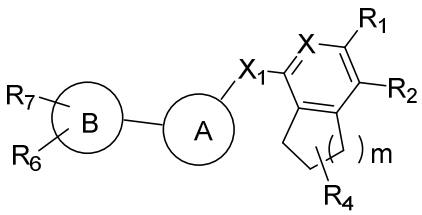
this inhibition is necessary. Therefore, the identification and development of new PD-1/PD-L1 inhibitor compounds treating cancer and other diseases or conditions associated with activation of PD-1/PD-L1 would open new opportunities in the realm of cancer treatment.

SUMMARY

[00010] The present disclosure refers to subject matter as defined in the attached set of claims. In an example, there is disclosed a compound of Formula I

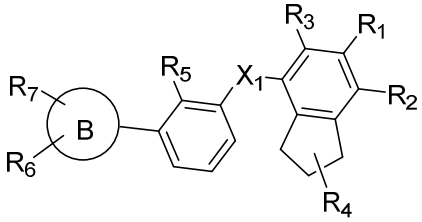


Formula (I)

their polymorphs, stereoisomers, tautomers, prodrugs, solvates, and pharmaceutically acceptable salts thereof, wherein X_1 is selected from -CH_2O-, -OCH_2-, -C(O)NH- or -NHC(O)-; R_4 is selected from hydrogen, C_{1-6} alkyl, -$C(O)OR_{a1}$, $C(O)NR_{b1}R_{c1}$, C_{5-6} aryl, or C_{1-6} heteroaryl, wherein C_{1-6} alkyl is optionally substituted with one or more of the groups selected from the group consisting of hydrogen, hydroxyl, amino, -$C(O)OR_{a1}$, $C(O)NR_{b1}R_{c1}$, C_{5-6} aryl, and C_{1-6} heteroaryl; R_{a1}, R_{b1}, and R_{c1} are independently selected from hydrogen or C_{1-6} alkyl; X is selected from CR_3 or N; R_1, R_2, R_3,R_6, and R_7 are independently selected from hydrogen, halo, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{1-6} haloalkoxy, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-14 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-14 membered heteroaryl)-C_{1-4} alkyl-, (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, CN, NO_2, OR^a, SR^a, $NHOR^a$, $C(O)R^a$, $C(O)NR^aR^a$, $C(O)OR^a$, $OC(O)R^a$, $OC(O)NR^aR^a$, NHR^a, NR^aR^a, $NR^aC(O)R^a$, $NR^aC(O)OR^a$, $NR^aC(O)NR^aR^a$, $C(=NR^a)R^a$, $C(=NR^a)NR^aR^a$, $NR^aC(=NR^a)NR^aR^a$, $NR^aS(O)R^a$, $NR^aS(O)_2R^a$, $NR^aS(O)_2NR^aR^a$, $S(O)R^a$, $S(O)NR^aR^a$, $S(O)_2R^a$, or $S(O)_2NR^aR^a$, wherein the C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-14 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-14 membered heteroaryl)-C_{1-4} alkyl-, and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, are independently optionally substituted with 1, 2, 3, or 4 R^b substituents; R^a is selected from hydrogen, cyano, C_{1-6} alkyl, C_{1-4} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl-, or (4-10

alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl-, (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, $NHOR^r$, OR^r, SR^r, $C(O)R^r$, $C(O)NR^rR^r$, $C(O)OR^r$, $OC(O)R^r$, $OC(O)NR^rR^r$, NHR^r, NR^rR^r, $NR^rC(O)R^r$, $NR^rC(O)NR^rR^r$, $NR^rC(O)OR^r$, $C(=NR^r)NR^rR^r$, $NR^rC(=NR^r)NR^rR^r$, $NR^rC(=NOH)NR^rR^r$, $NR^rC(=NCN)NR^rR^r$, $S(O)R^r$, $S(O)NR^rR^r$, $S(O)_2R^r$, $NR^rS(O)_2R^r$, $NR^rS(O)_2NR^rR^r$ or $S(O)_2NR^rR^r$, wherein the C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-6} haloalkoxy, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl- and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl- are optionally substituted with 1, 2 or 3 R^q substituents; R^e, R^i, R^k, R^o and R^r are independently selected from hydrogen, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{6-10} aryl, 5 or 6-membered heteroaryl, 4-6 membered heterocycloalkyl, C_{1-4} haloalkyl, C_{2-4} alkenyl, or C_{2-4} alkynyl, wherein the C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{6-10} aryl, 5 or 6-membered heteroaryl, 4-6 membered heterocycloalkyl, C_{2-4} alkenyl, and C_{2-4} alkynyl are optionally substituted with 1, 2 or 3 R^q substituents; R^q is selected from hydroxy, cyano, amino, halo, COOH, C_{1-6} haloalkyl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkylthio, C_{5-6} aryl, 5-6 membered heteroaryl, 4-6 membered heterocycloalkyl, C_{3-6} cycloalkyl, NHR^8, NR^8R^8, and C_{1-4} haloalkoxy, wherein the C_{1-6} alkyl, C_{5-6} aryl, C_{3-6} cycloalkyl, 4-6 membered heterocycloalkyl, and 5-6 membered heteroaryl are optionally substituted with halo, hydroxy, cyano, COOH, amino, C_{1-4} alkyl, C_{1-4} alkoxy, C_{1-4} haloalkyl, C_{1-4} haloalkoxy, C_{5-6} aryl, C_{3-10} cycloalkyl, 5-6 membered heteroaryl and 4-6 membered heterocycloalkyl; R^8 is C_{1-6} alkyl; m is 1 or 2; Ring A is selected from substituted or unsubstituted C_{5-10} aryl, substituted or unsubstituted C_{3-6} cycloalkyl, and substituted or unsubstituted 6-10 membered monocyclic saturated or unsaturated heterocyclic ring with 1-3 heteroatoms selected from N, S or O; Ring B is selected from C_{5-10} aryl, C_{3-6} cycloalkyl, 5-10 membered monocyclic saturated or unsaturated heterocyclic ring with 1-3 heteroatoms selected from N, S or O.

