AMOXICILLIN - amoxicillin capsule AMOXICILLIN - amoxicillin tablet, film coated AMOXICILLIN - amoxicillin powder, for suspension Physicians Total Care, Inc.

Amoxicillin Capsules, Tablets and Powder for Oral Suspension, USP

Rx only

To reduce the development of drug-resistant bacteria and maintain the effectiveness of amoxicillin and other antibacterial drugs, amoxicillin should be used only to treat or prevent infections that are proven or strongly suspected to be caused by bacteria.

DESCRIPTION

Formulations of amoxicillin contain amoxicillin, a semisynthetic antibiotic, an analog of ampicillin, with a broad spectrum of bactericidal activity against many gram-positive and gram-negative microorganisms. Chemically it is (2S,5R,6R)-6-[(R)-(-)-2-amino-2-(p-hydroxyphenyl)acetamido]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo [3.2.0]heptane-2-carboxylic acid trihydrate. It may be represented structurally as:

The amoxicillin molecular formula is $C_{16}H_{19}N_3O_5S \cdot 3H_2O$, and the molecular weight is 419.45. Capsules, tablets and powder for oral suspension of amoxicillin are intended for oral administration.

Capsules

Each amoxicillin capsule, with yellow opaque cap and body, contains 250 mg or 500 mg amoxicillin as the trihydrate. The 250 mg capsule is imprinted AMOX 250 on one side and GG 848 on the other side; the 500 mg capsule is imprinted AMOX 500 on one side and GG 849 on the other side. Inactive ingredients: Capsule shells - yellow ferric oxide, titanium dioxide, gelatin, black ferric oxide; Capsule contents - cellulose microcrystalline and magnesium stearate.

Meets USP Dissolution Test 2.

Tablets

Each film coated tablet contains 500 mg or 875 mg amoxicillin as the trihydrate. The tablets are oval-shaped, unscored and white to yellowish. The 500 mg tablet is embossed GG-961 on one side and 500 on the other side. The 875 mg tablet is embossed GG-962 on one side and 875 on the other side. In addition each amoxicillin tablet contains these inactive ingredients: colloidal silicon dioxide, crospovidone, ethylcellulose aqueous dispersion, hypromellose, magnesium stearate, microcrystalline cellulose, sodium starch glycolate, talc, triethyl citrate, and titanium dioxide.

Powder for Oral Suspension

Each 5 mL of reconstituted suspension contains 125 mg, 200 mg, 250 mg or 400 mg amoxicillin as the trihydrate. Each 5 mL of the 125 mg, 200 mg, 250 mg, and 400 mg reconstituted suspension contains 0.30 mEq (6.95 mg) of sodium.

Amoxicillin trihydrate for oral suspension 125 mg/5 mL, 200 mg/5 mL, 250 mg/5 mL and 400 mg/5 mL are fruity flavored pink suspensions. Inactive ingredients: anhydrous citric acid, colloidal silicon dioxide, flavorings: raspberry, strawberry, refrachessement, FD&C Red 40, sodium benzoate, sodium citrate, sucrose, and xantham gum.

CLINICAL PHARMACOLOGY

Amoxicillin is stable in the presence of gastric acid and is rapidly absorbed after oral administration. The effect of food on the absorption of amoxicillin from the tablets and suspension has been partially investigated. The 400 mg and 875 mg formulations have been studied only when administered at the start of a light meal. However, food effect studies have not been performed with the 200 mg and 500 mg formulations. Amoxicillin diffuses readily into most body tissues and fluids, with the exception of brain and spinal fluid, except when meninges are inflamed. The half-life of amoxicillin is 61.3 minutes. Most of the amoxicillin is excreted unchanged in the urine; its excretion can be delayed by concurrent administration of probenecid. In blood serum, amoxicillin is approximately 20% protein-bound.

Orally administered doses of 250 mg and 500 mg of amoxicillin capsules result in average peak blood levels 1 to 2 hours after administration in the range of 3.5 mcg/mL to 5 mcg/mL and 5.5 mcg/mL to 7.5 mcg/mL, respectively.

Mean amoxicillin pharmacokinetic parameters from an open, two-part, single-dose crossover bioequivalence study in 27 adults comparing 875 mg of Amoxicillin tablets with 875 mg of amoxicillin and clavulanate potassium showed that the 875 mg tablet of amoxicillin produces an AUC $_{0-\infty}$ of 35.4 \pm 8.1 mcg·hr/mL and a C $_{max}$ of 13.8 \pm 4.1 mcg/mL. Dosing was at the start of a light meal following an overnight fast.

Oral administration of single doses of amoxicillin 400 mg chewable tablets and 400 mg/5 mL suspension to 24 adult volunteers yielded the following pharmacokinetic data:

	AUC _{0-∞}	
Dose	(mcg.hr./mL)	C_{max} (mcg/mL)
	amoxicillin	amoxicillin
Amoxicillin	(±S.D.)	(±S.D.)
400 mg (5 mL of		
suspension)	17.1 (3.1)	5.92 (1.62)
400 mg (chewable tablet)	17.9 (2.4)	5.18 (1.64)

Orally administered doses of amoxicillin suspension, 125 mg/5 mL and 250 mg/5 mL, result in average peak blood levels 1 to 2 hours after administration in the range of 1.5 mcg/mL to 3 mcg/mL and 3.5 mcg/mL to 5 mcg/ mL, respectively.

Detectable serum levels are observed up to 8 hours after an orally administered dose of amoxicillin. Following a 1 gram dose and utilizing a special skin window technique to determine levels of the antibiotic, it was noted that therapeutic levels were found in the interstitial fluid. Approximately 60% of an orally administered dose of amoxicillin is excreted in the urine within 6 to 8 hours.

Microbiology

Amoxicillin is similar to ampicillin in its bactericidal action against susceptible organisms during the stage of active multiplication. It acts through the inhibition of biosynthesis of cell wall mucopeptide. Amoxicillin has been shown to be active against most strains of the following microorganisms, both *in vitro* and in clinical infections as described in the **INDICATIONS AND USAGE** section.

Aerobic Gram-Positive Microorganisms:

Enterococcus faecalis

Staphylococcus spp. (β-lactamase-negative strains only)

Streptococcus pneumoniae

Streptococcus spp. (α - and β -hemolytic strains only)

Aerobic Gram-Negative Microorganisms:

Escherichia coli (β-lactamase-negative strains only)

Haemophilus influenzae (β-lactamase-negative strains only)

Neisseria gonorrhoeae (β-lactamase-negative strains only)

Proteus mirabilis (β-lactamase-negative strains only)

Helicobacter:

Helicobacter pylori

Susceptibility Tests

Dilution Techniques

Quantitative methods are used to determine antimicrobial minimum inhibitory concentrations (MICs). These MICs provide estimates of the susceptibility of bacteria to antimicrobial compounds. The MICs should be determined using a standardized procedure. Standardized procedures are based on a dilution method¹ (broth or agar) or equivalent with standardized inoculum concentrations and standardized concentrations of **ampicillin** powder. Ampicillin is sometimes used to predict susceptibility of *S. pneumoniae* to amoxicillin; however, some intermediate strains have been shown to be susceptible to amoxicillin. Therefore, *S. pneumoniae* susceptibility should be tested using amoxicillin powder. The MIC values should be interpreted according to the following criteria:

For Gram-Positive Aerobes:

Enterococcus

MIC (mcg/mL)	Interpretation
≤ 8	Susceptible (S)
≥ 16	Resistant (R)

Staphylococcus

MIC (mcg/mL)	Interpretation
≤ 0.25	Susceptible (S)
≥ 0.5	Resistant (R)

Streptococcus (except S. pneumoniae)

MIC (mcg/mL)	Interpretation
≤ 0.25	Susceptible (S)
0.5 to 4	Intermediate (I)
≥ 8	Resistant (R)

S. pneumoniae from non-meningitis sources.

(**Amoxicillin** powder should be used to determine susceptibility.)

