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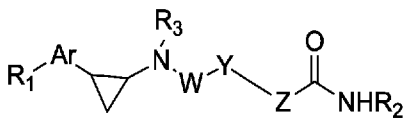
(54) Title: CYCLOPROPYL-AMIDE COMPOUNDS AS DUAL LSD1/HDAC INHIBITORS



Formula I

(57) Abstract: The present disclosure describes novel compounds of the general Formula (I), their analogs, tautomeric forms, stereoisomers, polymorphs, hydrates, solvates, pharmaceutically acceptable salts, pharmaceutical compositions, metabolites, and prodrugs thereof. These compounds can inhibit both LSD and HDAC and are useful as therpeautic or ameliorating agent for diseases that are involved in cellular growth such as malignant tumors, schizophrenia, Alzheimer's disease, parkinson's disease and the like.

WO 2017/195216 A4

[Continued on next page]

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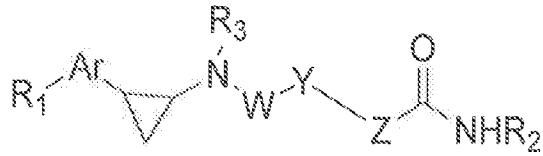
I/We claim

1. A compound of Formula I



I

their analogs, tautomeric forms, stereoisomers, polymorphs, solvates, intermediates, pharmaceutically acceptable salts, metabolites, and prodrugs thereof;

wherein

Ar is selected from the group consisting of substituted or unsubstituted C_{5-6}aryl, C_{1-6}heteroaryl, and C_{2-10}heterocyclyl with heteroatoms selected from N, O, S;

W represents a bond or CR_4R_5, wherein

R_4 and R_5 are independently selected from the group consisting of hydrogen, substituted or unsubstituted C_{1-8}alkyl, C_{5-6}aryl, and C_{1-6}heteroaryl with heteroatoms selected from N, O, S;

Y is a bond or is selected from the group consisting of substituted or unsubstituted C_{1-8}alkyl, C_{42-8}alkenyl, C_{42-8}alkynyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, -CO-, and -CO-C_{2-10}heterocyclyl;

wherein C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, and cyano;

Z represents a bond or is selected from the group consisting of C_{1-8}alkyl, C_{42-8}alkenyl, C_{42-8}alkynyl, C_{7-12}-alkylaryl, C_{7-12}-alkenylaryl, C_{7-15}-arylalkenyl, C_{2-12}-alkylheteroaryl, -CO-C_{7-12}alkylaryl, -CO-C_{7-12}alkenylaryl, ~~-CONR$_6$-C$_{1-8}$alkyl,~~ -NR_6CO-C_{1-8}alkyl-, ~~-NR$_6$-C$_{1-8}$alkyl,~~ -O-C_{1-8}alkyl-, -$CONR_6$-C_{5-6}aryl-, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10} heterocyclyl, -CO-C_{2-10}heterocyclyl, -NR_6-CO-OC_{1-8}alkyl, O-CO-NR_6-C_{1-8}alkyl, -NR_6CO-C_{5-6}aryl-, -NR_6-C_{5-6}aryl, -NR_6-C_{1-6}heteroaryl, -C_{1-8}alkyl-O-C_{5-6}aryl, -O-C_{5-6}aryl, O-C_{1-6}heteroaryl, -NR_6-CO-OC_{5-6}aryl, -$CONR_6$-C_{7-12}alkylaryl, -$CONR_6$-C_{7-12}alkenylaryl, -SO_2-C_{5-6}aryl, -SO_2-C_{7-12}alkylaryl, -NR_6SO_2-C_{7-12}alkylaryl, C_{1-8}alkyl-$CONR_6$-C_{5-6}aryl, and O-CO-NR_6-C_{5-6}aryl;

R_6 is selected from the group consisting of hydrogen, C_{1-8} alkyl, C_{1-6} haloalkyl, C_{3-8} cycloalkyl, C_{5-6} aryl, and C_{1-6} heteroaryl, with heteroatoms selected from N, O, S;

R_1 is selected from the group consisting of hydrogen, halogenhydroxy, nitro, cyano, azido, nitroso, oxo (=O), thioxo (=S), -SO_2-, amino, hydrazino, formyl, C_{1-8}alkyl, C_{1-8}haloalkyl,

C_{1-8}alkoxy, C_{1-8}haloalkoxy, C_{7-12}arylalkoxy, C_{3-8}cycloalkyl, C_{3-8}cycloalkyloxy, C_{5-6}aryl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, alkylamino, -$COOR_a$, -$C(O)R_b$, -$C(S)R_a$, -$C(O)NR_aR_b$, -$C(S)NR_aR_b$, -$NR_aC(O)NR_bR_c$, $NR_aC(S)NR_bR_c$, -$N(R_a)SOR_b$, -$N(R_a)SO_2R_b$, -$NR_aC(O)OR_b$, -NR_aR_b, -$NR_aC(O)R_b$-, -$NR_aC(S)R_b$-, -$SONR_aR_b$-, -$SO_2NR_aR_b$-, -OR_a, -$OR_aC(O)OR_b$-, -$OC(O)NR_aR_b$, $OC(O)R_a$, -$OC(O)NR_aR_b$-, -$R_aNR_bR_c$, -R_aOR_b-, -SR_a, -SOR_a, and -SO_2R_a, wherein R_a, R_b and R_c is independently selected from the group consisting of hydrogen, C_{1-8}alkyl, C_{3-8}cycloalkyl, C_{5-6}aryl, C_{7-15}arylalkyl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, and C_{2-12}heteroarylalkyl with heteroatoms selected from N, O, S;

wherein C_{7-12}arylalkoxy, C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, oxo(=O), C_{3-8} cycloalkyl, halogen, OH, amino, and cyano;

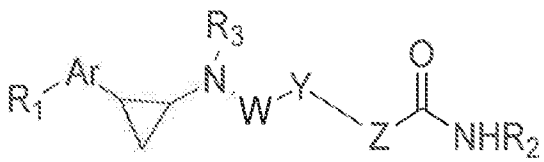
R_3 is selected from the group consisting of hydrogen, substituted or unsubstituted C_{1-8}alkyl, and C_{5-6}aryl;

R_2 is selected from the group consisting of –OR_7, aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl,

wherein aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl, is optionally substituted with one or more of the groups selected from C_{1-8} alkyl, halogen, OH, amino, and cyano;

R_7 is selected from the group consisting of hydrogen, C_{1-8}alkyl, C_{5-6}aryl, C_{2-10}heterocyclyl, and –COR_8, wherein R_8 is selected from the group consisting of C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{3-8}cycloalkyl, and C_{2-10}heterocyclyl.

2. A compound of Formula I



I

their analogs, tautomeric forms, stereoisomers, polymorphs, solvates, intermediates, pharmaceutically acceptable salts, metabolites, and prodrugs thereof;

wherein

Ar is selected from the group consisting of substituted or unsubstituted C_{5-6}aryl, C_{1-6}heteroaryl, and C_{2-10}heterocyclyl with heteroatoms selected from N, O, S;

W represents a bond or CR_4R_5, wherein

R_4 and R_5 are independently selected from the group consisting of hydrogen, and substituted or unsubstituted C_{1-8}alkyl;

Y is a bond or is selected from the group consisting of substituted or unsubstituted C_{1-8}alkyl, C_{42-8}alkenyl, C_{42-8}alkynyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclcyl, C_{3-8}cycloalkyl, -CO-, and -CO-C_{2-10}heterocyclyl;

wherein C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, and cyano;

Z represents a bond or is selected from the group consisting of C_{1-8}alkyl, C_{42-8}alkenyl, C_{42-8}alkynyl, C_{7-12}alkylaryl, C_{7-12}alkenylaryl, C_{7-15}arylalkenyl, C_{2-12}alkylheteroaryl, -CO-C_{7-12}alkylaryl, -CO-C_{7-12}alkenylaryl, ~~-CONR$_6$-C$_{1-8}$alkyl,~~ -NR_6CO-C_{1-8}alkyl-, ~~-NR$_6$-C$_{1-8}$alkyl,~~ -O-C_{1-8}alkyl-, -$CONR_6$-C_{5-6}aryl-, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10} heterocyclyl, -CO-C_{2-10}heterocyclyl, -NR_6-CO-OC_{1-8}alkyl, O-CO-NR_6-C_{1-8}alkyl, -NR_6CO-C_{5-6}aryl-, -NR_6-C_{5-6}aryl, -NR_6-C_{1-6}heteroaryl, -C_{1-8}alkyl-O-C_{5-6}aryl, -O-C_{5-6}aryl, O-C_{1-6}heteroaryl, -NR_6-CO-OC_{5-6}aryl, -$CONR_6$-C_{7-12}alkylaryl, -$CONR_6$-C_{7-12}alkenylaryl, -SO_2-C_{5-6}aryl, -SO_2-C_{7-12}alkylaryl, -NR_6SO_2-C_{7-12}alkylaryl, C_{1-8}alkyl-$CONR_6$-C_{5-6}aryl, and O-CO-NR_6-C_{5-6}aryl;

R_6 is selected from the group consisting of hydrogen, C_{1-8} alkyl, C_{1-6} haloalkyl, C_{3-8} cycloalkyl, C_{5-6} aryl, and C_{1-6} heteroaryl, with heteroatoms selected from N, O, S;

