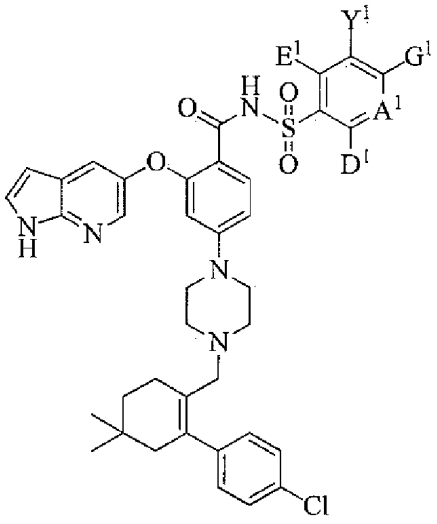
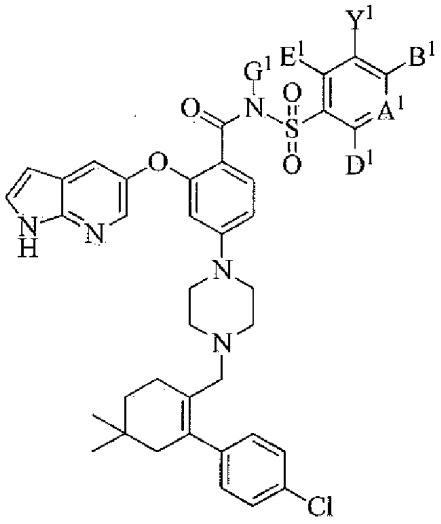
SUMMARY OF THE INVENTION

In one aspect, there is provided a compound having Formula (Ia) or (IIa)



(Ia)



(IIa)

;

or a therapeutically acceptable salt thereof, wherein

A^1 is N or $C(A^2)$;

A^2 is H, R^1, OR^1, SR^1, $S(O)R^1$, SO_2R^1, $C(O)R^1$, $C(O)OR^1$, $OC(O)R^1$, NHR^1, $N(R^1)_2$, $C(O)NHR^1$, $C(O)N(R^1)_2$, $NHC(O)R^1$, $NR^1C(O)R^1$, $NHC(O)OR^1$, $NR^1C(O)OR^1$, $NHC(O)NH_2$, $NHC(O)NHR^1$, $NHC(O)N(R^1)_2$, $NR^1C(O)NHR^1$, $NR^1C(O)N(R^1)_2$, SO_2NH_2, SO_2NHR^1, $SO_2N(R^1)_2$, $NHSO_2R^1$, $NR^1SO_2R^1$, $NHSO_2NHR^1$, $NHSO_2N(R^1)_2$, $NR^1SO_2NHR^1$, $NR^1SO_2N(R^1)_2$, $C(O)NHNOH$, $C(O)NHNOR^1$, $C(O)NHSO_2R^1$, $C(NH)NH_2$, $C(NH)NHR^1$, $C(NH)N(R^1)_2$ $NHSO_2NHR^1$, $NHSO_2N(CH_3)R^1$, $N(CH_3)SO_2N(CH_3)R^1$, F, Cl, Br, I, CN, NO_2, N_3, OH, C(O)H, CHNOH, $CH(NOCH_3)$, CF_3, C(O)OH, $C(O)NH_2$ or $C(O)OR^{1A}$;

B^1 is H, R^1, OR^1, SR^1, $S(O)R^1$, SO_2R^1, $C(O)R^1$, $C(O)OR^1$, $OC(O)R^1$, NHR^1, $N(R^1)_2$, $C(O)NHR^1$, $C(O)N(R^1)_2$, $NHC(O)R^1$, $NR^1C(O)R^1$, $NHC(O)OR^1$, $NR^1C(O)OR^1$, $NHC(O)NH_2$, $NHC(O)NHR^1$, $NHC(O)N(R^1)_2$, $NR^1C(O)NHR^1$, $NR^1C(O)N(R^1)_2$, SO_2NH_2, SO_2NHR^1, $SO_2N(R^1)_2$, $NHSO_2R^1$, $NR^1SO_2R^1$, $NHSO_2NHR^1$, $NHSO_2N(R^1)_2$, $NR^1SO_2NHR^1$, $NR^1SO_2N(R^1)_2$, $C(O)NHNOH$, $C(O)NHNOR^1$, $C(O)NHSO_2R^1$, $C(NH)NH_2$, $C(NH)NHR^1$, $C(NH)N(R^1)_2$ $NHSO_2NHR^1$, $NHSO_2N(CH_3)R^1$, $N(CH_3)SO_2N(CH_3)R^1$, F, Cl, Br, I, CN, NO_2, N_3, OH, C(O)H, CHNOH, $CH(NOCH_3)$, CF_3, C(O)OH, $C(O)NH_2$ or $C(O)OR^{1A}$;

D^1 is H, R^1, OR^1, SR^1, $S(O)R^1$, SO_2R^1, $C(O)R^1$, $C(O)OR^1$, $OC(O)R^1$, NHR^1, $N(R^1)_2$, $C(O)NHR^1$, $C(O)N(R^1)_2$, $NHC(O)R^1$, $NR^1C(O)R^1$, $NHC(O)OR^1$, $NR^1C(O)OR^1$, $NHC(O)NH_2$, $NHC(O)NHR^1$, $NHC(O)N(R^1)_2$, $NR^1C(O)NHR^1$, $NR^1C(O)N(R^1)_2$, SO_2NH_2, SO_2NHR^1, $SO_2N(R^1)_2$, $NHSO_2R^1$, $NR^1SO_2R^1$, $NHSO_2NHR^1$, $NHSO_2N(R^1)_2$, $NR^1SO_2NHR^1$,

