# CHLOROQUINE PHOSPHATE- chloroquine phosphate tablet, coated Avet Pharmaceuticals Inc.

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#### Chloroquine Phosphate Tablets, USP

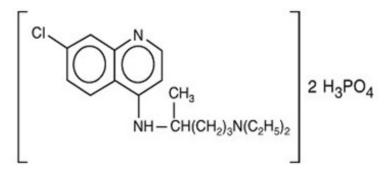
#### CHLOROQUINE PHOSPHATE TABLETS USP, 500 mg

#### DESCRIPTION

Chloroquine phosphate tablet, USP, is a 4-aminoquinoline compound for oral administration. It is a white, odorless, bitter tasting, crystalline substance, freely soluble in water.

Chloroquine phosphate tablet is an antimalarial and amebicidal drug.

Chemically, it is 7-chloro-4-[[4-(diethylamino)-1-methylbutyl]amino]quinoline phosphate (1:2) and has the following structural formula:



Each tablet contains 500 mg of chloroquine phosphate USP, equivalent to 300 mg chloroquine base.

#### Inactive Ingredients:

microcrystalline cellulose, dibasic calcium phosphate, pregelatinzed starch, sodium starch glycolate, colloidal silicon dioxide, magnesium stearate, polyethylene glycol, titanium dioxide, hydroxy propyl methyl cellulose and polysorbate 80.

# CLINICAL PHARMACOLOGY

Chloroquine is rapidly and almost completely absorbed from the gastrointestinal tract, and only a small proportion of the administered dose is found in the stools. Approximately 55% of the drug in the plasma is bound to nondiffusible plasma constituents. Excretion of chloroquine is quite slow but is increased by acidification of the urine. Chloroquine is deposited in the tissues in considerable amounts. In animals, from 200 to 700 times the plasma concentration may be found in the liver, spleen, kidney, and lung; leukocytes also concentrate the drug. The brain and spinal cord, in contrast, contain only 10 to 30 times the amount present in plasma.

Chloroquine undergoes appreciable degradation in the body. The main metabolite is desethylchloroquine, which accounts for one fourth of the total material appearing in the urine; bisdesethylchloroquine, a carboxylic acid derivative, and other metabolic products as yet uncharacterized are found in small amounts. Slightly more than half of the urinary drug products can be accounted for as unchanged chloroquine.

# Cardiac Electrophysiology

QTc interval prolongation was studied in a randomized, placebo-controlled parallel trial in 116 healthy subjects who received either chloroquine (1000 mg) alone or in combination with oral azithromycin (500 mg, 1000 mg, and 1500 mg once daily). Co-administration of azithromycin increased the QTc interval in a dose- and concentration- dependent manner. In comparison to chloroquine alone, the maximum mean (95% upper confidence bound) increases in QTcF were 5 ms, 7 (12) ms and 9 (14) ms with the co-administration of 500 mg, 1000 mg and 1500 mg azithromycin, respectively.

#### Microbiology

Mechanism of Action: Chloroquine, a 4-aminoquinoline, is an anti-protozoal agent. The precise mechanism by which chloroquine exhibits activity is not known. Chloroquine, may exert its effect against *Plasmodium*species by concentrating in the acid vesicles of the parasite and by inhibiting polymerization of heme. It can also inhibit certain enzymes by its interaction with DNA.

Activity *in Vitro*and in Clinical Infections: Chloroquine is active against the erythrocytic forms of susceptible strains of *Plasmodium falciparum*, *Plasmodium malariae*, *Plasmodium ovale*, and *Plasmodium vivax*. Chloroquine is not active against the gametocytes and the exoerythrocytic forms including the hypnozoite stage (*P. vivax* and *P. ovale*) of the *Plasmodium* parasites.

In vitro studies with Chloroquine demonstrated that it is active against the trophozoites of *Entamoeba histolytica*.

Drug Resistance: Resistance of *Plasmodium*parasites to chloroquine is widespread (see INDICATIONS AND USAGE, Limitations of Use in Malaria and WARNINGS).

*Plasmodium*parasites exhibiting reduced susceptibility to hydroxychloroquine also show reduced susceptibility to chloroquine.