MIC (mcg/mL)	Interpretation
≤ 2	Susceptible (S)
4	Intermediate (I)
≥ 8	Resistant (R)

NOTE: These interpretive criteria are based on the recommended doses for respiratory tract infections.

For Gram-Negative Aerobes:

Enterobacteriaceae

MIC (mcg/mL)	Interpretation
≤ 8	Susceptible (S)
16	Intermediate (I)
≥ 32	Resistant (R)

H. influenzae

MIC (mcg/mL)	Interpretation
≤ 1	Susceptible (S)
2	Intermediate (I)
≥ 4	Resistant (R)

A report of "Susceptible" indicates that the pathogen is likely to be inhibited if the antimicrobial compound in the blood reaches the concentrations usually achievable. A report of "Intermediate" indicates that the result should be considered equivocal, and, if the microorganism is not fully susceptible to alternative, clinically feasible drugs, the test should be repeated. This category implies possible clinical applicability in body sites where the drug is physiologically concentrated or in situations where high dosage of drug can be used. This category also provides a buffer zone, which prevents small uncontrolled technical factors from causing major discrepancies in interpretation. A report of "Resistant" indicates that the pathogen is not likely to be inhibited if the antimicrobial compound in the blood reaches the concentrations usually achievable; other therapy should be selected.

Standardized susceptibility test procedures require the use of laboratory control microorganisms to control the technical aspects of the laboratory procedures. Standard **ampicillin** powder should provide the following MIC values:

Mici	roorganism	MIC Range (mcg/mL)
E. coli	ATCC 25922	2 to 8
E. faecalis	ATCC 29212	0.5 to 2
H. influenzae	ATCC 49247	2 to 8
S. aureus	ATCC 29213	0.25 to 1

Using **amoxicillin** to determine susceptibility:

Microorganism	MIC Range (mcg/mL)
Wiferoorganism	Title italise (ince/ind)

Diffusion Techniques

Quantitative methods that require measurement of zone diameters also provide reproducible estimates of the susceptibility of bacteria to antimicrobial compounds. One such standardized procedure² requires the use of standardized inoculum concentrations. This procedure uses paper disks impregnated with 10 mcg ampicillin to test the susceptibility of microorganisms, except *S. pneumoniae*, to amoxicillin. Interpretation involves correlation of the diameter obtained in the disk test with the MIC for **ampicillin**.

Reports from the laboratory providing results of the standard single-disk susceptibility test with a 10 mcg ampicillin disk should be interpreted according to the following criteria:

For Gram-Positive Aerobes:

Enterococcus

Zone Diameter (mm)	Interpretation
≥ 17	Susceptible (S)
≤ 16	Resistant (R)

Staphylococcus

Zone Diameter (mm)	Interpretation
≥ 29	Susceptible (S)
≤ 28	Resistant (R)

β-hemolytic streptococci

Zone Diameter (mm)	Interpretation
≥ 26	Susceptible (S)
19 to 25	Intermediate (I)
≤ 18	Resistant (R)

NOTE: For streptococci (other than β -hemolytic streptococci and S. *pneumoniae*), an ampicillin MIC should be determined.

S. pneumoniae

S. pneumoniae should be tested using a 1 mcg oxacillin disk. Isolates with oxacillin zone sizes of \geq 20 mm are susceptible to amoxicillin. An amoxicillin MIC should be determined on isolates of *S. pneumoniae* with oxacillin zone sizes of \leq 19 mm.

For Gram-Negative Aerobes:

Enterobacteriaceae

Zone Diameter (mm)	Interpretation
≥ 17	Susceptible (S)
14 to 16	Intermediate (I)
≤ 13	Resistant (R)

H. influenzae

Zone Diameter (mm)	Interpretation
≥ 22	Susceptible (S)
19 to 21	Intermediate (I)
≤ 18	Resistant (R)

Interpretation should be as stated above for results using dilution techniques.

As with standard dilution techniques, disk diffusion susceptibility test procedures require the use of laboratory control microorganisms. The 10 mcg **ampicillin** disk should provide the following zone diameters in these laboratory test quality control strains:

Microorganism		Zone Diameter (mm)
E. coli	ATCC 25922	16 to 22
H. influenzae	ATCC 49247	13 to 21
S. aureus	ATCC 25923	27 to 35

Using 1 mcg **oxacillin** disk:

Microorganism		Zone Diameter (mm)
S. pneumoniae	ATCC 49619	8 to 12

Susceptibility Testing for Helicobacter pylori

In vitro susceptibility testing methods and diagnostic products currently available for determining minimum inhibitory concentrations (MICs) and zone sizes have not been standardized, validated, or approved for testing *H. pylori* microorganisms.

Culture and susceptibility testing should be obtained in patients who fail triple therapy. If clarithromycin resistance is found, a nonclarithromycin-containing regimen should be used.

INDICATIONS AND USAGE

Amoxicillin is indicated in the treatment of infections due to susceptible (ONLY β -lactamase-negative) strains of the designated microorganisms in the conditions listed below:

Infections of the ear, nose, and throat - due to *Streptococcus* spp. (α - and β -hemolytic strains only), *S. pneumoniae*, *Staphylococcus* spp., or *H. influenzae*.

Infections of the genitourinary tract - due to *E. coli*, *P. mirabilis*, or *E. faecalis*.

Infections of the skin and skin structure - due to *Streptococcus* spp. (α - and β -hemolytic strains only), *Staphylococcus spp.*, or *E. coli*

Infections of the lower respiratory tract - due to *Streptococcus* spp. (α - and β -hemolytic strains only), *S. pneumoniae, Staphylococcus* spp., or *H. influenzae*.

Gonorrhea, acute uncomplicated (ano-genital and urethral infections) - due to *N. gonorrhoeae* (males and females).

H. pylori eradication to reduce the risk of duodenal ulcer recurrence

Triple Therapy

Amoxicillin/clarithromycin/lansoprazole

Amoxicillin, in combination with clarithromycin plus lansoprazole as triple therapy, is indicated for the treatment of patients with *H. pylori* infection and duodenal ulcer disease (active or 1 year history of a duodenal ulcer) to eradicate *H. pylori*. Eradication of *H. pylori* has been shown to reduce the risk of duodenal ulcer recurrence. (See **CLINICAL STUDIES** and **DOSAGE AND ADMINISTRATION**.)