$NR^1SO_2N(R^1)_2$, C(O)NHNOH, $C(O)NHNOR^1$, $C(O)NHSO_2R^1$, $C(NH)NH_2$, $C(NH)NHR^1$, $C(NH)N(R^1)_2$ $NHSO_2NHR^1$, $NHSO_2N(CH_3)R^1$, $N(CH_3)SO_2N(CH_3)R^1$, F, Cl, Br, I, CN, NO_2, N_3, OH, C(O)H, CHNOH, $CH(NOCH_3)$, CF_3, C(O)OH, $C(O)NH_2$ or $C(O)OR^{1A}$;

E^1 is H, R^1, OR^1, SR^1, $S(O)R^1$, SO_2R^1, $C(O)R^1$, $C(O)OR^1$, $OC(O)R^1$, NHR^1, $N(R^1)_2$, $C(O)NHR^1$, $C(O)N(R^1)_2$, $NHC(O)R^1$, $NR^1C(O)R^1$, $NHC(O)OR^1$, $NR^1C(O)OR^1$, $NHC(O)NH_2$, $NHC(O)NHR^1$, $NHC(O)N(R^1)_2$, $NR^1C(O)NHR^1$, $NR^1C(O)N(R^1)_2$, SO_2NH_2, SO_2NHR^1, $SO_2N(R^1)_2$, $NHSO_2R^1$, $NR^1SO_2R^1$, $NHSO_2NHR^1$, $NHSO_2N(R^1)_2$, $NR^1SO_2NHR^1$, $NR^1SO_2N(R^1)_2$, C(O)NHNOH, $C(O)NHNOR^1$, $C(O)NHSO_2R^1$, $C(NH)NH_2$, $C(NH)NHR^1$, $C(NH)N(R^1)_2$ $NHSO_2NHR^1$, $NHSO_2N(CH_3)R^1$, $N(CH_3)SO_2N(CH_3)R^1$, F, Cl, Br, I, CN, NO_2, N_3, OH, C(O)H, CHNOH, $CH(NOCH_3)$, CF_3, C(O)OH, $C(O)NH_2$ or $C(O)OR^{1A}$; and

Y^1 is H, CN, NO_2, C(O)OH, F, Cl, Br, I, CF_3, OCF_3, CF_2CF_3, OCF_2CF_3, R^{17}, OR^{17}, $C(O)R^{17}$, $C(O)OR^{17}$, SR^{17}, NH_2, NHR^{17}, $N(R^{17})_2$, $NHC(O)R^{17}$, $C(O)NH_2$, $C(O)NHR^{17}$, $C(O)N(R^{17})_2$, $NHS(O)R^{17}$ or $NHSO_2R^{17}$;

G^1 is R^{1B}, OR^{1B}, or NHR^{1B};

wherein R^{1B}, or a substituent on R^{1B}, is substituted or further substituted with OP(O)(OH)(OH);

R^1 and R^{1B} are each independently R^2, R^3, R^4 or R^5;

R^{1A} is C_1-C_6-alkyl, C_3-C_6-alkenyl or C_3-C_6-alkynyl;

R^2 is phenyl which is unfused or fused with benzene, heteroarene or R^{2A}; R^{2A} is cycloalkane or heterocycloalkane;

R^3 is heteroaryl which is unfused or fused with benzene, heteroarene or R^{3A}; R^{3A} is cycloalkane or heterocycloalkane;

R^4 is cycloalkyl, cycloalkenyl, heterocycloalkyl or heterocycloalkenyl, each of which is unfused or fused with benzene, heteroarene or R^{4A}; R^{4A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^5 is alkyl, alkenyl or alkynyl, each of which is substituted with one or two or three substituents independently selected from the group consisting of R^6, $NC(R^{6A})(R^{6B})$, R^7, OR^7, SR^7, $S(O)R^7$, SO_2R^7, NHR^7, $N(R^7)_2$, $C(O)R^7$, $C(O)NH_2$, $C(O)NHR^7$, $NHC(O)R^7$, $NHSO_2R^7$, $NHC(O)OR^7$, SO_2NH_2, SO_2NHR^7, $SO_2N(R^7)_2$, $NHC(O)NH_2$, $NHC(O)NHR^7$, $NHC(O)CH(CH_3)NHC(O)CH(CH_3)NH_2$, $NHC(O)CH(CH_3)NHC(O)CH(CH_3)NHR^1$, OH, (O), C(O)OH, (O), N_3, CN, NH_2, CF_3, CF_2CF_3, F, Cl, Br and I;

R^6 is C_2-C_5-spiroalkyl, each of which is unsubstituted or substituted with OH, (O), N_3, CN, CF_3, CF_2CF_3, F, Cl, Br, I, NH_2, $NH(CH_3)$ or $N(CH_3)_2$;

R^{6A} and R^{6B} are independently selected alkyl;

R^7 is R^8, R^9, R^{10} or R^{11};

