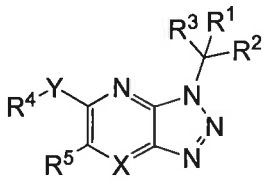
What is claimed:

1. ~~At least one~~A compound of formula 1:

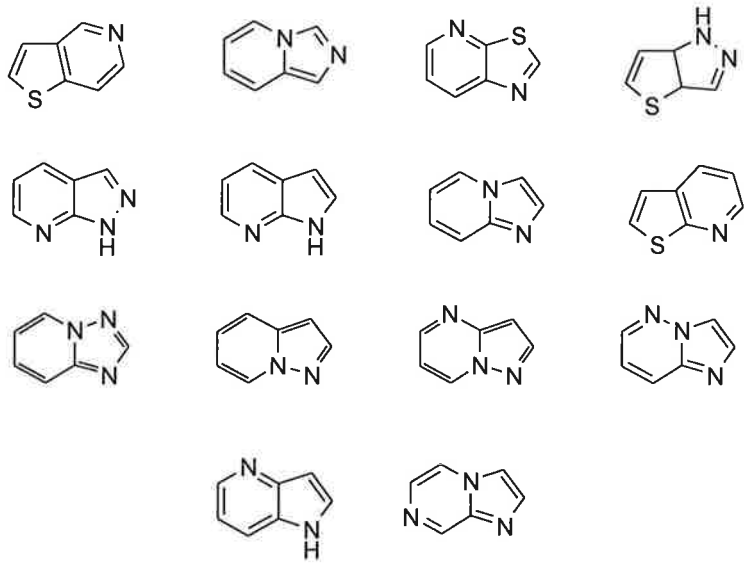


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and/or ~~at least one~~a pharmaceutically acceptable salt thereof, wherein:

~~X is N, Y is selected from -O-, -S-, and -N(R^7)- and R^1 is selected from aryl and heteroaryl, each of which is optionally substituted with one or more groups selected from halo, -CF_3, -CF_2H, cycloalkyl, -C(O)R^{11}, -C(O)OR^{11}, -CN, -C(O)$NR^{13}R^{14}$, -$NR^{13}R^{14}$, -NR^{13}C(O)R^{11}, -$NR^{13}S(O)_nR^{12}$, -$NR^{13}S(O)_nNR^{13}R^{14}$, -$NR^{13}$C(O)$OR^{12}$, -$NR^{13}$C(O)$NR^{13}R^{14}$, -$NO_2$, -$S(O)_nR^{12}$, -$S(O)_nNR^{13}R^{14}$, heterocycle, heteroaryl, aryl, alkenyl, alkynyl, lower alkyl, lower alkyl substituted with hydroxy, lower alkyl substituted with lower alkoxy, lower alkyl substituted with -$NR^{13}R^{14}$, and lower alkyl substituted with heterocycle; or~~

X is N, Y is absent and R^1 is a fused bicyclic heteroaryl selected from:



optionally substituted with one or more groups selected from halo, -CF_3, -CF_2H, C_3-C_{12} cycloalkyl, -C(O)R^{11}, -C(O)OR^{11}, -CN, -C(O)$NR^{13}R^{14}$, -$NR^{13}R^{14}$, -NR^{13}C(O)R^{11}, -$NR^{13}S(O)_nR^{12}$, -$NR^{13}S(O)_nNR^{13}R^{14}$, -$NR^{13}$C(O)$OR^{12}$, -$NR^{13}$C(O)$NR^{13}R^{14}$, -$NO_2$, -$S(O)_nR^{12}$, -$S(O)_nNR^{13}R^{14}$, ~~heterocycle~~an aliphatic heterocycle ring with 3 to 7 ring atoms, said heterocycle containing at least 2 carbon atoms in addition to 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen, ~~heteroaryl~~a 5 or 6 membered aromatic monocylic ring containing from 1 to 3 heteroatoms selected

from oxygen, sulfur and nitrogen, with the remaining ring atoms being carbon, ~~aryl~~ phenyl, C_2-C_{10} alkenyl, C_2-C_{10} alkynyl, ~~lower~~C_1-C_4 alkyl, ~~lower~~C_1-C_4 alkyl substituted with hydroxy, ~~lower~~C_1-C_4 alkyl substituted with ~~lower~~C_1-C_4 alkoxy, ~~lower~~C_1-C_4 alkyl substituted with $-NR^{13}R^{14}$, and ~~lower~~C_1-C_4 alkyl substituted with ~~heterocycle~~an aliphatic heterocycle ring with 3 to 7 ring atoms, said heterocycle containing at least 2 carbon atoms in addition to 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen; ~~or~~

~~X is $C(R^6)$, Y is selected from -O-, -S-, and $-N(R^7)$- or Y is absent, and R^1 is heteroaryl optionally substituted with one or more groups selected from halo, $-CF_3$, $-CF_2H$, cycloalkyl, $-C(O)R^{11}$, $-C(O)OR^{11}$, -CN, $-C(O)NR^{13}R^{14}$, $-NR^{13}R^{14}$, $-NR^{13}C(O)R^{11}$, $-NR^{13}S(O)_nR^{12}$, $-NR^{13}S(O)_nNR^{13}R^{14}$, $-NR^{13}C(O)OR^{12}$, $-NR^{13}C(O)NR^{13}R^{14}$, $-NO_2$, $-S(O)_nR^{12}$, $-S(O)_nNR^{13}R^{14}$, heterocycle, heteroaryl, aryl, alkenyl, alkynyl, lower alkyl, lower alkyl substituted with hydroxy, lower alkyl substituted with lower alkoxy, lower alkyl substituted with $-NR^{13}R^{14}$, and lower alkyl substituted with heterocycle;~~

R^2 and R^3 are independently selected from hydrogen, and C_1-C_{10} alkyl, or R^2 and R^3, together with the carbon to which they are attached, form a ring chosen from 3- to 7-membered cycloalkyl and 3- to 7-membered heterocycle, said heterocycle containing 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen;

R^4 is selected from halo, C_1-C_{10} alkyl, C_3-C_{12} cycloalkyl, ~~heterocycle~~an aliphatic heterocycle ring with 3 to 7 ring atoms, said heterocycle containing at least 2 carbon atoms in addition to 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen, ~~aryl~~ phenyl and ~~heteroaryl~~a 5 or 6 membered aromatic monocylic ring containing from 1 to 3 heteroatoms selected from oxygen, sulfur and nitrogen, with the remaining ring atoms being carbon, each of which, except for halo, is optionally substituted with one or more groups selected from

~~lower~~C_1-C_4 alkyl optionally substituted with one or more groups selected from hydroxy, ~~lower~~C_1-C_4 alkoxy, cyano, halo, -C(O)OR^{11}, -C(O)$NR^{13}R^{14}$, -$NR^{13}R^{14}$, -OC(O)R^{11}, -NR^{13}C(O)R^{11}, -$NR^{13}S(O)_nR^{12}$, -$NR^{13}S(O)_nNR^{13}R^{14}$, -$NR^{13}$C(O)$OR^{12}$, and -$NR^{13}$C(O)$NR^{13}R^{14}$,

~~lower~~C_1-C_4 alkoxy optionally substituted with one or more groups selected from halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

~~cycloalkoxy optionally substituted with one or more groups selected from halo, hydroxy, and lower alkoxy,~~

~~heterocycloalkoxy optionally substituted with one or more groups selected from halo, hydroxy, and lower alkoxy,~~

~~heterocyclea~~n aliphatic heterocycle ring with 3 to 7 ring atoms, said heterocycle containing at least 2 carbon atoms in addition to 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen, said heterocycle ring being optionally substituted with one or more groups selected from ~~lower~~C_1-C_4 alkyl, halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

~~heteroaryloxy optionally substituted with one or more groups selected from lower alkyl, halo, hydroxy, and lower alkoxy,~~

~~aryl~~ phenyl optionally substituted with one or more groups selected from ~~lower~~C_1-C_4 alkyl, halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