[00011] In another example, there is disclosed a compound of Formula II



(II)

membered heteroaryl)-C_{1-4} alkyl- and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl- are optionally substituted with 1, 2 or 3 R^q substituents;

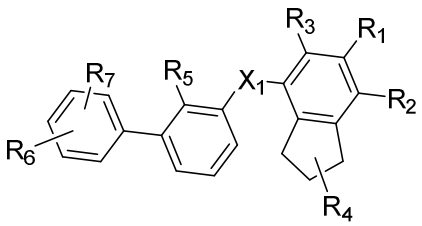
R^e, R^i, R^k, R^o and R^r are independently selected from hydrogen, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{6-10} aryl, 5 or 6-membered heteroaryl, 4-6 membered heterocycloalkyl, C_{1-4} haloalkyl, C_{2-4} alkenyl, or C_{2-4} alkynyl, wherein the C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{6-10} aryl, 5 or 6-membered heteroaryl, 4-6 membered heterocycloalkyl, C_{2-4} alkenyl, and C_{2-4} alkynyl are optionally substituted with 1, 2 or 3 R^q substituents;

R^q is selected from hydroxy, cyano, amino, halo, COOH, C_{1-6} haloalkyl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkylthio, C_{5-6} aryl, 5-6 membered heteroaryl, 4-6 membered heterocycloalkyl, C_{3-6} cycloalkyl, NHR^8, NR^8R^8, and C_{1-4} haloalkoxy, wherein the C_{1-6} alkyl, C_{5-6} aryl, C_{3-6} cycloalkyl, 4-6 membered heterocycloalkyl, and 5-6 membered heteroaryl are optionally substituted with halo, hydroxy, cyano, COOH, amino, C_{1-4} alkyl, C_{1-4} alkoxy, C_{1-4} haloalkyl, C_{1-4} haloalkoxy, C_{5-6} aryl, C_{3-10} cycloalkyl, 5-6 membered heteroaryl and 4-6 membered heterocycloalkyl;

R^8 is C_{1-6} alkyl;

Ring B is selected from C_{5-10} aryl, C_{3-6} cycloalkyl, 5-10 membered monocyclic saturated or unsaturated heterocyclic ring with 1-3 heteroatoms selected from N, S or O.

[00012] In yet another example, there is disclosed a compound of Formula III



(III)

their polymorphs, stereoisomers, tautomers, prodrugs, solvates, and pharmaceutically acceptable salts thereof,

wherein X_1 is selected from -CH_2O-, -OCH_2-, -C(O)NH- or -NHC(O)-;

R_4 is selected from hydrogen, C_{1-6} alkyl, -$C(O)OR_{a1}$, $C(O)NR_{b1}R_{c1}$, C_{5-6} aryl, or C_{1-6} heteroaryl; wherein C_{1-6} alkyl is optionally substituted with one or more of the groups selected from the group consisting of hydrogen, hydroxyl, amino, -$C(O)OR_{a1}$, $C(O)NR_{b1}R_{c1}$, C_{5-6} aryl, and C_{1-6} heteroaryl;

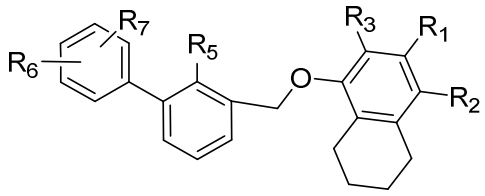
R_{a1}, R_{b1}, and R_{c1} are independently selected from hydrogen or C_{1-6} alkyl;

R_5 is selected from C_{1-4} alkyl, cyano, or C_{1-4} haloalkyl;

alkyl, C_{5-6} aryl, C_{3-6} cycloalkyl, 4-6 membered heterocycloalkyl, and 5-6 membered heteroaryl are optionally substituted with halo, hydroxy, cyano, COOH, amino, C_{1-4} alkyl, C_{1-4} alkoxy, C_{1-4} haloalkyl, C_{1-4} haloalkoxy, C_{5-6} aryl, C_{3-10} cycloalkyl, 5-6 membered heteroaryl and 4-6 membered heterocycloalkyl;

R^8 is C_{1-6} alkyl.

[00013] In yet another example, there is disclosed a compound of Formula IV



IV

their polymorphs, stereoisomers, tautomers, prodrugs, solvates, and pharmaceutically acceptable salts thereof,

whereinR$_5$ is selected from C_{1-4} alkyl, cyano, or C_{1-4} haloalkyl;

R_1, R_2, R_3,R_6, and R_7 are independently selected from hydrogen, halo, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{1-6} haloalkoxy, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-14 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-14 membered heteroaryl)-C_{1-4} alkyl-, (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, CN, NO_2, OR^a, SR^a, $NHOR^a$, $C(O)R^a$, $C(O)NR^aR^a$, $C(O)OR^a$, $OC(O)R^a$, $OC(O)NR^aR^a$, NHR^a, NR^aR^a, $NR^aC(O)R^a$, $NR^aC(O)OR^a$, $NR^aC(O)NR^aR^a$, $C(=NR^a)R^a$, $C(=NR^a)NR^aR^a$, $NR^aC(=NR^a)NR^aR^a$, $NR^aS(O)R^a$, $NR^aS(O)_2R^a$, $NR^aS(O)_2NR^aR^a$, $S(O)R^a$, $S(O)NR^aR^a$, $S(O)_2R^a$, or $S(O)_2NR^aR^a$, wherein the C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-14 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-14 membered heteroaryl)-C_{1-4} alkyl-, and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, are independently optionally substituted with 1, 2, 3, or 4 R^b substituents;

R^a is selected from hydrogen, cyano, C_{1-6} alkyl, C_{1-4} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl-, or (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, wherein the C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered

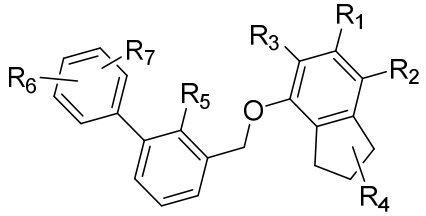
heteroaryl)-C_{1-4} alkyl-, (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, $NHOR^r$, OR^r, SR^r, $C(O)R^r$, $C(O)NR^rR^r$, $C(O)OR^r$, $OC(O)R^r$, $OC(O)NR^rR^r$, NHR^r, NR^rR^r, $NR^rC(O)R^r$, $NR^rC(O)NR^rR^r$, $NR^rC(O)OR^r$, $C(=NR^r)NR^rR^r$, $NR^rC(=NR^r)NR^rR^r$, $NR^rC(=NOH)NR^rR^r$, $NR^rC(=NCN)NR^rR^r$, $S(O)R^r$, $S(O)NR^rR^r$, $S(O)_2R^r$, $NR^rS(O)_2R^r$, $NR^rS(O)_2NR^rR^r$ or $S(O)_2NR^rR^r$, wherein the C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-6} haloalkoxy, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl- and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl- are optionally substituted with 1, 2 or 3 R^q substituents;