R^8 is phenyl which is unfused or fused with benzene, heteroarene or R^{8A}; R^{8A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^9 is heteroaryl which is unfused or fused with benzene, heteroarene or R^{9A}; R^{9A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{10} is C_3-C_{10}-cycloalkyl or C_4-C_{10}-cycloalkenyl, each having one or two CH_2 moieties unreplaced or replaced with independently selected O, C(O), CNOH, $CNOCH_3$, S, S(O), SO_2 or NH and one or two CH moieties unreplaced or replaced with N, and each of which is unfused or fused with benzene, heteroarene or R^{10A}; R^{10A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{11} is alkyl, alkenyl or alkynyl, each of which is unsubstituted or substituted with one or two or three substituents independently selected from the group consisting of R^{12}, OR^{12}, NHR^{12}, $N(R^{12})_2$, $C(O)NH_2$, $C(O)NHR^{12}$, $C(O)N(R^{12})_2$, OH, (O), C(O)OH, N_3, CN, NH_2, CF_3, CF_2CF_3, F, Cl, Br and I;

R^{12} is R^{13}, R^{14}, R^{15} or R^{16};

R^{13} is phenyl which is unfused or fused with benzene, heteroarene or R^{13A}; R^{13A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{14} is heteroaryl, each of which is unfused or fused with benzene, heteroarene or R^{14A}; R^{14A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{15} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene, each of which is unfused or fused with benzene, heteroarene or R^{15A}; R^{15A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{16} is alkyl, alkenyl or alkynyl;

R^{17} is R^{18}, R^{19}, R^{20} or R^{21};

R^{18} is phenyl which is unfused or fused with benzene, heteroarene or R^{18A}; R^{18A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{19} is heteroaryl which is unfused or fused with benzene, heteroarene or R^{19A}; R^{19A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{20} is C_3-C_{10}-cycloalkyl or C_4-C_{10}-cycloalkenyl, each having one or two CH_2 moieties unreplaced or replaced with independently selected O, C(O), CNOH, $CNOCH_3$, S, S(O), SO_2 or NH and one or two CH moieties unreplaced or replaced with N, and each of which is unfused or fused with benzene, heteroarene or R^{20A}; R^{20A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{21} is alkyl, alkenyl or alkynyl, each of which is unsubstituted or substituted with one or two or three independently selected R^{22}, OR^{22}, NHR^{22}, $N(R^{22})_2$, $C(O)NH_2$, $C(O)NHR^{22}$, $C(O)N(R^{22})_2$, OH, (O), C(O)OH, N_3, CN, NH_2, CF_3, CF_2CF_3, F, Cl, Br or I substituents;

R^{22} is R^{23}, R^{24} or R^{25};

R^{23} is phenyl which is unfused or fused with benzene, heteroarene or R^{23A}; R^{23A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{24} is heteroarene which is unfused or fused with benzene, heteroarene or R^{24A}; R^{24A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{25} is C_3-C_6-cycloalkyl or C_4-C_6-cycloalkenyl, each having one or two CH_2 moieties unreplaced or replaced with independently selected O, C(O), CNOH, $CNOCH_3$, S, S(O), SO_2 or NH and one or two CH moieties unreplaced or replaced with N, and each of which is unfused or fused with benzene, heteroarene or R^{25A}; R^{25A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

wherein the moieties represented by R^2, R^{2A}, R^3, R^{3A}, R^4, R^{4A}, R^6, R^8, R^{8A}, R^9, R^{9A}, R^{10}, R^{10A}, R^{13}, R^{13A}, R^{14}, R^{14A}, R^{15}, R^{15A}, R^{18}, R^{18A}, R^{19}, R^{19A}, R^{20}, R^{20A}, R^{23}, R^{23A}, R^{24}, R^{24A}, R^{25}, R^{25A} are independently unsubstituted, further unsubstituted, substituted or further substituted with one or two or three or four or five substituents independently selected from R^{50}, OR^{50}, SR^{50}, $S(O)R^{50}$, SO_2R^{50}, $C(O)R^{50}$, $CO(O)R^{50}$, $OC(O)R^{50}$, $OC(O)OR^{50}$, NH_2, NHR^{50}, $N(R^{50})_2$, $C(O)NH_2$, $C(O)NHR^{50}$, $C(O)N(R^{50})_2$, C(O)NHOH, $C(O)NHOR^{50}$, $C(O)NHSO_2R^{50}$, $C(O)NR^{55}SO_2R^{50}$, SO_2NH_2, SO_2NHR^{50}, $SO_2N(R^{50})_2$, CF_3, CF_2CF_3, C(O)H, C(O)OH, $C(N)NH_2$, $C(N)NHR^{50}$, $C(N)N(R^{50})_2$, OH, (O), CN, N_3, NO_2, CF_3, CF_2CF_3, OCF_3, OCF_2CF_3, F, Cl, Br and I;

R^{50} is R^{51}, R^{52}, R^{53} or R^{54};

R^{51} is phenyl which is unfused or fused with benzene, heteroarene or R^{51B}; R^{51B} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{52} is heteroaryl;