R_1 is selected from the group consisting of hydrogen, halogen, hydroxy, nitro, cyano, azido, nitroso, oxo (=O), thioxo (=S), -SO_2-, amino, hydrazino, formyl, C_{1-8}alkyl, C_{1-8}haloalkyl, C_{1-8}alkoxy, C_{1-8}haloalkoxy, C_{7-12}arylalkoxy, C_{3-8}cycloalkyl, C_{3-8}cycloalkyloxy, C_{5-6}aryl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, alkylamino, -$COOR_a$, -$C(O)R_b$, -$C(S)R_a$, -$C(O)NR_aR_b$, -$C(S)NR_aR_b$, -$NR_aC(O)NR_bR_c$, $NR_aC(S)NR_bR_c$, -$N(R_a)SOR_b$, -$N(R_a)SO_2R_b$, -$NR_aC(O)OR_b$, -NR_aR_b, -$NR_aC(O)R_b$-, $NR_aC(S)R_b$-, -$SONR_aR_b$-, -$SO_2NR_aR_b$-, -OR_a, -$OR_aC(O)OR_b$-, -$OC(O)NR_aR_b$, $OC(O)R_a$, -$OC(O)NR_aR_b$-, -$R_aNR_bR_c$, -R_aOR_b-, -SR_a, -SOR_a and -SO_2R_a, wherein R_a, R_b and R_c is independently selected from the group consisting of hydrogen, C_{1-8}alkyl, C_{3-8}cycloalkyl, C_{5-6}aryl, C_{7-15}arylalkyl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, and C_{2-12}hetroarylalkyl with heteroatoms selected from N, O, S;

wherein C_{7-12}arylalkoxy, C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclcyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclcyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, amino, and cyano;

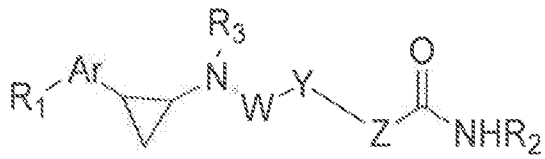
R_3 is selected from the group consisting of hydrogen, and substituted or unsubstituted C_{1-8}alkyl;

R_2 is selected from the group consisting of –OR_7, aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl,

wherein aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl, is optionally substituted with one or more of the groups selected from C_{1-8} alkyl, halogen, OH, amino, and cyano;

R_7 is selected from the group consisting of hydrogen, C_{1-8}alkyl, C_{5-6}aryl, C_{2-10}heterocyclyl, and –COR_8, wherein R_8 is selected the group consisting of C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{3-8}cycloalkyl, and C_{2-10}heterocyclyl.

3. A compound of Formula I



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their analogs, tautomeric forms, stereoisomers, polymorphs, solvates, intermediates, pharmaceutically acceptable salts, metabolites, and prodrugs thereof;

wherein

Ar is selected from the group consisting of C_{5-6}aryl, and C_{2-10}heterocyclyl with heteroatoms selected from N, O, S;

W represents a bond or CR_4R_5, wherein

R_4 and R_5 are independently selected from the group consisting of hydrogen, and substituted or unsubstituted C_{1-8}alkyl;

Y is a bond or is selected from the group consisting of substituted or unsubstituted C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, -CO-, and -CO-C_{2-10}heterocyclyl;

wherein C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclcyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, and cyano;

Z represents a bond or is selected from the group consisting of C_{1-8}alkyl, C_{12-8}alkenyl, C_{12-8}alkynyl, C_{7-12}alkylaryl, C_{7-12}alkenylaryl, C_{7-15}arylalkenyl, C_{2-12}alkylheteroaryl, -CO-C_{7-12}alkylaryl, -CO-C_{7-12}alkenylaryl, ~~-CONR_6-C_{1-8}alkyl,~~ -NR_6CO-C_{1-8}alkyl-, ~~-NR_6-C_{1-8}alkyl,~~ -O-C_{1-8}alkyl-, -CONR_6-C_{5-6}aryl-, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10} heterocyclycl, -CO-C_{2-10}heterocyclyl, -NR_6-CO-OC_{1-8}alkyl, O-CO-NR_6-C_{1-8}alkyl, -NR_6CO-C_{5-6}aryl-, -NR_6-C_{5-}

AMENDED SHEET (ARTICLE 19)

$_{6}$aryl, -NR_6-C_{1-6}heteroaryl, -C_{1-8}alkyl-O-C_{5-6}aryl, -O-C_{5-6}aryl, O-C_{1-6}heteroaryl, -NR_6-CO-OC_{5-6}aryl, -$CONR_6$-C_{7-12}alkylaryl, -$CONR_6$-C_{7-12}alkenylaryl, -SO_2-C_{5-6}aryl, -SO_2-C_{7-12}alkylaryl, -NR_6SO_2-C_{7-12}alkylaryl, C_{1-8}alkyl-$CONR_6$-C_{5-6}aryl, and O-CO-NR_6-C_{5-6}aryl;

R_6 is selected from the group consisting of hydrogen, C_{1-8} alkyl, C_{1-6} haloalkyl, C_{3-8} cycloalkyl, C_{5-6} aryl, and C_{1-6} heteroaryl, with heteroatoms selected from N, O, S;

R_1 is selected from the group consisting of hydrogen, halogen, hydroxy, nitro, cyano, azido, nitroso, oxo (=O), thioxo (=S), -SO_2-, amino, hydrazino, formyl, C_{1-8}alkyl, C_{1-8}haloalkyl, C_{1-8}alkoxy, C_{1-8}haloalkoxy, C_{7-12}arylalkoxy, C_{3-8}cycloalkyl, C_{3-8}cycloalkyloxy, C_{5-6}aryl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, alkylamino, -$COOR_a$, -$C(O)R_b$, -$C(S)R_a$, -$C(O)NR_aR_b$, -$C(S)NR_aR_b$, -$NR_aC(O)NR_bR_c$, $NR_aC(S)NR_bR_c$, -$N(R_a)SOR_b$, -$N(R_a)SO_2R_b$, -$NR_aC(O)OR_b$, -NR_aR_b, -$NR_aC(O)R_b$-, $NR_aC(S)R_b$-, -$SONR_aR_b$-, -$SO_2NR_aR_b$-, -OR_a, -$OR_aC(O)OR_b$-, -$OC(O)NR_aR_b$, $OC(O)R_a$, -$OC(O)NR_aR_b$-, -$R_aNR_bR_c$, -R_aOR_b-, -SR_a, -SOR_a and -SO_2R_a, wherein R_a, R_b and $R_c$is independently selected from the group consisting of hydrogen, C_{1-8}alkyl, C_{3-8}cycloalkyl, C_{5-6}aryl, C_{7-15}arylalkyl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, and C_{2-12}heteroarylalkyl with heteroatoms selected from N, O, S;

wherein C_{7-12}arylalkoxy, C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclcyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclcyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, amino, and cyano;

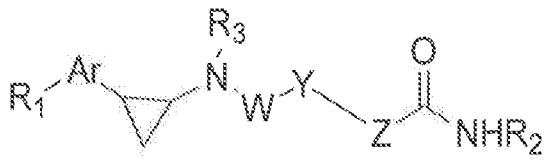
R_3 is selected from the group consisting of hydrogen, substituted or unsubstituted C_{1-8}alkyl, and C_{5-6}aryl;

R_2 is selected from the group consisting of –OR_7, aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl,

wherein aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl, is optionally substituted with one or more of the groups selected from C_{1-8} alkyl, halogen, OH, amino, and cyano;

R_7 is selected from the group consisting of hydrogen, C_{1-8}alkyl, C_{5-6}aryl, C_{2-10}heterocyclyl, and –COR_8, wherein R_8 is selected the group consisting of C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{3-8}cycloalkyl, and C_{2-10}heterocyclyl.

4. A compound of Formula I



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their analogs, tautomeric forms, stereoisomers, polymorphs, solvates, intermediates, pharmaceutically acceptable salts, metabolites, and prodrugs thereof;

wherein

Ar is selected from the group consisting of substituted or unsubstituted C_{5-6}aryl, C_{1-6}heteroaryl, and C_{2-10}heterocyclyl with heteroatoms selected from N, O, S;

W represents a bond or CR_4R_5, wherein

R_4 and R_5 is hydrogen;

Y is a bond or is selected from the group consisting of substituted or unsubstituted C_{1-8}alkyl, C_{42-8}alkenyl, C_{42-8}alkynyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, -CO-, and -CO-C_{2-10}heterocyclyl;

wherein C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, and cyano;

Z represents a bond or is selected from the group consisting of C_{1-8}alkyl, C_{42-8}alkenyl, C_{42-8}alkynyl, C_{7-12}alkylaryl, C_{7-12}alkenylaryl, C_{7-15}arylalkenyl, C_{2-12}alkylheteroaryl, -CO-C_{7-12}alkylaryl, -CO-C_{7-12}alkenylaryl, ~~-CONR$_6$-C$_{1-8}$alkyl,~~ -NR_6CO-C_{1-8}alkyl-, ~~-NR$_6$-C$_{1-8}$alkyl,~~ -O-C_{1-8}alkyl-, -$CONR_6$-C_{5-6}aryl-, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10} heterocyclycl, -CO-C_{2-10}heterocyclyl, -NR_6-CO-OC_{1-8}alkyl, O-CO-NR_6-C_{1-8}alkyl, -NR_6CO-C_{5-6}aryl-, -NR_6-C_{5-6}aryl, -NR_6-C_{1-6}heteroaryl, -C_{1-8}alkyl-O-C_{5-6}aryl, -O-C_{5-6}aryl, O-C_{1-6}heteroaryl, -NR_6-CO-OC_{5-6}aryl, -$CONR_6$-C_{7-12}alkylaryl, -$CONR_6$-C_{7-12}alkenylaryl, -SO_2-C_{5-6}aryl, -SO_2-C_{7-12}alkylaryl, -NR_6SO_2-C_{7-12}alkylaryl, C_{1-8}alkyl-$CONR_6$-C_{5-6}aryl, andO-CO-NR_6-C_{5-6}aryl;