Dual Therapy

Amoxicillin/lansoprazole

Amoxicillin, in combination with lansoprazole delayed-release capsules as dual therapy, is indicated for the treatment of patients with *H. pylori* infection and duodenal ulcer disease (active or 1 year history of a duodenal ulcer) **who are either allergic or intolerant to clarithromycin or in whom resistance to clarithromycin is known or suspected.** (See the clarithromycin package insert, **MICROBIOLOGY**.) Eradication of *H. pylori* has been shown to reduce the risk of duodenal ulcer recurrence. (See **CLINICAL STUDIES** and **DOSAGE AND ADMINISTRATION**.)

To reduce the development of drug-resistant bacteria and maintain the effectiveness of amoxicillin and other antibacterial drugs, amoxicillin should be used only to treat or prevent infections that are proven or strongly suspected to be caused by susceptible bacteria. When culture and susceptibility information are available, they should be considered in selecting or modifying antibacterial therapy. In the absence of such data, local epidemiology and susceptibility patterns may contribute to the empiric selection of therapy.

Indicated surgical procedures should be performed.

CONTRAINDICATIONS

A history of allergic reaction to any of the penicillins is a contraindication.

WARNINGS

SERIOUS AND OCCASIONALLY FATAL HYPERSENSITIVITY (ANAPHYLACTIC) REACTIONS HAVE BEEN REPORTED IN PATIENTS ON PENICILLIN THERAPY. ALTHOUGH ANAPHYLAXIS IS MORE FREQUENT FOLLOWING PARENTERAL THERAPY, IT HAS OCCURRED IN PATIENTS ON ORAL PENICILLINS. THESE REACTIONS ARE MORE LIKELY TO OCCUR IN INDIVIDUALS WITH A HISTORY OF PENICILLIN HYPERSENSITIVITY AND/OR A HISTORY OF SENSITIVITY TO MULTIPLE ALLERGENS. THERE HAVE BEEN REPORTS OF INDIVIDUALS WITH A HISTORY OF PENICILLIN HYPERSENSITIVITY WHO HAVE EXPERIENCED SEVERE REACTIONS WHEN TREATED WITH CEPHALOSPORINS. BEFORE INITIATING THERAPY WITH AMOXICILLIN, CAREFUL INQUIRY SHOULD BE MADE CONCERNING PREVIOUS HYPERSENSITIVITY REACTIONS TO PENICILLINS, CEPHALOSPORINS, OR OTHER ALLERGENS. IF AN ALLERGIC REACTION OCCURS, AMOXICILLIN SHOULD BE DISCONTINUED AND APPROPRIATE THERAPY INSTITUTED. SERIOUS ANAPHYLACTIC REACTIONS REQUIRE IMMEDIATE EMERGENCY TREATMENT WITH EPINEPHRINE. OXYGEN, INTRAVENOUS STEROIDS, AND AIRWAY MANAGEMENT, INCLUDING INTUBATION, SHOULD ALSO BE ADMINISTERED AS INDICATED.

Clostridium difficile associated diarrhea (CDAD) has been reported with use of nearly all antibacterial agents, including amoxicillin capsules, amoxicillin for oral suspension, or amoxicillin tablets, and may range in severity from mild diarrhea to fatal colitis. Treatment with antibacterial agents alters the normal flora of the colon leading to overgrowth of *C. difficile*.

C. difficile produces toxins A and B which contribute to the development of CDAD. Hypertoxin producing strains of *C. difficile* cause increased morbidity and mortality, as these infections can be

refractory to antimicrobial therapy and may require colectomy.

CDAD must be considered in all patients who present with diarrhea following antibiotic use. Careful medical history is necessary since CDAD has been reported to occur over two months after the administration of antibacterial agents.

If CDAD is suspected or confirmed, ongoing antibiotic use not directed against *C. difficile* may need to be discontinued. Appropriate fluid and electrolyte management, protein supplementation, antibiotic treatment of *C. difficile*, and surgical evaluation should be instituted as clinically indicated.

PRECAUTIONS

General

The possibility of superinfections with mycotic or bacterial pathogens should be kept in mind during therapy. If superinfections occur, amoxicillin should be discontinued and appropriate therapy instituted.

A high percentage of patients with mononucleosis who receive ampicillin develop an erythematous skin rash. Thus, ampicillin-class antibiotics should not be administered to patients with mononucleosis.

Prescribing amoxicillin in the absence of a proven or strongly suspected bacterial infection or a prophylactic indication is unlikely to provide benefit to the patient and increases the risk of the development of drug-resistant bacteria.

Laboratory Tests

As with any potent drug, periodic assessment of renal, hepatic, and hematopoietic function should be made during prolonged therapy.

All patients with gonorrhea should have a serologic test for syphilis at the time of diagnosis. Patients treated with amoxicillin should have a follow-up serologic test for syphilis after 3 months.

Drug Interactions

Probenecid decreases the renal tubular secretion of amoxicillin. Concurrent use of amoxicillin and probenecid may result in increased and prolonged blood levels of amoxicillin.

Chloramphenicol, macrolides, sulfonamides, and tetracyclines may interfere with the bactericidal effects of penicillin. This has been demonstrated *in vitro*; however, the clinical significance of this interaction is not well documented.

In common with other antibiotics, amoxicillin may affect the gut flora, leading to lower estrogen reabsorption and reduced efficacy of combined oral estrogen/progesterone contraceptives.

Drug/Laboratory Test Interactions

High urine concentrations of ampicillin may result in false-positive reactions when testing for the presence of glucose in urine using Clinitest®, Benedict's Solution, or Fehling's Solution. Since this effect may also occur with amoxicillin, it is recommended that glucose tests based on enzymatic glucose oxidase reactions (such as Clinistix®) be used.

Following administration of ampicillin to pregnant women, a transient decrease in plasma concentration of total conjugated estriol, estriol-glucuronide, conjugated estrone, and estradiol has been noted. This effect may also occur with amoxicillin.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Longterm studies in animals have not been performed to evaluate carcinogenic potential. Studies to detect mutagenic potential of amoxicillin alone have not been conducted; however, the following

information is available from tests on a 4:1 mixture of amoxicillin and potassium clavulanate. Amoxicillin and potassium clavulanate was non-mutagenic in the Ames bacterial mutation assay, and the yeast gene conversion assay. Amoxicillin and potassium clavulanate was weakly positive in the mouse lymphoma assay, but the trend toward increased mutation frequencies in this assay occurred at doses that were also associated with decreased cell survival. Amoxicillin and potassium clavulanate was negative in the mouse micronucleus test, and in the dominant lethal assay in mice. Potassium clavulanate alone was tested in the Ames bacterial mutation assay and in the mouse micronucleus test, and was negative in each of these assays. In a multi-generation reproduction study in rats, no impairment of fertility or other adverse reproductive effects were seen at doses up to 500 mg/kg (approximately 3 times the human dose in mg/m^2).

