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# Ribavirin/Recombinant Interferon alpha-2b

National Cancer Institute

## Source

National Cancer Institute. *Ribavirin/Recombinant Interferon alpha-2b*. NCI Thesaurus. Code C157542.

A fixed combination of ribavirin, a synthetic nucleoside analog of ribofuranose, and a recombinant form of interferon alfa-2b (IFN-a2b), with activity against hepatitis C virus (HCV). Upon oral administration of the ribavirin capsules, ribavirin is incorporated into viral RNA, thereby inhibiting viral RNA synthesis, inducing viral genome mutations, and inhibiting normal viral replication. Upon injection, IFN-a2b binds to specific IFN cell-surface receptors. This activates IFN-mediated signal transduction pathways and induces the transcription and translation of genes with interferon-stimulated response elements (ISREs); the protein products mediate antiviral, antiproliferative and immunomodulating effects. Although it's largely unknown how these two agents work together, in combination, this is used to treat hepatitis C infection by fighting and slowing the spread of the virus, thereby decreasing blood levels of HCV.