
TYA Pharmaceuticals		938389038	RELABEL(64725-0500, 64725-0501) , REPACK(64725-0500)

Revised: 5/2014

TYA Pharmaceuticals