Pregnancy

Teratogenic Effects

Pregnancy Category B

Reproduction studies have been performed in mice and rats at doses up to 10 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to amoxicillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Labor and Delivery

Oral ampicillin-class antibiotics are poorly absorbed during labor. Studies in guinea pigs showed that intravenous administration of ampicillin slightly decreased the uterine tone and frequency of contractions but moderately increased the height and duration of contractions. However, it is not known whether use of amoxicillin in humans during labor or delivery has immediate or delayed adverse effects on the fetus, prolongs the duration of labor, or increases the likelihood that forceps delivery or other obstetrical intervention or resuscitation of the newborn will be necessary.

Nursing Mothers

Penicillins have been shown to be excreted in human milk. Amoxicillin use by nursing mothers may lead to sensitization of infants. Caution should be exercised when amoxicillin is administered to a nursing woman.

Pediatric Use

Because of incompletely developed renal function in neonates and young infants, the elimination of amoxicillin may be delayed. Dosing of amoxicillin should be modified in pediatric patients 12 weeks or younger (≤3 months). (See **DOSAGE AND ADMINISTRATION: Neonates and Infants.**)

Geriatric Use

An analysis of clinical studies of amoxicillin was conducted to determine whether subjects aged 65 and over respond differently from younger subjects. Of the 1,811 subjects treated with amoxicillin capsules, 85% were < 60 years old, 15% were \ge 61 years old and 7% were \ge 71 years old. This analysis and other reported clinical experience have not identified differences in responses between the elderly and younger patients, but a greater sensitivity of some older individuals cannot be ruled out.

This drug is known to be substantially excreted by the kidney, and the risk of toxic reactions to this drug may be greater in patients with impaired renal function. Because elderly patients are more likely to have decreased renal function, care should be taken in dose selection, and it may be useful to monitor renal function.

Information for Patients

Amoxicillin may be taken every 8 hours or every 12 hours, depending on the strength of the product prescribed.

Patients should be counseled that antibacterial drugs including amoxicillin should only be used to treat bacterial infections. They do not treat viral infections (e.g., the common cold). When amoxicillin is prescribed to treat a bacterial infection, patients should be told that although it is common to feel better early in the course of therapy, the medication should be taken exactly as directed. Skipping doses or not completing the full course of therapy may: (1) decrease the effectiveness of the immediate treatment, and (2) increase the likelihood that bacteria will develop resistance and will not be treatable by amoxicillin or other antibacterial drugs in the future.

Diarrhea is a common problem caused by antibiotics which usually ends when the antibiotic is discontinued. Sometimes after starting treatment with antibiotics, patients can develop watery and bloody stools (with or without stomach cramps and fever) even as late as 2 or more months after having taken the last dose of the antibiotic. If this occurs, patients should contact their physician as soon as possible.

ADVERSE REACTIONS

As with other penicillins, it may be expected that untoward reactions will be essentially limited to sensitivity phenomena. They are more likely to occur in individuals who have previously demonstrated hypersensitivity to penicillins and in those with a history of allergy, asthma, hay fever, or urticaria. The following adverse reactions have been reported as associated with the use of penicillins:

Infections and Infestations: Mucocutaneous candidiasis.

Gas trointes tinal: Nausea, vomiting, diarrhea, black hairy tongue, and hemorrhagic/pseudomembranous colitis.

Onset of pseudomembranous colitis symptoms may occur during or after antibiotic treatment. (See **WARNINGS.**)

Hypersensitivity Reactions: Anaphylaxis (See **WARNINGS**), Serum sickness-like reactions, erythematous maculopapular rashes, erythema multiforme, Stevens-Johnson syndrome, exfoliative dermatitis, toxic epidermal necrolysis, acute generalized exanthematous pustulosis, hypersensitivity vasculitis and urticaria have been reported.

NOTE: These hypersensitivity reactions may be controlled with antihistamines and, if necessary, systemic corticosteroids. Whenever such reactions occur, amoxicillin should be discontinued unless, in the opinion of the physician, the condition being treated is life-threatening and amenable only to amoxicillin therapy.

Liver: A moderate rise in AST (SGOT) and/or ALT (SGPT) has been noted, but the significance of this finding is unknown. Hepatic dysfunction including cholestatic jaundice, hepatic cholestasis and acute cytolytic hepatitis have been reported.

Renal: Crystalluria has also been reported (See **OVERDOSAGE**).

Hemic and Lymphatic Systems: Anemia, including hemolytic anemia, thrombocytopenia, thrombocytopenic purpura, eosinophilia, leukopenia, and agranulocytosis have been reported during therapy with penicillins. These reactions are usually reversible on discontinuation of therapy and are believed to be hypersensitivity phenomena.

Central Nervous System: Reversible hyperactivity, agitation, anxiety, insomnia, confusion, convulsions, behavioral changes, and/or dizziness have been reported rarely.

Miscellaneous: Tooth discoloration (brown, yellow, or gray staining) has been rarely reported. Most reports occurred in pediatric patients. Discoloration was reduced or eliminated with brushing or dental cleaning in most cases.

Combination Therapy with Clarithromycin and Lansoprazole

In clinical trials using combination therapy with amoxicillin plus clarithromycin and lansoprazole, and amoxicillin plus lansoprazole, no adverse reactions peculiar to these drug combinations were observed. Adverse reactions that have occurred have been limited to those that had been previously reported with amoxicillin, clarithromycin, or lansoprazole.

Triple Therapy

Amoxicillin/Clarithromycin/Lansoprazole

The most frequently reported adverse events for patients who received triple therapy were diarrhea (7%), headache (6%), and taste perversion (5%). No treatment-emergent adverse events were observed at significantly higher rates with triple therapy than with any dual therapy regimen.

Dual Therapy

Amoxicillin/Lansoprazole

The most frequently reported adverse events for patients who received amoxicillin three times daily plus lansoprazole three times daily dual therapy were diarrhea (8%) and headache (7%). No treatment-emergent adverse events were observed at significantly higher rates with amoxicillin three times daily plus lansoprazole three times daily dual therapy than with lansoprazole alone.

For more information on adverse reactions with clarithromycin or lansoprazole, refer to their package inserts, **ADVERSE REACTIONS**.

OVERDOSAGE

In case of overdosage, discontinue medication, treat symptomatically, and institute supportive measures as required. If the overdosage is very recent and there is no contraindication, an attempt at emesis or other means of removal of drug from the stomach may be performed. A prospective study of 51 pediatric patients at a poison-control center suggested that overdosages of less than 250 mg/kg of amoxicillin are not associated with significant clinical symptoms and do not require gastric emptying.³

Interstitial nephritis resulting in oliguric renal failure has been reported in a small number of patients after overdosage with amoxicillin.

Crystalluria, in some cases leading to renal failure, has also been reported after amoxicillin overdosage in adult and pediatric patients. In case of overdosage, adequate fluid intake and diuresis should be maintained to reduce the risk of amoxicillin crystalluria.

