VANCOUVER GENERAL HOSPITAL
PHARMACEUTICAL SCIENCES
SPECIAL ACCESS PROGRAMME DRUG

DRUG NAME	**ALTERNATE NAME**
1. quinine base	Quinimax®
2. quinine dihydrochloride	Quininject®

STRENGTH	**DOSAGE FORM**
1. quinine base 500 mg/4 mL	Injectable
2. quinine dihydrochloride 600 mg/2 mL	

INDICATIONS

Treatment of severe and complicated malaria, and infections due to chloroquine-resistant or multi-drug resistant strains of malaria

DOSAGE AND ADMINISTRATION

Loading dose:

1. quinine base 5.8 mg/kg IV in 100 mL D5W (preferred) over 30 minutes x 1 dose
2. quinine dihydrochloride 7 mg/kg IV in 100 mL D5W (preferred) over 30 minutes x 1 dose

Administer via an infusion pump

Exceptions for Loading:

Loading dose should NOT be given if patient received quinine or quinidine within proceeding 24 hours, or dose or mefloquine within preceding two weeks due to risk of cumulative toxicity.

- *Use maintenance dosing for these patients; if history is unclear and/or benefits of loading dose outweigh risk, cardiac monitoring is recommended.*
- *Loading dose is NOT required if IV quinine used in patients without severe malaria and indication for parenteral anti-malarial is vomiting or inability to tolerate oral therapy.*

Maintenance dose (start 8 to 12 hours after loading dose):

1. quinine base 8.3 mg/kg IV Q8H
2. quinine dihydrochloride 10 mg/kg IV Q8H

Dilute in 10 mL/kg D5W (preferred)

Infuse over 4 hours

Continue until indication for IV quinine therapy no longer exists and/or patient can swallow, then switch to PO therapy to complete course.

If more than 48 hours of parenteral therapy required and patient remains severely ill or continues to have acute renal injury, change dosing interval to Q12H after 48 hours. Full dose can be used if patient is on dialysis.

KNOWN SIDE EFFECTS*

- Cinchonism (tinnitus, impaired hearing, headache, nausea, disturbed vision, vomiting, abdominal pain, diarrhea, vertigo), hypersensitivity (urticaria, pruritus, skin flushing, thrombocytopenia), fever, rashes, dyspnea, angioedema, precipitation of asthma, haemoglobinuria, hypoglycaemia (quinine-induced hyperinsulinemia), hypoprothrombinaemia, renal failure, cardiotoxicity (dysrhythmias, asystole, hypotension, angina symptoms), CNS disturbances, oculotoxicity (sudden blindness), injection site (abscess, focal necrosis, pain)

SPECIAL PRECAUTIONS

- Avoid if hypersensitivity to quinine or quinidine
- Use with caution in patient with a history of cardiovascular disease, renal dysfunction, glucose-6-phosphate dehydrogenase deficiency, asthma or atopy, or myasthenia gravis
- Monitor vital signs, blood glucose and ECG if history of underlying cardiac disease
- Compatible with normal saline and D5W
- Avoid rapid injection; maximum rate 4 mg/kg base per hour; exception 5.8 mg/kg loading dose to avoid risk of cardiovascular toxicity
- Store below 25°C and protect from light. Discard any unused solution

***REPORT ANY ADVERSE DRUG REACTIONS TO PHARMACEUTICAL SCIENCES**