SOLID PHARMACEUTICAL COMPOSITIONS FOR TREATING HCV

FIELD OF THE INVENTION

[0001] The present invention relates to solid pharmaceutical compositions comprising anti-HCV compounds and methods of using the same for treating HCV infection.

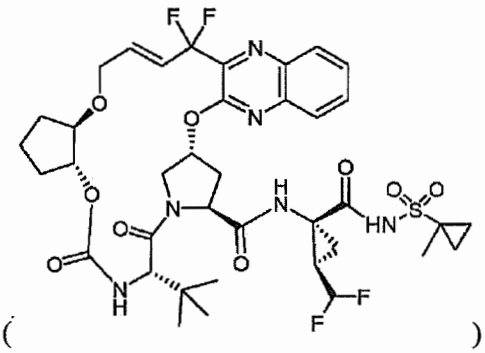
BACKGROUND OF THE INVENTION

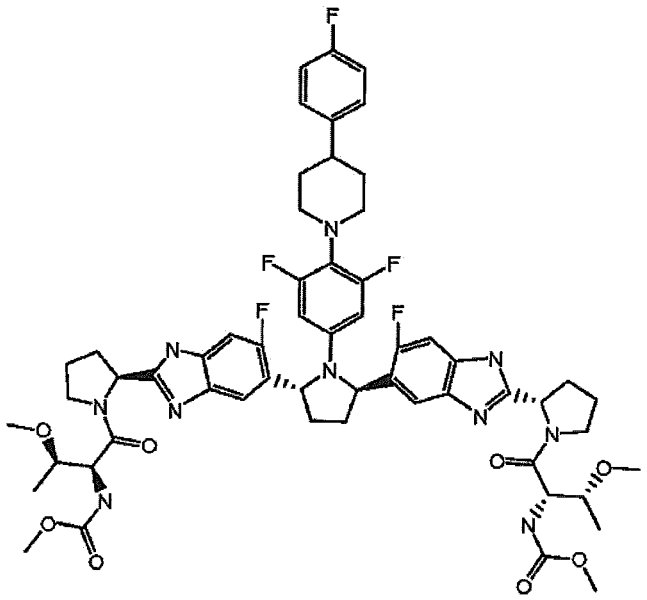
[0002] The hepatitis C virus (HCV) is an RNA virus belonging to the Hepacivirus genus in the Flaviviridae family. The enveloped HCV virion contains a positive stranded RNA genome encoding all known virus-specific proteins in a single, uninterrupted, open reading frame. The open reading frame comprises approximately 9500 nucleotides and encodes a single large polyprotein of about 3000 amino acids. The polyprotein comprises a core protein, envelope proteins E1 and E2, a membrane bound protein p7, and the non-structural proteins NS2, NS3, NS4A, NS4B, NS5A and NS5B.

[0003] Chronic HCV infection is associated with progressive liver pathology, including cirrhosis and hepatocellular carcinoma. Chronic hepatitis C may be treated with peginterferon-alpha in combination with ribavirin. Substantial limitations to efficacy and tolerability remain as many users suffer from side effects, and viral elimination from the body is often incomplete. Therefore, there is a need for new drugs to treat HCV infection.

SUMMARY

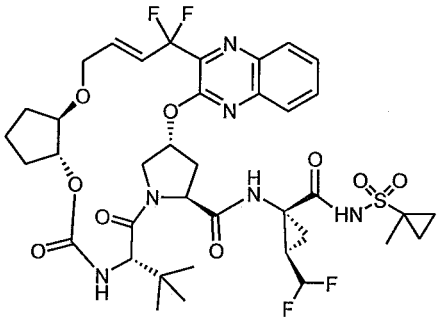
[0003a] In one aspect, there is provided a solid pharmaceutical composition comprising:

(1) 100 mg Compound 1 () formulated in amorphous solid dispersion which further comprises from 50% to 80% by weight of a first pharmaceutically acceptable polymer and from 5% to 15% by weight of a pharmaceutically acceptable surfactant; and

(2) 40 mg Compound 2 () formulated in amorphous solid dispersion which further comprises from 50% to 80% by weight of a second pharmaceutically acceptable polymer and from 5% to 15% by weight of a second pharmaceutically acceptable surfactant.

DETAILED DESCRIPTION

[0004] The present invention features solid pharmaceutical compositions useful for treating HCV. These solid pharmaceutical compositions comprise:

(1)  (Compound 1) or a pharmaceutically acceptable salt thereof, formulated in amorphous solid dispersion, and