Renal impairment appears to be reversible with cessation of drug administration. High blood levels may occur more readily in patients with impaired renal function because of decreased renal clearance of amoxicillin. Amoxicillin may be removed from circulation by hemodialysis.

DOSAGE AND ADMINISTRATION

Capsules, tablets and oral suspensions of amoxicillin may be given without regard to meals. The 400 mg suspension and the 875 mg tablet have been studied only when administered at the start of a light meal. However, food effect studies have not been performed with the 200 mg and 500 mg formulations.

Neonates and Infants Aged ≤12 Weeks (≤3 Months)

Due to incompletely developed renal function affecting elimination of amoxicillin in this age group, the recommended upper dose of amoxicillin is 30 mg/kg/day divided q12h.

Adults and Pediatric Patients >3 Months

		Usual Adult	Usual Dose for
Infection	Severity	Dose	Children > 3 months
Ear/Nose/	Mild/Moderate	500 mg	25 mg/kg/day in divided
Throat		every 12	doses every 12 hours
		hours or	or
		250 mg	20 mg/kg/day in divided
		every 8	doses every 8 hours
		hours	
	Severe	875 mg	45 mg/kg/day in divided
		every 12	doses every 12 hours
		hours or	or
		500 mg	40 mg/kg/day in divided
		every 8	doses every 8 hours
		hours	-
Lower	Mild/Moderate	875 mg	45 mg/kg/day in divided
Respiratory	or Severe	every 12	doses every 12 hours
Tract		hours or	or
		500 mg	40 mg/kg/day in divided
		every 8	doses every 8 hours
		hours	
Skin/Skin	Mild/Moderate	500 mg	25 mg/kg/day in divided
Structure		every 12	doses every 12 hours
		hours or	or
		250 mg	20 mg/kg/day in divided
		every 8	doses every 8 hours
		hours	
	Severe	875 mg	45 mg/kg/day in divided
		every 12	doses every 12 hours
		hours or	or
		500 mg	40 mg/kg/day in divided
		every 8	doses every 8 hours
		hours	
	Mild/Moderate		25 mg/kg/day in divided
Tract		every 12	doses every 12 hours
		hours or	or
		250 mg	20 mg/kg/day in divided
		every 8	doses every 8 hours
Severe		hours	
	Severe	875 mg	45 mg/kg/day in divided
		every 12	doses every 12 hours
		hours or	or
		500 mg	40 mg/kg/day in divided
		every 8	doses every 8 hours
		hours	.
Gonorrhea		3 grams as	<u>Prepubertal</u> children: 50
Acute,		single oral	mg/kg amoxicillin,
uncomplicated		dose	combined with 25 mg/kg
ano-genital			probenecid as a single
and urethral			dose.

infections in	NOTE: SINCE
males and	PROBENECID IS
females	CONTRAINDICATED
	IN CHILDREN
	UNDER 2 YEARS, DO
	NOT USE THIS
	REGIMEN IN THESE
	CASES.

After reconstitution, the required amount of suspension should be placed directly on the child's tongue for swallowing. Alternate means of administration are to add the required amount of suspension to formula, milk, fruit juice, water, ginger ale, or cold drinks. These preparations should then be taken immediately. To be certain the child is receiving full dosage, such preparations should be consumed in entirety.

All patients with gonorrhea should be evaluated for syphilis. (See **PRECAUTIONS – Laboratory Tests.**)

Larger doses may be required for stubborn or severe infections.

General

It should be recognized that in the treatment of chronic urinary tract infections, frequent bacteriological and clinical appraisals are necessary. Smaller doses than those recommended above should not be used. Even higher doses may be needed at times. In stubborn infections, therapy may be required for several weeks. It may be necessary to continue clinical and/or bacteriological followup for several months after cessation of therapy. Except for gonorrhea, treatment should be continued for a minimum of 48 to 72 hours beyond the time that the patient becomes asymptomatic or evidence of bacterial eradication has been obtained. It is recommended that there be at least 10 days' treatment for any infection caused by *Streptococcus pyogenes* to prevent the occurrence of acute rheumatic fever.

H. pylori Eradication to Reduce the Risk of Duodenal Ulcer Recurrence

Triple Therapy

Amoxicillin/clarithromycin/lansoprazole

The recommended adult oral dose is 1 gram amoxicillin, 500 mg clarithromycin, and 30 mg lansoprazole, all given twice daily (q12h) for 14 days. (See **INDICATIONS AND USAGE**.)

Dual Therapy

Amoxicillin/lansoprazole

The recommended adult oral dose is 1 gram amoxicillin and 30 mg lansoprazole, each given three times daily (q8h) for 14 days. (See **INDICATIONS AND USAGE**.)

Please refer to clarithromycin and lansoprazole full prescribing information for **CONTRAINDICATIONS** and **WARNINGS**, and for information regarding dosing in elderly and renally impaired patients.

Dosing Recommendations for Adults with Impaired Renal Function

Patients with impaired renal function do not generally require a reduction in dose unless the impairment is severe. Severely impaired patients with a glomerular filtration rate of <30 mL/minute should not receive the 875 mg tablet. Patients with a glomerular filtration rate of 10 to 30 mL/minute should receive 500 mg or 250 mg every 12 hours, depending on the severity of the infection. Patients with a less than 10 mL/minute glomerular filtration rate should receive 500 mg or 250 mg every 24 hours,

depending on severity of the infection.

Hemodialysis patients should receive 500 mg or 250 mg every 24 hours, depending on severity of the infection. They should receive an additional dose both during and at the end of dialysis.

There are currently no dosing recommendations for pediatric patients with impaired renal function.

Directions for Mixing Oral Suspension

Prepare suspension at time of dispensing as follows: Tap bottle until all powder flows freely. Add approximately 1/3 of the total amount of water for reconstitution (see table below) and shake vigorously to wet powder. Add remainder of the water and again shake vigorously.

125 mg/5 mL		
	Amount of Water Required for	
Bottle Size	Reconstitution	
80 mL	55 mL	
100 mL	68 mL	
150 mL	102 mL	
Each teaspoonful (5 mL) will contain 125 mg amoxicillin.		

200 mg/5 mL		
	Amount of Water Required for	
Bottle Size	Reconstitution	
50 mL	34 mL	
75 mL	51 mL	
100 mL	68 mL	
Each teaspoonful (5 mL) will contain 200 mg amoxicillin.		

250 mg/5 mL		
	Amount of Water Required for	
Bottle Size	Reconstitution	
80 mL	55 mL	
100 mL	68 mL	
150 mL	102 mL	
Each teaspoonful (5 mL) will contain 250 mg amoxicillin.		

400 mg/5 mL		
	Amount of Water Required for	
Bottle Size	Reconstitution	
50 mL	34 mL	
75 mL	51 mL	
100 mL	68 mL	
Each teaspoonful (5 mL) will contain 400 mg amoxicillin.		

NOTE: SHAKE ORAL SUSPENSION WELL BEFORE USING. Keep bottle tightly closed. Any unused portion of the reconstituted suspension must be discarded after 14 days. Refrigeration preferable, but not required.