R^{53} is C_3-C_6-cycloalkyl or C_4-C_6-cycloalkenyl, each having one or two CH_2 moieties unreplaced or replaced with independently selected O, C(O), CNOH, $CNOCH_3$, S, S(O), SO_2 or NH and one or two CH moieties unreplaced or replaced with N, and each of which is unfused or fused with benzene, heteroarene or R^{53B};

wherein R^{53B} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{54} is alkyl, alkenyl or alkynyl, each of which is unsubstituted or substituted with one or two or three substituents independently selected R^{55}, OR^{55}, SR^{55}, $S(O)R^{55}$, SO_2R^{55}, NHR^{55}, $N(R^{55})_2$, $C(O)R^{55}$, $C(O)NH_2$, $C(O)NHR^{55}$, $NHC(O)R^{55}$, $NHSO_2R^{55}$, $NHC(O)OR^{55}$, SO_2NH_2,

SO_2NHR^{55}, $SO_2N(R^{55})_2$, $NHC(O)NH_2$, $NHC(O)NHR^{55}$, OH, (O), C(O)OH, (O), N_3, CN, NH_2, CF_3, OCF_3, CF_2CF_3, OCF_2CF_3, F, Cl, Br and I;

R^{55} is alkyl, alkenyl, alkynyl, phenyl, heteroaryl or R^{56};

wherein the alkyl, alkenyl, and alkynyl are unsubstituted or substituted with OCH_3; and

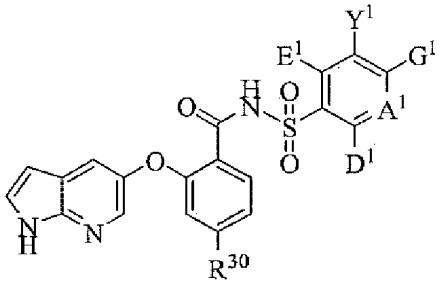
R^{56} is C_3-C_8-cycloalkyl or C_4-C_6-cycloalkenyl, each having one or two CH_2 moieties unreplaced or replaced with independently selected O, C(O), CNOH, $CNOCH_3$, S, S(O), SO_2 or NH and one or two CH moieties unreplaced or replaced with N.

In one aspect, there is provided a pharmaceutical composition comprising an excipient and a therapeutically effective amount of a compound or therapeutically acceptable salt thereof as described herein.

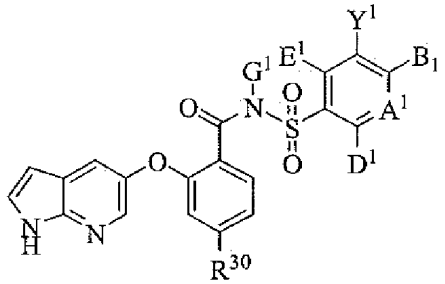
In one aspect, there is provided use of a compound or therapeutically acceptable salt as described herein in the manufacture of a medicament for treating bladder cancer, brain cancer, breast cancer, bone marrow cancer, cervical cancer, chronic lymphocytic leukemia, colorectal cancer, esophageal cancer, hepatocellular cancer, lymphoblastic leukemia, follicular lymphoma, a lymphoid malignancy of T-cell or B-cell origin, melanoma, myelogenous leukemia, myeloma, oral cancer, ovarian cancer, non-small cell lung cancer, prostate cancer, small cell lung cancer or spleen cancer.

In one aspect, there is provided use of a compound or therapeutically acceptable salt as described herein in the manufacture of a medicament to be administered with one or more additional therapeutic agents for treating bladder cancer, brain cancer, breast cancer, bone marrow cancer, cervical cancer, chronic lymphocytic leukemia, colorectal cancer, esophageal cancer, hepatocellular cancer, lymphoblastic leukemia, follicular lymphoma, a lymphoid malignancy of T-cell or B-cell origin, melanoma, myelogenous leukemia, myeloma, oral cancer, ovarian cancer, non-small cell lung cancer, prostate cancer, small cell lung cancer or spleen cancer.

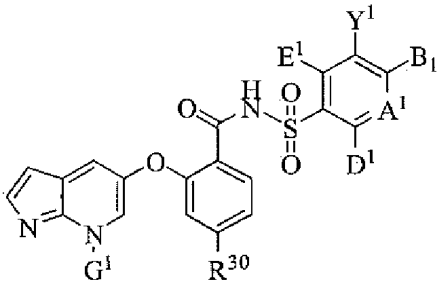
One embodiment of this invention, therefore, pertains to compounds or therapeutically acceptable salts, which are useful as selective inhibitors of one or more than one anti-apoptotic protein family member, the compounds having Formula (I), (II), or (III)



(I)



(II)



(III)

;

