SUMMARY OF PRODUCT CHARACHTERISTICS

Abther Injection

Arteether 225 mg/3 ml Injection

1. NAME OF THE MEDICINAL PRODUCT

Abther Injection

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 3 ml contains:

Alpha Beta Arteether	225 mg
Arachis oil BP	q.s

For full list of excipients refer 6.1

3. PHARMACEUTICAL FORM

A colourless to pale yellow liquid, filled and sealed in an amber glass ampoule.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Abther Injection is indicated in the treatment of acute uncomplicated multi-drug resistant falciparum malaria and for severe malaria.

4.2 Posology and method of administration

For INTRAMUSCULAR use only

For Adults

Intramuscular injection of 3 mg/kg body weight daily for 3 consecutive days.

One ampoule containing 225 mg α, β-arteether can be used in the population depending on the body weight.

For Children:

Intramuscular injection of 3 mg/kg body weight daily for 3 consecutive days.

4.3 Contraindications

Abther Injection is contraindicated in patients hypersensitive to α, β-arteether and in pregnant females.

4.4 Special warnings and precautions for use:

The product must be used only via the intramuscular route.

Severe falciparum infections may require supportive treatment such as glucose–salt infusion and the use of antipyretics. The potential of artemisinin derivatives to produce neurotoxity has been observed in animal studies. Such toxicity has not been observed in prospective studies of the use of artemisinin and its derivatives in over 10.000 patients. Continued vigilance and post-marketing surveillance is required.

4.5 Interaction with other medicinal products and other forms of interaction:

Preclinical parasitological studies have shown that the antimalarial effects of arteether with other antimalarial may be additive when these drugs are used in combination. In vitro studies suggest that arteether should be used with caution with drugs such as HIV-protease inhibitors or ketonazole, carbazepine and phenobarbitol.

4.6 Fertility, pregnancy and lactation

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

α/β arteether should be used with caution in pregnant women if the benefit justifies the risk to the foetus. However, they do not distinguish between the use of the drug in pregnant women with uncomplicated or severe malaria. WHO recommends that artemisinin derivatives can be used in the second and third trimesters of pregnancy but their use in the first trimester is not recommended.

There are also no data on the excretion of α/β arteether in human milk. It is therefore recommend that female patients should stop breastfeeding for a period of two weeks starting from the first dose of the treatment regimen.

4.7 Effects on ability to drive and use machines

No studies on the effects on the ability to drive and use machines have been performed.

4.8 Adverse effect:

Neurotoxicity is the common side effect associated with all artemisinin compounds in high doses. Neurotoxicity manifests as gait disturbances, loss of spinal cord pain responses, incoordination, respiratory depression, convulsions and cardio respiratory arrest.

Other side effects are nausea, dizziness and depressed GIT activity. Clinical, neurological, electrocardiographic and biochemical monitoring did not reveal significant

toxicity. Apart from some increase in eosinophil numbers, no haematological abnormally was seen.

4.9 Overdose:

There is no information available about symptoms and eventual effects in case of an overdose. The effects occurred may be similar to the adverse effect observed.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamics properties:

Arteether is fast acting blood schizontocidal agent for P. falciparum malaria at the erythrocytic stage. Arteether is concentrated in parasitized erythrocytes. The functional group responsible for antimalarial activity of arteether is “endoperoxide bridge”. The researchers believe that iron from the digested haemoglobin of the parasite's victim reduces this bridge, releasing a highly reactive free radical iron (IV) oxo species which rips apart the parasitic cell.

It is proposed that Arteether inhibits the protein synthesis and alter the ribosomal organization and endoplasmic reticulum. Arteether also acts on the membrane of the parasites through lipid peroxidation.

5.2 Pharmacokinetics:

Arteether has a long plasma half-life, resulting accumulation during the treatment course. After intramuscular injection, drug is released slowly into the systemic circulation. Peak plasma concentrations are generally attained between 3-12 hrs. following drug administration. The plasma elimination half- life is determined by the slow release from the injection site and varies dependent on muscle tone and activity. It is generally around 20-24 hrs. Elimination of arteether appears shorter with a half life of 4-11 hrs.

The steady state area under the curve (AUC) (over 24 hours after the last dose) increases linearly with dose. In particular this parameter was similar for both adults and children with severe malaria, indicating that age was not an important factor for the pharmacokinetics. Plasma protein binding of the drug is high, 98-99%.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Arachis Oil, Butylated Hydroxytoluene

6.2 Incompatibilities

Not applicable

6.3 Shelf life:

2 years

6.4 Special precautions for storage

Store in dry place, below 30°C. Protected from light.

Keep out of reach and sight of children.

6.5 Nature and contents of container

3 ml/Ampoule, 3 such Ampoules are placed in blister pack, which is packed in a monocarton along with insert.

6.6 Special precautions for disposal

Any unused product or waste material should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

Bliss GVS Pharma Ltd.102, Hyde Park, Saki Vihar Road, Andheri (E), Mumbai – 400072, INDIA.