National Agency for Food & Drug Administration & Control (NAFDAC)

Registration & Regulatory Affairs (R & R) Directorate

SUMMARY OF PRODUCT CHARACTERISTICS (SmPC)

1. NAME OF THE MEDICINAL PRODUCT

NITHER (α-β Arteether Injection 150mg/2ml; 2 ml)

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

α β Arteether…….75 mg.

Archis oil BP…….……..q.s

S. No.	Name of ingredients	Function of ingredients	Quantity required per ml	Overage (%)	Quantity required per ml	Water/ LOD content (%)	Total quantity required per ml
Active							
1.	α β Arteether	Active ingredient	75.0 mg	Nil	75.0 mg	Nil	75.0 mg
Inactive							
3.	Benzyl Alcohol BP	Preservative	18.0 mcl	Nil	18.0 mcl	Nil	18.0 mcl
4.	Archis oil BP	Solvent	q.s. 1.000 ml	Nil	q.s. 1.000 ml	Nil	q.s. 1.000 ml

{For a full list of excipients, see section 6.1}

3. PHARMACEUTICAL FORM

Liquid injection

Clear and light yellow colored oily solution

4. Clinical particulars

4.1 Therapeutic indications

α / β arteether is concentrated in parasitized erythrocytes. The functional group responsible for anti-malarial activity of α / β arteether is endoperoxide bridge. Iron from the digested haemoglobin of the parasite's victim reduces this bridge, releasing a highly reactive free radical iron species which causes lysis of the parasitic cell.

4.2 Posology and method of administration

Adult: 150mg i.e. 1 ampoule of b arteether once daily for 3 consecutive days.

Children: 3mg/Kg per day administered by intramuscular injection over a 3-day period.

4.3 Contraindications

Arteether injection is contraindicated in patients hypersensitive to artemisinin derivatives.

4.4 Special warnings and precautions for use

Use of Arteether is restricted to children and adolescents under the age of 16 because of the possibility that it may have an effect on the heart.

• Product must be used only via the intramuscular route.

• The loading dose should be equally divided and injected anteriorly into both thighs with each subsequent dose injected into alternating thighs.

• The use of Arteether for the treatment of severe malaria in patients with pre-existing renal or liver failure has not been studied.

• Use caution when using arteether in the case of medicine induced fever, patients with heart disease and drug resistance

4.5 Interaction with other medicinal products and other forms of interaction

Avoid using with drugs that prolong QT interval.

4.6 Fertility, pregnancy and lactation

There is no data available on the use of α/β arteether during pregnancy in humans.

4.7 Effects on ability to drive and use machines

None stated

4.8 Undesirable effects

Headache, nausea, cough and dizziness. Body ache, general weakness, vomiting, pain at injection site, abdominal pain, leg pain, chills and rigors and watery diarrhoea.

4.9 Overdose

None stated

5. Pharmacological properties

5.1 Pharmacodynamic properties

The clinical dose finding study of artemotil indicates that the rate of parasite clearance is determined by plasma concentrations of the drug during the first two days of treatment. It appears that a minimum exposure in terms of peak concentration and/or AUC is required to trigger parasite clearance. When the exposure during the beginning of treatment is too low, the onset of parasite clearance is delayed. Up to a certain level of exposure the onset of parasite clearance becomes faster. Thereafter, parasite clearance can not be reduced by exposure to higher concentrations of the drug. From the studies of arteether administration to adults and children with severe malaria, it can be tentatively concluded that a mean plasma concentration

of 100-150 ng/ml during the first day is the optimum parasite clearance. However, many patients showed rapid clearance of parasites in spite of lower concentrations.

5.2 Pharmacokinetic properties

As the physiochemical properties of the arteether exclude intravenous administration in humans, it is not possible to determine the bioavailabilty, the clearing or distribution following drug administration. Plasma protein binding of the drugs is high, 98-99%.

5.3 Preclinical safety data

None stated

6. Pharmaceutical particulars

6.1 List of excipients

Benzyl Alcohol BP
Archis oil BP

6.2 Incompatibilities

None

6.3 Shelf life

36 Months

6.4 Special precautions for storage

Store below 30°C. Protect from light. Keep out of reach of children.

6.5 Nature and contents of container

Clear and light yellow colored oily solution filled in amber type-1 glass ampoule having blue dot on neck with sticker label & sealed. 3 ampoules of 2 ml enclosed in a plastic tray and each tray packed in a printed carton with leaflet.

6.6 Special precautions for disposal and other handling

No special requirements

7. Marketing authorisation holder

8. Marketing authorisation number(s)

9. Date of first authorisation/renewal of the authorization

10. Date of revision of the text