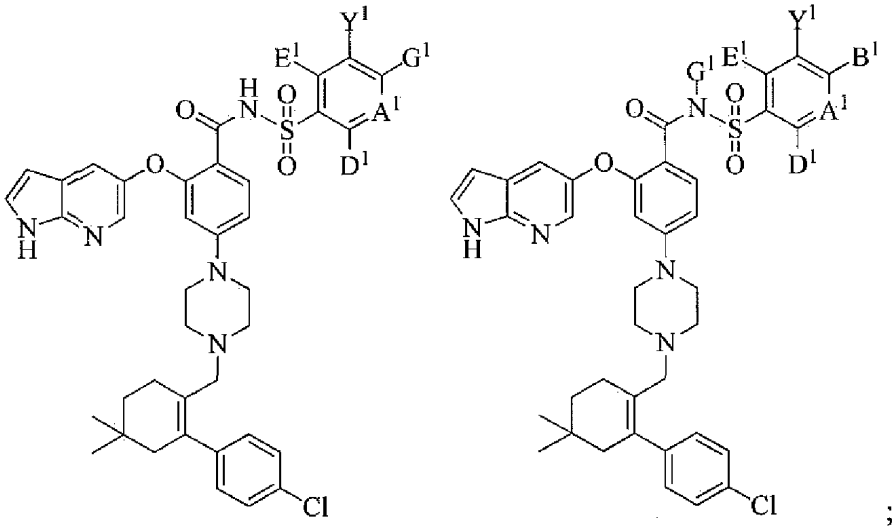
wherein

A^1 is N or $C(A^2)$;

A^2 is H, R^1, OR^1, SR^1, $S(O)R^1$, SO_2R^1, $C(O)R^1$, $C(O)OR^1$, $OC(O)R^1$, NHR^1, $N(R^1)_2$, $C(O)NHR^1$, $C(O)N(R^1)_2$, $NHC(O)R^1$, $NR^1C(O)R^1$, $NHC(O)OR^1$, $NR^1C(O)OR^1$, $NHC(O)NH_2$, $NHC(O)NHR^1$, $NHC(O)N(R^1)_2$, $NR^1C(O)NHR^1$, $NR^1C(O)N(R^1)_2$, SO_2NH_2, SO_2NHR^1, $SO_2N(R^1)_2$, $NHSO_2R^1$, $NR^1SO_2R^1$, $NHSO_2NHR^1$, $NHSO_2N(R^1)_2$, $NR^1SO_2NHR^1$, $NR^1SO_2N(R^1)_2$, $C(O)NHNOH$, $C(O)NHNOR^1$, $C(O)NHSO_2R^1$, $C(NH)NH_2$, $C(NH)NHR^1$, $C(NH)N(R^1)_2$ $NHSO_2NHR^1$, $NHSO_2N(CH_3)R^1$, $N(CH_3)SO_2N(CH_3)R^1$, F, Cl, Br, I, CN, NO_2, N_3, OH, C(O)H, CHNOH, $CH(NOCH_3)$, CF_3, C(O)OH, $C(O)NH_2$ or $C(O)OR^{1A}$;

WHAT IS CLAIMED IS:

1. A compound having Formula (Ia) or (IIa)



(Ia) (IIa)

or a therapeutically acceptable salt thereof, wherein

A^1 is N or $C(A^2)$;

A^2 is H, R^1, OR^1, SR^1, $S(O)R^1$, SO_2R^1, $C(O)R^1$, $C(O)OR^1$, $OC(O)R^1$, NHR^1, $N(R^1)_2$, $C(O)NHR^1$, $C(O)N(R^1)_2$, $NHC(O)R^1$, $NR^1C(O)R^1$, $NHC(O)OR^1$, $NR^1C(O)OR^1$, $NHC(O)NH_2$, $NHC(O)NHR^1$, $NHC(O)N(R^1)_2$, $NR^1C(O)NHR^1$, $NR^1C(O)N(R^1)_2$, SO_2NH_2, SO_2NHR^1, $SO_2N(R^1)_2$, $NHSO_2R^1$, $NR^1SO_2R^1$, $NHSO_2NHR^1$, $NHSO_2N(R^1)_2$, $NR^1SO_2NHR^1$, $NR^1SO_2N(R^1)_2$, C(O)NHNOH, $C(O)NHNOR^1$, $C(O)NHSO_2R^1$, $C(NH)NH_2$, $C(NH)NHR^1$, $C(NH)N(R^1)_2$ $NHSO_2NHR^1$, $NHSO_2N(CH_3)R^1$, $N(CH_3)SO_2N(CH_3)R^1$, F, Cl, Br, I, CN, NO_2, N_3, OH, C(O)H, CHNOH, $CH(NOCH_3)$, CF_3, C(O)OH, $C(O)NH_2$ or $C(O)OR^{1A}$;

B^1 is H, R^1, OR^1, SR^1, $S(O)R^1$, SO_2R^1, $C(O)R^1$, $C(O)OR^1$, $OC(O)R^1$, NHR^1, $N(R^1)_2$, $C(O)NHR^1$, $C(O)N(R^1)_2$, $NHC(O)R^1$, $NR^1C(O)R^1$, $NHC(O)OR^1$, $NR^1C(O)OR^1$, $NHC(O)NH_2$, $NHC(O)NHR^1$, $NHC(O)N(R^1)_2$, $NR^1C(O)NHR^1$, $NR^1C(O)N(R^1)_2$, SO_2NH_2, SO_2NHR^1, $SO_2N(R^1)_2$, $NHSO_2R^1$, $NR^1SO_2R^1$, $NHSO_2NHR^1$, $NHSO_2N(R^1)_2$, $NR^1SO_2NHR^1$, $NR^1SO_2N(R^1)_2$, C(O)NHNOH, $C(O)NHNOR^1$, $C(O)NHSO_2R^1$, $C(NH)NH_2$, $C(NH)NHR^1$, $C(NH)N(R^1)_2$ $NHSO_2NHR^1$, $NHSO_2N(CH_3)R^1$, $N(CH_3)SO_2N(CH_3)R^1$, F, Cl, Br, I, CN, NO_2, N_3, OH, C(O)H, CHNOH, $CH(NOCH_3)$, CF_3, C(O)OH, $C(O)NH_2$ or $C(O)OR^{1A}$;