Patients in whom chloroquine or hydroxychloroquine have failed to prevent or cure clinical malaria or parasitemia, or patients who acquired malaria in a geographic area where chloroquine resistance is known to occur should be treated with another form of antimalarial therapy (see WARNINGS and INDICATIONS AND USAGE, Limitations of Use).

# INDICATIONS AND USAGE

Chloroquine phosphate tablets are indicated for the:

- Treatment of uncomplicated malaria due to susceptible strains of *P. falciparum*, *P.malariae*, *P. ovale*, and *P.vivax*.
- Prophylaxis of malaria in geographic areas where resistance to chloroquine is not present.
- Treatment of extraintestinal amebiasis.

Chloroquine phosphate tablets do not prevent relapses in patients with vivax or ovale malaria because it is not effective against excerythrocytic forms of the parasites.

Limitations of Use in Malaria:

• Do not use Chloroquine phosphate tablets for the treatment of complicated malaria (high-grade parasitemia and/or complications e.g., cerebral malaria or acute renal failure).

- Do not use Chloroquine phosphate tablets for malaria prophylaxis in areas where chloroquine resistance occurs, Resistance to Chloroquine phosphate tablets is widespread in *P. falciparum*, and is reported in *P.vivax*(see WARNINGS).
- Concomitant therapy with an 8-aminoquinoline drug is necessary for treatment of the hypnozoite liver stage forms of *P.vivax* and *P.ovale*(see DOSAGE AND ADMINISTRATION).

# CONTRAINDICATIONS

Use of Chloroquine phosphate tablets for indications other than acute malaria is contraindicated in the presence of retinal or visual field changes of any etiology.

Use of Chloroquine phosphate tablets is contraindicated in patients with known hypersensitivity to 4- aminoquinoline compounds.

## WARNINGS

#### Chloroquine-Resistant Malaria

Chloroquine phosphate tablets are not effective against chloroquine-or hydroxychloroquine-resistant strains of *Plasmodium*species (see CLINICAL PHARMACOLOGY, Microbiology). Chloroquine resistance is widespread in *P. falciparum*and is reported in *P. vivax*. Before using chloroquine for prophylaxis, it should be ascertained whether chloroquine is appropriate for use in the region to be visited by the traveler. Information regarding the geographic areas where resistance to chloroquine occurs, is available at the Centers for Disease Control and Prevention (www.cdc.gov\malaria).

Patients infected with a resistant strain of plasmodia as shown by the fact that normally adequate doses have failed to prevent or cure clinical malaria or parasitemia should be treated with another form of antimalarial therapy.

# Treatment of Exo-Erythocytic Forms of Malaria

Chloroquine does not treat the hypnozoite liver stage forms of *Plasmodium*and will therefore not prevent relapses of malaria due to *P. vivax*or *P. ovale*. Additional treatment with an anti-malarial agent active against these forms, such as an 8-aminoquinoline, is required for the treatment of infections with *P. vivax*and *P. ovale*.

# Cardiac Effects including Cardiomyopathy and QT prolongation

Fatal and life-threatening cardiotoxicity, including cardiomyopathy and arrhythmias, have been reported with the use of chloroquine. (see ADVERSE REACTIONS and OVERDOSAGE). In multiple cases, endomyocardial biopsy showed association of the cardiomyopathy with phospholipidosis in the absence of inflammation, infiltration, or necrosis. Patients may present with ventricular hypertrophy and conduction disorders. ECG findings include atrioventricular, right or left bundle branch block. Chronic toxicity should be considered when conduction disorders (bundle branch block / atrioventricular heart block) are diagnosed.

QT interval prolongation, torsades de pointes, and ventricular arrhythmias have been reported with the use of chloroquine. The risk is greater if chloroquine is administered at high doses. Chloroquine should be used with caution in patients with cardiac disease, a history of ventricular arrhythmias, uncorrected hypokalemia and/or hypomagnesemia, or bradycardia (<50 bpm), and during concomitant administration with QT interval

prolonging agents due to potential for QT interval prolongation (see WARNINGS, PRECAUTIONS, Drug Interactions, ADVERSE REACTIONS and OVERDOSAGE). Monitor for signs and symptoms of cardiotoxicity during chloroquine therapy. Discontinue chloroquine if cardiotoxicity is suspected or demonstrated by tissue biopsy.