R^e, R^i, R^k, R^o and R^r are independently selected from hydrogen, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{6-10} aryl, 5 or 6-membered heteroaryl, 4-6 membered heterocycloalkyl, C_{1-4} haloalkyl, C_{2-4} alkenyl, or C_{2-4} alkynyl, wherein the C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{6-10} aryl, 5 or 6-membered heteroaryl, 4-6 membered heterocycloalkyl, C_{2-4} alkenyl, and C_{2-4} alkynyl are optionally substituted with 1, 2 or 3 R^q substituents;

R^q is selected from hydroxy, cyano, amino, halo, COOH, C_{1-6} haloalkyl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkylthio, C_{5-6} aryl, 5-6 membered heteroaryl, 4-6 membered heterocycloalkyl, C_{3-6} cycloalkyl, NHR^8, NR^8R^8, and C_{1-4} haloalkoxy, wherein the C_{1-6} alkyl, C_{5-6} aryl, C_{3-6} cycloalkyl, 4-6 membered heterocycloalkyl, and 5-6 membered heteroaryl are optionally substituted with halo, hydroxy, cyano, COOH, amino, C_{1-4} alkyl, C_{1-4} alkoxy, C_{1-4} haloalkyl, C_{1-4} haloalkoxy, C_{5-6} aryl, C_{3-10} cycloalkyl, 5-6 membered heteroaryl and 4-6 membered heterocycloalkyl;

R^8 is C_{1-6} alkyl.

[00014] In yet another example, there is disclosed a compound of Formula V



(V)

their polymorphs, stereoisomers, tautomers, prodrugs, solvates, and pharmaceutically acceptable salts thereof,

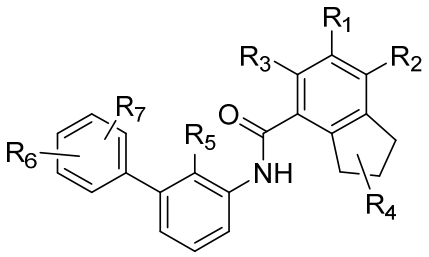
wherein R_5 is selected from C_{1-4} alkyl, cyano, or C_{1-4} haloalkyl;

C_{2-4} alkenyl, or C_{2-4} alkynyl, wherein the C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{6-10} aryl, 5 or 6-membered heteroaryl, 4-6 membered heterocycloalkyl, C_{2-4} alkenyl, and C_{2-4} alkynyl are optionally substituted with 1, 2 or 3 R^q substituents;

R^q is selected from hydroxy, cyano, amino, halo, COOH, C_{1-6} haloalkyl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkylthio, C_{5-6} aryl, 5-6 membered heteroaryl, 4-6 membered heterocycloalkyl, C_{3-6} cycloalkyl, NHR^8, NR^8R^8, and C_{1-4} haloalkoxy, wherein the C_{1-6} alkyl, C_{5-6} aryl, C_{3-6} cycloalkyl, 4-6 membered heterocycloalkyl, and 5-6 membered heteroaryl are optionally substituted with halo, hydroxy, cyano, COOH, amino, C_{1-4} alkyl, C_{1-4} alkoxy, C_{1-4} haloalkyl, C_{1-4} haloalkoxy, C_{5-6} aryl, C_{3-10} cycloalkyl, 5-6 membered heteroaryl and 4-6 membered heterocycloalkyl;

R^8 is C_{1-6} alkyl.

[00015] In yet another aspect example, there is disclosed a compound of Formula VI



(VI)

their polymorphs, stereoisomers, tautomers, prodrugs, solvates, and pharmaceutically acceptable salts thereof,

wherein R_5 is selected from C_{1-4} alkyl, cyano, or C_{1-4} haloalkyl;

R_4 is selected from hydrogen, C_{1-6} alkyl, $-C(O)OR_{a1}$, $C(O)NR_{b1}R_{c1}$, C_{5-6} aryl, or C_{1-6} heteroaryl; wherein C_{1-6} alkyl is optionally substituted with one or more of the groups selected from the group consisting of hydrogen, hydroxyl, amino, $-C(O)OR_{a1}$, $C(O)NR_{b1}R_{c1}$, C_{5-6} aryl, and C_{1-6} heteroaryl;

R_{a1}, R_{b1}, and R_{c1} are independently selected from hydrogen or C_{1-6} alkyl;

R_1, R_2, R_3,R_6, and R_7 are independently selected from hydrogen, halo, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{1-6} haloalkoxy, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-14 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-14 membered heteroaryl)-C_{1-4} alkyl-, (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, CN, NO_2, OR^a, SR^a, $NHOR^a$, $C(O)R^a$, $C(O)NR^aR^a$, $C(O)OR^a$, $OC(O)R^a$, $OC(O)NR^aR^a$, NHR^a, NR^aR^a, $NR^aC(O)R^a$, $NR^aC(O)OR^a$, $NR^aC(O)NR^aR^a$, $C(=NR^a)R^a$, $C(=NR^a)NR^aR^a$, $NR^aC(=NR^a)NR^aR^a$, $NR^aS(O)R^a$,

[00016] In yet another example, there is disclosed a process of preparation of compounds of Formula I, as disclosed herein or its polymorphs, stereoisomers, tautomers, prodrugs, solvates, and pharmaceutically acceptable salts thereof. The present disclosure further describes the process of preparation of compounds of Formula I, Formula II, Formula III, Formula IV, Formula V, Formula VI, or their polymorphs, stereoisomers, tautomers, prodrugs, solvates, and pharmaceutically acceptable salts thereof.

[00016a] In yet another example, there is disclosed a pharmaceutical composition comprising a compound of Formula I, Formula II, Formula III, Formula IV, Formula V, Formula VI, or a pharmaceutically acceptable salt thereof as disclosed herein, together with a pharmaceutically acceptable carrier, optionally in combination with one or more other pharmaceutical compositions.