D^1 is H, R^1, OR^1, SR^1, $S(O)R^1$, SO_2R^1, $C(O)R^1$, $C(O)OR^1$, $OC(O)R^1$, NHR^1, $N(R^1)_2$, $C(O)NHR^1$, $C(O)N(R^1)_2$, $NHC(O)R^1$, $NR^1C(O)R^1$, $NHC(O)OR^1$, $NR^1C(O)OR^1$, $NHC(O)NH_2$, $NHC(O)NHR^1$, $NHC(O)N(R^1)_2$, $NR^1C(O)NHR^1$, $NR^1C(O)N(R^1)_2$, SO_2NH_2,

SO_2NHR^1, $SO_2N(R^1)_2$, $NHSO_2R^1$, $NR^1SO_2R^1$, $NHSO_2NHR^1$, $NHSO_2N(R^1)_2$, $NR^1SO_2NHR^1$, $NR^1SO_2N(R^1)_2$, C(O)NHNOH, $C(O)NHNOR^1$, $C(O)NHSO_2R^1$, $C(NH)NH_2$, $C(NH)NHR^1$, $C(NH)N(R^1)_2$ $NHSO_2NHR^1$, $NHSO_2N(CH_3)R^1$, $N(CH_3)SO_2N(CH_3)R^1$, F, Cl, Br, I, CN, NO_2, N_3, OH, C(O)H, CHNOH, $CH(NOCH_3)$, CF_3, C(O)OH, $C(O)NH_2$ or $C(O)OR^{1A}$;

E^1 is H, R^1, OR^1, SR^1, $S(O)R^1$, SO_2R^1, $C(O)R^1$, $C(O)OR^1$, $OC(O)R^1$, NHR^1, $N(R^1)_2$, $C(O)NHR^1$, $C(O)N(R^1)_2$, $NHC(O)R^1$, $NR^1C(O)R^1$, $NHC(O)OR^1$, $NR^1C(O)OR^1$, $NHC(O)NH_2$, $NHC(O)NHR^1$, $NHC(O)N(R^1)_2$, $NR^1C(O)NHR^1$, $NR^1C(O)N(R^1)_2$, SO_2NH_2, SO_2NHR^1, $SO_2N(R^1)_2$, $NHSO_2R^1$, $NR^1SO_2R^1$, $NHSO_2NHR^1$, $NHSO_2N(R^1)_2$, $NR^1SO_2NHR^1$, $NR^1SO_2N(R^1)_2$, C(O)NHNOH, $C(O)NHNOR^1$, $C(O)NHSO_2R^1$, $C(NH)NH_2$, $C(NH)NHR^1$, $C(NH)N(R^1)_2$ $NHSO_2NHR^1$, $NHSO_2N(CH_3)R^1$, $N(CH_3)SO_2N(CH_3)R^1$, F, Cl, Br, I, CN, NO_2, N_3, OH, C(O)H, CHNOH, $CH(NOCH_3)$, CF_3, C(O)OH, $C(O)NH_2$ or $C(O)OR^{1A}$; and

Y^1 is H, CN, NO_2, C(O)OH, F, Cl, Br, I, CF_3, OCF_3, CF_2CF_3, OCF_2CF_3, R^{17}, OR^{17}, $C(O)R^{17}$, $C(O)OR^{17}$, SR^{17}, NH_2, NHR^{17}, $N(R^{17})_2$, $NHC(O)R^{17}$, $C(O)NH_2$, $C(O)NHR^{17}$, $C(O)N(R^{17})_2$, $NHS(O)R^{17}$ or $NHSO_2R^{17}$;

G^1 is R^{1B}, OR^{1B}, or NHR^{1B};

wherein R^{1B}, or a substituent on R^{1B}, is substituted or further substituted with OP(O)(OH)(OH);

R^1 and R^{1B} are each independently R^2, R^3, R^4 or R^5;

R^{1A} is C_1-C_6-alkyl, C_3-C_6-alkenyl or C_3-C_6-alkynyl;

R^2 is phenyl which is unfused or fused with benzene, heteroarene or R^{2A}; R^{2A} is cycloalkane or heterocycloalkane;

R^3 is heteroaryl which is unfused or fused with benzene, heteroarene or R^{3A}; R^{3A} is cycloalkane or heterocycloalkane;

R^4 is cycloalkyl, cycloalkenyl, heterocycloalkyl or heterocycloalkenyl, each of which is unfused or fused with benzene, heteroarene or R^{4A}; R^{4A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^5 is alkyl, alkenyl or alkynyl, each of which is substituted with one or two or three substituents independently selected from the group consisting of R^6, $NC(R^{6A})(R^{6B})$, R^7, OR^7, SR^7, $S(O)R^7$, SO_2R^7, NHR^7, $N(R^7)_2$, $C(O)R^7$, $C(O)NH_2$, $C(O)NHR^7$, $NHC(O)R^7$, $NHSO_2R^7$, $NHC(O)OR^7$, SO_2NH_2, SO_2NHR^7, $SO_2N(R^7)_2$, $NHC(O)NH_2$, $NHC(O)NHR^7$, $NHC(O)CH(CH_3)NHC(O)CH(CH_3)NH_2$, $NHC(O)CH(CH_3)NHC(O)CH(CH_3)NHR^1$, OH, (O), C(O)OH, (O), N_3, CN, NH_2, CF_3, CF_2CF_3, F, Cl, Br and I;