# Skeletal Muscle Myopathy and Neuropathy

Skeletal muscle myopathy or neuropathy leading to progressive weakness and atrophy of proximal muscle groups, and abnormal nerve conduction, have been reported. Muscle and nerve biopsies have shown associated phospholipidosis. Assess muscle strength and deep tendon reflexes periodically in patients on long-term therapy with chloroquine. Discontinue chloroquine if muscle or nerve toxicity is suspected or demonstrated by tissue biopsy.

# Hypoglycemia

Chloroquine has been shown to cause severe hypoglycemia including loss of consciousness that could be life-threatening in patients treated with or without antidiabetic medications (see PRECAUTIONS, Drug Interactions). Patients treated with Chloroquine phosphate tablets should be warned about the risk of hypoglycemia and the associated clinical signs and symptoms. Patients presenting with clinical symptoms suggestive of hypoglycemia during treatment with chloroquine should have their blood glucose level checked and treatment reviewed as necessary.

# Retinopathy <sup>1</sup>

Irreversible retinal damage has been observed in some patients who had received chloroquine. Significant risk factors for retinal damage include daily doses of chloroquine phosphate greater than 2.3 mg/kg of actual body weight, durations of use greater than five years, subnormal glomerular filtration, use of some concomitant drug products such as tamoxifen citrate (see PRECAUTIONS), and concurrent macular disease.

A baseline ophthalmological examination should be performed within the first year of starting chloroquine phosphate tablets. The baseline exam should include: best corrected distance visual acuity (BCVA), an automated threshold visual field (VF) of the central 10 degrees (with retesting if an abnormality is noted), and spectral domain optical coherence tomography (SD-OCT).

For individuals with significant risk factors (daily dose of chloroquine phosphate greater than 2.3 mg/kg of actual body weight, subnormal glomerular filtration, use of tamoxifen citrate or concurrent macular disease) monitoring should include annual examinations which include BCVA, VF and SD-OCT. For individuals without significant risk factors, annual exams (including BCVA, VF and SD-OCT) can usually be deferred until five years of treatment.

In individuals of Asian descent, retinal toxicity may first be noticed outside the macula. In patients of Asian descent, it is recommended that visual field testing be performed in the central 24 degrees instead of the central 10 degrees.

It is recommended that chloroquine be discontinued if ocular toxicity is suspected and the patient should be closely observed given that retinal changes (and visual disturbances) may progress even after cessation of therapy.

# **Central Nervous System Effects**

Acute extrapyramidal disorders may occur with chloroquine (see PRECAUTIONS,

ADVERSE REACTIONS and OVERDOSAGE). These adverse reactions usually resolve after treatment discontinuation and/or symptomatic treatment.

## Neuropsychiatric Reactions Including Suicidality

Suicidal behavior, suicidal ideation, and other neuropsychiatric adverse reactions have been reported in patients treated with chloroquine (see ADVERSE REACTIONS). Neuropsychiatric adverse reactions typically occur within the first month after the start of treatment with chloroquine and have been reported in patients with and without a prior history of psychiatric disorders. The risks and benefits of continued treatment with chloroquine should be assessed for patients who develop these symptoms. Given the long half-life of the drug, some patients may require several weeks off drug for symptoms to partially or fully abate.

Advise patients to contact their healthcare provider promptly if they experience new or worsening neuropsychiatric symptoms such as depression, suicidal thoughts or behavior, or mood changes

## **Renal Toxicity**

Proteinuria with or without a moderate reduction in glomerular filtration rate have been reported with the use of chloroquine. Renal biopsy showed phospholipidosis without immune deposits, inflammation, and/or increased cellularity. Physicians should consider phospholipidosis as a possible cause of renal injury in patients with underlying connective tissue disorders who are receiving chloroquine. Discontinue chloroquine if renal toxicity is suspected or demonstrated by tissue biopsy.