~~heteroaryl~~a 5 or 6 membered aromatic monocylic ring containing from 1 to 3 heteroatoms selected from oxygen, sulfur and nitrogen, with the remaining ring atoms being carbon optionally substituted with one or more groups selected from ~~lower~~C_1-C_4 alkyl, halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

halo, cyano,-C(O)R^{11}, -C(O)OR^{11}, -$NR^{13}R^{14}$, -NR^{13}C(O)R^{11}, -$NR^{13}S(O)_nR^{12}$, -$NR^{13}S(O)_nNR^{13}R^{14}$, -$NR^{13}$C(O)$OR^{12}$, -$NR^{13}$C(O)$NR^{13}R^{14}$, -C(O)$NR^{13}R^{14}$, -$S(O)_nR^{12}$, and -$S(O)_nNR^{13}R^{14}$;

R^5 is selected from hydrogen, halo, OH, NH_2, CF_3, -CF_2H, C_1-C_{10} alkyl, C_2-C_{10} alkenyl, and C_2-C_{10} alkynyl;

~~R^6 is selected from hydrogen, -OH, -NH_2, -NHC(O)R^{11}, halo and alkyl;~~

~~R^7 is selected from hydrogen and lower alkyl;~~

each n is independently 0, 1, or 2;

R^{11}, R^{12}, R^{13}, and R^{14} are independently selected from hydrogen, C_1-C_{10} alkyl, C_2-C_{10} alkenyl, C_2-C_{10} alkynyl, C_3-C_{12} cycloalkyl, ~~aryl~~ phenyl, ~~heteroaryl~~a 5 or 6 membered aromatic monocylic ring containing from 1 to 3 heteroatoms selected from oxygen, sulfur and nitrogen, with the remaining ring atoms being carbon, and ~~heterocyclea~~n aliphatic heterocycle ring with 3 to 7 ring atoms, said heterocycle containing at least 2 carbon

atoms in addition to 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, ~~lower~~C_1-C_4 alkyl, hydroxy, and ~~lower~~C_1-C_4 alkoxy, or R^{13} and R^{14}, with the nitrogen to which they are attached, combine to form a heterocycle ring, which is optionally substituted with one or more groups selected from halo, ~~lower~~C_1-C_4 alkyl, hydroxy, and ~~lower~~C_1-C_4 alkoxy and further optionally includes one or two additional heteroatoms in the heterocycle ring wherein the one or two additional heteroatoms are selected from -O-, -S-, and -N(R^{15})-; and

R^{15} is selected from hydrogen, ~~lower~~C_1-C_4 alkyl,-C(O)R^{11}, -C(O)OR^{11}, -C(O)N$R^{13}R^{14}$, -S(O)$_n$$R^{12}$, and -S(O)$_nNR^{13}R^{14}$;

~~provided that~~

~~R^1 is not optionally substituted phenyl or optionally substituted 4-pyridinyl;~~

when X is N, R^2 is hydrogen or methyl, R^3 and R^5 are hydrogen, and Y is absent, then R^1 is not quinolin-6-yl, 7-fluoroquinolin-6-yl, 3-quinazolin-6-yl, 2-3-dihydro-benzofuran-5-yl, or 2,3-dihydro-benzo[1,4]dioxin-6-yl; and

when X is N, R^2, R^3 and R^5 are hydrogen, and Y is -O- or -N(R^7)-, and R^1 is quinolin-6-yl, 7-fluoroquinolin-6-yl, 3-quinazolin-6-yl, 2-3-dihydro-benzofuran-5-yl, or 2,3-dihydro-benzo[1,4]dioxin-6-yl, then R^4 is optionally substituted heteroaryl.

2. At least one compound of claim 1, and/or at least one pharmaceutically acceptable salt thereof, wherein X is N.

3. At least one compound of claim 1, and/or at least one pharmaceutically acceptable salt thereof, wherein X is C(R^6).

4. At least one compound of claim 3, and/or at least one pharmaceutically acceptable salt thereof, wherein R^6 is selected from hydrogen and lower alkyl.

5. At least one compound of claim 4, and/or at least one pharmaceutically acceptable salt thereof, wherein R^6 is hydrogen.

6. At least one compound of any one of claims 1 to 5, and/or at least one pharmaceutically acceptable salt thereof, wherein Y is -O-.

7. At least one compound of any one of claims 1 to 5, and/or at least one pharmaceutically acceptable salt thereof, wherein Y is -S-.

8. At least one compound of any one of claims 1 to 5, and/or at least one pharmaceutically acceptable salt thereof, wherein Y is -N(R^7)-.

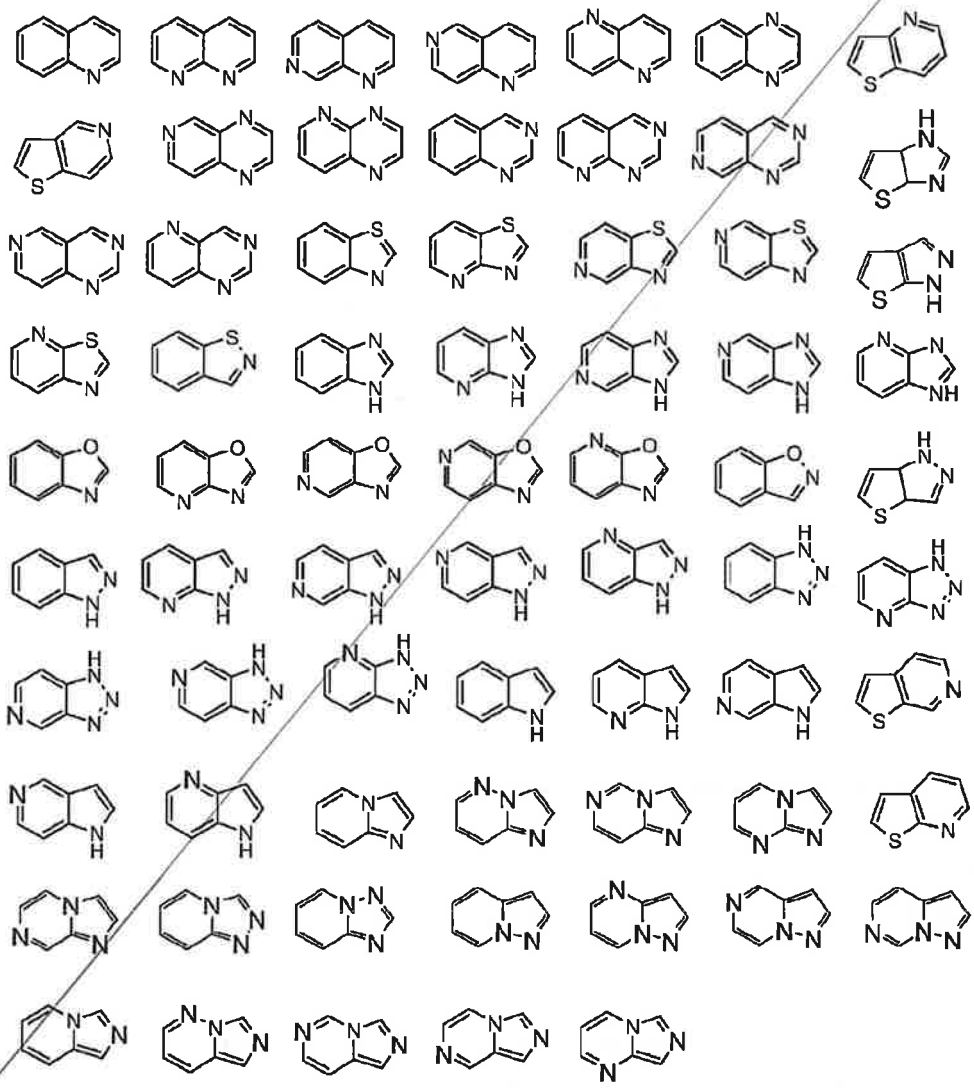
9. At least one compound of claim 8, and/or at least one pharmaceutically acceptable salt thereof, wherein R^7 is hydrogen or methyl.

10. At least one compound of any one of claims 1 to 5, and/or at least one pharmaceutically acceptable salt thereof, wherein Y is absent.