R_6 is selected from the group consisting of hydrogen, C_{1-8} alkyl, C_{1-6} haloalkyl, C_{3-8} cycloalkyl, C_{5-6} aryl, and C_{1-6} heteroaryl, with heteroatoms selected from N, O, S;

R_1 is selected from the group consisting of hydrogen, halogen, C_{1-8}alkyl, C_{1-8}haloalkyl, C_{1-8}alkoxy, C_{1-8}haloalkoxy, C_{7-12}arylalkoxy, C_{3-8}cycloalkyl, C_{3-8}cycloalkyloxy, C_{5-6}aryl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, -C(O)R_b, -C(O)NR_aR_b, wherein R_a, and R_b is independently selected from the group consisting of hydrogen, C_{1-8}alkyl, and C_{5-6}aryl;

wherein C_{7-12}arylalkoxy, C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclcyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, C_{5-6}aryl, oxo (=O), halogen, OH, amino, and cyano;

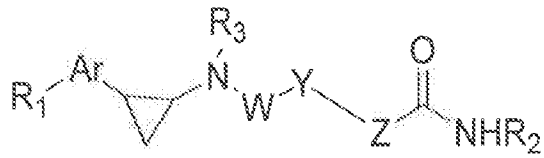
R_3 is hydrogen;

R_2 is selected from the group consisting of $-OR_7$, aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl,

wherein aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl, is optionally substituted with one or more of the groups selected from C_{1-8} alkyl, halogen, OH, amino, and cyano;

R_7 is selected from the group consisting of hydrogen, C_{1-8}alkyl, C_{5-6}aryl, C_{2-10}heterocyclyl, and $-COR_8$, wherein R_8 is selected the group consisting of C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{3-8}cycloalkyl, and C_{2-10}heterocyclyl.

5. A compound of Formula I



I

their analogs, tautomeric forms, stereoisomers, polymorphs, solvates, intermediates, pharmaceutically acceptable salts, metabolites, and prodrugs thereof;

wherein

Ar is selected from the group consisting of C_{5-6}aryl, and C_{2-10}heterocyclyl with heteroatoms selected from N, O, S;

W represents a bond or CR_4R_5, wherein

R_4 and R_5 is hydrogen;

Y is a bond or is selected from the group consisting of substituted or unsubstituted C_{1-8}alkyl, C_{42-8}alkenyl, C_{42-8}alkynyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclcyl, C_{3-8}cycloalkyl, -CO-, and -CO-C_{2-10}heterocyclyl;

wherein C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, and cyano;

Z represents a bond or is selected from the group consisting of C_{1-8}alkyl, C_{1-8}alkenyl, C_{7-12}alkylaryl, C_{7-15}arylalkenyl, C_{2-12}alkylheteroaryl, -CO- C_{7-12}alkylaryl, -CO- C_{7-12}alkenylaryl, ~~$-CONR_6-C_{1-8}$alkyl~~, C_{5-6}aryl, C_{1-6}heteroaryl, -CO-C_{2-10}heterocyclyl, $-NR_6-$ C_{5-6}aryl, $-NR_6-$ C_{1-6}heteroaryl, -O- C_{5-6}aryl, O- C_{1-6}heteroaryl, $-CONR_6-$ C_{7-12}alkylaryl, $-SO_2-$ C_{5-6}aryl, $-SO_2-$ C_{7-12}alkylaryl,and $-NR_6SO_2-C_{7-12}$alkylaryl;

R_6 is selected from the group consisting of hydrogen, and C_{1-8} alkyl;

R_1 is selected from the group consisting of hydrogen, halogen, hydroxy, nitro, cyano, azido, nitroso, oxo (=O), thioxo (=S), -SO_2-, amino, hydrazino, formyl, C_{1-8}alkyl, C_{1-8}haloalkyl, C_{1-8}alkoxy, C_{1-8}haloalkoxy,, C_{7-12}arylalkoxy, C_{3-8}cycloalkyl, C_{3-8}cycloalkyloxy, C_{5-6}aryl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, alkylamino, -$COOR_a$, -$C(O)R_b$, -$C(S)R_a$, -$C(O)NR_aR_b$, -$C(S)NR_aR_b$, -$NR_aC(O)NR_bR_c$, $NR_aC(S)NR_bR_c$, -$N(R_a)SOR_b$, -$N(R_a)SO_2R_b$, -$NR_aC(O)OR_b$, -NR_aR_b, -$NR_aC(O)R_b$-, $NR_aC(S)R_b$-, -$SONR_aR_b$-, -$SO_2NR_aR_b$-, -OR_a, -$OR_aC(O)OR_b$-, -$OC(O)NR_aR_b$, $OC(O)R_a$, -$OC(O)NR_aR_b$-, -$R_aNR_bR_c$, -R_aOR_b-, -SR_a, -SOR_a, and -SO_2R_a, wherein R_a, R_b and R_c is independently selected from the group consisting of hydrogen, C_{1-8}alkyl, C_{3-8}cycloalkyl, C_{5-6}aryl, C_{7-15}arylalkyl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, and C_{2-12}heteroarylalkyl with heteroatoms selected from N, O, S;

wherein C_{7-12}arylalkoxy, C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclcyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, amino, and cyano;

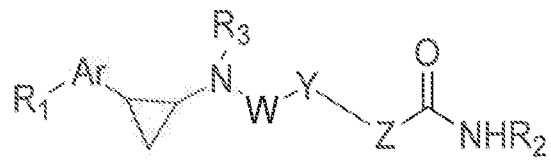
R_3 is selected from the group consisting of hydrogen, substituted or unsubstituted C_{1-8}alkyl, and C_{5-6}aryl;

R_2 is selected from the group consisting of –OR_7, aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl,

wherein aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl, is optionally substituted with one or more of the groups selected from C_{1-8} alkyl, halogen, OH, amino, and cyano;

R_7 is selected from the group consisting of hydrogen, C_{1-8}alkyl, C_{5-6}aryl, C_{2-10}heterocyclyl, and –COR_8, wherein R_8 is selected the group consisting of C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{3-8}cycloalkyl, and C_{2-10}heterocyclyl.

6. A compound of Formula I



I

their analogs, tautomeric forms, stereoisomers, polymorphs, solvates, intermediates, pharmaceutically acceptable salts, metabolites, and prodrugs thereof;

wherein

AMENDED SHEET (ARTICLE 19)

Ar is selected from the group consisting of C_{5-6}aryl, and C_{2-10}heterocyclyl with heteroatoms selected from N, O, S;

W represents a bond or CR_4R_5, wherein

R_4 and R_5 is hydrogen;

Y is a bond or is selected from the group consisting of substituted or unsubstituted C_{1-8}alkyl, C_{42-8}alkenyl, C_{42-8}alkynyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl,, C_{3-8}cycloalkyl, -CO-, and -CO-C_{2-10}heterocyclyl;

wherein C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, and cyano;

Z represents a bond or is selected from the group consisting of C_{1-8}alkyl, C_{42-8}alkenyl, C_{7-12}alkylaryl, C_{7-15}arylalkenyl, C_{2-12}alkylheteroaryl, -CO-C_{7-12}alkylaryl, -CO-C_{7-12}alkenylaryl, ~~-CONR$_6$-C$_{1-8}$alkyl,~~ C_{5-6}aryl, C_{1-6}heteroaryl, -CO-C_{2-10}heterocyclyl, -NR_6- C_{5-6}aryl, -NR_6-C_{1-6}heteroaryl, -O-C_{5-6}aryl, -O-C_{1-6}heteroaryl, -$CONR_6$-C_{7-12}alkylaryl, -SO_2-C_{5-6}aryl, -SO_2-C_{7-12}alkylaryl, and -NR_6SO_2-C_{7-12}alkylaryl;

R_6 is selected from the group consisting of hydrogen, and C_{1-8} alkyl;

R_1 is selected from the group consisting of hydrogen, halogen, C_{1-8}alkyl, C_{1-8}haloalkyl, C_{1-8}alkoxy, C_{1-8}haloalkoxy, C_{7-12}arylalkoxy, C_{3-8}cycloalkyl, C_{3-8}cycloalkyloxy, C_{5-6}aryl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, -C(O)R_b, -C(O)NR_aR_b, wherein R_a, and R_b is independently selected from the group consisting of hydrogen, C_{1-8}alkyl, and C_{5-6}aryl;

wherein C_{7-12}arylalkoxy, C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, C_{5-6}aryl, oxo (=O), halogen, OH, amino, and cyano;

R_3 is selected from the group consisting of hydrogen, substituted or unsubstituted C_{1-8}alkyl, and C_{5-6}aryl;

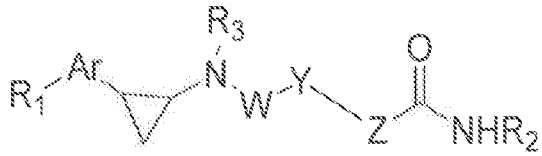
R_2 is selected from the group consisting of –OR_7, aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl,

wherein aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl, is optionally substituted with one or more of the groups selected from C_{1-8} alkyl, halogen, OH, amino, and cyano;

R_7 is selected from the group consisting of hydrogen, C_{1-8}alkyl, C_{5-6}aryl, C_{2-10}heterocyclyl, and –COR_8, wherein R_8 is selected the group consisting of C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{3-8}cycloalkyl, and C_{2-10}heterocyclyl.