HOW SUPPLIED

Amoxicillin Capsules, USP, for oral administration, contain 250 mg or 500 mg amoxicillin as the trihydrate and are supplied as:

250 mg: yellow, opaque, hard gelatin capsules imprinted AMOX 250 on one side and GG 848 on the other side.

Bottles of	NDC 54868-
15	3107-9
Bottles of	NDC 54868-
20	3107-7
Bottles of	NDC 54868-
21	3107-6
Bottle sof	NDC 54868-
30	3107-1
Bottles of	NDC 54868-
40	3107-3
Bottles of	NDC 54868-
500	3107-2

500 mg: yellow, opaque, hard gelatin capsules imprinted AMOX 500 on one side and GG 849 on the other side.

Bottles of	NDC 54868-
09	3109-6
Bottles of	NDC 54868-
15	3109-8
Bottles of	NDC 54868-
20	3109-7
Bottles of	NDC 54868-
21	3109-3
Bottles of	NDC 54868-
30	3109-1
Bottles of	NDC 54868-
40	3109-9
Bottles of	NDC 54868-
60	3109-5
Bottles of	NDC 54868-
100	3109-2
Bottles of	NDC 54868-
500	3109-0

Amoxicillin Tablets, USP equivalent to 875 mg amoxicillin as the trihydrate and are supplied as:

875 mg: oval-shaped, scored on one side, white to slightly yellowish film-coated tablets embossed GG-962 on one side and 875 on the other side.

Bottles of	NDC 54868-
10	4543-3
Bottles of	NDC 54868-

14	4543-1
Bottles of	NDC 54868-
20	4543-0
Bottles of	NDC 54868-
30	4543-2

Amoxicillin for Oral Suspension, USP: Each 5 mL of reconstituted fruity flavored pink suspension contains 125 mg, 200 mg, 250 mg or 400 mg amoxicillin as the trihydrate.

125 mg/5 mL

100 mL	NDC 54868-
Bottles	4150-2
150 mL	NDC 54868-
Bottles	4150-1

200 mg/5 mL

100 mL	NDC 54868-
Bottles	4468-0

250 mg/5 mL

80 mL	NDC 54868-
Bottles	4155-0
100 mL	NDC 54868-
Bottles	4155-2
150 mL	NDC 54868-
Bottles	4155-1
200 mL	NDC 54868-
Bottles	4155-3
300 mL	NDC 54868-
Bottles	4155-4

400mg/5 mL

50 mL	NDC 54868-
Bottles	5101-1
75 mL	NDC 54868-
Bottles	5101-2
100 mL	NDC 54868-
Bottles	5101-0
200 mL	NDC 54868-
Bottles	5101-3

Store capsules, tablets and unreconstituted powder for oral suspension at 20°-25°C (68°-77°F). [See USP Controlled Room Temperature]. Dispense in a tight container.

CLINICAL STUDIES

H. pylori Eradication to Reduce the Risk of Duodenal Ulcer Recurrence

Randomized, double-blind clinical studies performed in the United States in patients with *H. pylori* and duodenal ulcer disease (defined as an active ulcer or history of an ulcer within 1 year) evaluated the efficacy of lansoprazole in combination with amoxicillin capsules and clarithromycin tablets as triple 14 day therapy, or in combination with amoxicillin capsules as dual 14 day therapy, for the eradication of *H. pylori*. Based on the results of these studies, the safety and efficacy of 2 different eradication regimens were established:

Triple Therapy: Amoxicillin 1 gram twice daily/clarithromycin 500 mg twice daily/lansoprazole 30 mg twice daily.

Dual Therapy: Amoxicillin 1 gram three times daily/lansoprazole 30 mg three times daily.

All treatments were for 14 days. *H. pylori* eradication was defined as 2 negative tests (culture and histology) at 4 to 6 weeks following the end of treatment.

Triple therapy was shown to be more effective than all possible dual therapy combinations. Dual therapy was shown to be more effective than both monotherapies. Eradication of *H. pylori* has been shown to reduce the risk of duodenal ulcer recurrence.

H. pylori Eradication Rates – Triple Therapy (amoxicillin/clarithromycin/lansoprazole) Percent of Patients Cured [95% Confidence Interval] (Number of Patients)

	Triple Therapy	Triple Therapy
		Intent-to-Treat
Study	Evaluable Analysis	Analysis
Study 1	92*	86*
	[80.0-97.7]	[73.3-93.5]
	(n=48)	(n=55)
Study 2	86 [†]	83^{\dagger}
	[75.7-93.6]	[72.0-90.8]
	(n=66)	(n=70)

^{* (}p<0.05) versus lansoprazole/amoxicillin and lansoprazole/clarithromycin dual therapy.

H. pylori Eradication Rates – Dual Therapy (amoxicillin/lansoprazole) Percent of Patients Cured [95% Confidence Interval] (Number of Patients)

	Dual Therapy	Dual Therapy
		Intent-to-Treat
Study	Evaluable Analysis	Analysis
Study 1	77*	70 [*]
	[62.5-87.2]	[56.8-81.2]
	(n=51)	(n=60)
Study 2	66^{\dagger}	61^{\dagger}
	[51.9-77.5]	[48.5-72.9]
	(n=58)	(n=67)

^{* (}p<0.05) versus lansoprazole alone.

^{† (}p<0.05) versus clarithromycin/amoxicillin dual therapy.

† (p<0.05) versus lansoprazole alone or amoxicillin alone.

REFERENCES

- 1. National Committee for Clinical Laboratory Standards. Methods for Dilution Antimicrobial Susceptibility Tests for Bacteria that Grow Aerobically Fourth Edition; Approved Standard. NCCLS Document M7-A4, Vol. 17, No. 2. NCCLS, Wayne, PA, January 1997.
- 2. National Committee for Clinical Laboratory Standards. Performance Standards for Antimicrobial Disk Susceptibility Tests Sixth Edition; Approved Standard. NCCLS Document M2-A6, Vol. 17, No. 1. NCCLS, Wayne, PA, January 1997.
- 3. Swanson-Biearman B, Dean BS, Lopez G, Krenzelok EP. The effects of penicillin and cephalosporin ingestions in children less than six years of age. *Vet Hum Toxicol*. 1988;30:66-67.