11. At least one compound of any one of claims 1 to 10, and/or at least one pharmaceutically acceptable salt thereof, wherein R^1 is 8-10 membered heteroaryl optionally substituted with one or more groups selected from halo, $-CF_3$, $-CF_2H$, cycloalkyl, $-C(O)R^{11}$, -

$C(O)OR^{11}$, -CN, $-C(O)NR^{13}R^{14}$, $-NR^{13}R^{14}$, $-NR^{13}C(O)R^{11}$, $-NR^{13}S(O)_nR^{12}$, $-NR^{13}S(O)_nNR^{13}R^{14}$, $-NR^{13}C(O)OR^{12}$, $-NR^{13}C(O)NR^{13}R^{14}$, $-NO_2$, $-S(O)_nR^{12}$, $-S(O)_nNR^{13}R^{14}$, heterocycle, heteroaryl, aryl, alkenyl, alkynyl, lower alkyl, lower alkyl substituted with hydroxy, lower alkyl substituted with lower alkoxy, lower alkyl substituted with $-NR^{13}R^{14}$, and lower alkyl substituted with heterocycle.

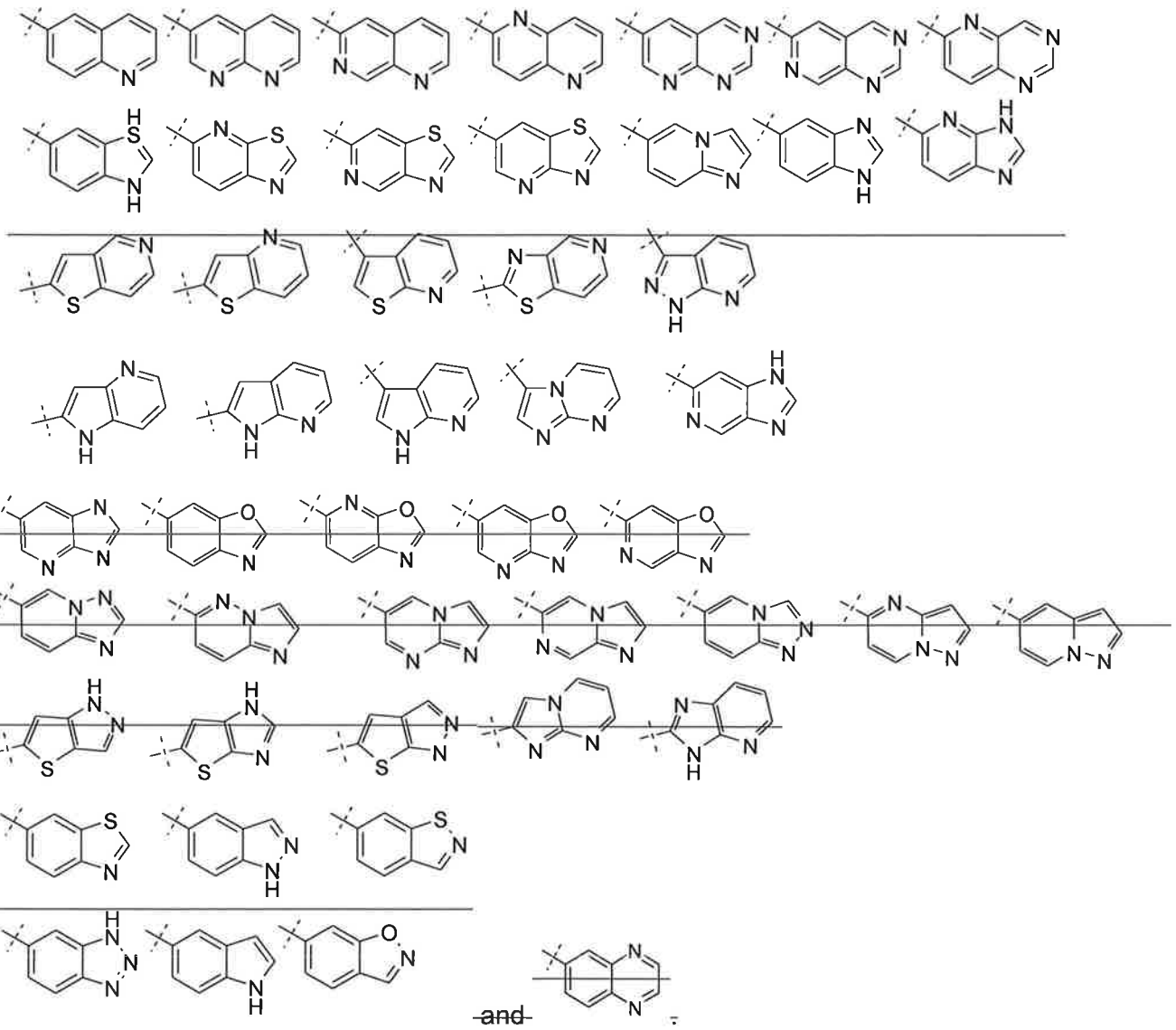
12. At least one compound of any one of claims 1 to11, and/or at least one pharmaceutically acceptable salt thereof, wherein R^1 is a ring system selected from



wherein each of said ring systems is optionally substituted with one or more groups selected from halo, CF_3, $-CF_2H$, cycloalkyl, $-C(O)R^{11}$, $C(O)OR^{11}$, -CN, $-C(O)NR^{13}R^{14}$, $-NR^{13}R^{14}$, $-NR^{13}C(O)R^{11}$, $-NR^{13}S(O)_nR^{12}$, $-NR^{13}S(O)_nNR^{13}R^{14}$, $-NR^{13}C(O)OR^{12}$, $-NR^{13}C(O)NR^{13}R^{14}$, $-NO_2$,

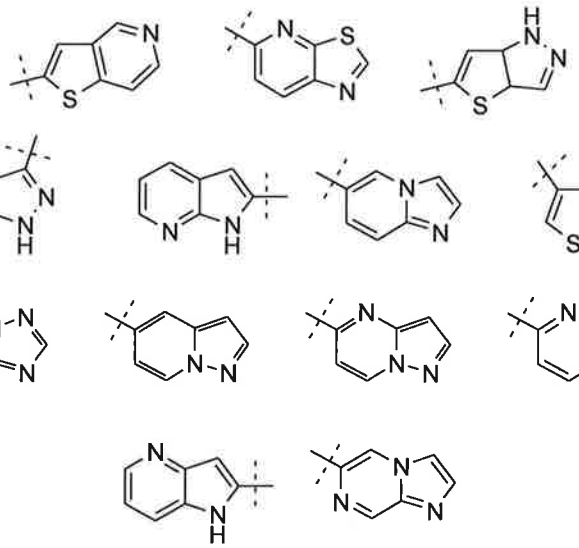
~~$-S(O)_nR^{12}$, $-S(O)_nNR^{13}R^{14}$, heterocycle, heteroaryl, aryl, alkenyl, alkynyl, lower alkyl, lower alkyl substituted with hydroxy, lower alkyl substituted with lower alkoxy, lower alkyl substituted with $-NR^{13}R^{14}$, and lower alkyl substituted with heterocycle.~~

~~13. At least one compound of any one of claims 1 to12, and/or at least one pharmaceutically acceptable salt thereof, wherein R^1 is a ring system selected from~~



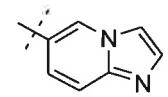
~~and~~ .

2. A compound of formula 1 as claimed in claim 1, and/or a pharmaceutically acceptable salt thereof, wherein R^1 is a ring system selected from



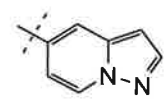
optionally substituted with one or more groups selected from halo, $-CF_3$, $-CF_2H$, C_3-C_{12} cycloalkyl, $-C(O)R^{11}$, $-C(O)OR^{11}$, -CN, $-C(O)NR^{13}R^{14}$, $-NR^{13}R^{14}$, $-NR^{13}C(O)R^{11}$, $-NR^{13}S(O)_nR^{12}$, $-NR^{13}S(O)_nNR^{13}R^{14}$, $-NR^{13}C(O)OR^{12}$, $-NR^{13}C(O)NR^{13}R^{14}$, $-NO_2$, $-S(O)_nR^{12}$, $-S(O)_nNR^{13}R^{14}$, an aliphatic heterocycle ring with 3 to 7 ring atoms, said heterocycle containing at least 2 carbon atoms in addition to 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen, a 5 or 6 membered aromatic monocylic ring containing from 1 to 3 heteroatoms selected from oxygen, sulfur and nitrogen, with the remaining ring atoms being carbon, phenyl, C_2-C_{10} alkenyl, C_2-C_{10} alkynyl, C_1-C_4 alkyl, C_1-C_4 alkyl substituted with hydroxy, C_1-C_4 alkyl substituted with C_1-C_4 alkoxy, C_1-C_4 alkyl substituted with $-NR^{13}R^{14}$, and C_1-C_4 alkyl substituted with an aliphatic heterocycle ring with 3 to 7 ring atoms, said heterocycle containing at least 2 carbon atoms in addition to 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen.

