Open Peer Review on Qeios

Velpatasvir

National Cancer Institute

Source

National Cancer Institute. <u>Velpatasvir</u>. NCI Thesaurus. Code C152851.

An orally available inhibitor of the hepatitis C virus (HCV) non-structural protein 5A (NS5A) replication complex, with potential activity against HCV genotypes 1-6. Although the exact mechanism of action of velpatasvir has not yet been completely determined, upon oral administration and intracellular uptake, it appears to bind to domain I of the NS5A protein. This inhibits the activity of the NS5A protein and results in the disruption of the viral RNA replication complex, blockage of viral HCV RNA production, and inhibition of viral replication. NS5A, a zinc-binding and proline-rich hydrophilic phosphoprotein, plays a crucial role in HCV RNA replication. HCV is a small, enveloped, single-stranded RNA virus belonging to the Flaviviridae family.