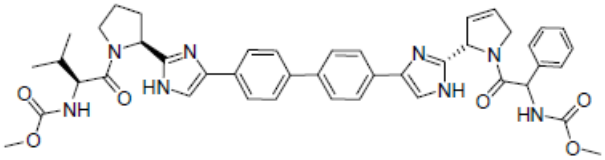
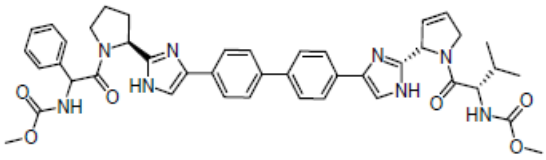
CLAIMS

1. A chemical compound as represented by Formula Ia-70, its stereoisomers, tautomers, pharmaceutically acceptable salts, or their isotopic substitutions in which the hydrogen, oxygen, or nitrogen is replaced by its corresponding isotope,



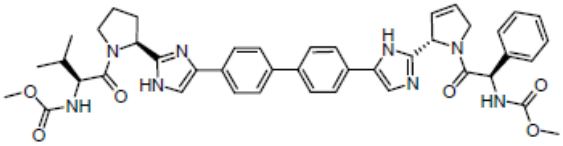
Ia-70.

2. A chemical compound as represented by Formula Ia-71, its stereoisomers, tautomers, pharmaceutically acceptable salts, or their isotopic substitutions in which the hydrogen, oxygen, or nitrogen is replaced by its corresponding isotope,



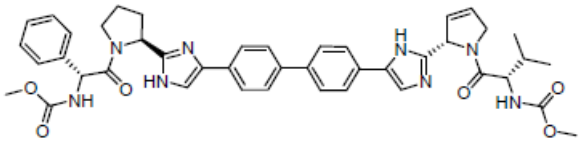
Ia-71.

3. A chemical compound as represented by Formula Ia-113, its stereoisomers, tautomers, pharmaceutically acceptable salts, or their isotopic substitutions in which the hydrogen, oxygen, or nitrogen is replaced by its corresponding isotope,



Ia-113.

4. A chemical compound as represented by Formula Ia-115, its stereoisomers, tautomers, pharmaceutically acceptable salts, or their isotopic substitutions in which the hydrogen, oxygen, or nitrogen is replaced by its corresponding isotope,



Ia-115.

5. A chemical compound as represented by Formula Ia-70, Ia-71, Ia-113 or Ia-115 in any one of claims 1-4, their stereoisomers, tautomers, pharmaceutically acceptable salts are used in preparation of HCV inhibitor drugs.

6. A kind of pharmaceutical composition, comprising a chemical compound as represented by Formula Ia-70, Ia-71, Ia-113 or Ia-115 in any one of claims 1-4, their stereoisomers, tautomers, pharmaceutically acceptable salts, and pharmaceutical acceptable excipient.

7. A kind of pharmaceutical composition according to claim 6, which includes: Immunomodulators, hepatitis C virus (HCV) NS3/4A inhibitors, HCV-NS5B inhibitors, HCV inhibitors of the nucleoside and non-nucleoside and nucleoside derivatives, hepatitis B viral (HBV) inhibitors, antiviral human immunodeficiency virus (HIV) inhibitors, anti-cancer drugs and anti-inflammatory drugs.

8. A kind of pharmaceutical composition according to claim 7, wherein: the described immunomodulators are interferon or interferon derivatives;

The described HBV inhibitors include Lamivudine, Telbivudine, Adefovir Dipivoxil, Emtricitabine, Entecavir, Tenofovir and Telbivudine;

The described anti-HIV inhibitors include ritonavir and/or ribavirin,

The described HCV protease inhibitors include VX-950, ZN2007, ABT-450, RG-7227, TMC-435, MK-5172, MK-7009, ACH-1625, GS-9256, TG2349, BMS-650032, IDX320, Yimitasvir phosphate capsule or Seraprevir potassium;

The described hepatitis C virus polymerase inhibitor comprises GS-5885, TMC647055, ABT-267, BMS-791325, PPI-383 or ALS-002158.

9. A kind of pharmaceutical composition according to claim 8, wherein the described interferon is pegylated interferon.