

Suramin

Class:

Suramin is an acidic hexa-sulphated naphthylamide structural related to trypan red and trypan blue.

Antiparasitic Activity:

Suramin is active against both subspecies of pathogenic African trypanosomes: *Trypanosoma brucei gambiense* and *Trypanosoma brucei rhodesiense*. It also has in vitro activity against *Onchocerca volvulus*, *Wucheria bancrofti* and *Cryptosporidium parvum*.

Mechanism of Action:

Unknown.

Mechanism of Resistance:

Resistance to suramin is rare and is not a problem in clinical practice.

Pharmacokinetics:

Half-life of 44-54 days in ill patients. 99.7% of suramin is protein-bound. The drug is not metabolized, and is eliminated in the urine. CSF penetration is negligible.

Dosage:

Intravenous only: An intravenous test dose of 5 mg/kg (max: 200 mg) is first given 1-2 days before the first full dose, although anaphylactic reaction is rare. The standard regimen is then 20 mg/kg (up to 1 gram) on days 1, 3, 7, 14 and 21.

Adverse Effects:

Shock after injection of suramin rarely occurs.

Proteinuria

Renal failure is rare.

Pregnancy:

In animals, suramin may cause birth defects or death of the foetus.

Drug Interactions:

No reliable data.

Brand names/Manufacturer: Some commonly used brand names are: Antrypol; Bayer 205; Belganyl; 309 F; Fourneau 309; Germanin; Moranyl; Naganin; Naganol; Naphuride.