R^6 is C_2-C_5-spiroalkyl, each of which is unsubstituted or substituted with OH, (O), N_3, CN, CF_3, CF_2CF_3, F, Cl, Br, I, NH_2, $NH(CH_3)$ or $N(CH_3)_2$;

R^{6A} and R^{6B} are independently selected alkyl;

R^7 is R^8, R^9, R^{10} or R^{11};

R^8 is phenyl which is unfused or fused with benzene, heteroarene or R^{8A}; R^{8A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^9 is heteroaryl which is unfused or fused with benzene, heteroarene or R^{9A}; R^{9A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{10} is C_3-C_{10}-cycloalkyl or C_4-C_{10}-cycloalkenyl, each having one or two CH_2 moieties unreplaced or replaced with independently selected O, C(O), CNOH, $CNOCH_3$, S, S(O), SO_2 or NH and one or two CH moieties unreplaced or replaced with N, and each of which is unfused or fused with benzene, heteroarene or R^{10A}; R^{10A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{11} is alkyl, alkenyl or alkynyl, each of which is unsubstituted or substituted with one or two or three substituents independently selected from the group consisting of R^{12}, OR^{12}, NHR^{12}, $N(R^{12})_2$, $C(O)NH_2$, $C(O)NHR^{12}$, $C(O)N(R^{12})_2$, OH, (O), C(O)OH, N_3, CN, NH_2, CF_3, CF_2CF_3, F, Cl, Br and I;

R^{12} is R^{13}, R^{14}, R^{15} or R^{16};

R^{13} is phenyl which is unfused or fused with benzene, heteroarene or R^{13A}; R^{13A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{14} is heteroaryl, each of which is unfused or fused with benzene, heteroarene or R^{14A}; R^{14A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{15} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene, each of which is unfused or fused with benzene, heteroarene or R^{15A}; R^{15A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{16} is alkyl, alkenyl or alkynyl;

R^{17} is R^{18}, R^{19}, R^{20} or R^{21};

R^{18} is phenyl which is unfused or fused with benzene, heteroarene or R^{18A}; R^{18A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{19} is heteroaryl which is unfused or fused with benzene, heteroarene or R^{19A}; R^{19A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{20} is C_3-C_{10}-cycloalkyl or C_4-C_{10}-cycloalkenyl, each having one or two CH_2 moieties unreplaced or replaced with independently selected O, C(O), CNOH, $CNOCH_3$, S, S(O), SO_2 or NH and one or two CH moieties unreplaced or replaced with N, and each of which is unfused or fused with benzene, heteroarene or R^{20A}; R^{20A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{21} is alkyl, alkenyl or alkynyl, each of which is unsubstituted or substituted with one or two or three independently selected R^{22}, OR^{22}, NHR^{22}, $N(R^{22})_2$, $C(O)NH_2$, $C(O)NHR^{22}$, $C(O)N(R^{22})_2$, OH, (O), C(O)OH, N_3, CN, NH_2, CF_3, CF_2CF_3, F, Cl, Br or I substituents;

R^{22} is R^{23}, R^{24} or R^{25};

R^{23} is phenyl which is unfused or fused with benzene, heteroarene or R^{23A}; R^{23A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{24} is heteroarene which is unfused or fused with benzene, heteroarene or R^{24A}; R^{24A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{25} is C_3-C_6-cycloalkyl or C_4-C_6-cycloalkenyl, each having one or two CH_2 moieties unreplaced or replaced with independently selected O, C(O), CNOH, $CNOCH_3$, S, S(O), SO_2 or NH and one or two CH moieties unreplaced or replaced with N, and each of which is unfused or fused with benzene, heteroarene or R^{25A}; R^{25A} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

wherein the moieties represented by R^2, R^{2A}, R^3, R^{3A}, R^4, R^{4A}, R^6, R^8, R^{8A}, R^9, R^{9A}, R^{10}, R^{10A}, R^{13}, R^{13A}, R^{14}, R^{14A}, R^{15}, R^{15A}, R^{18}, R^{18A}, R^{19}, R^{19A}, R^{20}, R^{20A}, R^{23}, R^{23A}, R^{24}, R^{24A}, R^{25}, R^{25A} are independently unsubstituted, further unsubstituted, substituted or further substituted with one or two or three or four or five substituents independently selected from R^{50}, OR^{50}, SR^{50}, $S(O)R^{50}$, SO_2R^{50}, $C(O)R^{50}$, $CO(O)R^{50}$, $OC(O)R^{50}$, $OC(O)OR^{50}$, NH_2, NHR^{50}, $N(R^{50})_2$, $C(O)NH_2$, $C(O)NHR^{50}$, $C(O)N(R^{50})_2$, C(O)NHOH, $C(O)NHOR^{50}$, $C(O)NHSO_2R^{50}$, $C(O)NR^{55}SO_2R^{50}$, SO_2NH_2, SO_2NHR^{50}, $SO_2N(R^{50})_2$, CF_3, CF_2CF_3, C(O)H, C(O)OH, $C(N)NH_2$, $C(N)NHR^{50}$, $C(N)N(R^{50})_2$, OH, (O), CN, N_3, NO_2, CF_3, CF_2CF_3, OCF_3, OCF_2CF_3, F, Cl, Br and I;