AMENDED SHEET (ARTICLE 19)

7. A compound of Formula I



I

their analogs, tautomeric forms, stereoisomers, polymorphs, solvates, intermediates, pharmaceutically acceptable salts, metabolites, and prodrugs thereof;

wherein

Ar is selected from the group consisting of C_{5-6}aryl, and C_{2-10}heterocyclyl with heteroatoms selected from N, O, S;

W represents a bond or CR_4R_5, wherein

R_4 and R_5 is hydrogen;

Y is a bond or is selected from the group consisting of substituted or unsubstituted C_{1-8}alkyl, C_{42-8}alkenyl, C_{42-8}alkynyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, -CO-, and -CO-C_{2-10}heterocyclyl;

wherein C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, and cyano;

Z represents a bond or is selected from the group consisting of C_{1-8}alkyl, C_{42-8}alkenyl, C_{7-12}alkylaryl, C_{7-15}arylalkenyl, C_{2-12}alkylheteroaryl, -CO-C_{7-12}alkylaryl, -CO-C_{7-12}alkenylaryl, ~~-CONR$_6$-C$_{1-8}$alkyl,~~ C_{5-6}aryl, C_{1-6}heteroaryl, -CO-C_{2-10}heterocyclyl, -NR_6- C_{5-6}aryl, -NR_6-C_{1-6}heteroaryl, -O-C_{5-6}aryl, -O-C_{1-6}heteroaryl, -$CONR_6$-C_{7-12}alkylaryl, -SO_2-C_{5-6}aryl, -SO_2-C_{7-12}alkylaryl, and -NR_6SO_2-C_{7-12}alkylaryl;

R_6 is selected from the group consisting of hydrogen, and C_{1-8} alkyl;

R_1 is selected from the group consisting of hydrogen, halogen, hydroxy, nitro, cyano, azido, nitroso, oxo (=O), thioxo (=S), -SO_2-, amino, hydrazino, formyl, C_{1-8}alkyl, C_{1-8}haloalkyl, C_{1-8}alkoxy, C_{1-8}haloalkoxy, C_{7-12}arylalkoxy, C_{3-8}cycloalkyl, C_{3-8}cycloalkyloxy, C_{5-6}aryl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, alkylamino, -$COOR_a$, -$C(O)R_b$, -$C(S)R_a$, -$C(O)NR_aR_b$, -$C(S)NR_aR_b$, -$NR_aC(O)NR_bR_c$, -$NR_aC(S)NR_bR_c$, -$N(R_a)SOR_b$, -$N(R_a)SO_2R_b$, -$NR_aC(O)OR_b$, -NR_aR_b, -$NR_aC(O)R_b$-, $NR_aC(S)R_b$-, -$SONR_aR_b$-, -$SO_2NR_aR_b$-, -OR_a, -$OR_aC(O)OR_b$-, -$OC(O)NR_aR_b$, $OC(O)R_a$, -$OC(O)NR_aR_b$-, -$R_aNR_bR_c$, -R_aOR_b-, -SR_a, -SOR_a, and -SO_2R_a, wherein R_a, R_b and R_c is independently selected from the group consisting of hydrogen, C_{1-}

$_{8}$alkyl, C_{3-8}cycloalkyl, C_{5-6}aryl, C_{7-15}arylalkyl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, and C_{2-12}heteroarylalkyl with heteroatoms selected from N, O, S;

wherein C_{7-12}arylalkoxy, C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, amino, and cyano;

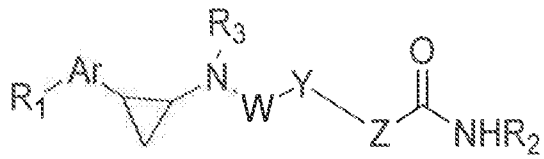
R_3 is hydrogen;

R_2 is selected from the group consisting of --OR_7, and aniline;

wherein aniline is optionally substituted with one or more of the groups selected from C_{1-8} alkyl, halogen, OH, amino, and cyano;

R_7 is selected from the group consisting of hydrogen, and C_{1-8}alkyl.

8. A compound of Formula I



I

their analogs, tautomeric forms, stereoisomers, polymorphs, solvates, intermediates, pharmaceutically acceptable salts, metabolites, and prodrugs thereof;

wherein

Ar is selected from the group consisting of C_{5-6}aryl,and C_{2-10}heterocyclyl with heteroatoms selected from N, O, S;

W represents a bond or CR_4R_5, wherein

R_4 and R_5 is hydrogen;

Y is a bond or is selected from the group consisting of substituted or unsubstituted C_{1-8}alkyl, C_{i2-8}alkenyl, C_{i2-8}alkynyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, -CO-, and -CO-C_{2-10}heterocyclyl;

wherein C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, and cyano;

Z represents a bond or is selected from the group consisting of C_{1-8}alkyl, C_{i2-8}alkenyl, C_{7-12}alkylaryl, C_{7-15}arylalkenyl, C_{2-12}alkylheteroaryl, -CO-C_{7-12}alkylaryl, -CO-C_{7-12}alkenylaryl, ~~-CONR$_6$-C$_{1-8}$alkyl,~~ C_{5-6}aryl, C_{1-6}heteroaryl, -CO-C_{2-10}heterocyclyl, -NR_6- C_{5-6}aryl, -NR_6-C_{1-}

$_6$heteroaryl, -O-C_{5-6}aryl, -O-C_{1-6}heteroaryl, -$CONR_6$-C_{7-12}alkylaryl, -SO_2-C_{5-6}aryl, -SO_2-C_{7-12}alkylaryl, and -NR_6SO_2-C_{7-12}alkylaryl;

R_6 is selected from the group consisting of hydrogen, and C_{1-8} alkyl;

R_1 is selected from the group consisting of hydrogen, halogen, hydroxy, nitro, cyano, azido, nitroso, oxo (=O), thioxo (=S), -SO_2-, amino, hydrazino, formyl, C_{1-8}alkyl, C_{1-8}haloalkyl, C_{1-8}alkoxy, C_{1-8}haloalkoxy, C_{7-12}arylalkoxy, C_{3-8}cycloalkyl, C_{3-8}cycloalkyloxy, C_{5-6}aryl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, alkylamino, -$COOR_a$, -$C(O)R_b$, -$C(S)R_a$, -$C(O)NR_aR_b$, -$C(S)NR_aR_b$, -$NR_aC(O)NR_bR_c$, $NR_aC(S)NR_bR_c$, -$N(R_a)SOR_b$, -$N(R_a)SO_2R_b$, -$NR_aC(O)OR_b$, -NR_aR_b, -$NR_aC(O)R_b$-, $NR_aC(S)R_b$-, -$SONR_aR_b$-, -$SO_2NR_aR_b$-, -OR_a, -$OR_aC(O)OR_b$-, -$OC(O)NR_aR_b$, $OC(O)R_a$, -$OC(O)NR_aR_b$-, -$R_aNR_bR_c$, -R_aOR_b-, -SR_a, -SOR_a, and -SO_2R_a, wherein R_a, R_b and R_c is independently selected from the group consisting of hydrogen, C_{1-8}alkyl, C_{3-8}cycloalkyl, C_{5-6}aryl, C_{7-15}arylalkyl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, and C_{2-12}hetroarylalkyl with heteroatoms selected from N, O, S;

wherein C_{7-12}arylalkoxy, C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, amino, and cyano;

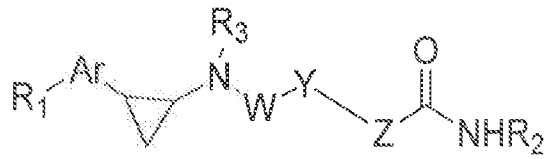
R_3 is hydrogen;

R_2 is selected from the group consisting of –OR_7, and aniline;

wherein aniline is optionally substituted with one or more of the groups selected from C_{1-8} alkyl, halogen, OH, amino, and cyano;

R_7 is selected from the group consisting of hydrogen, and C_{1-8} alkyl.

9. A compound of Formula I



I

their analogs, tautomeric forms, stereoisomers, polymorphs, solvates, intermediates, pharmaceutically acceptable salts, metabolites, and prodrugs thereof;

wherein

Ar is selected from the group consisting of C_{5-6}aryl, and C_{2-10}heterocyclyl with heteroatoms selected from N, O, S;

AMENDED SHEET (ARTICLE 19)

W represents a bond or CR_4R_5, wherein

R_4 and R_5 is hydrogen;

Y is a bond or is selected from the group consisting of substituted or unsubstituted C_{1-8}alkyl, C_{42-8}alkenyl, C_{42-8}alkynyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, -CO-, and -CO-C_{2-10}heterocyclyl;

wherein C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, and cyano;

Z represents a bond or is selected from the group consisting of C_{42-8}alkyl, C_{42-8}alkenyl, C_{7-12}-alkylaryl, C_{7-15}-arylalkenyl, C_{2-12}-alkylheteroaryl, -CO-C_{7-12}alkylaryl, -CO-C_{7-12}alkenylaryl, ~~-CONR$_6$-C$_{1-8}$alkyl,~~ C_{5-6}aryl, C_{1-6}heteroaryl, -CO-C_{2-10}heterocyclyl, -NR_6-C_{5-6}aryl, -NR_6-C_{1-6}heteroaryl, -O-C_{5-6}aryl, -O-C_{1-6}heteroaryl, -$CONR_6$-C_{7-12}alkylaryl, -SO_2-C_{5-6}aryl, -SO_2-C_{7-12}alkylaryl, and -NR_6SO_2-C_{7-12}alkylaryl;

