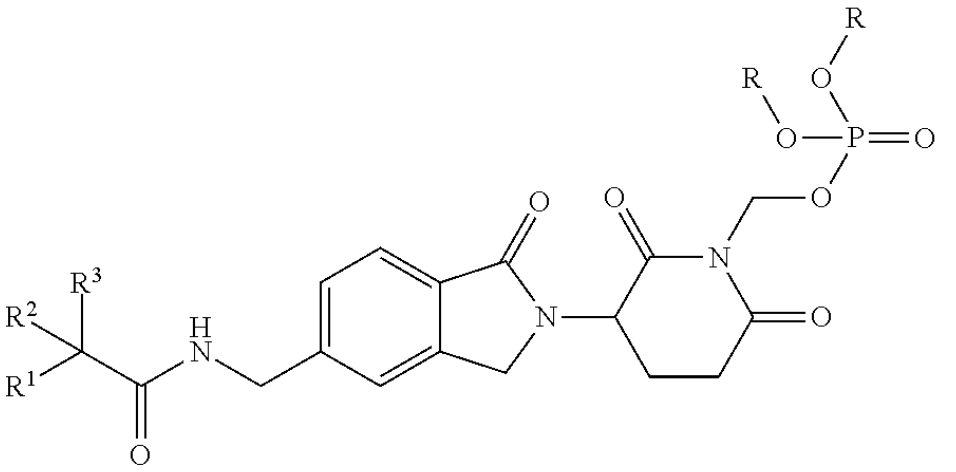
CLAIMS

1. A compound of formula A-I:

A-I



or a stereoisomer or mixture of stereoisomers, tautomer, pharmaceutically acceptable salt, solvate, hydrate, co-crystal, clathrate, isotopologue or polymorph thereof, wherein:

each R is independently H, optionally substituted alkyl, or optionally substituted cycloalkyl;

R^1 is optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl or optionally substituted heterocyclyl;

R^2 and R^3 are each halo;

where the substituents on R^1, when present are one to three groups Q, where each Q is independently alkyl, halo, haloalkyl, hydroxyl, alkoxy, optionally substituted cycloalkyl,

optionally substituted cycloalkylalkyl, optionally substituted aryl, —R^4OR^5, —R^4SR^5, —$R^4N(R^6)(R^7)$, $R^4OR^4N(R^6)(R^7)$ or $R^4OR^4C(J)N(R^6)(R^7)$;

J is O or S;

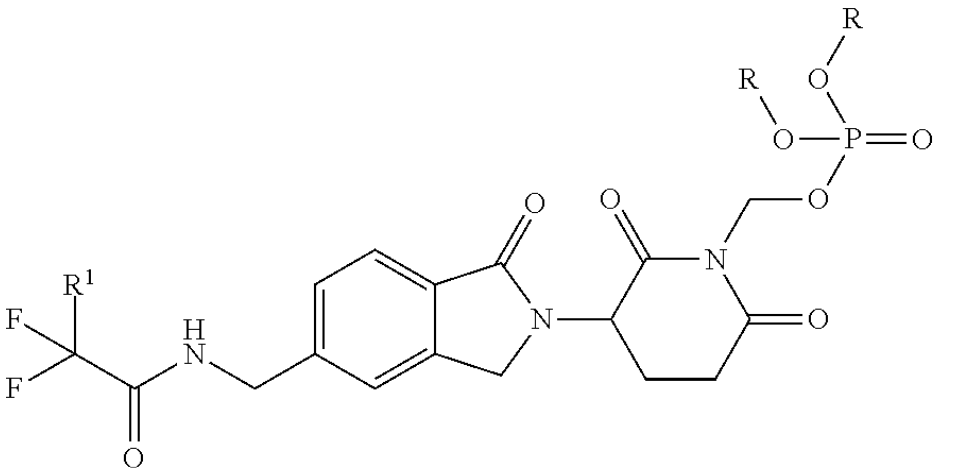
each R^4 is independently alkylene, alkenylene or a direct bond;

each R^5 is independently hydrogen, alkyl, haloalkyl or hydroxyalkyl; and

R^6 and R^7 are each independently hydrogen or alkyl or R^6 and R^7 together with the nitrogen atom on which they are substituted form a 5 or 6-membered heterocyclyl or heteroaryl ring, optionally substituted with one or two halo, alkyl or haloalkyl.

2. The compound of claim 1, wherein the compound is of Formula A-II:

A-II



or a stereoisomer or mixture of stereoisomers, tautomer, pharmaceutically acceptable salt, solvate, hydrate, co-crystal, clathrate, isotopologue or polymorph thereof, wherein:

each R is independently H, optionally substituted alkyl, or optionally substituted cycloalkyl;

R^1 is optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl or optionally substituted heterocyclyl;

where the substituents on R^1, when present are one to three groups Q, where each Q is independently alkyl, halo, haloalkyl, hydroxyl, alkoxy, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted aryl, —R^4OR^5, —R^4SR^5, —$R^4N(R^6)(R^7)$, $R^4OR^4N(R^6)(R^7)$ or $R^4OR^4C(J)N(R^6)(R^7)$;

J is O or S;

each R^4 is independently alkylene, alkenylene or a direct bond;

each R^5 is independently hydrogen, alkyl, haloalkyl or hydroxyalkyl; and

R^6 and R^7 are each independently hydrogen or alkyl or R^6 and R^7together with the nitrogen atom on which they are substituted form a 5 or 6-membered heterocyclyl or heteroaryl ring, optionally substituted with one or two halo, alkyl or haloalkyl.

3. The compound of claim 1, wherein each R is independently H or (C_1-C_6)alkyl; R^1 is optionally substituted aryl, where the substituents on R^1, when present, are one to three groups Q, where each Q is independently halo, alkyl, —R^4OR^5, —R^4SR^5 or $R^4OR^4C(O)N(R^6)(R^7)$; each R^4 is independently a direct bond or alkylene; each R^5 is

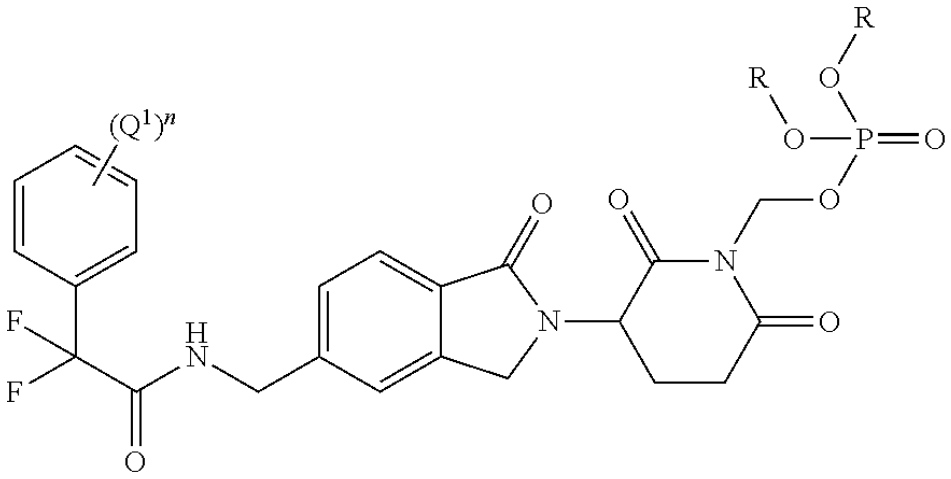
independently hydrogen, halo, alkyl or haloalkyl; and R^6 and R^7 are each independently hydrogen or alkyl.

4. The compound of claim 1, wherein each R is independently is H or (C_1-C_6)alkyl; and R^1 is optionally substituted aryl, where the substituents on R^1, when present, are one to three groups Q, where each Q is independently fluoro, chloro, methyl, —R^4OR^5, —$R^4N(R^6)(R^7)$, —R^4SR^5 or $R^4OR^4C(O)N(R^6)(R^7)$; each R^4 is independently a direct bond or methylene; each R^5 is independently hydrogen, methyl, ethyl or trifluoromethyl; and R^6 and R^7 are each independently hydrogen or methyl.

5. The compound of claim 1, wherein each R is independently H or (C_1-C_6)alkyl and R^1 is optionally substituted phenyl, where the substituents on R^1, when present, are one to three groups Q, where each Q is independently fluoro, chloro, methyl, tert butyl, —R^4OR^5, —$R^4N(R^6)(R^7)$, —R^4SR^5 or $R^4OR^4C(O)N(R^6)(R^7)$; each R^4 is independently a direct bond or methylene; each R^5 is independently hydrogen, methyl, ethyl or trifluoromethyl; and R^6 and R^7 are each independently hydrogen or methyl.