## **Pediatric Accidental Ingestion**

A number of fatalities have been reported following the accidental ingestion of chloroquine, sometimes in relatively small doses (0.75 g or 1 g chloroquine phosphate in one 3-year-old child). Patients should be strongly warned to keep Chloroquine phosphate tablets out of the reach of children because they are especially sensitive to the 4-aminoquinoline compounds (see OVERDOSAGE and ADVERSE REACTIONS).

#### Worsening of Psoriasis

Use of Chloroquine phosphate tablets in patients with psoriasis may precipitate a severe attack of psoriasis. Chloroquine phosphate tablets should not be used in psoriasis unless the benefit to the patient outweighs the potential risks.

# Risks Associated with Use in Porphyria

Administration of chloroquine to patients with porphyria may exacerbate porphyria. Avoid chloroquine in patients with porphyria. Hepatotoxicity Associated with Porphyria Cutanea Tarda Cases of hepatotoxicity have been reported when chloroquine was used in patients with porphyria cutanea tarda (PCT). Patients received dosages up to 500 mg per day. Most of the PCT-related cases presented with marked elevations in transaminases (>20 times the upper limit of the reference range) within days to a month of chloroquine initiation. Measure liver tests promptly in patients who report symptoms that may indicate liver injury, such as fatigue, rash, nausea, dark urine, or jaundice. In this clinical context, if the patient is found to have abnormal serum liver tests, interrupt chloroquine treatment and investigate further to establish the probable cause. The safety and effectiveness of chloroquine for the treatment of PCT have not been established and chloroquine is not approved for this use.

## **Potential Carcinogenic Risk**

Experimental data showed a potential risk of inducing gene mutations. There is insufficient evidence regarding the carcinogenicity of chloroquine in experimental animals (see PRECAUTIONS, Carcinogenesis, Mutagenesis, Impairment of Fertility). In humans, there are insufficient data to rule out an increased risk of cancer in patients receiving long-term treatment.

#### **Usage in Pregnancy**

In animal studies, embryo-fetal developmental toxicity was shown at doses ranging from 250 to 1500 mg/kg body weight; approximately 3 to 16 times the maximum recommended therapeutic dose based on a body surface area comparison (see PRECAUTIONS, Animal Pharmacology and/or Animal Toxicology). Preclinical data showed a potential risk of genotoxicity in some test systems (PRECAUTIONS, Carcinogenesis, Mutagenesis, Impairment of Fertility).

In humans, at recommended doses for prophylaxis and treatment of malaria, observational studies as well as a meta-analysis, including a small number of prospective studies with chloroquine exposure during pregnancy, have shown no increase in the rate of birth defects or spontaneous abortions.

The individual benefit-risk balance should be reviewed before prescribing chloroquine in pregnant women.

# PRECAUTIONS

#### Hematological Effects/Laboratory Tests

Complete blood cell counts should be checked periodically if patients are given prolonged therapy (see ADVERSE REACTIONS).

Chloroquine may cause hemolysis in glucose-6 phosphate dehydrogenase (G-6-PD) deficiency. Blood monitoring may be needed as hemolytic anemia may occur, in particular in association with other drugs that cause hemolysis (see ADVERSE REACTIONS).

#### Auditory Effects

In patients with preexisting auditory damage, chloroquine should be administered with caution. In case of any defects in hearing, chloroquine should be immediately discontinued, and the patient closely observed (see ADVERSE REACTIONS).

#### Use in Patients with Hepatic Impairment

Since Chloroquine phosphate tablets are known to concentrate in the liver, it should be used with caution in patients with hepatic disease or alcoholism or in conjunction with known hepatotoxic drugs.

#### **Central Nervous System Effects**

Chloroquine may increase the risk of convulsions in patients with a history of epilepsy.

#### **Drug Interactions**

Antacids and kaolin: Antacids and kaolin can reduce absorption of chloroquine; an interval of at least 4 hours between intake of these agents and chloroquine should be observed.

Cimetidine: Cimetidine can inhibit the metabolism of chloroquine, increasing its plasma level. Concomitant use of cimetidine should be avoided.