R^{50} is R^{51}, R^{52}, R^{53} or R^{54};

R^{51} is phenyl which is unfused or fused with benzene, heteroarene or R^{51B}; R^{51B} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{52} is heteroaryl;

R^{53} is C_3-C_6-cycloalkyl or C_4-C_6-cycloalkenyl, each having one or two CH_2 moieties unreplaced or replaced with independently selected O, C(O), CNOH, $CNOCH_3$, S, S(O), SO_2 or NH and one or two CH moieties unreplaced or replaced with N, and each of which is unfused or fused with benzene, heteroarene or R^{53B};

wherein R^{53B} is cycloalkane, cycloalkene, heterocycloalkane or heterocycloalkene;

R^{54} is alkyl, alkenyl or alkynyl, each of which is unsubstituted or substituted with one or two or three substituents independently selected R^{55}, OR^{55}, SR^{55}, $S(O)R^{55}$, SO_2R^{55}, NHR^{55}, $N(R^{55})_2$, $C(O)R^{55}$, $C(O)NH_2$, $C(O)NHR^{55}$, $NHC(O)R^{55}$, $NHSO_2R^{55}$, $NHC(O)OR^{55}$, SO_2NH_2,

SO_2NHR^{55}, $SO_2N(R^{55})_2$, $NHC(O)NH_2$, $NHC(O)NHR^{55}$, OH, (O), C(O)OH, (O), N_3, CN, NH_2, CF_3, OCF_3, CF_2CF_3, OCF_2CF_3, F, Cl, Br and I;

R^{55} is alkyl, alkenyl, alkynyl, phenyl, heteroaryl or R^{56};

wherein the alkyl, alkenyl, and alkynyl are unsubstituted or substituted with OCH_3; and

R^{56} is C_3-C_8-cycloalkyl or C_4-C_6-cycloalkenyl, each having one or two CH_2 moieties unreplaced or replaced with independently selected O, C(O), CNOH, $CNOCH_3$, S, S(O), SO_2 or NH and one or two CH moieties unreplaced or replaced with N.

2. The compound or therapeutically acceptable salt of claim 1, wherein

A^1 is $C(A^2)$; and

A^2 is H.

3. The compound or therapeutically acceptable salt of claim 1, wherein

A^1 is $C(A^2)$;

A^2 is H; and

D^1 is H.

4. The compound or therapeutically acceptable salt thereof of claim 1, wherein

A^1 is $C(A^2)$;

A^2 is H;

D^1 is H; and

E^1 is H.

5. The compound of or therapeutically acceptable salt claim 1, wherein

A^1 is $C(A^2)$;

A^2 is H;

D^1 is H;

E^1 is H; and

Y^1 is NO_2.

6. The compound or therapeutically acceptable salt thereof of claim 1, wherein the compound is chosen from a group consisting of:

3-[(4-{[4-(4-{[2-(4-chlorophenyl)-4,4-dimethylcyclohex-1-en-1-yl]methyl}piperazin-1-yl)-2-(1H-pyrrolo[2,3-b]pyridin-5-yloxy)benzoyl]sulfamoyl}-2-nitrophenyl)amino]-2,2-dimethylpropyl dihydrogen phosphate; and

trans-4-[(4-{[4-(4-{[2-(4-chlorophenyl)-4,4-dimethylcyclohex-1-en-1-yl]methyl}piperazin-1-yl)-2-(1H-pyrrolo[2,3-b]pyridin-5-yloxy)benzoyl]sulfamoyl}-2-nitrophenoxy)methyl]cyclohexyl dihydrogen phosphate.

7. A pharmaceutical composition comprising an excipient and a therapeutically effective amount of a compound or therapeutically acceptable salt thereof of any one of claims 1-6.

8. Use of a compound or therapeutically acceptable salt of any one of claims 1-6 in the manufacture of a medicament for treating bladder cancer, brain cancer, breast cancer, bone marrow cancer, cervical cancer, chronic lymphocytic leukemia, colorectal cancer, esophageal cancer, hepatocellular cancer, lymphoblastic leukemia, follicular lymphoma, a lymphoid malignancy of T-cell or B-cell origin, melanoma, myelogenous leukemia, myeloma, oral cancer, ovarian cancer, non-small cell lung cancer, prostate cancer, small cell lung cancer or spleen cancer.

9. Use of a compound or therapeutically acceptable salt of any one of claims 1-6 in the manufacture of a medicament to be administered with one or more additional therapeutic agents for treating bladder cancer, brain cancer, breast cancer, bone marrow cancer, cervical cancer, chronic lymphocytic leukemia, colorectal cancer, esophageal cancer, hepatocellular cancer, lymphoblastic leukemia, follicular lymphoma, a lymphoid malignancy of T-cell or B-cell origin, melanoma, myelogenous leukemia, myeloma, oral cancer, ovarian cancer, non-small cell lung cancer, prostate cancer, small cell lung cancer or spleen cancer.