[00017] In yet another example, there is disclosed theuse of the compound of Formula I, Formula II, Formula III, Formula IV, Formula V, or Formula VI as disclosed herein or the pharmaceutical composition as disclosed herein, with other clinically relevant cytotoxic agents or non-cytotoxic agents in the manufacture of a medicament for treating and/or preventing various diseases, including cancer and infectious diseases. The present disclosure also discloses the method for the treatment and/or prevention of various diseases, including cancer and infectious diseases, comprising administering to a subject suffering from the proliferative disorder or cancer a therapeutically effective amount of the compound of Formula I, Formula II, Formula III, Formula IV, Formula V, Formula VI, or the pharmaceutical composition comprising compound of Formula I, Formula II, Formula III, Formula IV, Formula V, or Formula VI, with other clinically relevant cytotoxic agents or non-cytotoxic agents to a subject in need thereof.

[00018] In yet another example, there is disclosed theuse of the compound of Formula I, Formula II, Formula III, Formula IV, Formula V, or Formula VI as disclosed herein, or the pharmaceutical composition as disclosed herein, in the manufacture of a medicament for treating and/or preventing various diseases including proliferative disorder or cancer; or in the manufacture of a medicament for treating cancer together with other clinically relevant cytotoxic agents or non-cytotoxic agents. The present disclosure further discloses the use of the compounds of Formula I, Formula II, Formula III, Formula IV, Formula V, Formula VI, or the pharmaceutical composition comprising compounds of Formula I, Formula II, Formula III, Formula IV, Formula V, or Formula VI, for the treatment and/or prevention of various diseases including proliferative

disorder or cancer; or treatment of cancer together with other clinically relevant cytotoxic agents or non-cytotoxic agents.

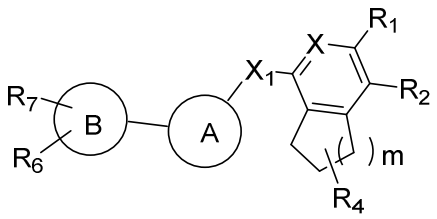
[00019] In yet another example, there is disclosed theuse of a combination of the compound of Formula I, Formula II, Formula III, Formula IV, Formula V, or Formula VI as disclosed herein or the pharmaceutical composition as disclosed herein, with other clinically relevant cytotoxic agents or non-cytotoxic agents in the manufacture of a medicament for treating cancer. The present disclosure also discloses a method for the treatment of cancer, said method comprising administering a combination of the compounds of Formula I, Formula II, Formula III, Formula IV, Formula V, Formula VI, or the pharmaceutical composition comprising compounds of Formula I, Formula II, Formula III, Formula IV, Formula V, or Formula VI, with other clinically relevant cytotoxic agents or non-cytotoxic agents to a subject in need thereof.

[00020] In yet another example, there is disclosed theuse of a combination of the compound of Formula I, Formula II, Formula III, Formula IV, Formula V, or Formula VI as disclosed herein, or the pharmaceutical composition as disclosed herein, with other clinically relevant immune modulators agents in the manufacture of a medicament for treating cancer. The present disclosure further describes a method of treatment of cancer, said method comprising administering a combination of the compounds of Formula I, Formula II, Formula III, Formula IV, Formula V, Formula VI, or the pharmaceutical composition, with other clinically relevant immune modulators agents to a subject in need of thereof.

[00021] These and other features, aspects, and advantages of the present subject matter will become better understood with reference to the following description. This summary is provided to introduce a selection of concepts in a simplified form. This summary is not intended to identify key features or essential features of the disclosure, nor is it intended to be used to limit the scope of the subject matter.

I/We Claim:

1. A compound of Formula (I)



(I)

their stereoisomers and pharmaceutically acceptable salts thereof,

wherein, X_1 is selected from $-CH_2O-$ or $-OCH_2-$;

R_4 is hydrogen or C_{1-6} alkyl;

X is selected from CR_3 or N;

R_1, R_2, R_3, R_6 and R_7 are independently selected from hydrogen, halo, C_{1-6} alkyl, (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, OR^a and $C(O)OR^a$, wherein, the C_{1-6} alkyl, and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, are independently optionally substituted with 1, 2 or 3 R^b substituents;

R^a is selected from hydrogen, C_{1-6} alkyl, C_{1-4} haloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl-, or (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, wherein, the C_{1-6} alkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl- and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl- are independently optionally substituted with 1, 2 or 3 R^d substituents;

R^b is selected from hydroxy, amino, C_{1-4} alkyl, 4-10 membered heterocycloalkyl, OR^c, $C(O)NR^cR^c$, $C(O)OR^c$, NHR^c, NR^cR^c, or $NR^cC(O)R^c$; wherein, the C_{1-4} alkyl, and 4-10 membered heterocycloalkyl, are optionally substituted with 1, 2 or 3 R^d substituents;

R^c is selected from hydrogen, C_{1-6} alkyl, or C_{3-10} cycloalkyl, wherein, the C_{1-6} alkyl, and C_{3-10} cycloalkyl, are optionally substituted with 1, 2 or 3 R^f substituent;

R^d is selected from cyano, C_{1-6} alkyl, halo, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, $C(O)NR^eR^e$, or $C(O)OR^e$, wherein, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl, and 4-10 membered heterocycloalkyl, are optionally substituted with 1, 2, or 3 R^f substituents;

R^f is selected from C_{1-4} alkyl, halogen, CN, OR^g, $C(O)NR^gR^g$, $C(O)OR^g$, or $NR^gC(O)R^g$;

R^g is selected from hydrogen or C_{1-6} alkyl;

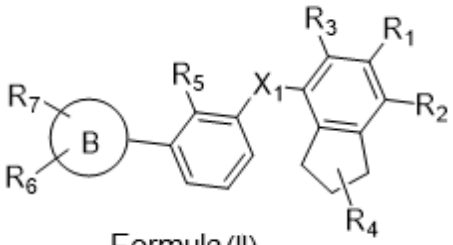
R^e is selected from hydrogen, or C_{1-4} alkyl;

m is 1 or 2;

Ring A is substituted or unsubstituted C_{6-10} aryl, substituted with C_{1-4} alkyl, cyano or C_{1-4} haloalkyl;

Ring B is selected from C_{6-10} aryl, C_{3-6} cycloalkyl, 5-10 membered monocyclic saturated or unsaturated heterocyclic ring with 1-3 heteroatoms selected from N, S or O.