Insulin and other antidiabetic drugs: As chloroquine may enhance the effects of a hypoglycemic treatment, a decrease in doses of insulin or other antidiabetic drugs may be required.

Arrhythmogenic drugs: There may be an increased risk of inducing ventricular arrhythmias if chloroquine is used concomitantly with other arrhythmogenic drugs, such as amiodarone or moxifloxacin.

Ampicillin: In a study of healthy volunteers, chloroquine significantly reduced the bioavailability of ampicillin. An interval of at least two hours between intake of ampicillin and chloroquine should be observed.

Cyclosporine: After introduction of chloroquine (oral form), a sudden increase in serum cyclosporine level has been reported. Therefore, close monitoring of serum cyclosporine level is recommended and, if necessary, chloroquine should be discontinued.

Mefloquine: Co-administration of chloroquine and mefloquine may increase the risk of convulsions.

The blood concentrations of chloroquine and desethylchloroquine (the major metabolite of chloroquine, which also has antimalarial properties) were negatively associated with log antibody titers. Chloroquine taken in the dose recommended for malaria prophylaxis can reduce the antibody response to primary immunization with intradermal human diploid-cell rabies vaccine.

Praziquantel: In a single-dose interaction study, chloroquine has been reported to reduce the bioavailability of praziquantel.

Tamoxifen: Concomitant use of chloroquine with drugs known to induce retinal toxicity such as tamoxifen is not recommended (see WARNINGS).

#### Carcinogenesis, Mutagenesis, Impairment of Fertility

Carcinogenesis

There is insufficient evidence regarding the carcinogenicity of chloroquine in experimental animals.

#### Mutagenesis

Chloroquine is reported in the literature to be a weak genotoxic agent which may elicit both gene mutations and chromosomal/DNA breaks. Mechanisms may involve DNA intercalation or induction of oxidative stress. The publications reported both positive and negative results in the in vitro reverse gene mutation assays using bacteria (Ames test) and in the in vivo studies using rodents (mouse bone marrow cell sister chromatid exchange, mouse bone marrow cell chromosome abnormality, and rat DNA strand breaks in multiple organs when animals were dosed by intraperitoneal route). Those chromosomal effects were not observed when Chloroquine was administered in animals orally (i.e. the therapeutic route of administration). Altogether those cellular and rodent data show evidence of genotoxic potential but discrepancies have been noted between published data.

Fertility

A study in male rats after 30 days of oral treatment at 5 mg/day of chloroquine showed a decrease in testosterone levels, weight of testes, epididymis, seminal vesicles, and prostate. Untreated female rats had reduced number of fetuses after mating with males that received intraperitoneal injections of 10 mg/kg chloroquine for 14 days.

## Animal Pharmacology and/or Animal Toxicology

Based on non-Good Laboratory Practice literature reports, chloroquine causes malformations in rats, resulting in a fetal mortality rate of 25% after administration at doses between 250 and 1500 mg/kg (approximately 3 to 16 times the maximum recommended therapeutic dose of 900 mg of chloroquine base, based on a body surface area comparison), showing ocular malformations in 45% of fetuses in the 1000 mg/kg group (approximately 11 times the maximum recommended therapeutic dose based on a body surface area comparison). Autoradiographic studies have shown that when administered at the start or the end of gestation, Chloroquine accumulates in the eyes and ears.

## Pregnancy

See WARNINGS, Usage in Pregnancy.

## **Nursing Mothers**

Because of the potential for serious adverse reactions in nursing infants from chloroquine, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the potential clinical benefit of the drug to the mother.

The excretion of chloroquine and the major metabolite, desethylchloroquine, in breast milk was investigated in eleven lactating mothers following a single oral dose of chloroquine (600 mg base). The maximum daily dose of the drug that the infant can receive from breastfeeding was about 0.7% of the maternal start dose of the drug in malaria chemotherapy. Separate chemoprophylaxis for the infant is required (see DOSAGE AND ADMINISTRATION).

# Pediatric Use

See WARNINGS and DOSAGE AND ADMINISTRATION.