R_6 is selected from the group consisting of hydrogen, and C_{1-8} alkyl;

R_1 is selected from the group consisting of hydrogen, halogen, hydroxy, nitro, cyano, azido, nitroso, oxo (=O), thioxo (=S), -SO_2-, amino, hydrazino, formyl, C_{1-8}alkyl, C_{1-8}haloalkyl, C_{1-8}alkoxy, C_{1-8}haloalkoxy, C_{7-12}arylalkoxy, C_{3-8}cycloalkyl, C_{3-8}cycloalkyloxy, C_{5-6}aryl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, alkylamino, -$COOR_a$, -$C(O)R_b$, -$C(S)R_a$, -$C(O)NR_aR_b$, -$C(S)NR_aR_b$, -$NR_aC(O)NR_bR_c$, $NR_aC(S)NR_bR_c$, -$N(R_a)SOR_b$, -$N(R_a)SO_2R_b$, -$NR_aC(O)OR_b$, -NR_aR_b, -$NR_aC(O)R_b$-, $NR_aC(S)R_b$-, -$SONR_aR_b$-, -$SO_2NR_aR_b$-, -OR_a, -$OR_aC(O)OR_b$-, -$OC(O)NR_aR_b$, $OC(O)R_a$, -$OC(O)NR_aR_b$-, -$R_aNR_bR_c$, -R_aOR_b-, -SR_a, -SOR_a and -SO_2R_a, wherein R_a, R_b and $R_c$is independently selected from the group consisting of hydrogen, C_{1-8}alkyl, C_{3-8}cycloalkyl, C_{5-6}aryl, C_{7-15}arylalkyl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, and C_{2-12}heteroarylalkyl with heteroatoms selected from N, O, S;

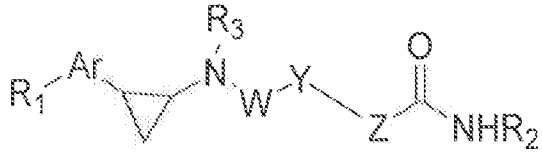
wherein C_{7-12}arylalkoxy, C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, amino, and cyano;

R_3 is hydrogen;

R_2 is selected from the group consisting of –OR_7, R_7 is selected from the group consisting of hydrogen, and C_{1-8}alkyl.

10. A compound of Formula I

AMENDED SHEET (ARTICLE 19)



I

their analogs, tautomeric forms, stereoisomers, polymorphs, solvates, intermediates, pharmaceutically acceptable salts, metabolites, and prodrugs thereof;

wherein

Ar is selected from the group consisting of C_{5-6}aryl, and C_{2-10}heterocyclyl with heteroatoms selected from N, O, S;

W represents a bond or CR_4R_5, wherein

R_4 and R_5 is hydrogen;

Y is a bond or is selected from the group consisting of substituted or unsubstituted C_{1-8}alkyl, C_{42-8}alkenyl, C_{42-8}alkynyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, -CO-, and -CO-C_{2-10}heterocyclyl;

wherein C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, and cyano;

Z represents a bond or is selected from the group consisting of C_{1-8}alkyl, C_{42-8}alkenyl, C_{7-12}-alkylaryl, C_{7-15}-arylalkenyl, C_{2-12}-alkylheteroaryl, -CO-C_{7-12}alkylaryl, -CO-C_{7-12}alkenylaryl, ~~-CONR$_6$-C$_{1-8}$alkyl,~~ C_{5-6}aryl, C_{1-6}heteroaryl, -CO-C_{2-10}heterocyclyl, -NR_6-C_{5-6}aryl, -NR_6-C_{1-6}heteroaryl, -O-C_{5-6}aryl, -O-C_{1-6}heteroaryl, -$CONR_6$-C_{7-12}alkylaryl, -SO_2-C_{5-6}aryl, -SO_2-C_{7-12}alkylaryl, and -NR_6SO_2-C_{7-12}alkylaryl;

R_6 is selected from the group consisting of hydrogen, and C_{1-8} alkyl;

R_1 is selected from the group consisting of hydrogen, halogen, hydroxy, nitro, cyano, azido, nitroso, oxo (=O), thioxo (=S), -SO_2-, amino, hydrazino, formyl, C_{1-8}alkyl, C_{1-8}haloalkyl, C_{1-8}alkoxy, C_{1-8}haloalkoxy, C_{7-12}arylalkoxy, C_{3-8}cycloalkyl, C_{3-8}cycloalkyloxy, C_{5-6}aryl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, alkylamino, -$COOR_a$, -$C(O)R_b$, -$C(S)R_a$, -$C(O)NR_aR_b$, -$C(S)NR_aR_b$, -$NR_aC(O)NR_bR_c$, $NR_aC(S)NR_bR_c$, -$N(R_a)SOR_b$, -$N(R_a)SO_2R_b$, -$NR_aC(O)OR_b$, -NR_aR_b, -$NR_aC(O)R_b$-, $NR_aC(S)R_b$-, -$SONR_aR_b$-, -$SO_2NR_aR_b$-, -OR_a, -$OR_aC(O)OR_b$-, -$OC(O)NR_aR_b$, $OC(O)R_a$, -$OC(O)NR_aR_b$-, -$R_aNR_bR_c$, -R_aOR_b-, -SR_a, -SOR_a and -SO_2R_a, wherein R_a, R_b and R_c is independently selected from the group consisting of hydrogen, C_{1-}

AMENDED SHEET (ARTICLE 19)

$_8$alkyl, C_{3-8}cycloalkyl, C_{5-6}aryl, C_{7-15}arylalkyl, C_{2-10}heterocyclyl, C_{1-6}heteroaryl, and C_{2-12}heteroarylalkyl with heteroatoms selected from N, O, S;

wherein C_{7-12}arylalkoxy, C_{1-8}alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, C_{3-8}cycloalkyl, is optionally substituted with one or more of the groups selected from hydrogen, C_{1-6} alkyl, C_{5-6}aryl, C_{1-6}heteroaryl, C_{2-10}heterocyclyl, oxo (=O), C_{3-8} cycloalkyl, halogen, OH, amino, and cyano;

R_3 is hydrogen;

R_2 is selected from the group consisting of aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl, wherein aniline, amino C_{5-6}aryl, and amino C_{1-6}heteroaryl, is optionally substituted with one or more of the groups selected from C_{1-8} alkyl, halogen, OH, amino, and cyano.

11. The compound of Formula (I) as claimed in claim 1 or its stereoisomers, pharmaceutically acceptable salts, complexes, hydrates, solvates, tautomers, polymorphs, racemic mixtures, optically active forms and pharmaceutically active derivative thereof, which is selected from a group consisting of:

1) (E)-3(4(((2(4cyclopropylphenyl)cyclopropyl)amino)methyl)phenyl)-N-hydroxyacrylamide TFA salt

2) (E)-3-(4-{[2-(4-Fluoro-phenyl)-cyclopropylamino]-methyl}-phenyl)-N-hydroxy-acrylamide TFA salt

3) (E)-3-(4-(((2-(4-((4-fluorobenzyl)oxy)phenyl)cyclopropyl)amino)methyl)phenyl)-N-hydroxyacrylamideTFA salt

4) (E)-N-hydroxy-3-(4-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)phenyl) acrylamideTFA salt

5) (E)-3-(4-(((2-(4'-chloro-[1,1'-biphenyl]-4-yl)cyclopropyl)amino)methyl)phenyl)-N-hydroxyacrylamideTFA salt

6) (E)-3-(4-(((2-(4-(3,5-dimethylisoxazol-4-yl)phenyl)cyclopropyl)amino)methyl)phenyl)-N-hydroxyacrylamide TFA salt

7) (E)-N-hydroxy-3-(4-(((2-(4-(pyrimidin-5-yl)phenyl)cyclopropyl)amino)methyl)phenyl) acrylamide TFA salt

8) 2-(4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)-N-hydroxy pyrimidine-5-carboxamide TFA salt

9) 2-[4-(2-Phenyl-cyclopropylamino)-piperidin-1-yl]-pyrimidine-5-carboxylicacid hydroxyamide TFA salt

10) 2-{4-[2-(4-Fluoro-phenyl)-cyclopropylamino]-piperidin-1-yl}-pyrimidine-5-carboxylic acid hydroxyamide TFA salt

11) 2-(4-(((2-(4-((4-fluorobenzyl)oxy)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)-N-hydroxypyrimidine-5-carboxamideTFA salt

12) 2-(4-((2-(4-((4-fluorobenzyl)oxy)phenyl)cyclopropyl)amino)piperidin-1-yl)-N-hydroxypyrimidine-5-carboxamideTFA salt

13) 2-(4-((2-(4'-chloro-[1,1'-biphenyl]-4-yl)cyclopropyl)amino)piperidin-1-yl)-N-hydroxypyrimidine-5-carboxamideTFA salt

14) 2-(4-(((2-(4'-chloro-[1,1'-biphenyl]-4-yl)cyclopropyl)amino)methyl)piperidin-1-yl)-N-hydroxypyrimidine-5-carboxamide TFA salt

15) 2-(4-(((2-(4'-fluoro-[1,1'-biphenyl]-4-yl)cyclopropyl)amino)methyl)piperidin-1-yl)-N-hydroxypyrimidine-5-carboxamide TFA salt

16) 2-(4-(((2-(4-(3,5-dimethylisoxazol-4-yl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)-N-hydroxypyrimidine-5-carboxamide TFA salt

17) N-hydroxy-2-(4-(((2-(4-(pyrimidin-5-yl)phenyl)cyclopropyl)amino)methyl) piperidin-1-yl)pyrimidine-5-carboxamide.TFA salt