2. A compound of Formula (II)



Formula (II)

their stereoisomers and pharmaceutically acceptable salts thereof,

wherein, X_1 is selected from $-CH_2O-$ or $-OCH_2-$;

R_4 is hydrogen or C_{1-6} alkyl;

R_5 is selected from C_{1-4} alkyl, cyano, or C_{1-4} haloalkyl;

R_1, R_2, R_3, R_6 and R_7 are independently selected from hydrogen, halo, C_{1-6} alkyl, (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, OR^a, and $C(O)OR^a$, wherein, the C_{1-6} alkyl, and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, are independently optionally substituted with 1, 2 or 3 R^b substituents;

R^a is selected from hydrogen, C_{1-6} alkyl, C_{1-4} haloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl-, or (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, wherein, the C_{1-6} alkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl- and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl- are independently optionally substituted with 1, 2 or 3 R^d substituents;

R^b is selected from hydroxy, amino, C_{1-4} alkyl, 4-10 membered heterocycloalkyl, OR^c, $C(O)NR^cR^c$, $C(O)OR^c$, NHR^c, NR^cR^c, or $NR^cC(O)R^c$; wherein, the C_{1-4} alkyl, and 4-10 membered heterocycloalkyl, are optionally substituted with 1, 2 or 3 R^d substituents;

R^d is selected from cyano, C_{1-6} alkyl, halo, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, $C(O)NR^eR^e$, or $C(O)OR^e$, wherein, the C_{6-10} aryl, 5-10

membered heteroaryl, C_{3-10} cycloalkyl, and 4-10 membered heterocycloalkyl, are optionally substituted with 1, 2, or 3 R^f substituents;

R^c is selected from hydrogen, C_{1-6} alkyl, or C_{3-10} cycloalkyl, wherein, the C_{1-6} alkyl, and C_{3-10} cycloalkyl, are optionally substituted with 1, 2 or 3 R^f substituent;

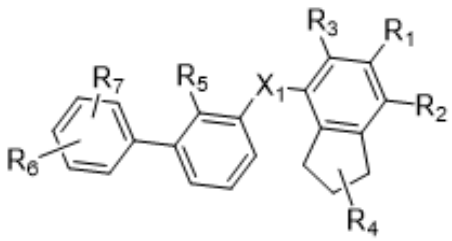
R^f is selected from C_{1-4} alkyl, halogen, CN, OR^g, $C(O)NR^gR^g$, $C(O)OR^g$, or $NR^gC(O)R^g$;

R^g is selected from hydrogen, or C_{1-6} alkyl;

R^e is selected from hydrogen, or C_{1-4} alkyl;

Ring B is selected from C_{6-10} aryl, C_{3-6} cycloalkyl, 5-10 membered monocyclic saturated or unsaturated heterocyclic ring with 1-3 heteroatoms selected from N, S or O.

3. A compound of Formula (III)



Formula (III)

their stereoisomers and pharmaceutically acceptable salts thereof,

wherein, X_1 is selected from $-CH_2O-$ or $-OCH_2-$;

R_4 is hydrogen or C_{1-6} alkyl;

R_5 is selected from C_{1-4} alkyl, cyano, or C_{1-4} haloalkyl;

R_1, R_2, R_3, R_6 and R_7 are independently selected from hydrogen, halo, C_{1-6} alkyl, (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, OR^a, and $C(O)OR^a$, wherein, the C_{1-6} alkyl, and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, are independently optionally substituted with 1, 2 or 3 R^b substituents;

R^a is selected from hydrogen, C_{1-6} alkyl, C_{1-4} haloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl-, or (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, wherein, the C_{1-6} alkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4}alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl- and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl- are independently optionally substituted with 1, 2 or 3 R^d substituents;

R^b is selected from hydroxy, amino, C_{1-4} alkyl, 4-10 membered heterocycloalkyl, OR^c, $C(O)NR^cR^c$, $C(O)OR^c$, NHR^c, NR^cR^c, or $NR^cC(O)R^c$; wherein, the C_{1-4} alkyl, and 4-10 membered heterocycloalkyl, are optionally substituted with 1, 2, or 3 R^d substituents;

R^d is selected from cyano, C_{1-6} alkyl, halo, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, $C(O)NR^eR^e$, or $C(O)OR^e$, wherein, the C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl, and 4-10 membered heterocycloalkyl, are optionally substituted with 1, 2, or 3 R^f substituents;

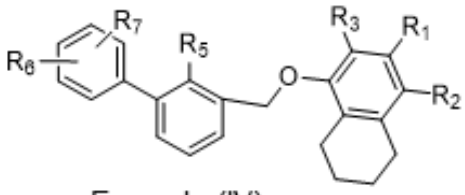
R^c is selected from hydrogen, C_{1-6} alkyl, or C_{3-10} cycloalkyl, wherein, the C_{1-6} alkyl, and C_{3-10} cycloalkyl, are optionally substituted with 1, 2 or 3 R^f substituent;

R^f is selected from C_{1-4} alkyl, halogen, CN, OR^g, $C(O)NR^gR^g$, $C(O)OR^g$, or $NR^gC(O)R^g$;

R^g is selected from hydrogen or C_{1-6} alkyl;

R^e is selected from hydrogen or C_{1-4} alkyl.

4. A compound of Formula (IV)



Formula (IV)

their stereoisomers and pharmaceutically acceptable salts thereof,

wherein, R_5 is selected from C_{1-4} alkyl, cyano, or C_{1-4} haloalkyl;

R_1, R_2, R_3, R_6 and R_7 are independently selected from hydrogen, halo, C_{1-6} alkyl, (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, OR^a, and $C(O)OR^a$, wherein, the C_{1-6} alkyl, and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, are independently optionally substituted with 1, 2 or 3 R^b substituents;

R^a is selected from hydrogen, C_{1-6} alkyl, C_{1-4} haloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl-, or (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, wherein, the C_{1-6} alkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl- and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl- are independently optionally substituted with 1, 2 or 3 R^d substituents;

R^b is selected from hydroxy, amino, C_{1-4} alkyl, 4-10 membered heterocycloalkyl, OR^c, $C(O)NR^cR^c$, $C(O)OR^c$, NHR^c, NR^cR^c, or $NR^cC(O)R^c$; wherein, the C_{1-4} alkyl, and 4-10 membered heterocycloalkyl, are optionally substituted with 1, 2 or 3 R^d substituents;

R^d is selected from cyano, C_{1-6} alkyl, halo, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, $C(O)NR^eR^e$, or $C(O)OR^e$, wherein, the C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl, and 4-10 membered heterocycloalkyl, are optionally substituted with 1, 2 or 3 R^f substituents;

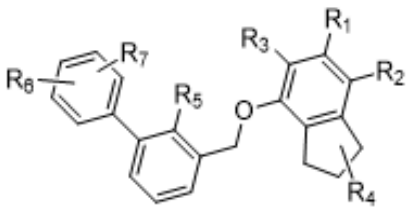
R^c is selected from hydrogen, C_{1-6} alkyl, or C_{3-10} cycloalkyl, wherein, the C_{1-6} alkyl, and C_{3-10} cycloalkyl, are optionally substituted with 1, 2 or 3 R^f substituent;

R^f is selected from C_{1-4} alkyl, halogen, CN, OR^g, $C(O)NR^gR^g$, $C(O)OR^g$, or $NR^gC(O)R^g$;

R^g is selected from hydrogen or C_{1-6} alkyl;

R^e is selected from hydrogen or C_{1-4} alkyl.