# Geriatric Use

Clinical studies of Chloroquine phosphate tablets did not include sufficient numbers of subjects aged 65 and over to determine whether they respond differently from younger subjects. However, 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.

# **ADVERSE REACTIONS**

The following adverse reactions have been identified during post-approval use of chloroquine or other 4-aminoqunoline compounds. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

**Ocular disorders:**Maculopathy and macular degeneration have been reported and may be irreversible. Irreversible retinopathy with retinal pigmentation changes (bull's eye appearance) and visual field defects (paracentral scotomas) in patients receiving longterm or high-dosage 4-aminoquinoline therapy have been reported (see WARNINGS). Visual disturbances (blurring of vision and difficulty of focusing or accommodation); nyctalopia; scotomatous vision with field defects of paracentral, pericentral ring types, and typically temporal scotomas (e.g., difficulty in reading with words tending to disappear, seeing half an object, misty vision, and fog before the eyes) have been reported. Reversible corneal opacities have also been reported.

Immune system disorders: Urticaria, anaphylactic reaction including angioedema.

**Ear and labyrinth disorders:**Nerve type deafness; tinnitus, reduced hearing in patients with preexisting auditory damage.

**Musculoskeletal and connective tissue-disorders:**Sensorimotor disorders, skeletal muscle myopathy or neuromyopathy leading to progressive weakness and atrophy of proximal muscle groups, depression of tendon reflexes and abnormal nerve conduction.

**Gastrointestinal disorders:**Hepatitis, increased liver enzymes, anorexia, nausea, vomiting, diarrhea, abdominal cramps.

Skin and subcutaneous tissue disorders: Erythema multiforme, Stevens-Johnson syndrome, toxic epidermal necrolysis, exfoliative dermatitis. Pleomorphic skin eruptions, skin and mucosal pigmentary changes; lichen planus-like eruptions, pruritus,; drug rash with eosinophilia and systemic symptoms (DRESS syndrome); photosensitivity and hair loss and bleaching of hair pigment.

**Blood and lymphatic system disorders:**Pancytopenia, aplastic anemia, reversible agranulocytosis, thrombocytopenia and neutropenia. Hemolytic anemia in G6PD deficient patients (see PRECAUTIONS).

**Nervous system disorders:**Convulsions, mild and transient headache, polyneuropathy, acute extrapyramidal disorders (such as dystonia, dyskinesia, tongue protrusion, torticollis) (see WARNINGS and OVERDOSAGE).

**Neuropsychiatric disorders:**Neuropsychiatric changes including psychosis, delirium, anxiety, agitation, insomnia, confusion, hallucinations, personality changes, depression, suicidal behavior, suicidal ideation, affect/emotional lability, irritability, nervousness, nightmares/sleep terrors, depression, delusions, paranoia, and mania.

**Cardiac disorders:**Hypotension, electrocardiographic changes (particularly, inversion or depression of the T-wave with widening of the QRS complex), and cardiomyopathy (which may result in cardiac failure and in some cases a fatal outcome).

Cardiac arrhythmias, conduction disorders such as bundle branch block / atrioventricular block, QT interval prolongation, torsade de pointes, ventricular tachycardia and ventricular fibrillation have been reported with therapeutic doses of chloroquine as well as with overdose. The risk is greater if chloroquine is administered at high doses. Fatal cases have been reported (see WARNINGS, Cardiac Effects and OVERDOSAGE).

Metabolic and Nutritional disorders: Hypoglycemia (see WARNINGS).

To report SUSPECTED ADVERSE REACTIONS, contact Avet Pharmaceuticals at 1-866-901-DRUG (3784), or the FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

# OVERDOSAGE

**Signs and Symptoms:**Chloroquine is very rapidly and completely absorbed after ingestion. Toxic doses of chloroquine can be fatal. As little as 1 g may be fatal in children. Toxic symptoms can occur within minutes. The symptoms of overdosage may include nausea, vomiting, headache, drowsiness, visual disturbances, cardiovascular collapse, convulsions, hypokalemia, rhythm and conduction disorders including QT prolongation, torsades de pointes, ventricular tachycardia and ventricular fibrillation, followed by sudden potentially fatal respiratory and cardiac arrest. Immediate medical attention is required, as these effects may appear shortly after the overdose. Cases of extrapyramidal disorders have also been reported in the context of chloroquine overdose (see WARNINGS and ADVERSE REACTIONS).