6. The compound of claim 1, wherein the compound is of Formula A-III:

A-III



or a stereoisomer or mixture of stereoisomers, tautomer, pharmaceutically acceptable salt, solvate, hydrate, co-crystal, clathrate, isotopologue or polymorph thereof, wherein:

each R is independently H, optionally substituted alkyl, or optionally substituted cycloalkyl;

each Q^1 is independently alkyl, halo, haloalkyl, alkoxyalkyl, hydroxyl, alkoxy, optionally substituted cycloalkyl, optionally substituted cycloalkylakyl, optionally substituted aryl —R^4OR^5, —R^4SR^5, —$R^4N(R^6)(R^7)$, $R^4OR^4N(R^6)(R^7)$ or $R^4OR^4C(J)N(R^6)(R^7)$;

J is O or S;

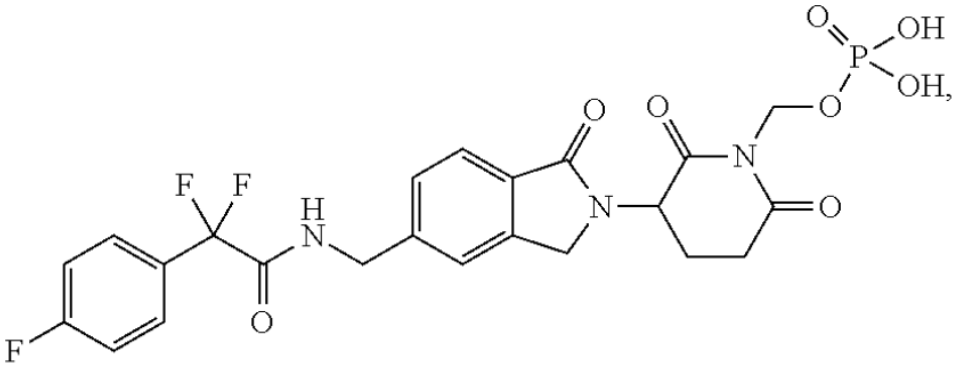
each R^4 is independently alkylene, alkenylene or a direct bond;

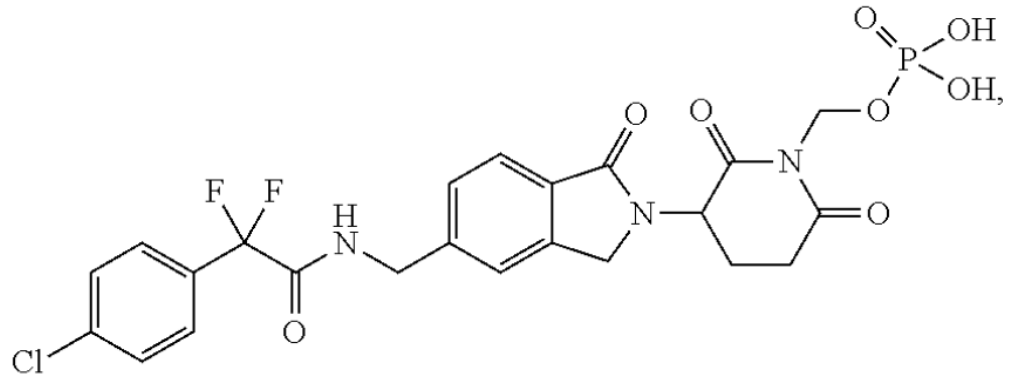
each R^5 is independently hydrogen, alkyl, haloalkyl or hydroxyalkyl;

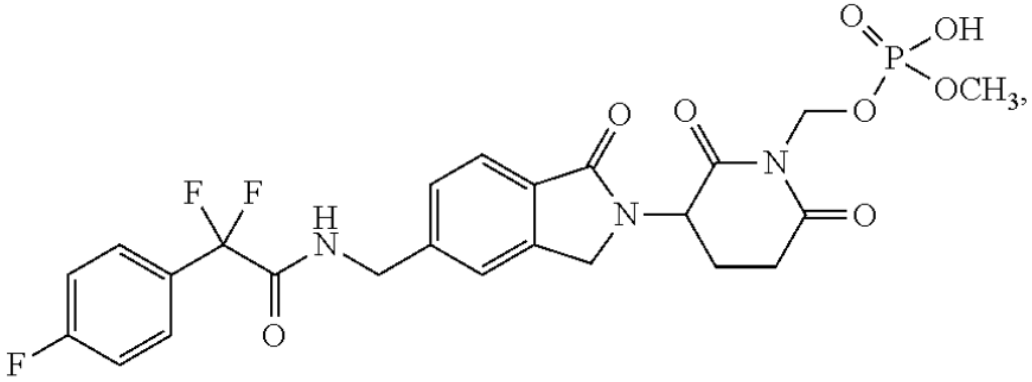
R^6 and R^7 are each independently hydrogen or alkyl or R^6 and R^7 together with the nitrogen atom on which they are substituted form a 5 or 6-membered heterocyclyl or heteroaryl ring, optionally substituted with one or two halo, alkyl or haloalkyl; and

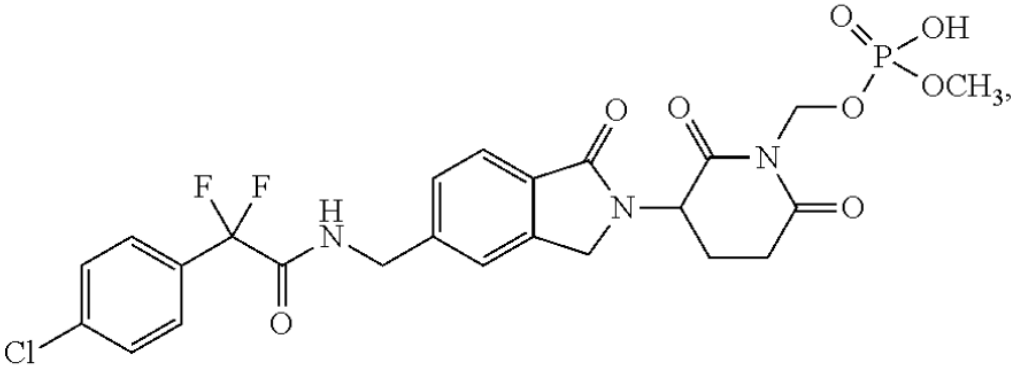
n is 0-3.

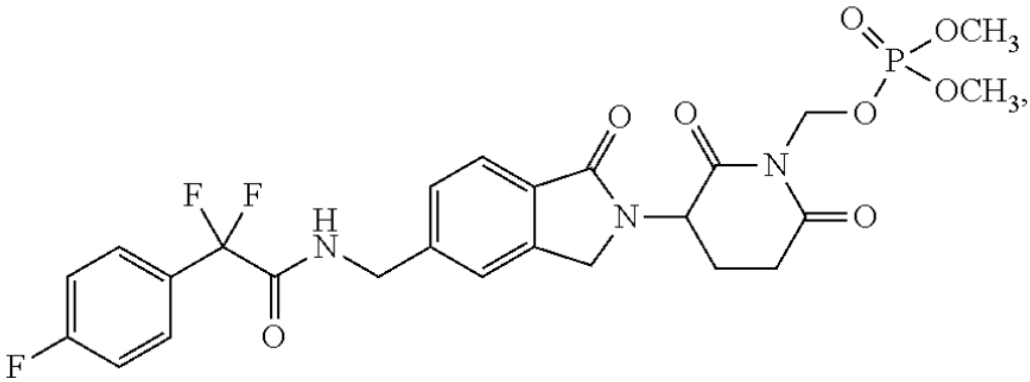
7. The compound of claim 1, wherein the compound is selected from the group consisting of:

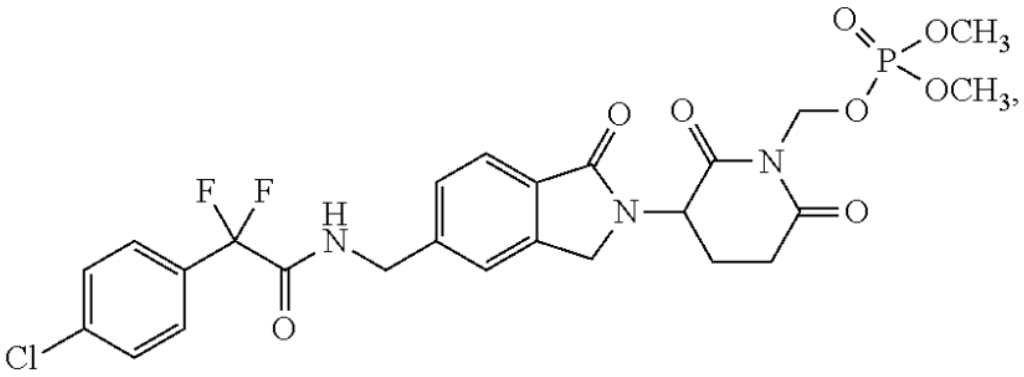


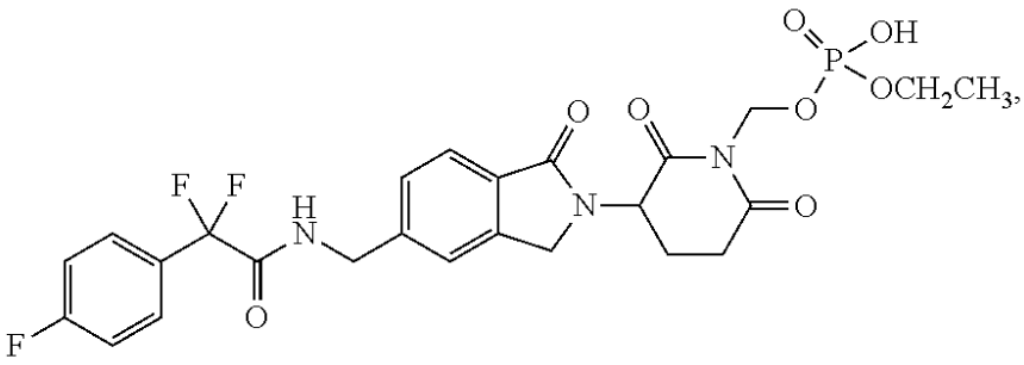


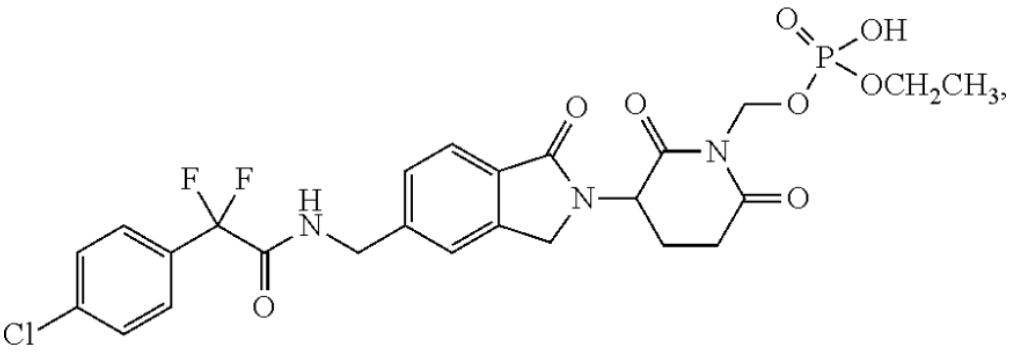


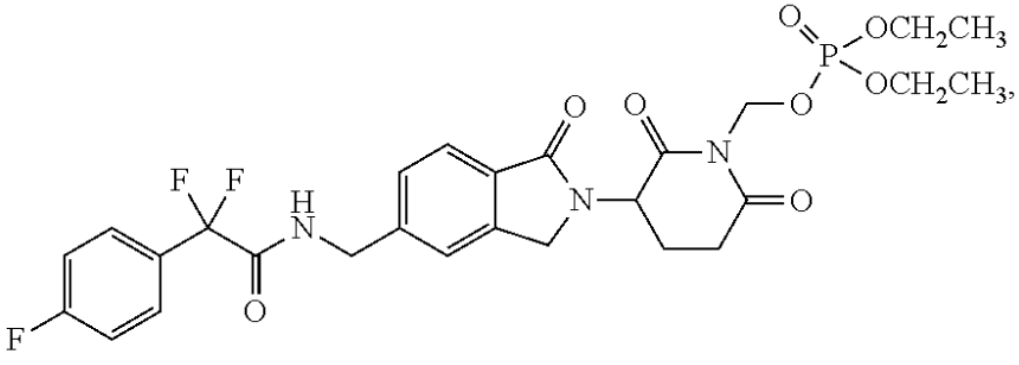


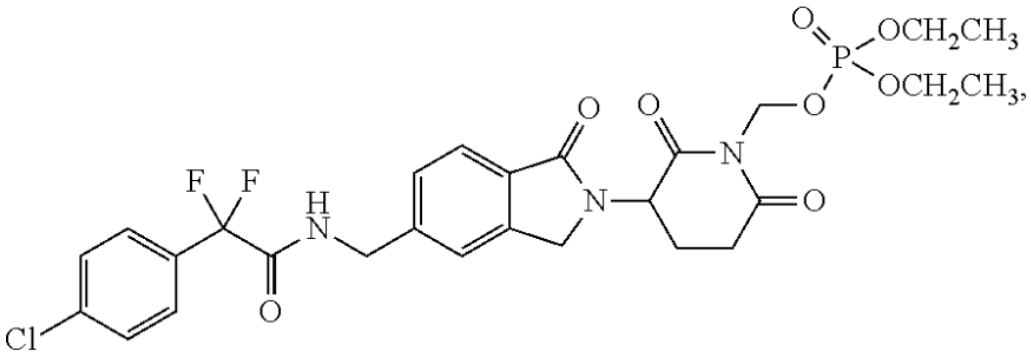


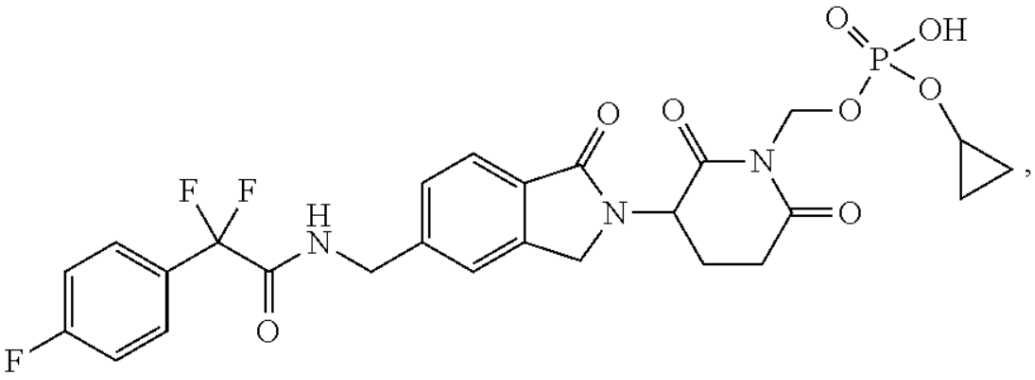


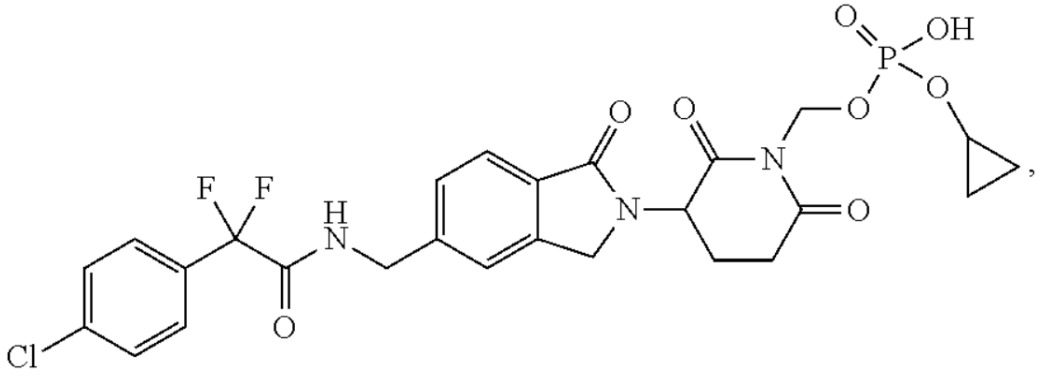


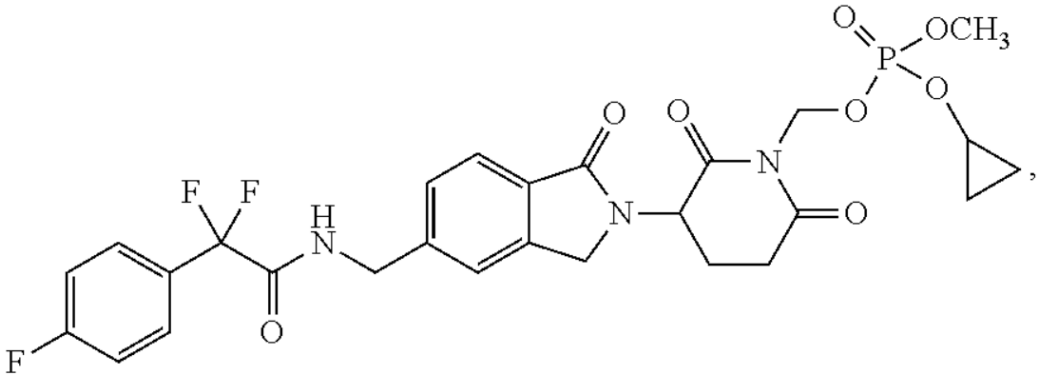


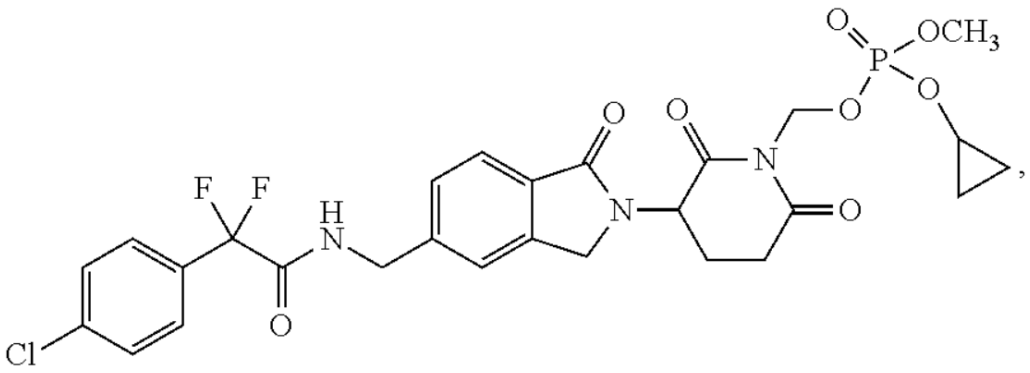


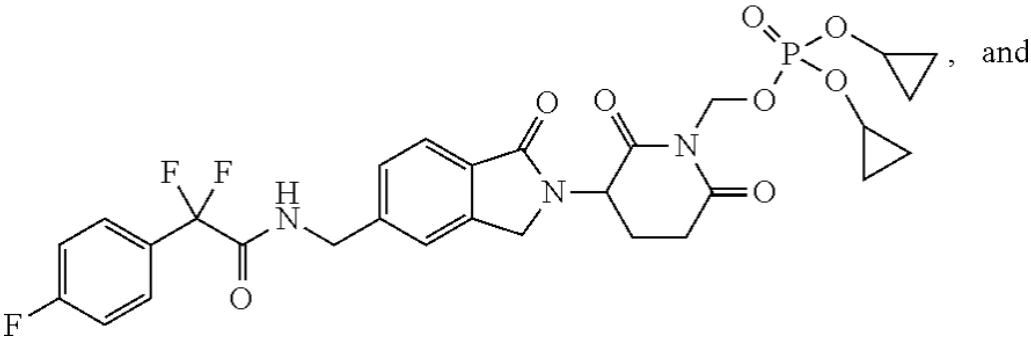




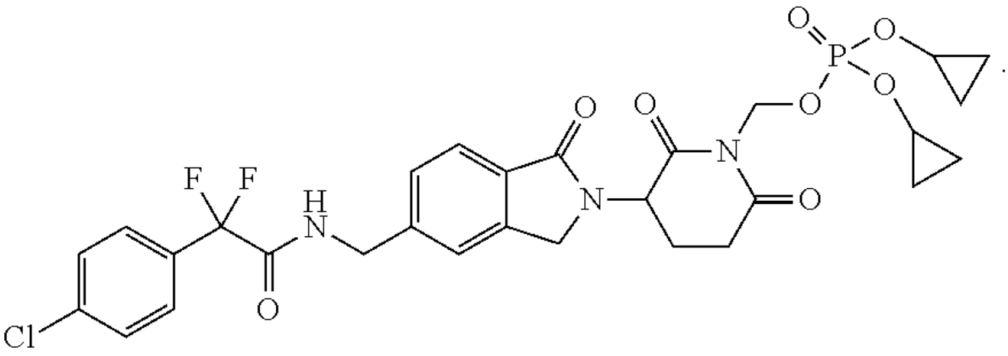






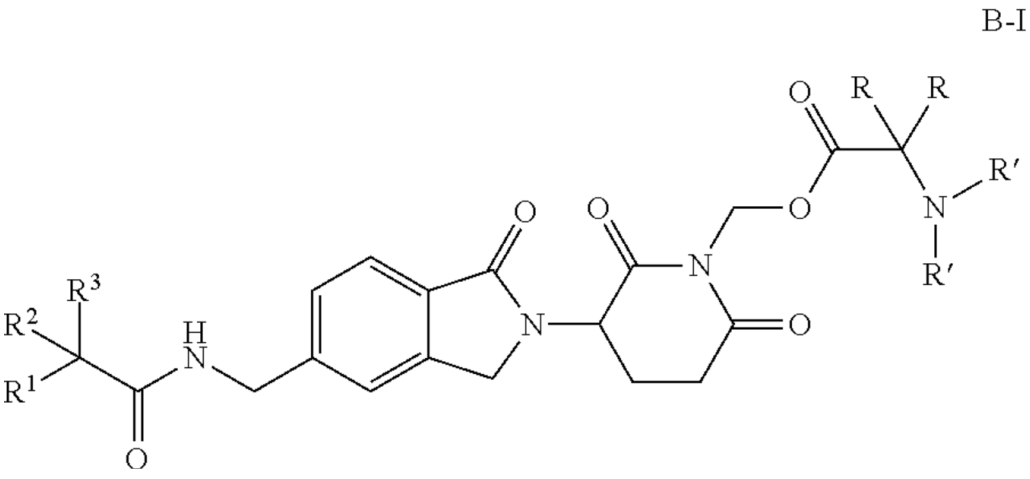


, and



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8. A compound of Formula B-I:



B-I

or a stereoisomer or mixture of stereoisomers, tautomer, pharmaceutically acceptable salt, solvate, hydrate, co-crystal, clathrate, isotopologue or polymorph thereof, wherein:

each R′ is independently H or optionally substituted alkyl; or optionally substituted cycloalkyl;