5. A compound of Formula (V)



Formula (V)

their stereoisomers and pharmaceutically acceptable salts thereof,

wherein, R_5 is selected from C_{1-4} alkyl, cyano, or C_{1-4} haloalkyl;

R_4 is hydrogen or C_{1-6} alkyl;

R_1, R_2, R_3, R_6 and R_7 are independently selected from hydrogen, halo, C_{1-6} alkyl, (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, OR^a, and $C(O)OR^a$, wherein, the C_{1-6} alkyl, and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, are independently optionally substituted with 1, 2 or 3 R^b substituents;

R^a is selected from hydrogen, C_{1-6} alkyl, C_{1-4} haloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl-, or (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, wherein, the C_{1-6} alkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl- and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl- are independently optionally substituted with 1, 2 or 3 R^d substituents;

R^b is selected from hydroxy, amino, C_{1-4} alkyl, 4-10 membered heterocycloalkyl, OR^c, $C(O)NR^cR^c$, $C(O)OR^c$, NHR^c, NR^cR^c, or $NR^cC(O)R^c$; wherein, the C_{1-4} alkyl, and 4-10 membered heterocycloalkyl, are optionally substituted with 1, 2 or 3 R^d substituents;

R^d is selected from cyano, C_{1-6} alkyl, halo, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, $C(O)NR^eR^e$, or $C(O)OR^e$, wherein, the C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl, and 4-10 membered heterocycloalkyl, are optionally substituted with 1, 2 or 3 R^f substituents;

R^c is selected from hydrogen, C_{1-6} alkyl, or C_{3-10} cycloalkyl, wherein, the C_{1-6} alkyl, and C_{3-10} cycloalkyl, are optionally substituted with 1, 2 or 3 R^f substituent;

R^f is selected from C_{1-4} alkyl, halogen, CN, OR^g, $C(O)NR^gR^g$, $C(O)OR^g$, or $NR^gC(O)R^g$;

R^g is selected from hydrogen or C_{1-6} alkyl;

R^e is selected from hydrogen or C_{1-4} alkyl.

6. A compound or its stereoisomers and pharmaceutically acceptable salts thereof, selected from a group consisting of:

(S)-1-((7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl) piperidine-2-carboxylic acid (1),

N-(2-(((5-methoxy-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl) methyl)amino)ethyl)acetamide (2),

(S)-1-((7-((3-(1-(3-(3,3-difluoropyrrolidin-1-yl)propyl)-1H-indol-4-yl)-2-methylbenzyl)oxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (3),

(S)-1-((6-methyl-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (4),

(S)-1-((6-chloro-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (5),

Methyl 7-(((2-acetamidoethyl)amino)methyl)-4-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-indene-5-carboxylate (6),

(S)-1-((7-((3'-(3-(3,3-difluoropyrrolidin-1-yl)propoxy)-2,2'-dimethyl-[1,1'-biphenyl]-3-yl)methoxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (7),

(S)-1-((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (8),

(S)-1-((5-((5-fluoropyridin-3-yl)methoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (9)

N-(2-(((5-((5-fluoropyridin-3-yl)methoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)acetamide (10)

(S)-5-((5-methoxy-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)-5-azaspiro[2.4]heptane-6-carboxylic acid (11)

(S)-1-((7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-5-(2,2,2-trifluoroethoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (12)

N-(2-(((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)-N-methylacetamide(13)

N-(2-(((5-(1-(3-cyanophenyl)ethoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)acetamide (14)

N-(1-((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidin-3-yl)acetamide (15)

N-(2-(((7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)acetamide (16)

6-((7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)-2-oxa-6-azaspiro[3.3]heptane (17)

2-(hydroxymethyl)-2-(((7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)propane-1,3-diol (18)

1-(((7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)cyclopropane-1-carboxylic acid (19)

((7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)glycine (20)

3-(((7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)propanoic acid (21)

N-methyl-N-((7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)glycine (22)

3-(((7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)butanoic acid (23)

((7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)alanine (24)

(2S,4R)-4-hydroxy-1-((5-methoxy-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)pyrrolidine-2-carboxylic acid (25)

(S)-1-((5-methoxy-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (26)

1-((4-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-5,6,7,8-tetrahydronaphthalen-1-yl)methyl)piperidine-2-carboxylic acid (27)

N-(2-(((6-methyl-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)acetamide (28)

(2S,4R)-4-hydroxy-1-((6-methyl-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)pyrrolidine-2-carboxylic acid (29)

N-(2-(((6-chloro-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)acetamide (30)

(2S,4R)-1-((6-chloro-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)-4-hydroxypyrrolidine-2-carboxylic acid (31)

N-(2-(((7-((3'-(3-(3,3-difluoropyrrolidin-1-yl)propoxy)-2,2'-dimethyl-[1,1'-biphenyl]-3-yl)methoxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)acetamide (32)

(2S,4R)-1-((7-((3'-(3-(3,3-difluoropyrrolidin-1-yl)propoxy)-2,2'-dimethyl-[1,1'-biphenyl]-3-yl)methoxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)-4-hydroxypyrrolidine-2-carboxylic acid (33)

N-(2-(((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)acetamide (34)

(2S,4R)-1-((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)-4-hydroxypyrrolidine-2-carboxylic acid (35)

(S)-1-((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (36)

(S)-1-((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxamide (37)

3-(((4-(((1,3-dihydroxy-2-(hydroxymethyl)propan-2-yl)amino)methyl)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-5-yl)oxy)methyl)benzonitrile (38)

3-(((4-((2-oxa-6-azaspiro[3.3]heptan-6-yl)methyl)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-5-yl)oxy)methyl)benzonitrile (39)