3. A compound of formula 1 as claimed in claim 2, and/or a pharmaceutically acceptable salt thereof, wherein R^1 is



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4. A compound of formula 1 as claimed in claim 2, and/or a pharmaceutically acceptable salt thereof, wherein R^1 is



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~~14~~5. ~~At least one~~A compound of formula 1 as claimed in any one of claims 1 to ~~13~~4, and/or ~~at least one~~a pharmaceutically acceptable salt thereof, wherein R^2 and R^3 are independently selected from hydrogen and C_1-C_6 alkyl or R^2 and R^3, together with the carbon to which they are attached, form a 3-membered cycloalkyl.

6. A compound of formula 1 as claimed in claim 5, and/or a pharmaceutically acceptable salt thereof, wherein R^2 is hydrogen and R^3 is selected from hydrogen and methyl.

7~~15~~. ~~At least one~~A compound of formula 1 as claimed in any one of claims 1 to ~~14~~6, and/or ~~at least one~~a pharmaceutically acceptable salt thereof, wherein R^5 is hydrogen.

8~~16~~. ~~At least one~~A compound of formula 1 as claimed in any one of claims 1 to ~~15~~7, and/or ~~at least one~~a pharmaceutically acceptable salt thereof, wherein R^4 is ~~aryl~~ phenyl optionally substituted with one or more groups selected from

~~lower~~C_1-C_4 alkyl optionally substituted with one or more groups selected from hydroxy, ~~lower~~C_1-C_4 alkoxy, cyano, halo, $-C(O)OR^{11}$, $-C(O)NR^{13}R^{14}$, $-NR^{13}R^{14}$, $-OC(O)R^{11}$, $-NR^{13}C(O)R^{11}$, $-NR^{13}S(O)_nR^{12}$, $-NR^{13}S(O)_nNR^{13}R^{14}$, $-NR^{13}C(O)OR^{12}$, and $-NR^{13}C(O)NR^{13}R^{14}$,

~~lower~~C_1-C_4 alkoxy optionally substituted with one or more groups selected from halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

~~heterocyclea~~n aliphatic heterocycle ring with 3 to 7 ring atoms, said heterocycle containing at least 2 carbon atoms in addition to 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen, said heterocycle ring being optionally substituted with one or more groups selected from ~~lower~~C_1-C_4 alkyl, halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

~~heteroaryloxy optionally substituted with one or more groups selected from lower alkyl, halo, hydroxy, and lower alkoxy,~~

~~aryl~~ phenyl optionally substituted with one or more groups selected from ~~lower~~C_1-C_4 alkyl, halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

~~heteroaryl~~a 5 or 6 membered aromatic monocylic ring containing from 1 to 3 heteroatoms selected from oxygen, sulfur and nitrogen, with the remaining ring atoms being carbon optionally substituted with one or more groups selected from ~~lower~~C_1-C_4 alkyl, halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

halo, cyano,$-C(O)R^{11}$, $-C(O)OR^{11}$, $-NR^{13}R^{14}$, $-NR^{13}C(O)R^{11}$, $-NR^{13}S(O)_nR^{12}$, $-NR^{13}S(O)_nNR^{13}R^{14}$, $-NR^{13}C(O)OR^{12}$, $-NR^{13}C(O)NR^{13}R^{14}$, $-C(O)NR^{13}R^{14}$, $-S(O)_nR^{12}$, and $-S(O)_nNR^{13}R^{14}$.

9~~17~~. ~~At least one~~A compound of formula 1 as claimed in any one of claims 1 to ~~15~~7, and/or ~~at least one~~a pharmaceutically acceptable salt thereof, wherein R^4 is ~~heterocyclea~~n aliphatic heterocycle ring with 3 to 7 ring atoms, said heterocycle containing at least 2 carbon atoms in addition to 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen, said heterocycles ring being optionally substituted with one or more groups selected from

~~lower~~C_1-C_4 alkyl optionally substituted with one or more groups selected from hydroxy, ~~lower~~C_1-C_4 alkoxy, cyano, halo, $-C(O)OR^{11}$, $-C(O)NR^{13}R^{14}$, $-NR^{13}R^{14}$, $-OC(O)R^{11}$, $-NR^{13}C(O)R^{11}$, $-NR^{13}S(O)_nR^{12}$, $-NR^{13}S(O)_nNR^{13}R^{14}$, $-NR^{13}C(O)OR^{12}$, and $-NR^{13}C(O)NR^{13}R^{14}$,

~~lower~~C_1-C_4 alkoxy optionally substituted with one or more groups selected from halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

~~heterocycle~~an aliphatic heterocycle ring with 3 to 7 ring atoms, said heterocycle containing at least 2 carbon atoms in addition to 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen, said heterocycles ring being optionally substituted with one or more groups selected from ~~lower~~C_1-C_4 alkyl, halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

halo, cyano,$-C(O)R^{11}$, $-C(O)OR^{11}$, $-NR^{13}R^{14}$, $-NR^{13}C(O)R^{11}$, $-NR^{13}S(O)_nR^{12}$, $-NR^{13}S(O)_nNR^{13}R^{14}$, $-NR^{13}C(O)OR^{12}$, $-NR^{13}C(O)NR^{13}R^{14}$, $-C(O)NR^{13}R^{14}$, $-S(O)_nR^{12}$, and $-S(O)_nNR^{13}R^{14}$.

1018. ~~At least one~~A compound of formula 1 as claimed in claim ~~17~~9, and/or ~~at least one~~a pharmaceutically acceptable salt thereof, wherein R^4 is selected from pyrrolidin-1-yl, piperidin-1-yl, tetrahydro-2H-pyran-4-yl, morpholin-4-yl, and 6,7-dihydrothieno[3,2-c]pyridin-5(4H)-yl, each of which is optionally substituted with one or more groups selected from

~~lower~~C_1-C_4 alkyl optionally substituted with one or more groups selected from hydroxy, ~~lower~~C_1-C_4 alkoxy, cyano, halo, $-C(O)OR^{11}$, $-C(O)NR^{13}R^{14}$, $-NR^{13}R^{14}$, $-OC(O)R^{11}$, $-NR^{13}C(O)R^{11}$, $-NR^{13}S(O)_nR^{12}$, $-NR^{13}S(O)_nNR^{13}R^{14}$, $-NR^{13}C(O)OR^{12}$, and $-NR^{13}C(O)NR^{13}R^{14}$,

~~lower~~C_1-C_4 alkoxy optionally substituted with one or more groups selected from halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

~~heterocycle~~ an aliphatic heterocycle ring with 3 to 7 ring atoms, said heterocycle containing at least 2 carbon atoms in addition to 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen, said heterocycle ring being optionally substituted with one or more groups selected from ~~lower~~C_1-C_4 alkyl, halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

halo, cyano,$-C(O)R^{11}$, $-C(O)OR^{11}$, $-NR^{13}R^{14}$, $-NR^{13}C(O)R^{11}$, $-NR^{13}S(O)_nR^{12}$, $-NR^{13}S(O)_nNR^{13}R^{14}$, $-NR^{13}C(O)OR^{12}$, $-NR^{13}C(O)NR^{13}R^{14}$, $-C(O)NR^{13}R^{14}$, $-S(O)_nR^{12}$, and $-S(O)_nNR^{13}R^{14}$.