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12-2011

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Relabeling and Repackaging by:

Physicians Total Care, Inc. Tulsa, Oklahoma 74146

250 mg Capsule Label

Amoxicillin

Capsules,

USP

250 mg

Rx only



500 mg Capsule Label

Amoxicillin

Capsules,

USP

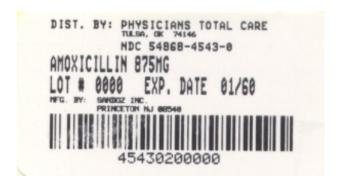
500 mg

Rx only



875 mg Tablet Label

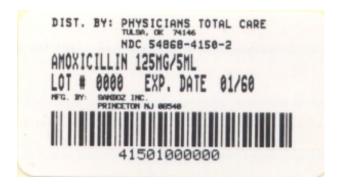
Amoxicillin Tablets, USP 875 mg Rx only



$125\ mg/5\ mL$ Oral Suspension Label

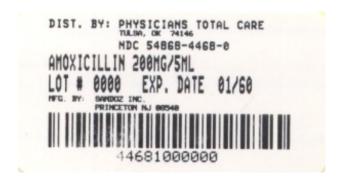
Amoxicillin
for Oral
Suspension, USP
125 mg/5 mL
When reconstituted, each 5 mL
(1 teaspoonful) will contain

amoxicillin trihydrate equivalent to 125 mg amoxicillin. Rx only



200 mg/5 mL Oral Suspension Label

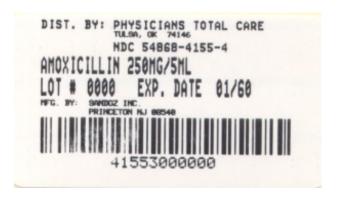
Amoxicillin for Oral
Suspension, USP
200 mg/5 mL
When reconstituted, each 5 mL
(1 teaspoonful) will contain
amoxicillin trihydrate equivalent to 200 mg amoxicillin.
Rx only



250 mg/5 mL Oral Suspension Label

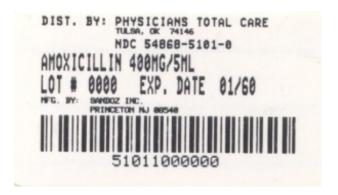
Amoxicillin for Oral Suspension, USP 250 mg/5 mL When reconstituted, each 5 mL

(1 teaspoonful) will contain amoxicillin trihydrate equivalent to 250 mg amoxicillin. Rx only



400 mg/5 mL Oral Suspension Label

Amoxicillin for Oral Suspension, USP 400 mg/5 mL When reconstituted, each 5 mL (1 teaspoonful) will contain amoxicillin trihydrate equivalent to 400 mg amoxicillin. Rx only



AMOXICILLIN

amoxicillin capsule

Product Information

ORAL

Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
(0 = 0

AMO XICILLIN (UNII: 804826J2HU) (AMO XICILLIN ANHYDROUS - UNII:9EM05410Q9) AMO XICILLIN ANHYDROUS 250 mg

Inactive Ingredients

mactive ingredients		
Ingredient Name	Strength	
FERRIC OXIDE YELLOW (UNII: EX438O2MRT)		
TITANIUM DIO XIDE (UNII: 15FIX9 V2JP)		
GELATIN (UNII: 2G86QN327L)		
CELLULO SE, MICRO CRYSTALLINE (UNII: OP1R32D61U)		
MAGNESIUM STEARATE (UNII: 70097M6I30)		
SHELLAC (UNII: 46N107B71O)		
ISOPROPYL ALCOHOL (UNII: ND2M416302)		
BUTYL ALCOHOL (UNII: 8 PJ6 1P6 TS3)		
PROPYLENE GLYCOL (UNII: 6DC9Q167V3)		
FERROSOFERRIC OXIDE (UNII: XM0 M8 7F357)		
AMMO NIA (UNII: 5138 Q 19 F1X)		
POTASSIUM HYDRO XIDE (UNII: WZH3C48 M4T)		
WATER (UNII: 059QF0KO0R)		

ALCOHOL (UNII: 3K9958V90M)

2.70 4.00 5.00 4.00			
Color	YELLOW (Opaque)	Score	no score
Shape	CAPSULE	Size	18 mm
Flavor		Imprint Code	AMOX;250;GG;848
Contains			

Packaging

_	1 uckuging			
#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:54868-3107-1	30 in 1 BOTTLE		
2	NDC:54868-3107-2	500 in 1 BOTTLE		
3	NDC:54868-3107-3	40 in 1 BOTTLE		
4	NDC:54868-3107-6	21 in 1 BOTTLE		
5	NDC:54868-3107-7	20 in 1 BOTTLE		
6	NDC:54868-3107-9	15 in 1 BOTTLE		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA064076	10/29/2003	

amoxicillin capsule

Product Information			
Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:54868-3109(NDC:0781-2613)
Route of Administration	ORAL		

	Active Ingredient/Active Moiety		
l	Ingredient Name	Basis of Strength	Strength
l	AMO XICILLIN (UNII: 804826J2HU) (AMO XICILLIN ANHYDROUS - UNII:9EM05410Q9)	AMOXICILLIN ANHYDROUS	500 mg

Inactive Ingredients		
Ingredient Name	Strength	
FERRIC OXIDE YELLOW (UNII: EX438 O2MRT)		
TITANIUM DIO XIDE (UNII: 15FIX9 V2JP)		
GELATIN (UNII: 2G86QN327L)		
CELLULO SE, MICRO CRYSTALLINE (UNII: OP1R32D61U)		
MAGNESIUM STEARATE (UNII: 70097M6I30)		
SHELLAC (UNII: 46 N10 7B710)		
ISOPROPYL ALCOHOL (UNII: ND2M416302)		
BUTYL ALCOHOL (UNII: 8PJ61P6TS3)		
PROPYLENE GLYCOL (UNII: 6DC9Q167V3)		
FERROSOFERRIC OXIDE (UNII: XM0 M8 7F357)		
AMMO NIA (UNII: 5138 Q19 F1X)		
PO TASSIUM HYDRO XIDE (UNII: WZH3C48 M4T)		
WATER (UNII: 059QF0KO0R)		
ALCOHOL (UNII: 3K9958V90M)		

Product Characteristics				
Color	YELLOW (Opaque)	Score	no score	
Shape	CAPSULE	Size	22mm	
Flavor		Imprint Code	AMOX;500;GG;849	
Contains				

P	Packaging			
#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:54868-3109-0	500 in 1 BOTTLE		
2	NDC:54868-3109-1	30 in 1 BOTTLE		
3	NDC:54868-3109-2	100 in 1 BOTTLE		
4	NDC:54868-3109-3	21 in 1 BOTTLE		
5	NDC:54868-3109-6	09 in 1 BOTTLE		
6	NDC:54868-3109-7	20 in 1 BOTTLE		
7	NDC:54868-3109-8	15 in 1 BOTTLE		
8	NDC:54868-3109-9	40 in 1 BOTTLE		

9 NDC:54868-3109-5 60 in 1 BOTTLE

Marketing Information

Marketing CategoryApplication Number or Monograph CitationMarketing Start DateMarketing End DateANDAANDA06407609/30/1994

AMOXICILLIN

amoxicillin tablet, film coated

Product Information

Product TypeHUMAN PRESCRIPTION DRUGItem Code (Source)NDC:54868-4543(NDC:0781-5061)

Route of Administration ORAL

Active Ingredient/Active Moiety

Ingredient NameBasis of StrengthStrengthAMO XICILLIN (UNII: 804826J2HU) (AMO XICILLIN ANHYDROUS - UNII:9EM05410Q9)AMO XICILLIN ANHYDROUS875 mg

Inactive Ingredients

Ingredient Name	Strength
SILICON DIO XIDE (UNII: ETJ7Z6 XBU4)	
CROSPO VIDO NE (UNII: 68401960 MK)	