3-(((4-((3-hydroxypiperidin-1-yl)methyl)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-5-yl)oxy)methyl)benzonitrile (40)

((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)glycine (41)

(S)-5-((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)-5-azaspiro[2.4]heptane-6-carboxylic acid (42)

rac-(1R,6S)-2-((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl) methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)-2-azabicyclo[4.1.0]heptane-1-carboxylic acid (cis, racemic) (43)

4-(((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl) methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)butanoic acid (44)

(1R,6S)-2-((5-methoxy-7-((2-methyl-[1,1'-biphenyl]-3-yl) methoxy)-2,3-dihydro-1H-inden-4-yl) methyl)-2-azabicyclo [4.1.0]heptane-1-carboxylic acid (cis, racemic) (45)

(S)-1-((5-((5-cyanopyridin-3-yl)methoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl) methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (46)

(2S,4R)-1-((5-((5-cyanopyridin-3-yl)methoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)-4-hydroxypyrrolidine-2-carboxylic acid (47)

N-(2-(((5-((5-cyanopyridin-3-yl)methoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)acetamide (48)

5-(((4-(((1,3-dihydroxy-2-(hydroxymethyl)propan-2-yl)amino)methyl)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-5-yl)oxy)methyl)nicotinonitrile (49)

(S)-4-((5-((5-cyanopyridin-3-yl)methoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)morpholine-3-carboxylic acid (50)

rac-(1R,6S)-2-((5-((5-cyanopyridin-3-yl)methoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)-2-azabicyclo[4.1.0]heptane-1-carboxylic acid (cis, racemic) (51)

(S)-5-((5-((5-cyanopyridin-3-yl)methoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)-5-azaspiro[2.4]heptane-6-carboxylic acid (52)

N-(2-(((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)(methyl)amino)ethyl)acetamide (53)

N-(2-(((5-((4-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)acetamide (54)

(S)-1-((7-((2-cyano-[1,1'-biphenyl]-3-yl)methoxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (55)

N-(2-(((7-((2-cyano-[1,1'-biphenyl]-3-yl)methoxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)acetamide (56)

(2S,4R)-1-((7-((2-cyano-[1,1'-biphenyl]-3-yl)methoxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)-4-hydroxypyrrolidine-2-carboxylic acid (57)

3-(((7-(((1,3-dihydroxy-2-(hydroxymethyl)propan-2-yl)amino)methyl)-6-methoxy-2,3-dihydro-1H-inden-4-yl)oxy)methyl)-[1,1'-biphenyl]-2-carbonitrile (58)

(S)-4-((7-((2-cyano-[1,1'-biphenyl]-3-yl)methoxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)morpholine-3-carboxylic acid (59)

((7-((2-cyano-[1,1'-biphenyl]-3-yl)methoxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)glycine (60)

(S)-5-((7-((2-cyano-[1,1'-biphenyl]-3-yl)methoxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)-5-azaspiro[2.4]heptane-6-carboxylic acid (61)

rac-(1R,6S)-2-((7-((2-cyano-[1,1'-biphenyl]-3-yl)methoxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)-2-azabicyclo[4.1.0]heptane-1-carboxylic acid (cis, racemic) (62)

2-(1-((7-((2-cyano-[1,1'-biphenyl]-3-yl)methoxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)piperidin-2-yl)acetic acid (63)

N-(2-(((7-((2-cyano-[1,1'-biphenyl]-3-yl)methoxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)(methyl)amino)ethyl)-N-methylacetamide (64)

5-((4-(((2-acetamidoethyl)amino)methyl)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-5-yl)oxy)pentanoic acid (65)

5-((4-(((2-acetamidoethyl)amino)methyl)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-5-yl)oxy)pentanamide (66)

(S)-1-((5-(4-carboxybutoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (67)

(S)-1-((5-((5-amino-5-oxopentyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (68)

(S)-1-((5-((5-cyanopyridin-3-yl)methoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl) methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (69)

(2S,4R)-1-((7-((2-cyano-[1,1'-biphenyl]-3-yl)methoxy)-5-((5-cyanopyridin-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)-4-hydroxypyrrolidine-2-carboxylic acid (70)

(R)-1-((7-((2-cyano-[1,1'-biphenyl]-3-yl)methoxy)-5-((5-cyanopyridin-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-3-carboxylic acid (71)

rac-(1R,6S)-2-((7-((2-cyano-[1,1'-biphenyl]-3-yl)methoxy)-5-((5-cyanopyridin-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)-2-azabicyclo[4.1.0]heptane-1-carboxylic acid (cis racemic) (72)

Methyl 4-(((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)bicyclo[2.2.2]octane-1-carboxylate (73)

4-(((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)bicyclo[2.2.2]octane-1-carboxylic acid (74)

(S)-1-((5-methoxy-7-((2-(trifluoromethyl)-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (75)

(2S,4R)-4-hydroxy-1-((5-methoxy-7-((2-(trifluoromethyl)-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)pyrrolidine-2-carboxylic acid (76)

(2S)-1-((7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-5-((1-methylpiperidin-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (77)

(S)-1-((5-(4-carboxybutoxy)-7-((2-cyano-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (78)

N-(2-(((5-(4-cyanobutoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)acetamide (79)

(S)-1-((5-(4-cyanobutoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxamide (80)

(2S,4R)-1-((5-(4-cyanobutoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)-4-hydroxypyrrolidine-2-carboxylic acid (81)

(S)-1-((5-(((1S,2R)-2-carboxycyclopropyl)methoxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (82)

(1R,2S)-2-(((4-(((2-acetamidoethyl)amino)methyl)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-5-yl)oxy)methyl)cyclopropane-1-carboxylic acid (83)

(S)-1-((7-((3-(2,3-dihydrobenzo[b][1,4]dioxin-6-yl)-2-methylbenzyl)oxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (84)

(2S,4R)-1-((7-((3-(2,3-dihydrobenzo[b][1,4]dioxin-6-yl)-2-methylbenzyl)oxy)-5-methoxy-2,3-dihydro-1H-inden-4-yl)methyl)-4-hydroxypyrrolidine-2-carboxylic acid (85)

N-(2-(((5-((3-cyanobenzyl)oxy)-7-((2,2'-dimethyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)acetamide (86)

N-(2-(((5-((3-cyanobenzyl)oxy)-7-((4'-fluoro-2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)amino)ethyl)acetamide (87)

(S)-1-((5-((3-carbamoylbenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)piperidine-2-carboxylic acid (88)