1119. ~~At least one~~A compound of formula 1 as claimed in any one of claims 1 to ~~15~~7, and/or ~~at least one~~a pharmaceutically acceptable salt thereof, wherein R^4 is a 5 or 6 membered aromatic monocylic ring containing from 1 to 3 heteroatoms selected from oxygen, sulfur and nitrogen, with the remaining ring atoms being carbon~~heteroaryl~~ optionally substituted with one or more groups selected from

~~lower~~C_1-C_4 alkyl optionally substituted with one or more groups selected from hydroxy, ~~lower~~C_1-C_4 alkoxy, cyano, halo, $-C(O)OR^{11}$, $-C(O)NR^{13}R^{14}$, $-NR^{13}R^{14}$, $-OC(O)R^{11}$, $-NR^{13}C(O)R^{11}$, $-NR^{13}S(O)_nR^{12}$, $-NR^{13}S(O)_nNR^{13}R^{14}$, $-NR^{13}C(O)OR^{12}$, and $-NR^{13}C(O)NR^{13}R^{14}$,

~~lower~~C_1-C_4 alkoxy optionally substituted with one or more groups selected from halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

~~heterocycle~~an aliphatic heterocycle ring with 3 to 7 ring atoms, said heterocycle containing at least 2 carbon atoms in addition to 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen, said heterocycle ring being optionally substituted with one or more groups selected from ~~lower~~C_1-C_4 alkyl, halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

halo, cyano,-C(O)R^{11}, -C(O)OR^{11}, -N$R^{13}R^{14}$, -NR^{13}C(O)R^{11}, -NR^{13}S(O)$_n R^{12}$, -NR^{13}S(O)$_n$N$R^{13}R^{14}$, -NR^{13}C(O)OR^{12}, -NR^{13}C(O)N$R^{13}R^{14}$, -C(O)N$R^{13}R^{14}$, -S(O)$_n R^{12}$, and -S(O)$_n$N$R^{13}R^{14}$.

12~~20~~. ~~At least one~~A compound of formula 1 as claimed in claim ~~19~~11, and/or ~~at least one~~a pharmaceutically acceptable salt thereof, wherein R^4 is selected from 1H-pyrazol-1-yl, 1H-pyrazol-3-yl, 1H-pyrazol-4-yl, 1H-imidazol-1-yl, 1H-imidazol-4-yl, oxazol-2-yl, thiazol-2-yl, isoxazol-3-yl, isoxazol-5-yl, 1H-pyrrol-2-yl, 1H-pyrrol-3-yl, thiophen-2-yl, thiophen-3-yl, pyridin-2-yl, pyridin-3-yl, and pyridin-4-yl, each of which is optionally substituted with one or more groups selected from

~~lower~~C_1-C_4 alkyl optionally substituted with one or more groups selected from hydroxy, ~~lower~~C_1-C_4 alkoxy, cyano, halo, $-C(O)OR^{11}$, $-C(O)NR^{13}R^{14}$, $-NR^{13}R^{14}$, $-OC(O)R^{11}$, $-NR^{13}C(O)R^{11}$, $-NR^{13}S(O)_nR^{12}$, $-NR^{13}S(O)_nNR^{13}R^{14}$, $-NR^{13}C(O)OR^{12}$, and $-NR^{13}C(O)NR^{13}R^{14}$,

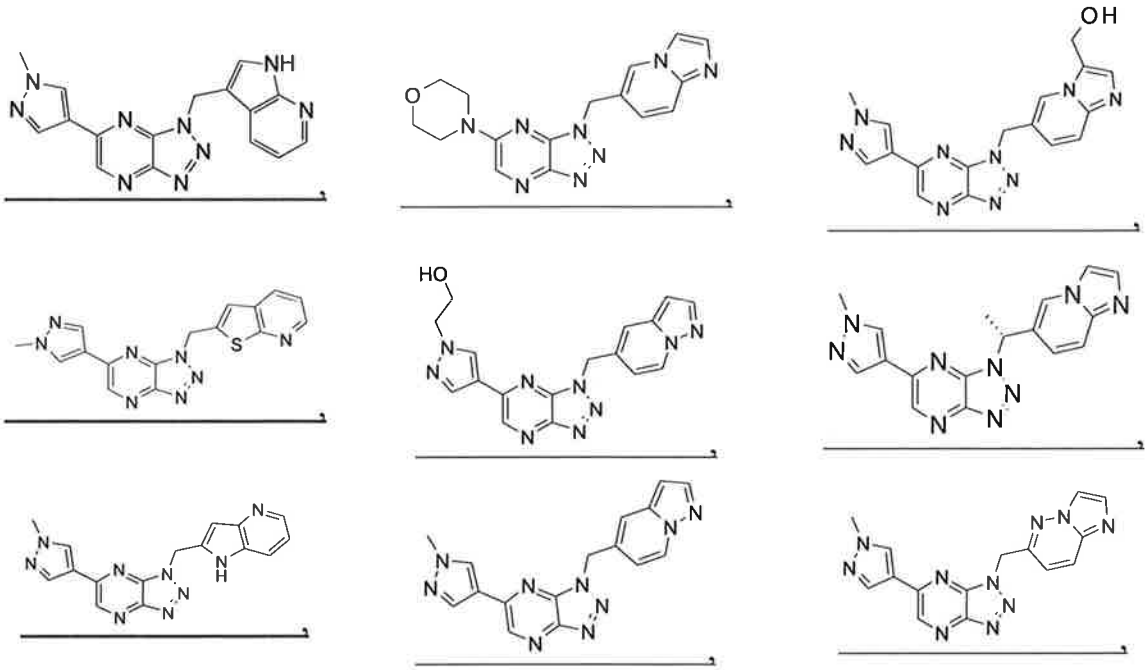
~~lower~~C_1-C_4 alkoxy optionally substituted with one or more groups selected from halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

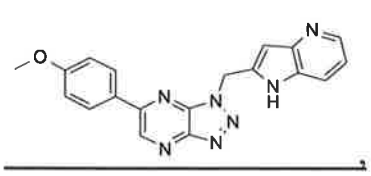
~~heterocycle~~an aliphatic heterocycle ring with 3 to 7 ring atoms, said heterocycle containing at least 2 carbon atoms in addition to 1-3 heteroatoms independently selected from oxygen, sulfur and nitrogen, said heterocycle ring being optionally substituted with one or more groups selected from ~~lower~~C_1-C_4 alkyl, halo, hydroxy, and ~~lower~~C_1-C_4 alkoxy,

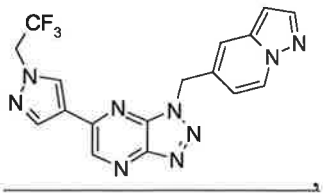
halo, cyano,$-C(O)R^{11}$, $-C(O)OR^{11}$, $-NR^{13}R^{14}$, $-NR^{13}C(O)R^{11}$, $-NR^{13}S(O)_nR^{12}$, $-NR^{13}S(O)_nNR^{13}R^{14}$, $-NR^{13}C(O)OR^{12}$, $-NR^{13}C(O)NR^{13}R^{14}$, $-C(O)NR^{13}R^{14}$, $-S(O)_nR^{12}$, and $-S(O)_nNR^{13}R^{14}$.

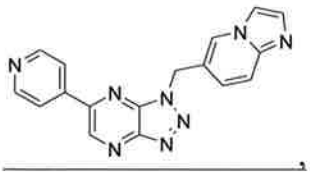
13. A compound of formula 1 as claimed in claim 12 and/or a pharmaceutically acceptable salt thereof, wherein R^4 is 1H-pyrazol-4-yl optionally substituted with C_1-C_4 alkyl.