ETHYLCELLULOSES (UNII: 7Z8S9VYZ4B)

 $\textbf{HYPROMELLOSE 2910 (5 MPA.S)} \; (UNII: R75537T0T4)$

MAGNESIUM STEARATE (UNII: 70097M6I30)

 $\textbf{CELLULO SE, MICRO CRYSTALLINE} \ (\textbf{UNII: OP1R32D61U})$

 $\textbf{SODIUM STARCH GLYCOLATE TYPE A POTATO} \hspace{0.1cm} \textbf{(UNII: } 58\,56\,\text{J}3G2A2\textbf{)}$

TALC (UNII: 7SEV7J4R1U)

TRIETHYL CITRATE (UNII: 8Z96QXD6UM)

TITANIUM DIO XIDE (UNII: 15FIX9 V2JP)

WATER (UNII: 059QF0KO0R)

Product Characteristics

Color	WHITE (slightly yellowish)	Score	no score
Shape	OVAL	Size	21mm
Flavor		Imprint Code	GG;962;875
Contains			

Contains

ŀ	Packaging				
#	Item Code	Package Description	Marketing Start Date	Marketing End Date	

1 NDC:54868-4543-0 20 in 1 BOTTLE

2 NDC:54868-4543-1	14 in 1 BOTTLE
3 NDC:54868-4543-2	30 in 1 BOTTLE
4 NDC:54868-4543-3	10 in 1 BOTTLE

Marketing Information				
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date	
ANDA	ANDA065228	03/12/2002		

amoxicillin powder, for suspension

Product Information			
Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:54868-4150(NDC:0781-6039)
Route of Administration	ORAL		

l	Active Ingredient/Active Moiety			
	Ingredient Name	Basis of Strength	Strength	
	AMO XICILLIN (UNII: 804826J2HU) (AMO XICILLIN ANHYDROUS - UNII:9EM05410Q9)	AMO XICILLIN ANHYDROUS	125 mg in 5 mL	

Inactive Ingredients		
Ingredient Name	Strength	
ANHYDRO US CITRIC ACID (UNII: XF417D3PSL)		
SILICON DIO XIDE (UNII: ETJ7Z6 XBU4)		
FD&C RED NO. 40 (UNII: WZB9127XOA)		
SO DIUM BENZO ATE (UNII: OJ245FE5EU)		
ANHYDRO US TRISO DIUM CITRATE (UNII: RS7A450 LGA)		
SUCROSE (UNII: C151H8M554)		
XANTHAN GUM (UNII: TTV12P4NEE)		

Packaging			
# Item Code	Package Description	Marketing Start Date	Marketing End Date
1 NDC:54868-4150-1	150 mL in 1 BOTTLE		
2 NDC:54868-4150-2	100 mL in 1 BOTTLE		

Marketing Information			
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA065387	11/24/2004	

amoxicillin powder, for suspension

Product Information					
Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:54868-4468(NDC:0781-6156)		
Route of Administration	ORAL				

Active Ingredient/Active Moiety				
Ingredient Name	Basis of Strength	Strength		
AMO XICILLIN (UNII: 804826J2HU) (AMO XICILLIN ANHYDROUS - UNII:9EM05410Q9)	AMOXICILLIN ANHYDROUS	200 mg in 5 mL		

Inactive Ingredients	
Ingredient Name	Strength
ANHYDRO US CITRIC ACID (UNII: XF417D3PSL)	
SILICON DIO XIDE (UNII: ETJ7Z6 XBU4)	
FD&C RED NO. 40 (UNII: WZB9127XOA)	
SODIUM BENZOATE (UNII: OJ245FE5EU)	
ANHYDRO US TRISO DIUM CITRATE (UNII: RS7A450 LGA)	
SUCROSE (UNII: C151H8M554)	
XANTHAN GUM (UNII: TTV12P4NEE)	

P	ackaging			
#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:54868-4468-0	100 mL in 1 BOTTLE		

Marketing Information				
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date	
ANDA	ANDA065378	02/28/2006		

AMOXICILLIN

amoxicillin powder, for suspension

Product Information			
Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:54868-4155(NDC:0781-6041)
Route of Administration	ORAL		

Active Ingredient/Active Moiety		
Ingredient Name	Basis of Strength	Strength

Inactive Ingredients			
Ingredient Name	Strength		
ANHYDRO US CITRIC ACID (UNII: XF417D3PSL)			
SILICON DIO XIDE (UNII: ETJ7Z6 XBU4)			
FD&C RED NO. 40 (UNII: WZB9127XOA)			
SODIUM BENZOATE (UNII: OJ245FE5EU)			
ANHYDRO US TRISO DIUM CITRATE (UNII: RS7A450 LGA)			
SUCROSE (UNII: C151H8M554)			
XANTHAN GUM (UNII: TTV12P4NEE)			

P	Packaging				
#	Item Code	Package Description	Marketing Start Date	Marketing End Date	
1	NDC:54868-4155-0	80 mL in 1 BOTTLE			
2	NDC:54868-4155-1	150 mL in 1 BOTTLE			
3	NDC:54868-4155-2	100 mL in 1 BOTTLE			
4	NDC:54868-4155-3	200 mL in 1 BOTTLE			
5	NDC:54868-4155-4	300 mL in 1 BOTTLE			

Marketing Information			
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA065387	01/22/2009	

amoxicillin powder, for suspension

Product Information				
Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:54868-5101(NDC:0781-6157)	
Route of Administration	ORAL			

Active Ingredient/Active Moiety				
Ingredient Name	Basis of Strength	Strength		
AMO XICILLIN (UNII: 804826J2HU) (AMO XICILLIN ANHYDROUS - UNII:9EM05410Q9)	AMOXICILLIN ANHYDROUS	400 mg in 5 mL		

Inactive Ingredients		
Ingredient Name	Strength	
ANHYDRO US CITRIC ACID (UNII: XF417D3PSL)		
SILICON DIO XIDE (UNII: ETJ7Z6 XBU4)		

FD&C RED NO. 40 (UNII: WZB9127XOA)	
SODIUM BENZOATE (UNII: OJ245FE5EU)	
ANHYDRO US TRISO DIUM CITRATE (UNII: RS7A450 LGA)	
SUCROSE (UNII: C151H8M554)	
XANTHAN GUM (UNII: TTV12P4NEE)	

P	Packaging				
#	Item Code	Package Description	Marketing Start Date	Marketing End Date	
1	NDC:54868-5101-0	100 mL in 1 BOTTLE			
2	NDC:54868-5101-1	50 mL in 1 BOTTLE			
3	NDC:54868-5101-2	75 mL in 1 BOTTLE			
4	NDC:54868-5101-3	200 mL in 1 BOTTLE			

Marketing Information				
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date	
ANDA	ANDA065378	02/25/2010		

Labeler - Physicians Total Care, Inc. (194123980)

Establishment				
Name	Address	ID/FEI	Business Operations	
Physicians Total Care, Inc.		194123980	relabel, repack	

Revised: 2/2012 Physicians Total Care, Inc.