**Treatment:**Treatment is symptomatic and must be prompt with immediate evacuation of the stomach by emesis or gastric lavage followed by treatment with activated charcoal. Chloroquine overdose is a life- threatening emergency and should be managed with cardio-respiratory and hemodynamic support, monitoring of potassium along with management of arrhythmias and convulsions, as necessary. A patient who survives the acute phase and is asymptomatic should be closely observed until all clinical features of toxicity resolve.

# **DOSAGE & ADMINISTRATION**

The dosage of chloroquine phosphate is often expressed in terms of equivalent chloroquine base. Each 500 mg tablet of Chloroquine phosphate contains the equivalent of 300 mg chloroquine base. In infants and children the dosage is preferably calculated by body weight.

# Prophylaxis against chloroquine-sensitive *Plasmodium*species

**Adult Dose:**The dosage for prophylaxis is 500 mg (= 300 mg base) administered once per week on exactly the same day of each week.

**Pediatric Dose:**The dosage for prophylaxis is 5 mg calculated as base, per kg of body weight, administered once per week on exactly the same day of each week. The pediatric dose should never exceed the adult dose regardless of weight.

If circumstances permit, suppressive therapy should begin two weeks prior to exposure. However, failing this in adults, an initial double (loading) dose of 1 g (= 600 mg base), or in children 10 mg base/kg may be taken in two divided doses, six hours apart. The suppressive therapy should be continued for eight weeks after leaving the endemic area.

# Treatment of uncomplicated malaria due to chloroquine-sensitive *Plasmodium*species

**Adults:**An initial dose of 1 g salt (= 600 mg base) followed by an additional 500 mg (= 300 mg base) after six to eight hours and a single dose of 500 mg (= 300 mg base) on

each of two consecutive days. This represents a total dose of 2.5 g chloroquine phosphate or 1.5 g base in three days.

**Infants and Children:**In infants and children, the recommended dose is 10 mg base/kg followed by 5 mg based/kg at 6, 24 and 36 hours (total dose 25 mg based/kg). The pediatric dose should never exceed the adult dose regardless of weight.

The dosage for adults of low body weight and for infants and children should be determined as follows:

First dose: 10 mg base per kg (but not exceeding a single dose of 600 mg base).

Second dose: (6 hours after first dose) 5 mg base per kg (but not exceeding a single dose of 300 mg base).

Third dose: (24 hours after first dose) 5 mg base per kg.

Fourth dose: (36 hours after first dose) 5 mg base per kg.

**P. vivaxand P. ovale:** Concomitant therapy with an 8-aminoquinoline compound is necessary for treatment of the hypnozoite liver stage forms of the parasites.

**Extraintestinal Amebiasis:**Adults Dosage: 1 g salt (600 mg base) daily for two days, followed by 500 mg (300 mg base) daily for at least two to three weeks. Treatment is usually combined with an effective intestinal amebicide.

#### Geriatric Use

See PRECAUTIONS, Geriatric Use.

# HOW SUPPLIED

Chloroquine phosphate tablets, USP contains 500 mg chloroquine phosphate USP, equivalent to 300 mg of chloroquine base

Bottle of 25 (NDC 23155-850-74)

White, round, biconvex film-coated tablets, with debossing of 'CP 500' on one side and plain surface on the other side.

Dispense in tight, light-resistant container as defined in the USP/NF.

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]. Protect from light and moisture.

