

Ribavirin

Ribavirin is an antiviral medication with activity against both RNA and DNA viruses. It is indicated for hepatitis C and viral hemorrhagic fevers, with off label use for RSV. It can lead to hemolytic anemia, and is a known teratogen.



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Mechanism

Hypermutation in RNA Viruses

Hiker-mutant with RNA-rhino

This drug is incorporated into RNA base pairs guanine and adenosine. This induces hypermutations in RNA-dependant replication, leading to virus death.

Inhibits Inosine Monophosphate Dehydrogenase

Inhibiting-chains on N-SYNC with Monkey-phosphate

This drug's DNA virus efficacy is not fully understood. It is known that Ribavirin inhibits cellular inosine monophosphate dehydrogenase, depleting intracellular GTP, which may play a role.

Indications

Hepatitis C

Happy-tie Liver Cat

Ribavirin is primarily used to treat patients with chronic hepatitis C infections.

Viral Hemorrhagic Fevers

Virus Hemorrhage-hammer Fever-beaver

This medication is helpful in treating viral hemorrhagic fevers as well.

Respiratory Syncytial Virus (RSV)

Super RV

A common, but off-label use for Ribavirin is for the treatment of severe respiratory syncytial virus (RSV).

Side Effects

Hemolytic Anemia

Hemolysing-RBCs from Anemone

A common side effect of Ribavirin is hemolytic anemia, and patients taking this antiviral medication should not take any other medications which can compound this anemia. Patients should have their blood studies closely followed.

Teratogen

Tarantula-gem

Ribavirin has severe teratogenic effects, and should be avoided in women who are pregnant.