18) N-hydroxy-2-(4-(((2-(4-methoxyphenyl)cyclopropyl)amino)methyl)piperidin-1-yl)pyrimidine-5-carboxamideTFA salt

19) N-hydroxy-2-(4-((2-(4-methoxyphenyl)cyclopropyl)amino)piperidin-1-yl)pyrimidine-5-carboxamide TFA salt

20) 2-(4-((((1R,2S)-2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)-N-hydroxypyrimidine-5-carboxamide TFA salt

21) 2-(4-((((1S,2R)-2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)-N-hydroxypyrimidine-5-carboxamide TFA salt

22) 4-(4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)-N-hydroxybenzamide TFA salt

23) N-hydroxy-2-(2-(((2-phenylcyclopropyl)amino)methyl)-5,6-dihydroimidazo[1,2-a]pyrazin-7(8H)-yl)pyrimidine-5-carboxamide TFA salt

24) N-hydroxy-2-(2-(((2-(4-methoxyphenyl)cyclopropyl)amino)methyl)-5,6-dihydroimidazo[1,2-a]pyrazin-7(8H)-yl)pyrimidine-5-carboxamide TFA salt

25) 2-(2-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)-5,6-dihydroimidazo[1,2-a]pyrazin-7(8H)-yl)-N-hydroxypyrimidine-5-carboxamide TFA salt

26) 3-(((2-(4-bromophenyl)cyclopropyl)amino)methyl)-N-hydroxybenzamide TFA salt

27) N-hydroxy-3-(((2-phenylcyclopropyl)amino)methyl)benzamide TFA salt

28) N-hydroxy-4-(((2-phenylcyclopropyl)amino)methyl)benzamide TFA salt

29) N-hydroxy-6-((2-phenylcyclopropyl)amino)hexanamide TFA salt

30) 4-(3-((2-(4-fluorophenyl)cyclopropyl)amino)propyl)-N-hydroxybenzamide TFA salt

31) N-(6-Hydroxycarbamoyl-hexyl)-4-[(2-phenyl-cyclopropylamino)-methyl]-benzamide TFA salt

32) 4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide TFA salt

33) 4-(2-Phenyl-cyclopropylamino)-cyclohexanecarboxylic acid hydroxyamide TFA salt

34) (1S,4R)-N-hydroxy-4-((1S)-1-((2phenylcyclopropyl)amino)ethyl)cyclohexanecarboxamideTFA salt

35) N-hydroxy-4-((4-(((2-(4-(1-methyl-6-oxo-1,6-dihydropyridin-3-yl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)methyl)benzamide TFA Salt

36) N-Hydroxy-4-{4-[(2-phenyl-cyclopropylamino)-methyl]-piperidin-1-ylmethyl}-benzamide TFA salt

37) 4-((4-(((2-(4-(3,5-dimethylisoxazol-4-yl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl) methyl)-N-hydroxybenzamide TFA salt

38) N-hydroxy-4-((4-(((2-(4-(pyrimidin-5-yl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)methyl)benzamide TFA salt

39) 6-((4-(((2-(4-(3,5-dimethylisoxazol-4-yl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)methyl)-N-hydroxynicotinamide TFA salt

40) N-hydroxy-4-((4-(((2-phenylcyclopropyl)amino)methyl)-1H-pyrazol-1-yl)methyl) benzamide TFA salt

41) N-hydroxy-4-((4-(((2-phenylcyclopropyl)amino)methyl)-1H-1,2,3-triazol-1-yl) methyl)benzamide TFA salt

42) N-hydroxy-4-(2-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)ethyl)benzamide TFA salt

43) N-hydroxy-4-(3-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

44) N-hydroxy-4-(3-(4-((2-phenylcyclopropyl)amino)piperidin-1-yl)propyl)benzamideTFA salt

45) N-hydroxy-4-(3-(4-((methyl (2-phenylcyclopropyl) amino) methyl) piperidin-1-yl) propyl)benzamide TFA salt

46) N-hydroxy-4-(3-(6-((2-phenylcyclopropyl)amino)-2-azaspiro[3.3]heptan-2-l)propyl) benzamide TFA salt

47) 4-[3-(4-{[2-(4-Fluoro-phenyl)-cyclopropylamino]-methyl}-piperidin-1-yl)-propyl]-N-hydroxy-benzamide TFA salt

48) 4-(3-(3-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)azetidin-1-yl)propyl)-N-hydroxy benzamide TFA salt

49) 4-(3-(4-(((2-(3-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)-N-hydroxy benzamide TFA salt

50) 4-(3-(4-(((2-(3,4-difluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)-N-hydroxybenzamide TFA salt

51) N-hydroxy-4-(3-(4-(((2-(4-methoxyphenyl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

52) N-hydroxy-4-(3-(4-(((2-(4-(morpholine-4-carbonyl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamideTFA salt

53) N-hydroxy-4-(3-(4-(((2-(4-(morpholine-4-carbonyl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamideTFA salt

54) N-hydroxy-4-(3-(4-(((2-(4-(piperidine-1-carbonyl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

55) N-(2-(dimethylamino)ethyl)-4-(2-(((1-(3-(4-(hydroxycarbamoyl)phenyl)propyl)piperidin-4-yl)methyl)amino)cyclopropyl)benzamide TFA salt

56) 4-(3-(4-(((2-(4'-chloro-[1,1'-biphenyl]-4-yl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)-N-hydroxybenzamideTFA salt

57) 4-(3-(4-(((2-(4'-fluoro-[1,1'-biphenyl]-4-yl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)-N-hydroxybenzamideTFA salt

58) 4-(3-(3-(((2-(4'-fluoro-[1,1'-biphenyl]-4-yl)cyclopropyl)amino)methyl)azetidin-1-yl)propyl)-N-hydroxybenzamide

59) 4-(3-(4-(((2-(4'-cyano-[1,1'-biphenyl]-4-yl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)-N-hydroxybenzamideTFA salt

60) N-hydroxy-4-(3-(4-(((2-(4-(1-methyl-2-oxo-1,2-dihydropyridin-4-yl)phenyl)cyclopropyl) amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

61) N-hydroxy-4-(3-(4-(((2-(4-(pyrimidin-5-yl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

62) N-hydroxy-4-(3-(4-(((2-(4-(1-methyl-1H-pyrazol-4-yl)phenyl)cyclopropyl)amino) methyl)piperidin-1-yl) propyl) benzamide TFA salt

63) N-hydroxy-4-(3-(3-(((2-(4-(1-methyl-1H-pyrazol-4-yl)phenyl)cyclopropyl)amino) methyl) azetidin-1-yl)propyl)benzamide

64) 4-(3-(4-(((2-(4-(3,5-dimethylisoxazol-4-yl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)-N-hydroxybenzamide TFA salt

65) 3-(3-(3-(((2-(4-(3,5-dimethylisoxazol-4-yl)phenyl)cyclopropyl)amino)methyl)azetidin-1-yl)propyl)-N-hydroxybenzamideTFA salt

66) N-hydroxy-4-(3-(4-(((2-(4-(6-(trifluoromethyl)pyridin-3-yl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamideTFA salt

67) N-hydroxy-4-(3-(4-(((2-(1-isopropyl-1H-pyrazol-4-yl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamideTFA salt

68) N-hydroxy-4-(3-(4-(((2-(1-phenyl-1H-pyrazol-4-yl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamideTFA salt

69) N-hydroxy-4-(3-(4-(((2-(2-methylthiazol-5-yl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamideTFA salt

70) N-hydroxy-4-(3-(4-(((2-(pyridin-3-yl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl) benzamideTFA salt

71) N-hydroxy-4-(3-(2-(((2-(4-methoxyphenyl)cyclopropyl)amino)methyl)-5,6-dihydroimidazo[1,2-a]pyrazin-7(8H)-yl)propyl)benzamide TFA salt

72) 4-(3-(2-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)-5,6-dihydroimidazo[1,2-a] pyrazin-7(8H)-yl)propyl)-N-hydroxybenzamide TFA salt

73) 4-(3-(4-(((2-(3,4-difluorophenyl)cyclopropyl)amino)methyl)-1H-imidazol-1-yl) propyl)-N-hydroxybenzamide TFA salt

74) N-hydroxy-4-(3-(4-(((2-phenylcyclopropyl)amino)methyl)-1H-imidazol-1-yl)propyl) benzamide TFA salt

75) N-hydroxy-4-(3-(4-(((2-phenylcyclopropyl)amino)methyl)-1H-imidazol-1-yl)propyl) benzamide

76) N-hydroxy-4-(3-(4-(((2-phenylcyclopropyl)amino)methyl)-1H-pyrazol-1-yl)propyl) benzamide TFA salt

77) N-hydroxy-4-(3-(4-(((2-phenylcyclopropyl)amino)methyl)-1H-1,2,3-triazol-1-yl)propyl)benzamide TFA salt

78) 4-(3-(6-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)-3,4-dihydroisoquinolin-2-(1H)-yl)propyl)-N-hydroxybenzamide TFA salt

79) 4-((7-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)-3,4-dihydroisoquinolin-2(1H)-yl)methyl)-N-hydroxybenzamide TFA salt

80) 4-((2-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)-5,6-dihydroimidazo[1,2-a]pyrazin-7 (8H)-yl)methyl)-N-hydroxybenzamide TFA salt

81) N-hydroxy -4-(3-(4(((2-(1,3,3,-trimethyl -2-oxoindoline-5-yl)cyclopropyl)amino)methyl) piperidine-1-yl)propyl)benzamide TFA salt