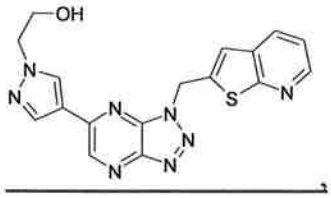
14. A compound of formula 1 as claimed in claim 1, or a pharmaceutically acceptable salt thereof which is selected from:

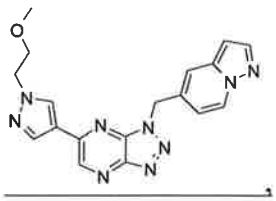


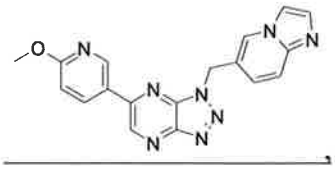


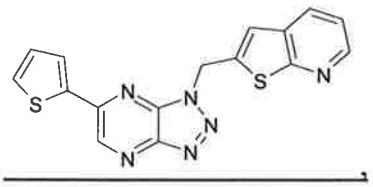


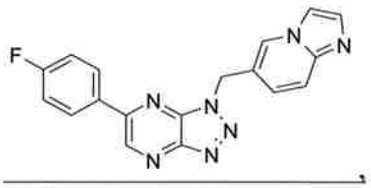


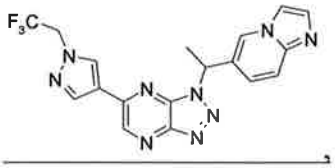


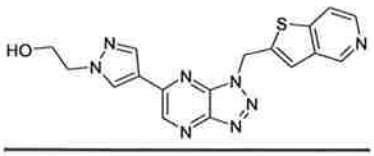


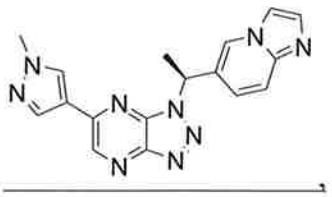


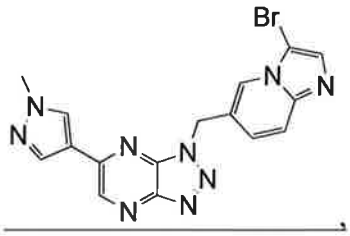


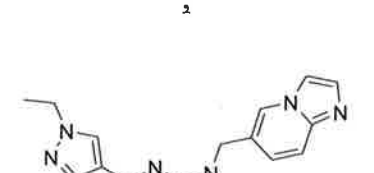


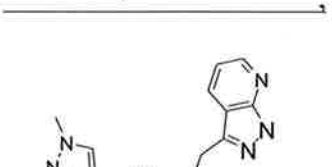


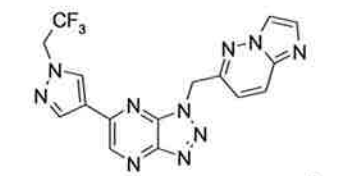


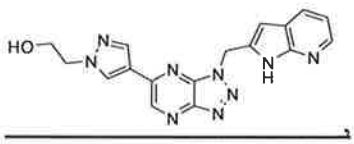


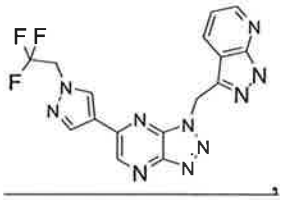


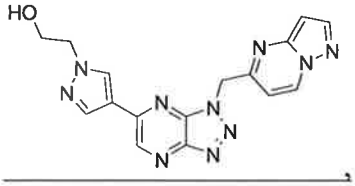


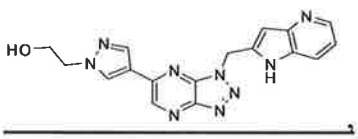


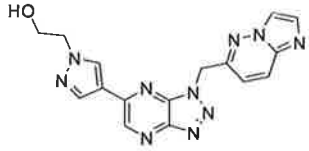


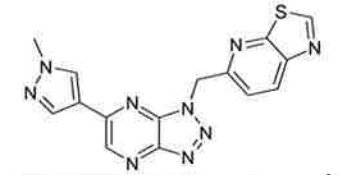


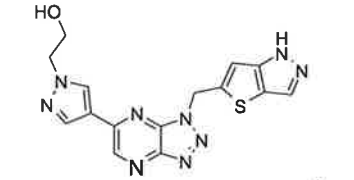


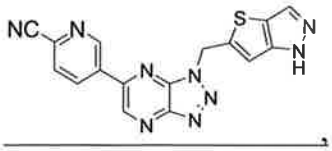


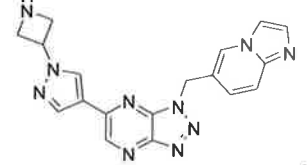




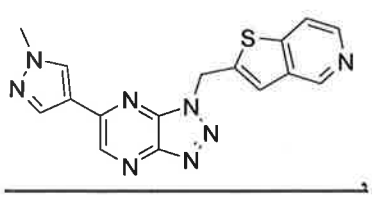


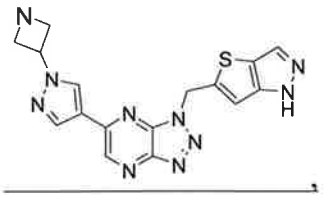


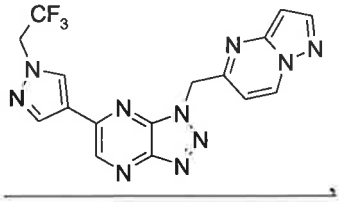


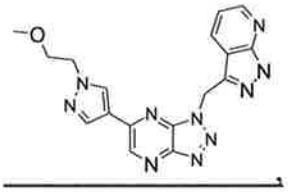


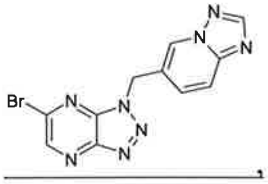


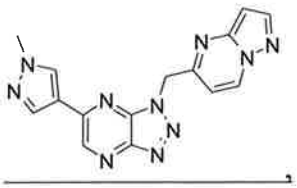


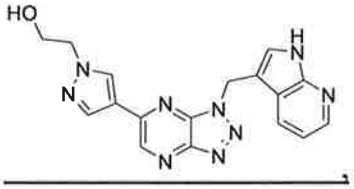


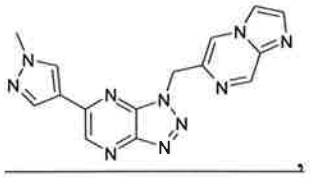


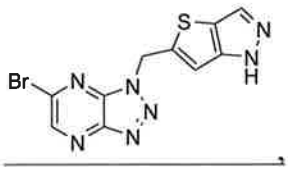


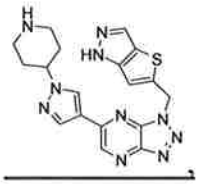


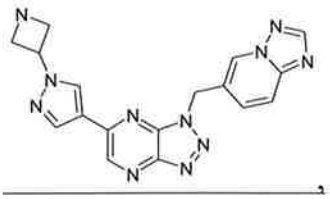


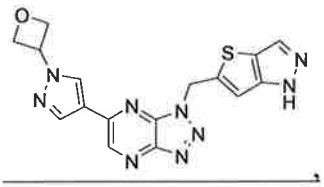