3-(((4-(aminomethyl)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-5-yl)oxy)methyl)benzonitrile (89)

N-((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl) methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)acetamide (90)

6-acetamido-N-((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)hexanamide (91)

3-(((4-((dimethylamino)methyl)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-5-yl)oxy)methyl)benzonitrile (92)

5-(((4-(((2-acetamidoethyl)amino)methyl)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-5-yl)oxy)methyl)nicotinic acid (93)

5-(((4-(((2-acetamidoethyl)amino)methyl)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-5-yl)oxy)methyl)nicotinamide (94)

3-(((4-(((2-acetamidoethyl)amino)methyl)-7-((2-methyl-[1,1'-biphenyl] -3-yl)methoxy)-2,3-dihydro-1H-inden-5-yl)oxy)methyl)benzamide (95)

(S)-1-((3-methoxy-1-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-6,7-dihydro-5H-cyclopenta[c]pyridin-4-yl)methyl)piperidine-2-carboxylic acid (96)

N-(2-(((3-methoxy-1-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-6,7-dihydro-5H-cyclopenta[c]pyridin-4-yl)methyl)amino)ethyl)acetamide (97)

(S)-4-((5-methoxy-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)morpholine-3-carboxylic acid (98)

5-((5-((3-cyanobenzyl)oxy)-7-((2-methyl-[1,1'-biphenyl]-3-yl)methoxy)-2,3-dihydro-1H-inden-4-yl)methyl)-4,5,6,7-tetrahydro-1H-pyrazolo[4,3-c]pyridine-3-carboxylic acid (99)

7. A process of preparation of compounds of Formula (I), as claimed in claim 1 or its stereoisomers and pharmaceutically acceptable salts thereof.

8. The process of preparation of compounds of Formula (I) as claimed in claim 7, comprising: (a) reacting compounds of Formula I (a) with substituted aliphatic, aromatic, heterocyclic and cyclic amines to obtain compounds of Formula (I)



Formula (I) (a) Formula (I)

wherein, the X_1 of Formula I (a) and Formula (I) is selected from $-CH_2O-$ or $-OCH_2-$; R_4 of Formula I (a) and Formula (I) is hydrogen or C_{1-6} alkyl; X of Formula I (a) and Formula (I) is selected from CR_3 or N; R_1, R_2, R_3, R_6 and R_7 of Formula I (a) and Formula (I) are independently selected from hydrogen, halo, C_{1-6} alkyl, (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, OR^a, and $C(O)OR^a$, wherein, the C_{1-6} alkyl, and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, are independently optionally substituted with 1, 2 or 3 R^b substituents; R^a is selected from hydrogen, C_{1-6} alkyl, C_{1-4} haloalkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4} alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl-, or (4-10 membered heterocycloalkyl)-C_{1-4} alkyl-, wherein, the C_{1-6} alkyl, C_{6-10} aryl-C_{1-4} alkyl-, C_{3-10} cycloalkyl-C_{1-4}alkyl-, (5-10 membered heteroaryl)-C_{1-4} alkyl- and (4-10 membered heterocycloalkyl)-C_{1-4} alkyl- are independently optionally substituted with 1, 2 or 3 R^d substituents; R^b is selected from hydroxy, amino, C_{1-4} alkyl, 4-10 membered heterocycloalkyl, OR^c, $C(O)NR^cR^c$, $C(O)OR^c$, NHR^c, NR^cR^c, or $NR^cC(O)R^c$; wherein, the C_{1-4} alkyl, and 4-10 membered heterocycloalkyl, are optionally substituted with 1, 2 or 3 R^d substituents; R^c is selected from hydrogen, C_{1-6} alkyl, or C_{3-10} cycloalkyl, wherein, the C_{1-6} alkyl, and C_{3-10} cycloalkyl, are optionally substituted with 1, 2 or 3 R^f substituent;

R^d is selected from cyano, C_{1-6} alkyl, halo, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, $C(O)NR^eR^e$, or $C(O)OR^e$, wherein, the C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl, and 4-10 membered heterocycloalkyl, are optionally substituted with 1, 2 or 3 R^f substituents;

R^f is selected from C_{1-4} alkyl, halogen, CN, OR^g, $C(O)NR^gR^g$, $C(O)OR^g$, or $NR^gC(O)R^g$; R^g is selected from hydrogen or C_{1-6} alkyl; R^e is selected from hydrogen or C_{1-4} alkyl; m is 1 or 2; Ring A is selected from substituted or unsubstituted C_{6-10} aryl, substituted with C_{1-4} alkyl, cyano or C_{1-4} haloalkyl; Ring B is selected from C_{6-10} aryl, C_{3-6} cycloalkyl, 5-10 membered monocyclic saturated or unsaturated heterocyclic ring with 1-3 heteroatoms selected from N, S or O, with substituted amines in the presence of solvents to obtain compounds of Formula (I).

9. A pharmaceutical composition comprising a compound of Formula I, Formula II, Formula III, Formula IV, Formula V, Formula VI, or a pharmaceutically acceptable salt thereof as claimed in any of the claims 1-6, together with a pharmaceutically acceptable carrier, optionally in combination with one or more other pharmaceutical compositions.

10. The pharmaceutical composition as claimed in claim 9, wherein the composition is in the form selected from the group consisting of a tablet, capsule, powder, syrup, solution, aerosol and suspension.

11. Use of the compound of Formula I, Formula II, Formula III, Formula IV, Formula V, or Formula VI as claimed in any one of claims 1 – 6 or the pharmaceutical composition as claimed in claim 9 or 10, with other clinically relevant cytotoxic agents or non-cytotoxic agents in the manufacture of a medicament for treating and/or preventing diseases selected from cancer, HIV, Influenza, herpes virus, Hepatitis A, Hepatitis B, Hepatitis C, and Hepatitis D.

12. Use of a combination of the compound of Formula I, Formula II, Formula III, Formula IV, Formula V, or Formula VI as claimed in any of claims 1 – 6 or the pharmaceutical composition as claimed in claim 9 or 10, with other clinically relevant cytotoxic agents or non-cytotoxic agents in the manufacture of a medicament for treating cancer.

13. Use of a combination of the compound of Formula I, Formula II, Formula III, Formula IV, Formula V, or Formula VI as claimed in any of claims 1 – 6, or the pharmaceutical composition as claimed in claim 9 or 10, with other clinically relevant immune modulators agents in the manufacture of a medicament for treating cancer.