82) N-hydroxy-4-(3-oxo-3-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

83) N-hydroxy-4-(3-oxo-3-(4-((2-phenylcyclopropyl)amino)piperidin-1-yl)propyl)benzamide TFA salt

84) N-hydroxy-4-(2-oxo-2-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)ethyl) benzamide TFA salt

84A. N-hydroxy-4-(2-oxo-2-(4-((((1R,2S)-2-phenylcyclopropyl)amino)methyl)piperidin-1-yl) ethyl)benzamide

84B. N-hydroxy-4-(2-oxo-2-(4-((((1S,2R)-2-phenylcyclopropyl)amino)methyl)piperidin-1-yl) ethyl)benzamide

85) N-hydroxy-4-((4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)sulfonyl) benzamide TFA salt

86) N-hydroxy-4-((N-(2-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)ethyl) sulfamoyl)methyl)benzamideTFA salt

87) 4-(N-(2-(4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)ethyl) sulfamoyl)-N-hydroxybenzamide

88) N-hydroxy-4-(2-((4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)sulfonyl)ethyl) benzamideTFA salt

AMENDED SHEET (ARTICLE 19)

89) N-hydroxy-N4-(2-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)ethyl) terephthalamideTFA salt

90) N1-(2-(4-(((2-(3,4-difluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)ethyl)-N4-hydroxyterephthalamide TFA salt

91) N-hydroxy-4-((4-(2-((2-phenylcyclopropyl)amino)acetyl)piperazin-1-yl)methyl)benzamide TFA salt

92) N-hydroxy-4-(3-oxo-3-(4-(2-((2-phenylcyclopropyl)amino)acetyl)piperazin-1-yl)propyl)benzamide TFA salt

93) N-hydroxy-4-(3-(1-(2-((2-phenylcyclopropyl)amino)acetyl)piperidin-4-yl)propyl)benzamide TFA salt

94) N-hydroxy-4-(3-(2-oxo-4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl) propyl)benzamideTFA salt

95) N-hydroxy-4-(2-((2-phenylcyclopropyl)amino)ethoxy)benzamide TFA salt

96) 6-(2-(4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)ethoxy)-N-hydroxynicotinamide TFA salt

97) N-hydroxy-6-(2-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)ethoxy)nicotinamide TFA salt

98) 6-(2-(4-(((2-(4'-fluoro-[1,1'-biphenyl]-4-yl)cyclopropyl)amino)methyl)piperidin-1-yl) ethoxy)-N-hydroxynicotinamide TFA salt

99) N-hydroxy-4-(2-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)ethoxy)benzamide TFA salt

100) N-hydroxy-4-(3-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)propoxy)benzamide TFA salt

101) N-hydroxy-4-(3-((2-phenylcyclopropyl)amino)propoxy)benzamide TFA salt

102) 2-((2-(4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)ethyl)amino)-N-hydroxypyrimidine-5-carboxamide TFA salt

103) 5-(2-((2-(4-fluorophenyl)cyclopropyl)amino)acetyl)-N-hydroxy-4,5,6,7-tetrahydro thieno[3,2-c]pyridine-2-carboxamide TFA salt

103A) 5-(2-(((1R,2S)-2-(4-fluorophenyl)cyclopropyl)amino)acetyl)-N-hydroxy-4,5,6,7-tetrahydrothieno[3,2-c]pyridine-2-carboxamide

103B) 5-(2-(((1S,2R)-2-(4-fluorophenyl)cyclopropyl)amino)acetyl)-N-hydroxy-4,5,6,7-tetrahydrothieno[3,2-c]pyridine-2-carboxamide

104) 2-(2-((2-(4-fluorophenyl)cyclopropyl)amino)acetyl)-N-hydroxy-1,2,3,4-tetrahydro isoquinoline-7-carboxamide TFA salt

104A) 2-(2-(((1S,2R)-2-(4-fluorophenyl)cyclopropyl)amino)acetyl)-N-hydroxy-1,2,3,4-tetrahydroisoquinoline-7-carboxamide

104B) 2-(2-(((1R,2S)-2-(4-fluorophenyl)cyclopropyl)amino)acetyl)-N-hydroxy-1,2,3,4-tetrahydroisoquinoline-7-carboxamide

105) 5-(4-((2-(4-fluorophenyl)cyclopropyl)amino)butanoyl)-N-hydroxy-4,5,6,7-tetrahydro thieno[3,2-c]pyridine-2-carboxamide TFA salt

106) 5-(4-(4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)butanoyl)-N-hydroxy-4,5,6,7-tetrahydrothieno[3,2-c]pyridine-2-carboxamide TFA salt

107) 2-(4-((2-(4-fluorophenyl)cyclopropyl)amino)butanoyl)-N-hydroxy-1,2,3,4-tetrahydro isoquinoline-7-carboxamide TFA salt

108) 2-(4-((2-(4-fluorophenyl)cyclopropyl)amino)butanoyl)-N-hydroxyisoindoline-5-carboxamide TFA salt

109) N-hydroxy-2-(4-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)butanoyl) isoindoline-5-carboxamideTFA salt

110) N-hydroxy-2-(3-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)propyl) thiazole-4-carboxamide TFA salt

111) 2-(3-(4-(((2-(4'-fluoro-[1,1'-biphenyl]-4-yl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)-N-hydroxythiazole-4-carboxamide

112) N-hydroxy-2-(3-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)propyl) thiazole-5-carboxamide TFA salt

113) N-hydroxy-2-(3-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)propyl) oxazole-4-carboxamide

114) (E)-N-hydroxy-4-(3-oxo-3-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl) prop-1-en-1-yl)benzamide TFA salt

114A) N-hydroxy-4-((E)-3-oxo-3-(4-((((1R,2S)-2-phenylcyclopropyl)amino)methyl) piperidin-1-yl)prop-1-en-1-yl)benzamide TFA salt

114B) N-hydroxy-4-((E)-3-oxo-3-(4-((((1S,2R)-2-phenylcyclopropyl)amino)methyl) piperidin-1-yl)prop-1-en-1-yl)benzamide TFA salt

115) 4-((E)-3-(4-((((1S,2R)-2-(4-fluorophenyl)cyclopropyl)amino)methyl) piperidin-1-yl)-3-oxoprop-1-en-1-yl)-N-hydroxybenzamide TFA salt

115A)4-((E)-3-(4-((((1S,2R)-2-(4-fluorophenyl)cyclopropyl)amino)methyl) piperidin-1-yl)-3-oxoprop-1-en-1-yl)-N-hydroxybenzamide TFA salt

116) (E)-4-(3-(4-(((2-(4-(3,5-dimethylisoxazol-4-yl)phenyl)cyclopropyl)amino)methyl) piperidin-1-yl)-3-oxoprop-1-en-1-yl)-N-hydroxybenzamide TFA salt

117) (E)-N-hydroxy-4-(3-oxo-3-(4-(((2-(4-(pyrimidin-5-yl)phenyl)cyclopropyl)amino) methyl)piperidin-1-yl)prop-1-en-1-yl)benzamide TFA salt

118) (E)-4-(3-(3-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)azetidin-1-yl)-3-oxoprop-1-en-1-yl)-N-hydroxybenzamideTFA salt

119) (E)-N-hydroxy-4-(3-(3-(((2-(4-(1-methyl-1H-pyrazol-4-yl)phenyl)cyclopropyl)amino)methyl)azetidin-1-yl)-3-oxoprop-1-en-1-yl)benzamide TFA salt

120) (E)-N-(2-aminophenyl)-3-(4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)phenyl)acrylamide TFA salt

121) N-(2-aminophenyl)-4-(3-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

122) N-(2-aminophenyl)-4-(3-(4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

123) N-(2-aminophenyl)-4-(3-(4-(((2-(4-methoxyphenyl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

124) N-(2-aminophenyl)-4-(3-(4-(((2-(3,4-difluorophenyl)cyclopropyl)amino)methyl) piperidin-1-yl)propyl)benzamide TFA salt

125) N-(2-aminophenyl)-4-(3-(4-(((2-(4-(piperidine-1-carbonyl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

126) N-(2-aminophenyl)-4-(3-(3-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)azetidin-1-yl) propyl)benzamide TFA salt

127) N-(2-aminophenyl)-4-(3-(6-((2-phenylcyclopropyl)amino)-2-azaspiro[3.3]heptan-2-yl)propyl)benzamide TFA salt

128) N-(2-aminophenyl)-4-(3-(4-(((2-(1-isopropyl-1H-pyrazol-4-yl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

129) N-(2-aminophenyl)-4-(3-(4-(((2-(1-phenyl-1H-pyrazol-4-yl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

130) N-(2-aminophenyl)-4-(3-(4-(((2-(2-methylthiazol-5-yl)cyclopropyl)amino)methyl) piperidin-1-yl)propyl)benzamide TFA salt

131) N-(2-aminophenyl)-4-(3-(4-(((2-(pyridin-3-yl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

132) N-(2-amino-5-fluorophenyl)-4-(3-(4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

133) N-(2-aminophenyl)-4-(3-oxo-3-(4-((2-phenylcyclopropyl)amino)piperidin-1-yl)propyl)benzamide TFA salt

134) N-(2-aminophenyl)-4-(3-oxo-3-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide TFA salt

135) N-(2-aminophenyl)-4-(3-(4-(((2-(3,4-difluorophenyl)cyclopropyl)amino)methyl)-1H-imidazol-1-yl)propyl)benzamide TFA salt

136) N-(2-aminophenyl)-4-(3-(4-(((2-phenylcyclopropyl)amino)methyl)-1H-imidazol-1-yl)propyl)benzamide

