We claim:

1. A compound of Formula I:

\[
\text{Formula I}
\]

or a pharmaceutically acceptable salt, racemate, enantiomer, diastereomer, or tautomer thereof:

wherein:

R\(^1\) is (C\(_1\)–C\(_8\))alkyl;

at least one of R\(^2\), R\(^3\), or R\(^4\) is N(R\(^\text{II}\)_2), N\(_3\), CN, NO\(_2\), S(O)\(_n\)R\(^a\), halogen, (C\(_1\)–C\(_8\))alkyl,

(C\(_4\)–C\(_8\))carbocyclicalkyl, (C\(_1\)–C\(_8\))substituted alkyl, (C\(_2\)–C\(_8\))alkenyl,

(C\(_2\)–C\(_8\))substituted alkenyl, (C\(_2\)–C\(_8\))alkynyl, (C\(_2\)–C\(_8\))substituted alkynyl or aryl(C\(_1\)–C\(_8\))alkyl and each remaining R\(^2\), R\(^3\), R\(^4\), or R\(^5\) is, independently, H, OR\(^a\), N(R\(^\text{II}\)_2), N\(_3\), CN, NO\(_2\), S(O)\(_n\)R\(^a\), halogen, (C\(_1\)–C\(_8\))alkyl, (C\(_4\)–C\(_8\))carbocyclicalkyl,

(C\(_1\)–C\(_8\))substituted alkyl, (C\(_2\)–C\(_8\))alkenyl, (C\(_2\)–C\(_8\))substituted alkenyl,

(C\(_2\)–C\(_8\))alkynyl, (C\(_2\)–C\(_8\))substituted alkynyl or aryl(C\(_1\)–C\(_8\))alkyl or any two R\(^2\), R\(^3\), R\(^4\),
or R\(^5\) on adjacent carbon atoms when taken together are –O(CO)O- or when taken together with the ring carbon atoms to which they are attached form a double bond; each n is independently 0, 1, or 2;

each R\(^\text{II}\) is independently H, (C\(_1\)–C\(_8\))alkyl, (C\(_2\)–C\(_8\))alkenyl, (C\(_2\)–C\(_8\))alkynyl, aryl(C\(_1\)–

C\(_8\))alkyl, (C\(_4\)–C\(_8\))carbocyclicalkyl, -C(=O)R\(^{11}\), -C(=O)OR\(^{11}\), -C(=O)NR\(^{11}\)R\(^{12}\),

-C(=O)SR\(^{11}\), -S(=O)R\(^{11}\), -S(=O)\(_2\)R\(^{11}\), -S(=O)(OR\(^{11}\)), -S(O)\(_2\)(OR\(^{11}\)), or -SO\(_2\)NR\(^{11}\)R\(^{12}\);

R\(^7\) is H, -C(=O)R\(^{11}\), -C(=O)OR\(^{11}\), -C(=O)NR\(^{11}\)R\(^{12}\), -C(=O)SR\(^{11}\), -S(O)R\(^{11}\), -S(=O)\(_2\)R\(^{11}\),

-S(O)(OR\(^{11}\)), -S(O)\(_2\)(OR\(^{11}\)), or -SO\(_2\)NR\(^{11}\)R\(^{12}\), or
each Y or Y¹ is, independently, O, S, NR, N(O)(O(R), N(O), N(O)(O(R), or N—NR₂;
W¹ and W², when taken together, are —Y¹(C(R²)₂)Y¹—; or one of W¹ or W² together
with either R³ or R⁴ is —Y³— and the other of W¹ or W² is Formula Ia; or W¹ and W²
are each, independently, a group of the Formula Ia:

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wherein:
each Y² is independently a bond, O, CR₂, NR, N(O)(O(R), N(O),
⁴N(O)(O(R), N—NR₂, S, S—S, sulfur, or S(O)₂;
each Y³ is independently O, S, or NR;
M₂ is 0, 1 or 2;
each R⁵ is independently R⁶ or the formula:

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wherein:
each M¹a, M¹c, and M¹d is independently 0 or 1;
M¹2c is 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 or 12;
each R⁶ is independently H, F, Cl, Br, I, OH, R, -C(=Y¹), R₁,
-C(=Y¹)OR, -C(=Y¹)N(R)₂, -N(O)=N(R)₃, -N(R)₃, -SR, -S(O)R, -S(O₂)R, -S(O)(O(R),
-S(O₂)(OR), -OC(=Y¹), -OC(=Y¹)OR, -OC(=Y¹)(N(R)₂), -SC(=Y¹)R, -SC(=Y¹)OR,
-SC(=Y')(N(R)2), -N(R)C(=Y')R, -N(R)C(=Y')OR, -N(R)C(=Y')N(R)2, -SO2NR2, -CN, -N3, -NO2, -OR, or W3; or when taken together, two R' on the same carbon atom form a carbocyclic ring of 3 to 7 carbon atoms;
each R is independently H, (C1-C8) alkyl, (C1-C8) substituted alkyl, (C2-C8) alkenyl, (C2-C8) substituted alkenyl, (C2-C8) alkynyl, (C2-C8) substituted alkynyl, C6-C20 aryl, C6-C20 substituted aryl, C2-C20 heterocyclyl, C2-C20 substituted heterocyclyl, arylalkyl or substituted arylalkyl;
W' is Wd or W5: Wd is R, -C(Y')R, -C(Y')W5, -SO2R, or -SO2W5; and W5 is a carbocycle or a heterocycle wherein W5 is independently substituted with 0 to 3 R' groups;
each X' or X2 is independently C-R10 or N wherein at least one of X' or X2 is N;
each R' is, independently, halogen, NR11R12, N(R11)OR11, NR11NR11R12, N3, NO, NO2, CHO, CN, -CH(=NR11), -CH=NHNR11, -CH=N(OR11), -CH(OR11), -C(=O)NR11R12, -C(=S)NR11R12, -C(=O)OR11, (C1-C8)alkyl, (C2-C8)alkenyl, (C2-C8)alkynyl, (C4-C8)carbocyclalkyl, optionally substituted aryl, optionally substituted heteroaryl. -C(=O)(C1-C8)alkyl, -S(O)n(C1-C8)alkyl, aryI(C1-C8)alkyl, OR11 or SR11;
each R' or R'' is independently H, halogen, NR11R12, N(R11)OR11, NR11NR11R12, N3, NO, NO2, CHO, CN, -CH(=NR11), -CH=NHNR11, -CH=N(OR11), -CH(OR11), -C(=O)NR11R12, -C(=S)NR11R12, -C(=O)OR11, R11, OR11 or SR11;
each R' or R'' is independently H, (C1-C8)alkyl, (C2-C8)alkenyl, (C2-C8)alkynyl, (C4-C8)carbocyclalkyl, optionally substituted aryl, optionally substituted heteroaryl, -C(=O)(C1-C8)alkyl, -S(O)n(C1-C8)alkyl or aryl(C1-C8)alkyl; or R'1 and R'2 taken together with a nitrogen to which they are both attached form a 3 to 7 membered heterocyclic ring wherein any one carbon atom of said heterocyclic ring can optionally be replaced with -O-, -S- or -NR2-;
wherein each (C1-C8)alkyl, (C2-C8)alkenyl, (C2-C8)alkynyl or aryl(C1-C8)alkyl of each R'1, R'2, R'3, R'4, R'5, R'11 or R'12 is, independently, optionally substituted with one or more halo, hydroxy, CN, N3, N(R'2)2 or OR'; and wherein one or more of the non-terminal carbon atoms of each said (C1-C8)alkyl may be optionally replaced with -O-, -S- or -NR2-;
wherein each alkyl is a hydrocarbon containing normal, secondary, tertiary or cyclic carbon atoms.

2. A compound as claimed in claim 1 wherein $R^8$ is halogen, NR$_{11}^{11}R^{12}$, N(R$_{11}^{11}$)OR$_{11}^{11}$, NR$_{11}^{11}$NR$_{11}^{11}$R$_{11}^{11}$, OR$_{11}^{11}$ or SR$_{11}^{11}$.

3. A compound as claimed in claims 1 or 2 wherein $R^9$ is H or NR$_{11}^{11}$R$_{11}^{11}$.

4. A compound as claimed in any one of claims 1-3 represented by Formula II

\[
\begin{align*}
\text{Formula II} & \\
\text{wherein each } Y \text{ and } Y^1 \text{ is O.}
\end{align*}
\]

5. A compound as claimed in any one of claims 1-4 wherein $R^7$ is H or

\[
\begin{align*}
\text{Formula III} & \\
\text{wherein each } Y \text{ and } Y^1 \text{ is O.}
\end{align*}
\]

6. A compound as claimed in any one of claims 1-5 wherein $X^1$ is N and $R^3$ is H.

7. A compound as claimed in any one of claims 1-6 wherein at least one of $R^2$ or $R^4$ is OR$^9$.

8. A compound as claimed in any one of claims 1-7 wherein each $R^2$ and $R^4$ is OR$^9$. 
9. A compound as claimed in any one of claims 1-8 wherein X² is CH and R¹ is methyl.

10. A compound as claimed in any one of claims 1-8 wherein X² is CH and R³ is N₃, CN, methyl, CH₂OH, ethenyl, or ethynyl.

11. A compound as claimed in any one of claims 1-8 wherein R¹ is methyl.

12. A compound as claimed in any one of claims 1-9 or 11 wherein R³ is H.

13. A compound as claimed in any one of claims 1-12 wherein R² and R⁴ are OH.

14. A compound as claimed in any one of claims 1-13 wherein W¹ and W² are each, independently, a group of the Formula la.

15. A compound as claimed in any one of claims 1-13 wherein R³ is H.

16. A compound as claimed in claim 1 that is

![Chemical structures](image-url)
or a pharmaceutically acceptable salt, racemate, enantiomer, diasteromer, or tautomer thereof.

17. A pharmaceutical composition comprising a therapeutically effective amount a compound as in any one of claims Error! Reference source not found. 1 to 16 and a pharmaceutically acceptable carrier.

18. The pharmaceutical composition of claim 17 comprising at least one additional therapeutic agent.

19. The pharmaceutical composition of claim 18, wherein said additional therapeutic agent is selected from the group consisting of interferons, ribavirin analogs, NS3 protease inhibitors. NS5a inhibitors. NS5b polymerase inhibitors,
alpha-glucosidase I inhibitors, cyclophilin inhibitors, hepatoprotectants, non-nucleoside inhibitors of HCV, and other drugs for treating HCV.

Dated this the 20th day of October 2010.

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