R′ is H or optionally substituted alkyl;

R^1 is optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl or optionally substituted heterocyclyl;

R^2 and R^3 are each halo;

where the substituents on R^1, when present are one to three groups Q, where each Q is independently alkyl, halo, haloalkyl, hydroxyl, alkoxy, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted aryl, —R^4OR^5, —R^4SR^5, —$R^4N(R^6)(R^7)$, $R^4OR^4N(R^6)(R^7)$ or $R^4OR^4C(J)N(R^6)(R^7)$;

J is O or S;

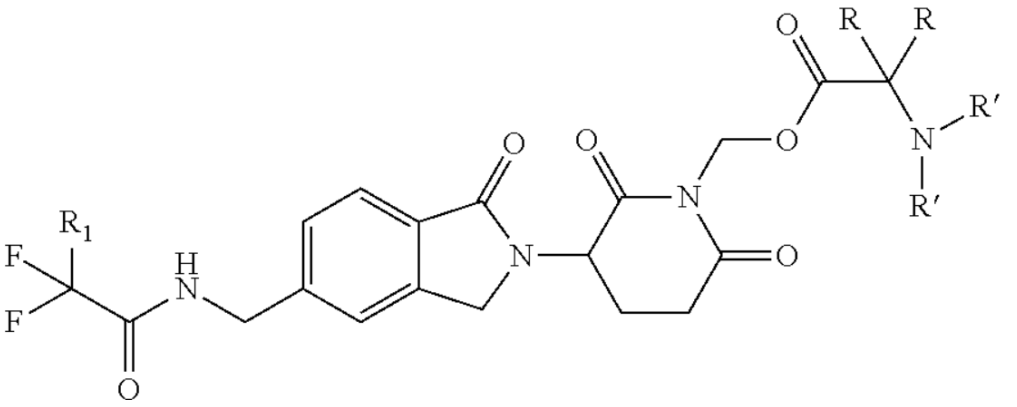
each R^4 is independently alkylene, alkenylene or a direct bond;

each R^5 is independently hydrogen, alkyl, haloalkyl or hydroxyalkyl; and

R^6 and R^7 are each independently hydrogen or alkyl or R^6 and R^7 together with the nitrogen atom on which they are substituted form a 5 or 6-membered heterocyclyl or heteroaryl ring, optionally substituted with one or two halo, alkyl or haloalkyl.