137) N-(2-aminophenyl)-4-(3-(4-(((2-phenylcyclopropyl)amino)methyl)-1H-1,2,3-triazol-1-yl)propyl)benzamideTFA salt

138) N-(2-aminophenyl)-4-(3-(4-(((2-phenylcyclopropyl)amino)methyl)-1H-pyrazol-1-yl)propyl)benzamideTFA salt

139) N-(2-aminophenyl)-4-(2-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl) ethyl)benzamideTFA salt

140) N-(2-aminophenyl)-4-((4-((((1R,2S)-2-phenylcyclopropyl)amino)methyl)piperidin-1-yl) methyl)benzamideTFA salt

141) N-(2-aminophenyl)-4-((4-(((2-(4-(1-methyl-6-oxo-1,6-dihydropyridin-3-yl)phenyl) cyclopropyl)amino)methyl)piperidin-1-yl)methyl)benzamide TFA salt

142) N-(2-aminophenyl)-4-((4-(((2-(4-(1-methyl-1H-pyrazol-4-yl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)methyl)benzamide TFA salt

143) N-(2-aminophenyl)-4-((4-(((2-(4-(3,5-dimethylisoxazol-4-yl)phenyl)cyclopropyl)amino) methyl)piperidin-1-yl)methyl)benzamide TFA salt

144) N-(2-aminophenyl)-4-((4-(((2-(4-(pyrimidin-5-yl)phenyl)cyclopropyl)amino)methyl)piperidin-1-yl)methyl)benzamide TFA salt

145) N-(2-aminophenyl)-4-((4-(((2-phenylcyclopropyl)amino)methyl)-1H-pyrazol-1-yl)methyl)benzamideTFA salt

146) N-(2-aminophenyl)-4-((4-(((2-phenylcyclopropyl)amino)methyl)-1H-1,2,3-triazol-1-yl)methyl)benzamideTFA salt

147) N-(2-aminophenyl)-4-(2-(4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)-2-oxoethyl)benzamide TFA salt

148) N-(2-aminophenyl)-4-(2-((2-(4-fluorophenyl) cyclopropyl) amino) ethoxy) benzamide TFA salt

149) N-(2-aminophenyl)-6-(2-(4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)ethoxy)nicotinamide TFA salt

150) N-(-2-aminophenyl)-2-((2-4(((2-(4-flurophenyl)cyclopropyl)amino)methyl)piperdine-1-yl)ethyl)amino)pyrimidine-5-carboxamide TFA salt

151) N-(2-aminophenyl)-5-((2-(4-fluorophenyl)cyclopropyl)glycyl)-4,5,6,7-tetrahydrothieno[3,2-c]pyridine-2-carboxamide TFA salt

152) N-(2-aminophenyl)-2-(2-((2-(4-fluorophenyl)cyclopropyl)amino)acetyl)-1,2,3,4-tetrahydroisoquinoline-7-carboxamide TFA salt

153) N-(2-aminophenyl)-2-(3-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)propyl)oxazole-4-carboxamideTFA salt

154) N-(2-aminophenyl)-2-(3-(4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)propyl)thiazole-5-carboxamide TFA salt

155) N-(2-aminophenyl)-4-((2-((2-(4-fluorophenyl)cyclopropyl)amino)acetamido) methyl)benzamide TFA salt

156) (E)-N-(2-aminophenyl)-4-(3-(4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidin-1-yl)-3-oxoprop-1-en-1-yl)benzamide TFA salt

157) (E)-N-(2-aminophenyl)-4-(3-(3-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)azetidin-1-yl)-3-oxoprop-1-en-1-yl)benzamide TFA salt

158) N-(4-((2-aminophenyl)carbamoyl)benzyl)-4-(((2-(4-fluorophenyl)cyclopropyl)amino)methyl)piperidine-1-carboxamide TFA salt

159) N-(2-aminophenyl)-4-(3-(2-oxo-4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)propyl)benzamide

160) N-(2-aminophenyl)-4-((4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)sulfonyl) benzamide TFA salt

AMENDED SHEET (ARTICLE 19)

161) N-(2-aminophenyl)-4-(((4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)sulfonyl)methyl)benzamideTFA salt

162) N-(2-aminophenyl)-4-(2-((4-(((2-phenylcyclopropyl)amino)methyl)piperidin-1-yl)sulfonyl)ethyl)benzamideTFA salt

12. A process of preparation of compounds of Formula (I) as claimed in any of claims 1 to 11 or its tautomers, polymorphs, stereoisomers, prodrugs, solvate, co-crystals or pharmaceutically acceptable salts thereof.

13. A pharmaceutical composition comprising a compound of Formula (I) or a pharmaceutically acceptable salt thereof of as claimed in any of claims 1 to 11 together with a pharmaceutically acceptable carrier, optionally in combination with one or more other pharmaceutical compositions.

14. The pharmaceutical composition as claimed in claim 13, wherein the composition is in the form selected from the group consisting of a tablet, capsule, powder, syrup, solution, aerosol and suspension.

15. The compound as claimed in any of the claims 1 to 11 or a pharmaceutically acceptable salt thereof for use in the manufacture of a medicament for inhibiting LSD1 enzymes in a cell.

16. A method of inhibiting LSD1 in a cell, comprising treating said cell with an effective amount of the compoundsas claimed in any of the claims 1 to 11.

17. A method of treating a condition mediated by LSD1 comprising administering to a subject suffering from a condition mediated by LSD1, a therapeutically effective amount of the compound according to any one of claims 1 to 10 or the pharmaceutical composition according to claim 13, or 14.

18. Thecompound as claimed in any of the claims 1 to 11 or a pharmaceutically acceptable salt thereof for use in the manufacture of a medicament for inhibiting HDAC enzymes in a cell.

19. A method of inhibiting HDACin a cell comprising treating said cell with an effective amount of the compound as claimed in any of the claims 1 to 11.

20. A method of treating a condition mediated by HDAC, comprising administering to a subject suffering from a condition mediated by HDAC,a therapeutically effective amount of the compound according to any one of claims 1 to 11 or the pharmaceutical composition according to claim 13, or 14.

AMENDED SHEET (ARTICLE 19)

21. A compound as claimed in any of claims 1 to 11 or a pharmaceutically acceptable salt thereof for use in the manufacture of a medicament for inhibiting both LSD1 and HDAC enzymes in a cell.

22. A method of inhibiting both LSD1 and HDAC in a cell comprising treating said cell with an effective amount of the compound as claimed in any of the claims 1 to 11.

23. A method of treating a condition mediated by both LSD1 and HDAC, comprising administering to a subject suffering from a condition mediated by both LSD1 and HDAC, a therapeutically effective amount of the compound as claimed in any one of claims 1 to 11 or the pharmaceutical composition as claimed in claim 13, or 14.

24. A method for the treatment and/or prevention of a proliferative disorder or cancer, comprising administering to a subject suffering from the proliferative disorder or cancer a therapeutically effective amount of the compound according to any one of claims 1 to 10 or the pharmaceutical composition as claimed in claim 13, or 14.

25. The method as claimed in claim 24, wherein said compound or composition is administered in combinationwith at least one compound selected from cytotoxic agents and non-cytotoxic agents to a subject in need thereof.

26. Use of the compounds as claimed in any one of claims 1-11 or the pharmaceutical composition as claimed in claim 13 for treatment of a condition mediated by LSD1; treatment and/or prevention of a proliferative disorder or cancer; or treatment of cancer together with other clinically relevant cytotoxic agents or non-cytotoxic agents.

27. A method for the treatment and/or prevention of a condition mediated by LSD1 or a proliferative disorder or cancer, comprising administering to a subject suffering from the condition mediated by LSD1 or the proliferative disorder or cancer, a therapeutically effective amount of the compound or the pharmaceutical composition as claimed in claim 13.

28. Use of the compounds as claimed in any of claims 1 to 11 or the pharmaceutical composition as claimed in claim 13 for: treatment of a condition mediated by HDAC; treatment and/or prevention of a proliferative disorder or cancer; or treatment of cancer together with other clinically relevant cytotoxic agents or non-cytotoxic agents.

29. A method for the treatment and/or prevention of a condition mediated by HDAC or a proliferative disorder or cancer, comprising administering to a subject suffering from the condition mediated by HDAC or the proliferative disorder or cancer, a therapeutically

effective amount of the compound as claimed in any of claims 1 to 11 or the pharmaceutical composition as claimed in claim 13.

30. Use of the compounds as claimed inany one of claims 1-11 or the pharmaceutical composition a claimed in claim 13 for: treatment of a condition mediated by both LSD1 and HDAC; treatment and/or prevention of a proliferative disorder or cancer; or treatment of cancer together with other clinically relevant cytotoxic agents or non-cytotoxic agents.

31. A method for the treatment and/or prevention of a condition mediated by both LSD1 and HDAC or a proliferative disorder or cancer, comprising administering to a subject suffering from the condition mediated by both LSD1 and HDAC or the proliferative disorder or cancer, a therapeutically effective amount of the compound as claimed in any of claims 1 to 11 or the pharmaceutical composition as claimed in claim 13.

32. A method for the treatment of cancer, said method comprising administering a combination of the compounds as claimed in any of claims 1 to 11 or the pharmaceutical composition as claimed in claim 13, with other clinically relevant cytotoxic agents or non-cytotoxic agents to a subject in need thereof.

33. A method of treatment of cancer, said method comprising administering a combination of the compounds as claimed in any of claims 1 to 11 or the pharmaceutical composition as claimed in claim 13, with other clinically relevant immune modulators agents to a subject in need of thereof.