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# Voxilaprevir

National Cancer Institute

## Source

National Cancer Institute. *Voxilaprevir*. NCI Thesaurus. Code C152922.

An orally bioavailable inhibitor of the hepatitis C virus (HCV) non-structural protein 3/non-structural protein 4A (NS3/NS4A) serine protease, with antiviral activity. Upon administration, voxilaprevir binds to the HCV NS3/NS4A serine protease and prevents NS3/NS4A protease-mediated polyprotein maturation. This disrupts both the processing of viral proteins and the formation of the viral replication complex, thereby preventing viral replication and function. NS3, a serine protease, is essential for the proteolytic cleavage of multiple sites within the HCV polyprotein and plays a key role during HCV ribonucleic acid (RNA) replication. NS4A is an activating factor for NS3. HCV is a small, enveloped, single-stranded RNA virus belonging to the Flaviviridae family; HCV infection is associated with the development of hepatocellular carcinoma (HCC).