

ANTHELMINTICS

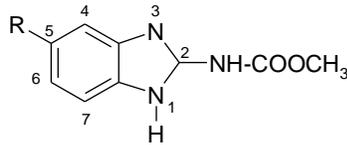
Anthelmintics are drug used to destroy the parasitic worms or remove them from the infected host or these drugs are used to treat parasitic infection due to flatworm and roundworms.

A)- Nematelminthes (roundworm)

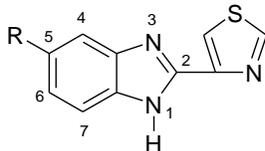
B)- Platyhelminthes (Flatworm)

CLASSIFICATION

1)- Benzimidazoles



DRUG	R
Albendazole	-S-CH ₂ -CH ₂ -CH ₃
Mebendazole	-COC ₆ H ₅
Flubendazole	-CO--F
Cyclobendazole	-CO-
Fenbendazole	-S-C ₆ H ₅
Oxibendazole	-O-CH ₂ -CH ₂ -CH ₃
Parbendazole	-CH ₂ -CH ₂ -CH ₂ -CH ₃



DRUG	R
Thiabendazole	-H

Cambendazole



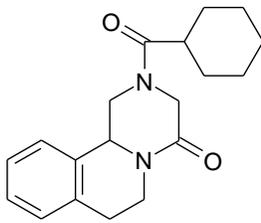
Thiabendazole - It inhibits the helminth specific enzyme fumarate reductase.

They inhibit a high affinity for tubulin, the precursor protein for microtubule synthesis.

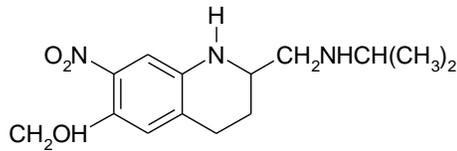
Mebendazole – Mebendazole irreversibly block glucose uptake in helminthes there by depleting glycogen stored in the parasite. It also inhibits cell division in nematodes.

Albendazole – It is widely used for the treatment of intestinal nematode infection . It is effective as a single dose treatment for ascansis.

2) – Quinoline and Isoquinolines –

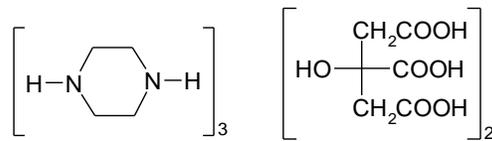


Praziquantel



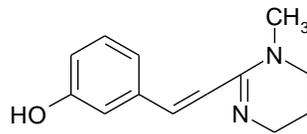
Oxamniquine

3) – Piperazine derivatives –



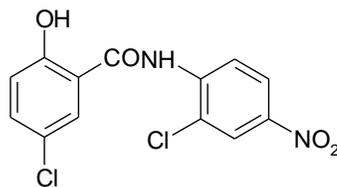
Piperazine citrate

4) –Vinyl Pyrimidines –



Oxantel

5) – Amides –

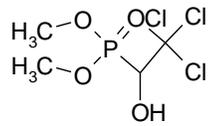


Niclosamide

6)- Natural product –

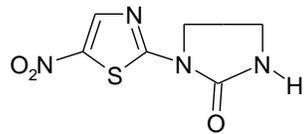
Exam- Ivermectin

7) – Organophosphorus –



Mefenoxate

8) -Nitro derivative –



Nitroimidazole