9. The compound of claim 8, wherein the compound is of Formula B-II:

B-II



or a stereoisomer or mixture of stereoisomers, tautomer, pharmaceutically acceptable salt, solvate, hydrate, co-crystal, clathrate, isotopologue or polymorph thereof, wherein:

each R is independently H, optionally substituted alkyl, or optionally substituted cycloalkyl;

each R′ is independently is H or optionally substituted alkyl;

R^1 is optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl or optionally substituted heterocyclyl;

where the substituents on R^1, when present are one to three groups Q, where each Q is independently alkyl, halo, haloalkyl, hydroxyl, alkoxy, optionally substituted cycloalkyl,

optionally substituted cycloalkylalkyl, optionally substituted aryl, —R^4OR^5, —R^4SR^5, —$R^4N(R^6)(R^7)$, $R^4OR^4N(R^6)(R^7)$ or $R^4OR^4C(J)N(R^6)(R^7)$;

J is O or S;

each R^4 is independently alkylene, alkenylene or a direct bond;

each R^5 is independently hydrogen, alkyl, haloalkyl or hydroxyalkyl; and

R^6 and R^7 are each independently hydrogen or alkyl or R^6 and R^7 together with the nitrogen atom on which they are substituted form a 5 or 6-membered heterocyclyl or heteroaryl ring, optionally substituted with one or two halo, alkyl or haloalkyl.

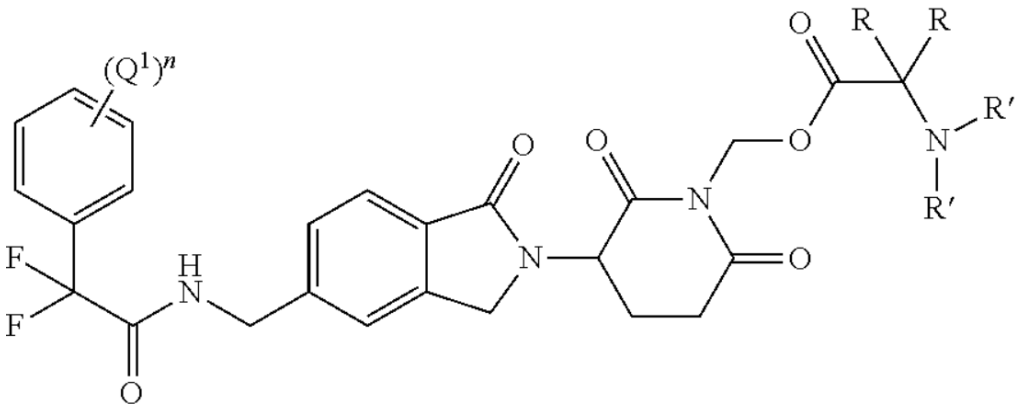
10. The compound of claim 8, wherein each R is independently H or (C_1-C_6)alkyl; each R′ is independently is H or (C1-C6)alkyl; R^1 is optionally substituted aryl, where the substituents on R^1, when present, are one to three groups Q, where each Q is independently halo, alkyl, —R^4OR^5, —R^4SR^5 or $R^4OR^4C(O)N(R^6)(R^7)$; each R^4 is independently a direct bond or alkylene; each R^5 is independently hydrogen, halo, alkyl or haloalkyl; and R^6 and R^7 are each independently hydrogen or alkyl.

11. The compound of claim 8, wherein each R is independently H or (C_1-C_6)alkyl; each R′ is independently H or (C1-C6)alkyl; R^1 is optionally substituted phenyl, where the substituents on R^1, when present, are one to three groups Q, where each Q is independently fluoro, chloro, methyl, tert butyl, —R^4OR^5, —$R^4N(R^6)(R^7)$, —R^4SR^5 or $R^4OR^4C(O)N(R^6)(R^7)$; each R^4 is independently a direct bond or methylene; each R^5 is

independently hydrogen, methyl, ethyl or trifluoromethyl; and R^6 and R^7 are each independently hydrogen or methyl.

12. The compound of claim 8, wherein the compound is of Formula B-III:

B-III



or a stereoisomer or mixture of stereoisomers, tautomer, pharmaceutically acceptable salt, solvate, hydrate, co-crystal, clathrate, isotopologue or polymorph thereof, wherein:

each R is independently H, optionally substituted alkyl, or optionally substituted cycloalkyl;

each R′ is independently is H or optionally substituted alkyl;

each Q^1 is independently alkyl, halo, haloalkyl, alkoxyalkyl, hydroxyl, alkoxy, optionally substituted cycloalkyl, optionally substituted cycloalkylakyl, optionally substituted aryl, —R^4OR^5, —R^4SR^5, —$R^4N(R^6)(R^7)$, $R^4OR^4N(R^6)(R^7)$ or $R^4OR^4C(J)N(R^6)(R^7)$;

J is O or S;

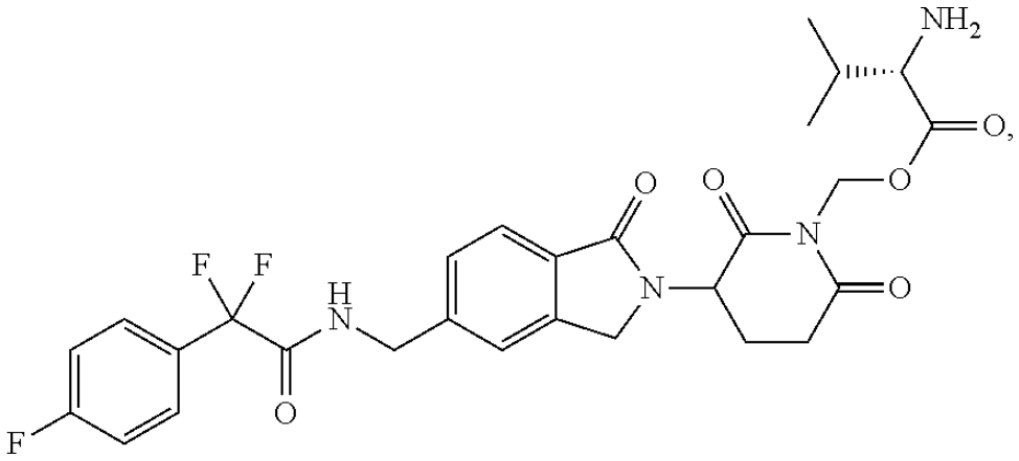
each R^4 is independently alkylene, alkenylene or a direct bond;

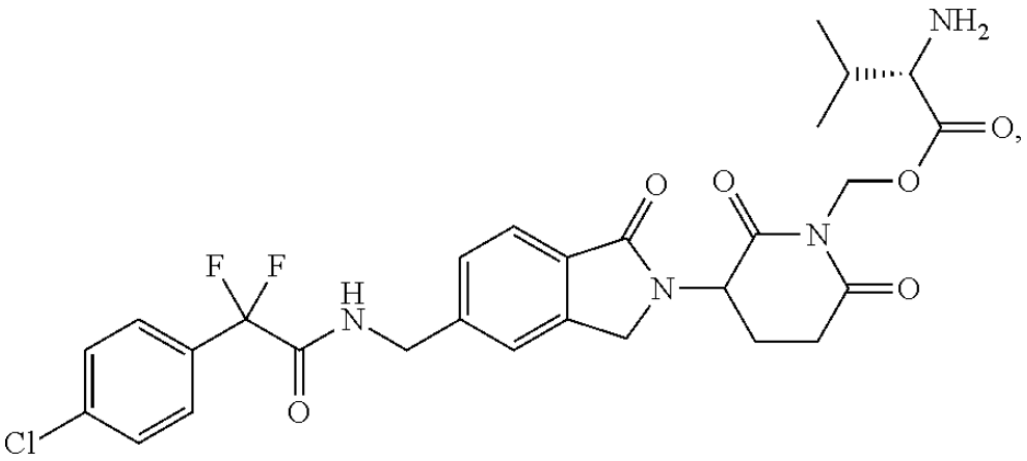
each R^5 is independently hydrogen, alkyl, haloalkyl or hydroxyalkyl;

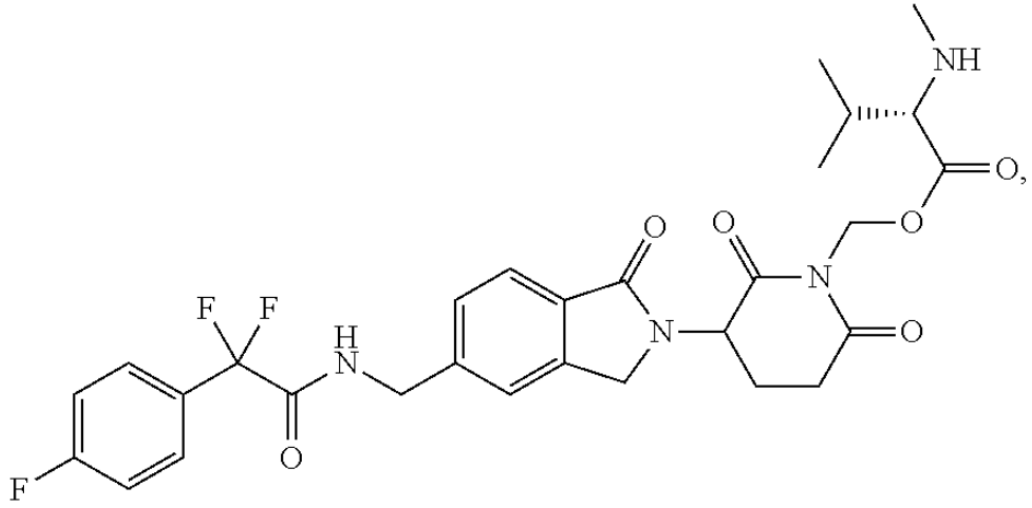
R^6 and R^7 are each independently hydrogen or alkyl or R^6 and R^7 together with the nitrogen atom on which they are substituted form a 5 or 6-membered heterocyclyl or heteroaryl ring, optionally substituted with one or two halo, alkyl or haloalkyl; and