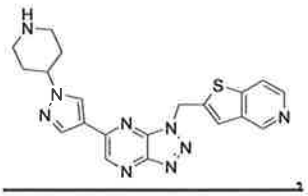


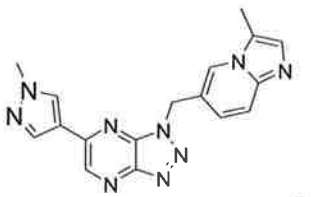


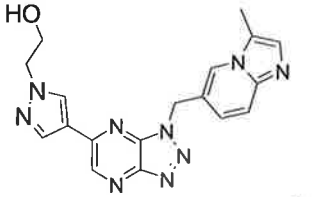


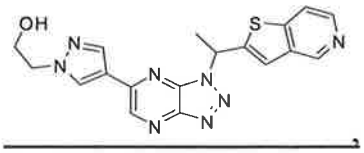


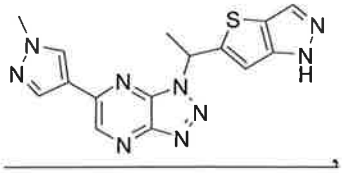


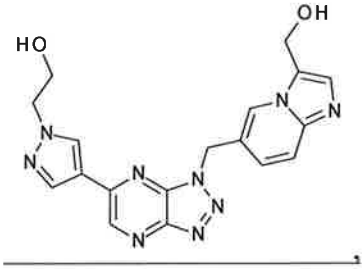


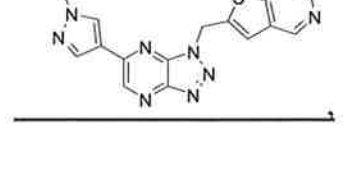


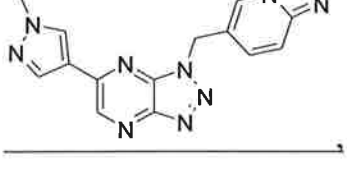


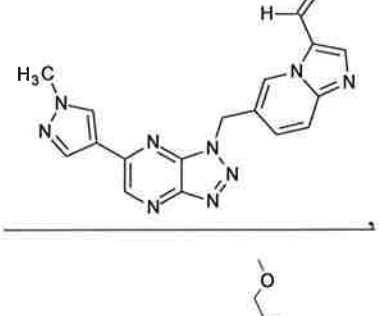


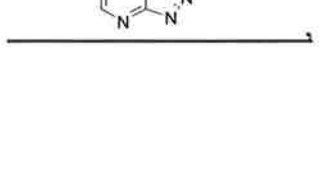


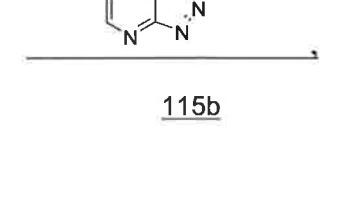


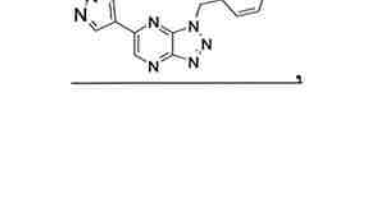


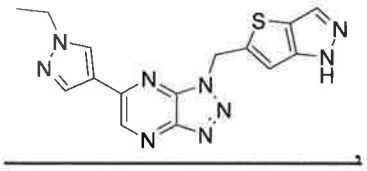


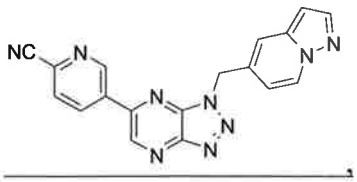


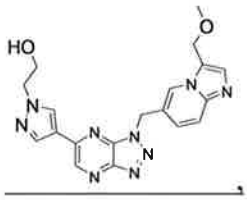


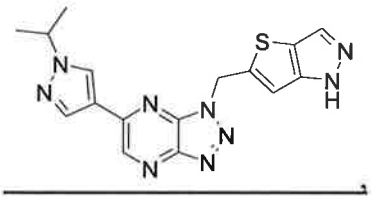


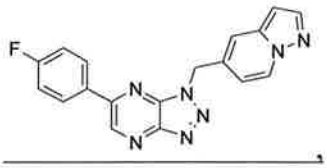


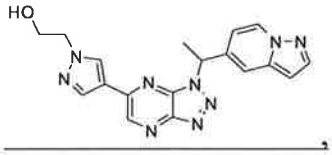


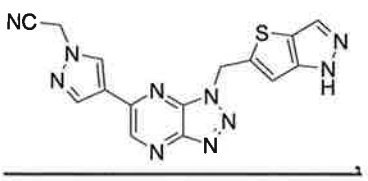


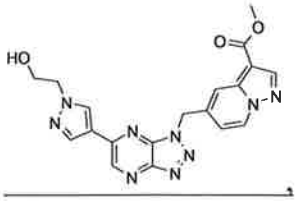


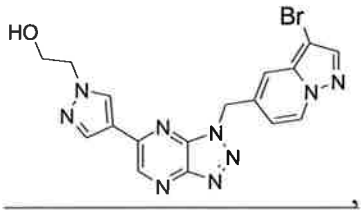


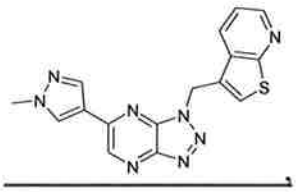


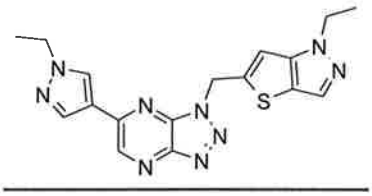


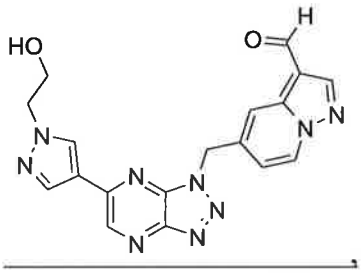


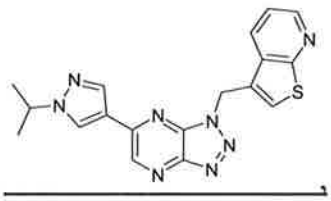


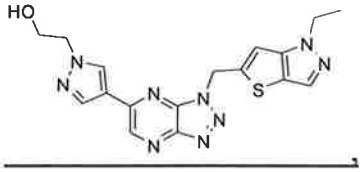


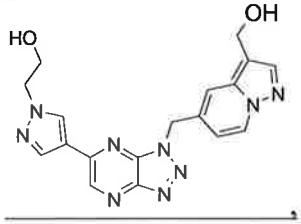


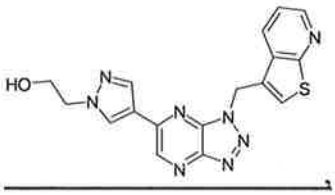


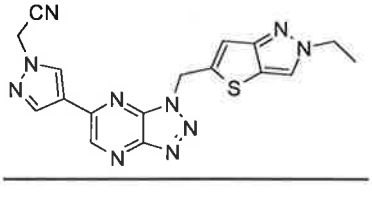


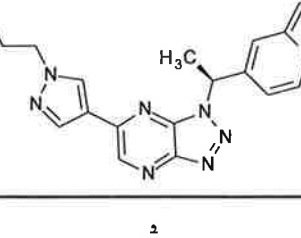


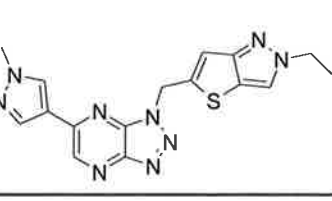


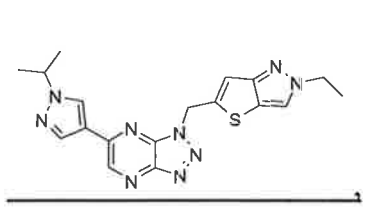


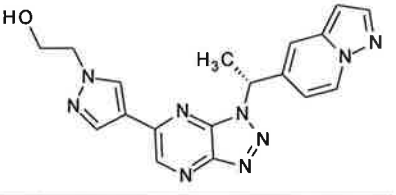




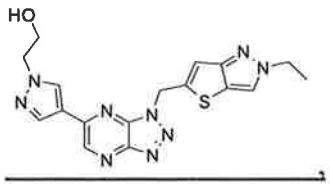


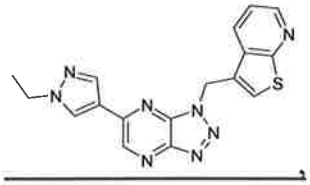


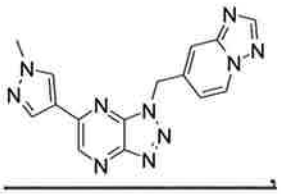