# REFERENCES

 Marmor MF, Kellner U, and Lai TY, et al. Recommendations on Screening for Chloroquine and Hydroxychloroquine Retinopathy (2016 Revision). Ophthalmology 2016. Doi10.1016./jophtha.2016.01.058

# Rx Only

Manufactured by:

Suven Pharmaceuticals Limited

Plot No's.: 262 to 271, IDA Pashamylaram,

Sangareddy District 502307, Telangana, India

ML No: 24/MD/AP/2009/F/CC

Manufactured for:

## Avet Pharmaceuticals Inc.

East Brunswick, NJ 08816

1.866.91.DRUG (3784)

#### Avet Pharma®

Lb50395-3-01

#### Revised: 05/2023

#### 25 Ct Bottle Label

NDC 23155-850-74	*Each tablet contains :	N3 23155
	Chloroquine phosphate, USP 500 mg	85074 1
Tablets, USP	(Equivalent to 300 mg Chloroquine base)	
500 mg*	USUAL ADULT DOSAGE :See accompanying	
Rx Only 25 Tablets	product literature for	
For use in Malaria and	complete information.	
Extraintestinal	<b>Dispense</b> in a tight, light resistant container as	
Amebiasis Only	defined in the USP	
:b50395-1-00	using a child-resistant closure.	
Rev. 01/2023Avet	Store at 200 to 25oC (680 to 77oF); excursions	
Pharma ®	permitted to	
	15o to 30oC (59o to 86oF) [see USP Controlled	
	Room	
	Temperature]. Protect from light and moisture.	
	WARNING : Physicians should completely	
	familiarize	
	themselves with the complete contents of the	
	product	
	literature, before prescribing chloroquine	
	phosphate.	
	KEEP OUT OF THE REACH OF CHILDREN	
	Manufacured by: Suven Pharmaceuticals	
	Limited,	
	Pashamylaram, Telangana 502307, India	
	ML No: 24/MD/AP/2009/F/CC	
	Manufactured for: Avet Pharmaceuticals Inc.	
	East Brunswick, NJ 08816	
	1.866.901.DRUG (3784)	

NDC 23155- <b>850</b> -74 Chloroquine Phosphate Tablets, USP	* Each tablet contains : Chloroquine phosphate, USP 500 mg (Equivalent to 300 mg Chloroquine base) USUAL ADULT DOSAGE : See accompanying product literature for complete information. Dispense in a tight, light-resistant container as defined in the USP using a child-resistant closure.	N3 23155 85074 1
500 mg*	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]. Protect from light and moisture.	
Rx Only 25 Tablets	WARINING : Physicians should completely familiarize themselves with the complete contents of the product	NON VARNISH AREA* 45 x 18 mm
For use in Malaria and Extraintestinal Amebiasis Only	literature, before prescribing chloroquine phosphate. KEEP OUT OF THE REACH OF CHLDREN Manufactured by: <b>Suven Pharmaceuticals Limited</b> , Pashamytaram, Telangana 502307, India ML No: 24/MD/AP/2009/F/CC	Batch details & 2 D barcode along -with human readable details to be overprinted during batch packaging as per specimen.
Lb50395-1-00 Rev. 01/2023 + Avet Pharma®	Manufactured for: Avet Pharmaceuticals Inc. East Brunswick, NJ 08816 1.866.901.DRUG (3784)	

СНІ	CHLOROQUINE PHOSPHATE								
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Pro	duct Info	rmation							
Prod	duct Type		HUMAN PRESCRIPTION DRUG	G Item Code (Source)			ND	NDC:23155-850	
Route of Administration			ORAL						
		/							
Active Ingredient/Active Moiety									
Ingredient Name				Basis of Strengt			:h	Strength	
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Color white				Score			no score		
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Flavo	ivor Imprint Code								
Cont	tains								
Pac	Packaging								
# It	tem Code	Pa	ckage Description				ting End ate		
	DC:23155- 0-74	25 in 1 BOTTLE Combination Pr	; PLASTIC; Type 0: Not a oduct		03/20/20	023			

-			
3	00		
-			
Marketing	Information		
Marketing Category	Information Application Number or Monograph Citation	Marketing Start Date	Marketing End Date

Labeler - Avet Pharmaceuticals Inc. (780779901)

Registrant - Suven Pharmaceuticals Limited (861468675)

# Establishment

Name	Address	ID/FEI	Business Operations
Suven Pharmaceuticals Limited		677604288	pack(23155-850) , analysis(23155-850) , api manufacture(23155-850) , label(23155-850) , manufacture(23155-850)

Revised: 12/2024

Avet Pharmaceuticals Inc.