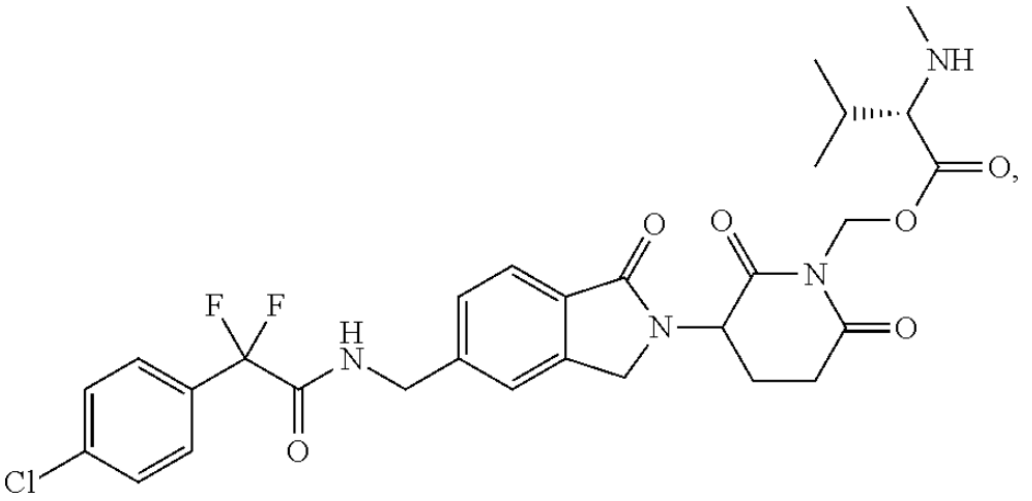
n is 0-3.

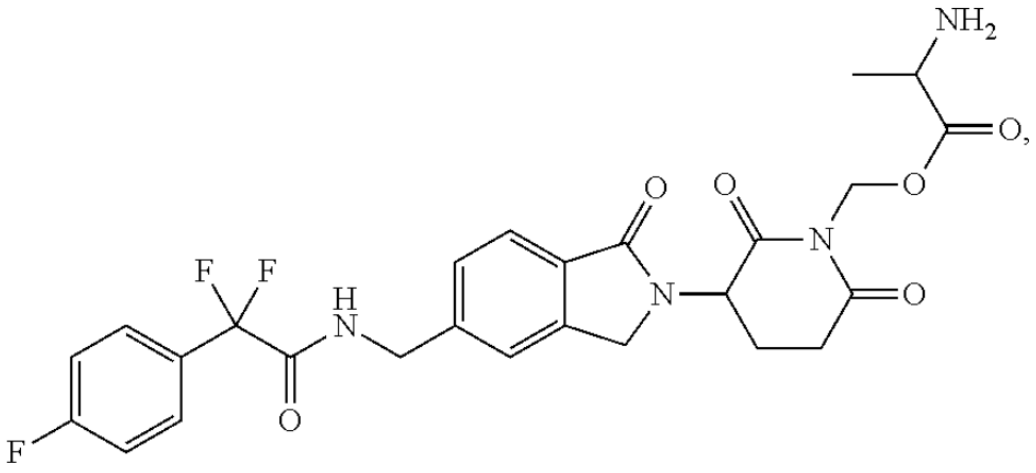
13. The compound of claim 8, wherein the compound is selected from the group consisting of:

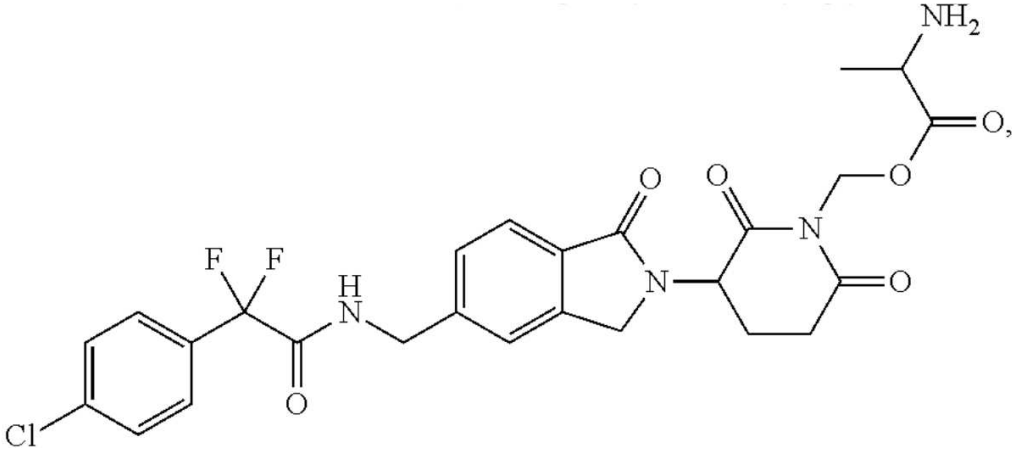


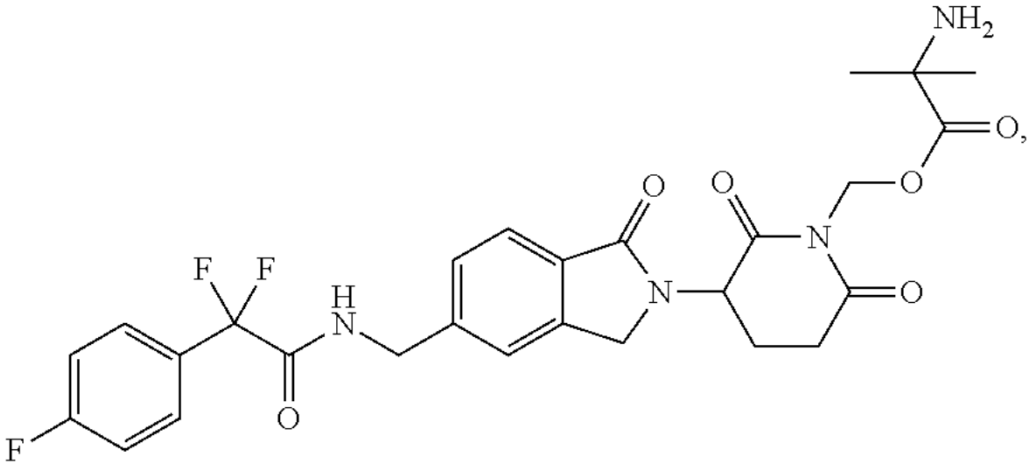


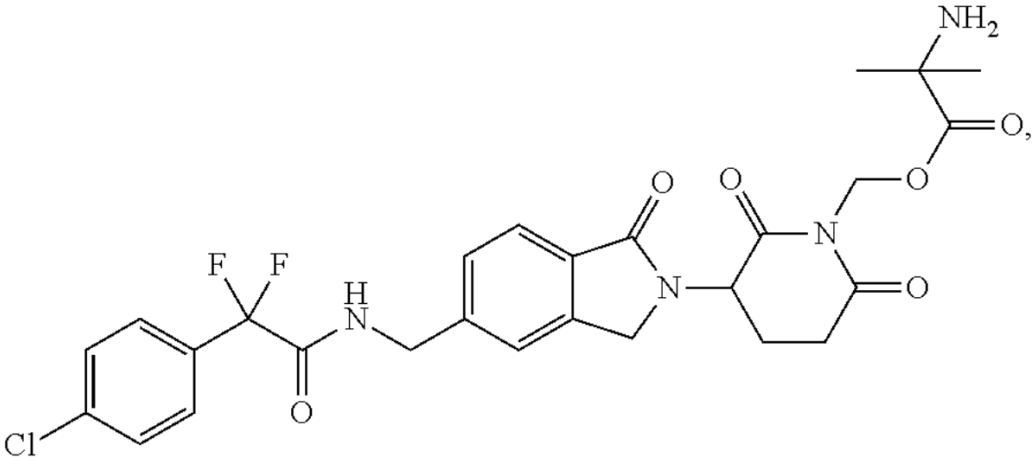


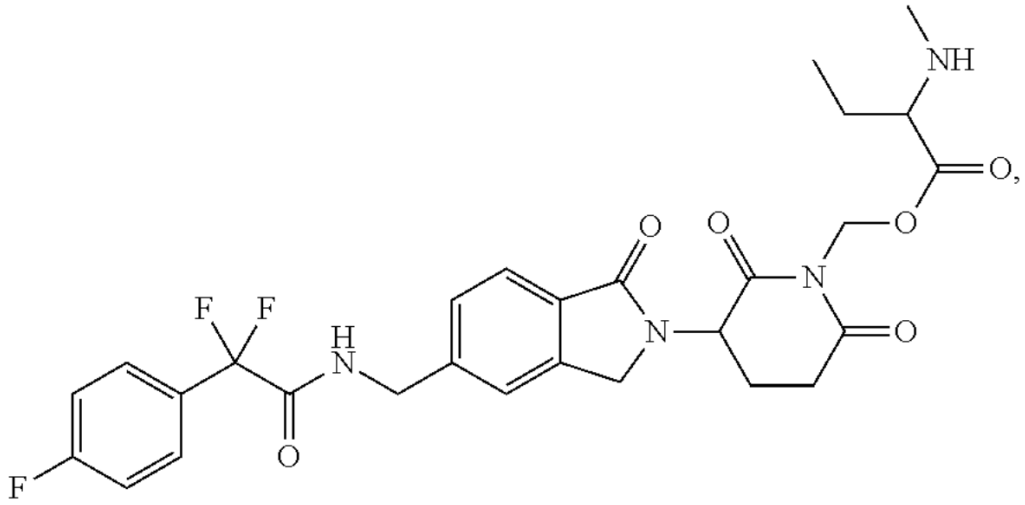


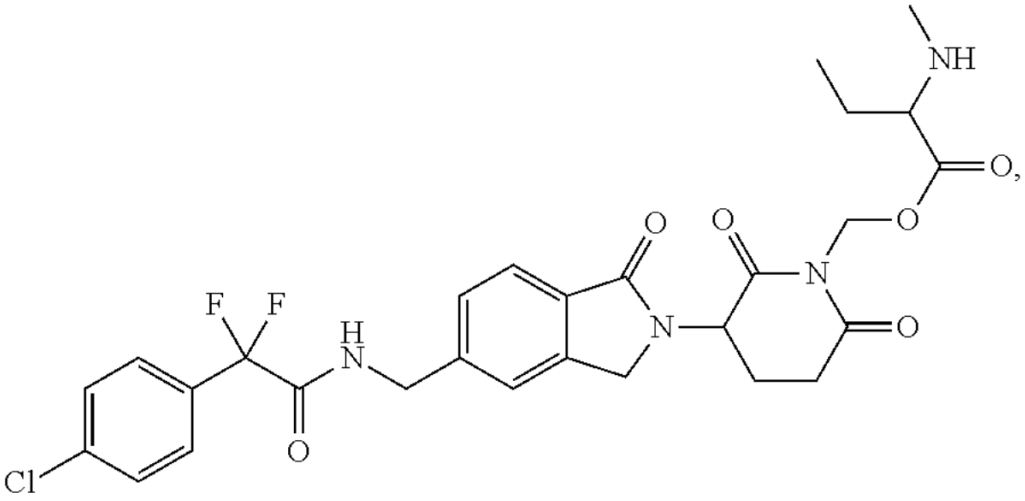


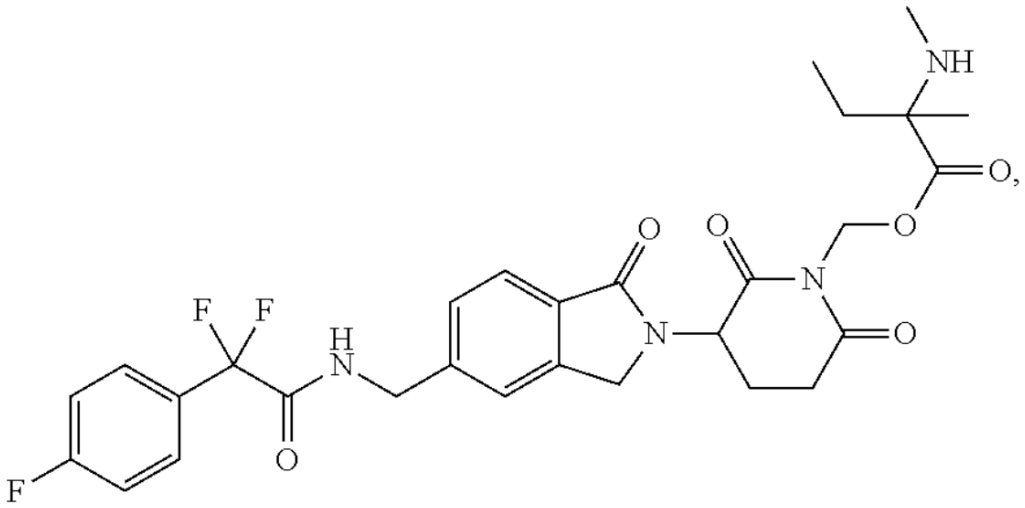


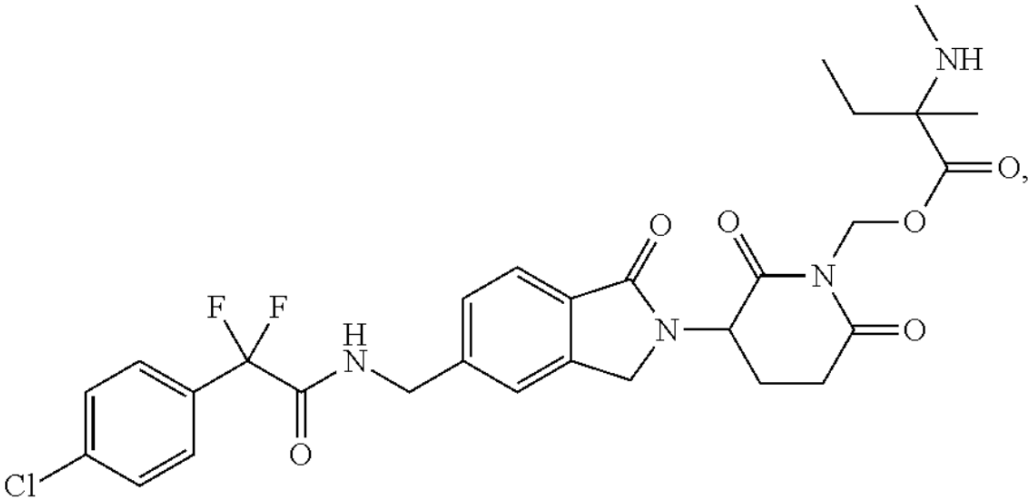


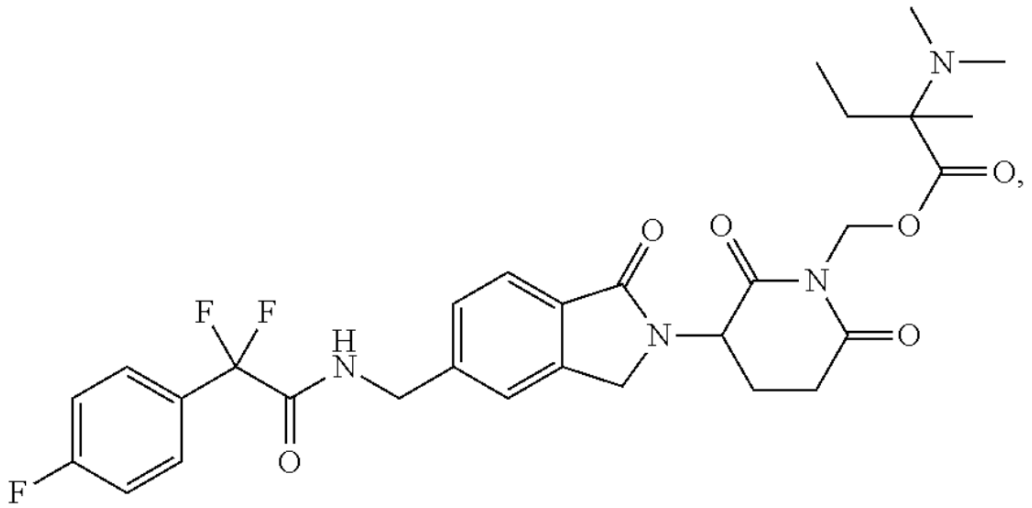


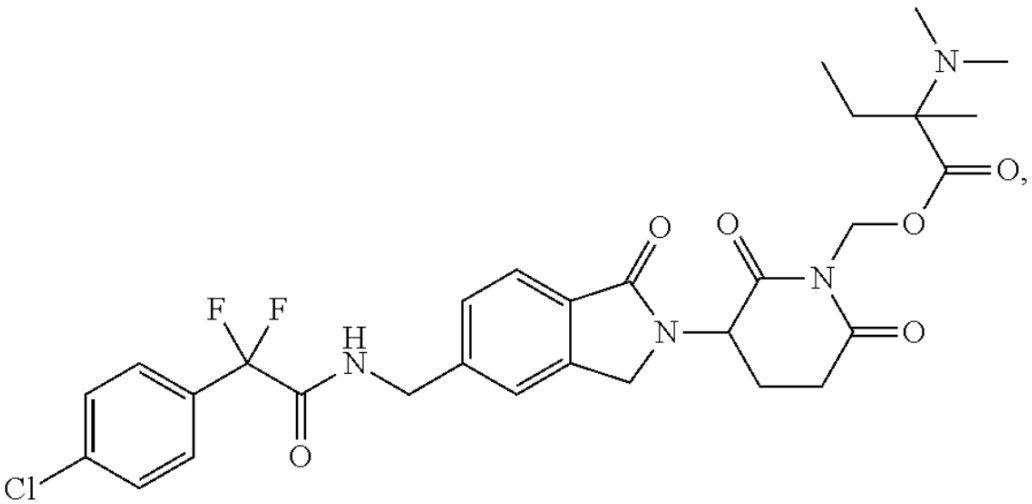


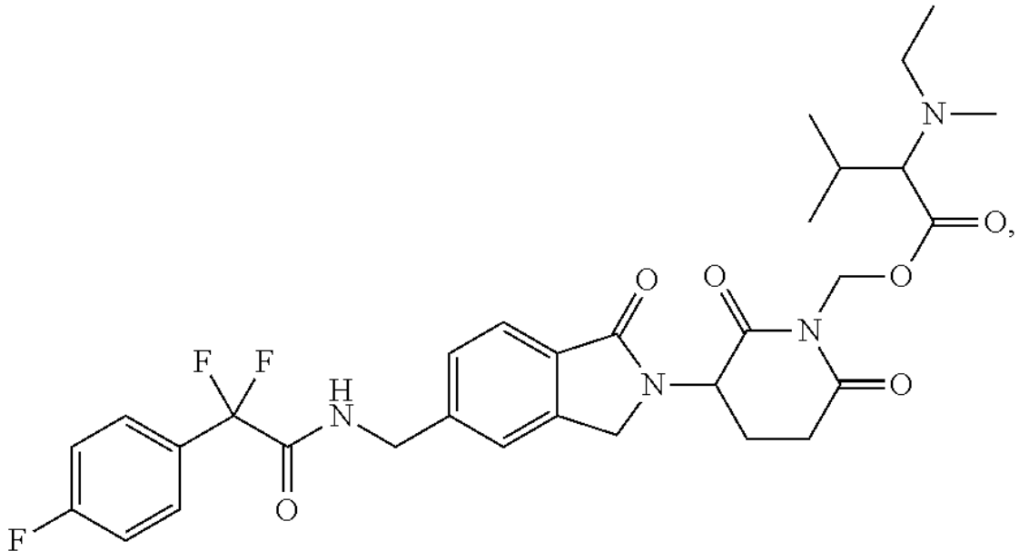


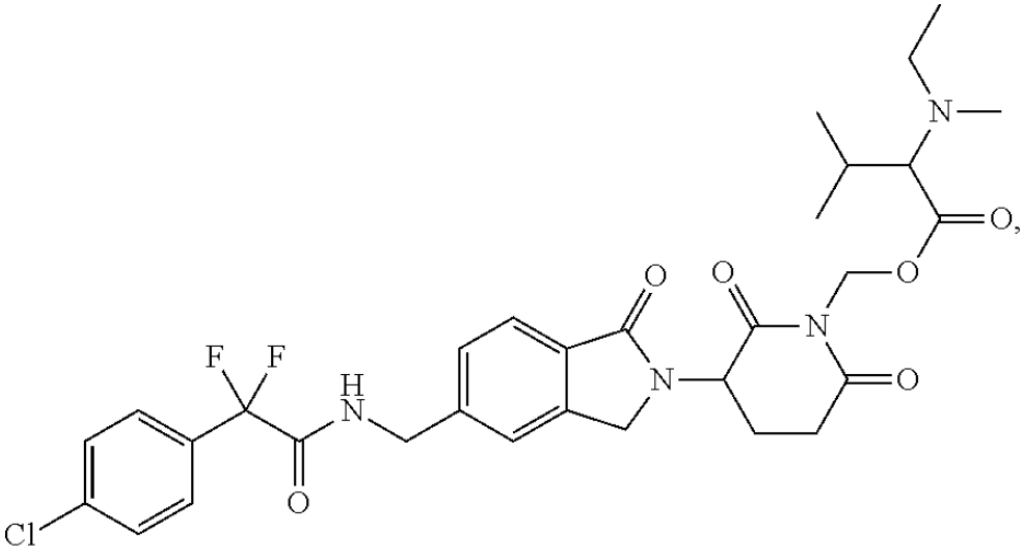


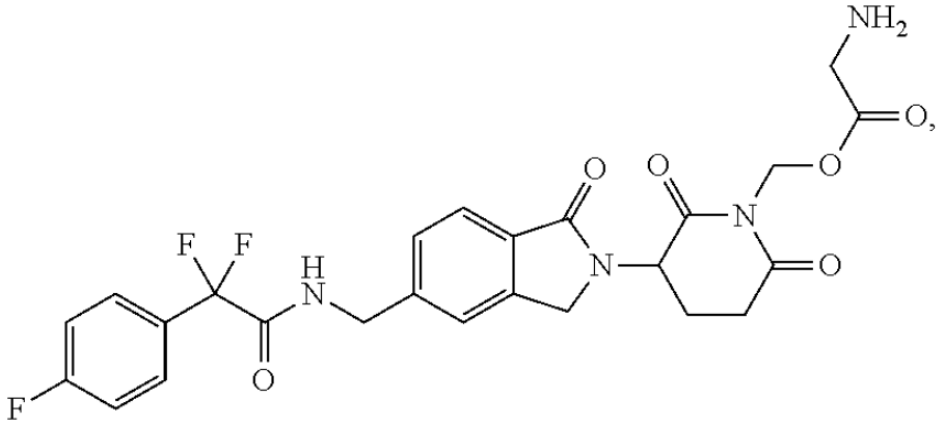




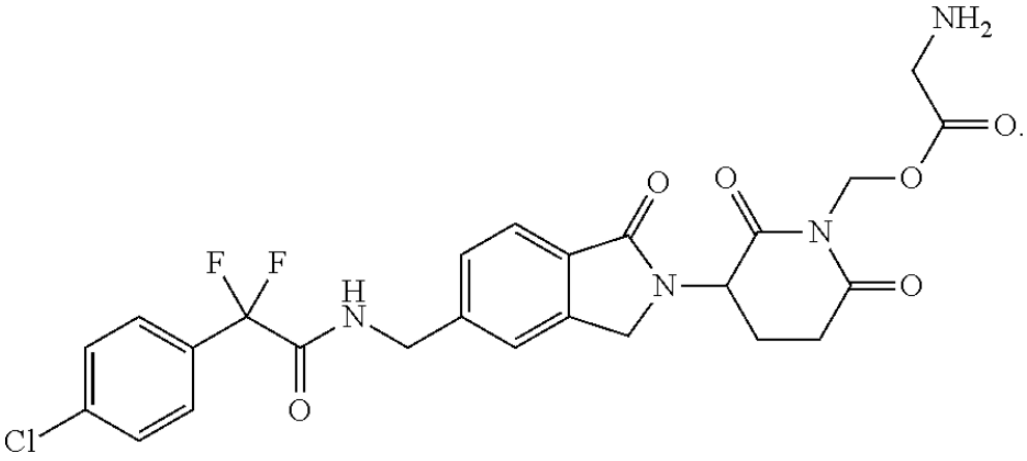








and



14. A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier, diluent or excipient.

15. The pharmaceutical composition of claim 14, wherein the composition is formulated for parenteral, or intravenous administration.

16. The pharmaceutical composition of claim 14, wherein the composition is formulated as a single unit dosage form.

17. A pharmaceutical composition comprising a compound of claim 8 and a pharmaceutically acceptable carrier, diluent or excipient.

18. The pharmaceutical composition of claim 17, wherein the composition is formulated for parenteral, or intravenous administration.

19. The pharmaceutical composition of claim 17, wherein the composition is formulated as a single unit dosage form.