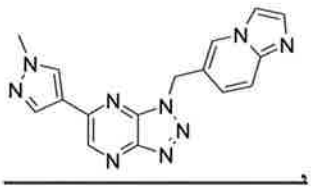


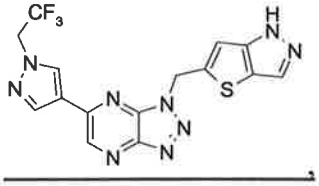


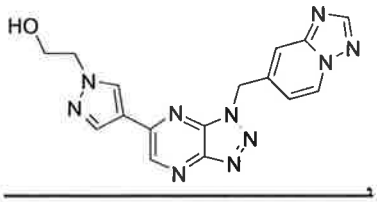


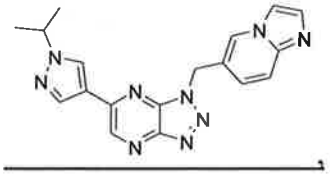


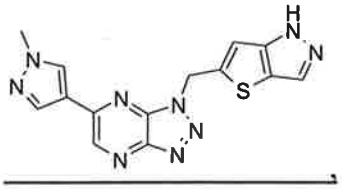


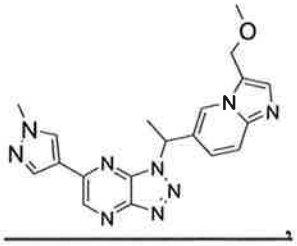


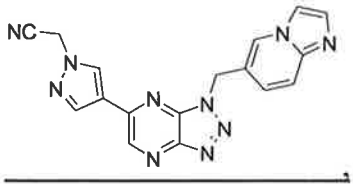


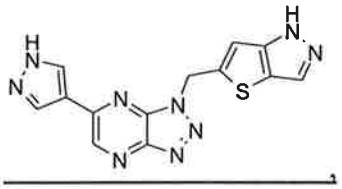


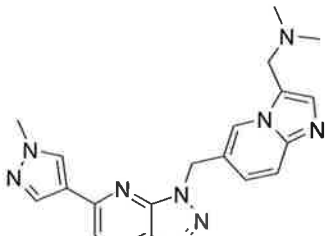


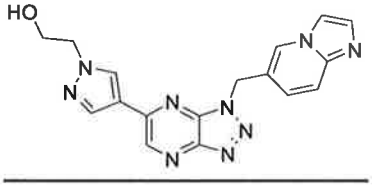


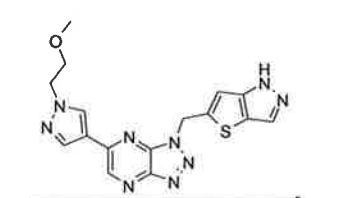


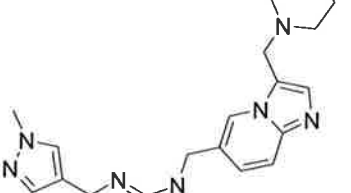


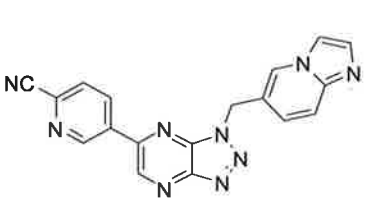


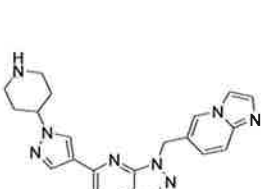


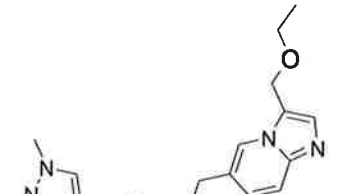


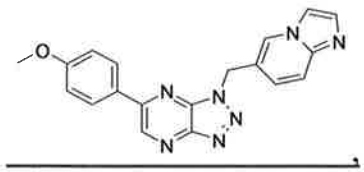


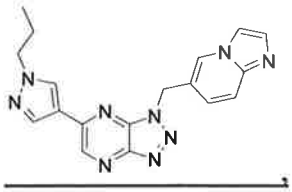


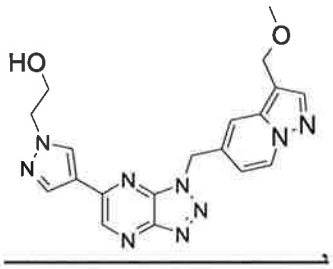


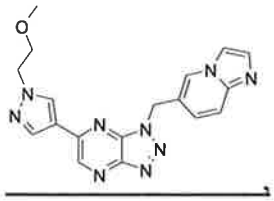


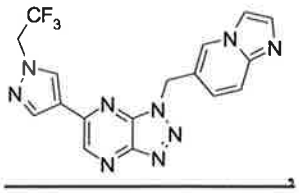


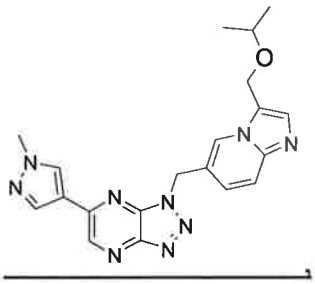


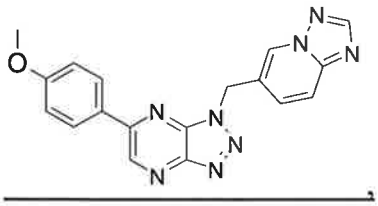


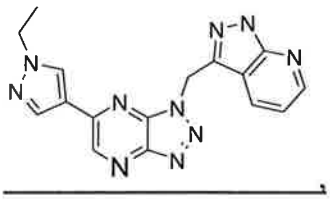


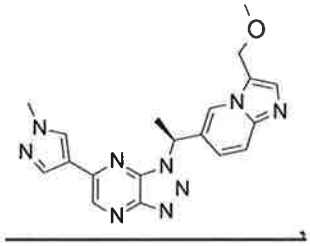


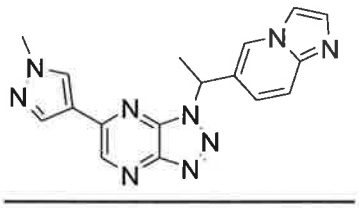


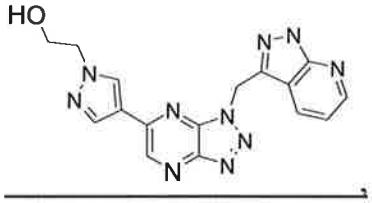


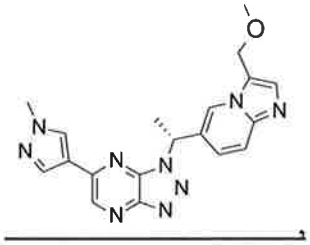


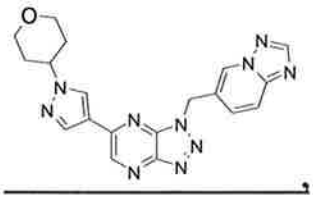


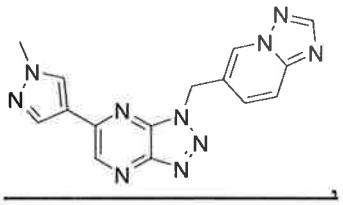


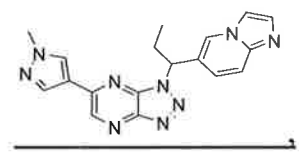


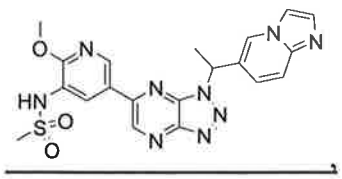


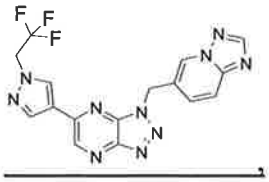


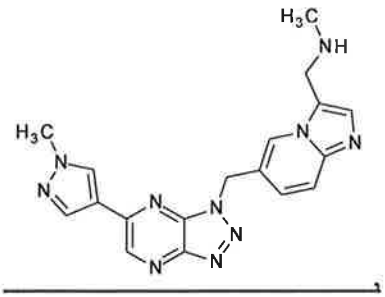


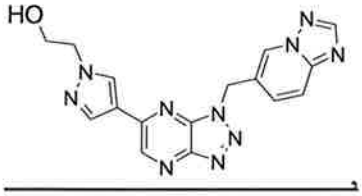


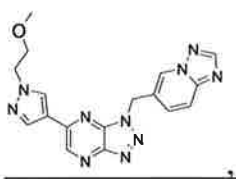




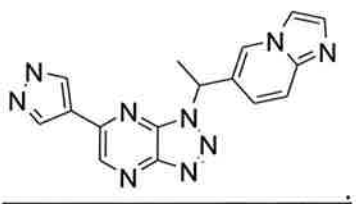




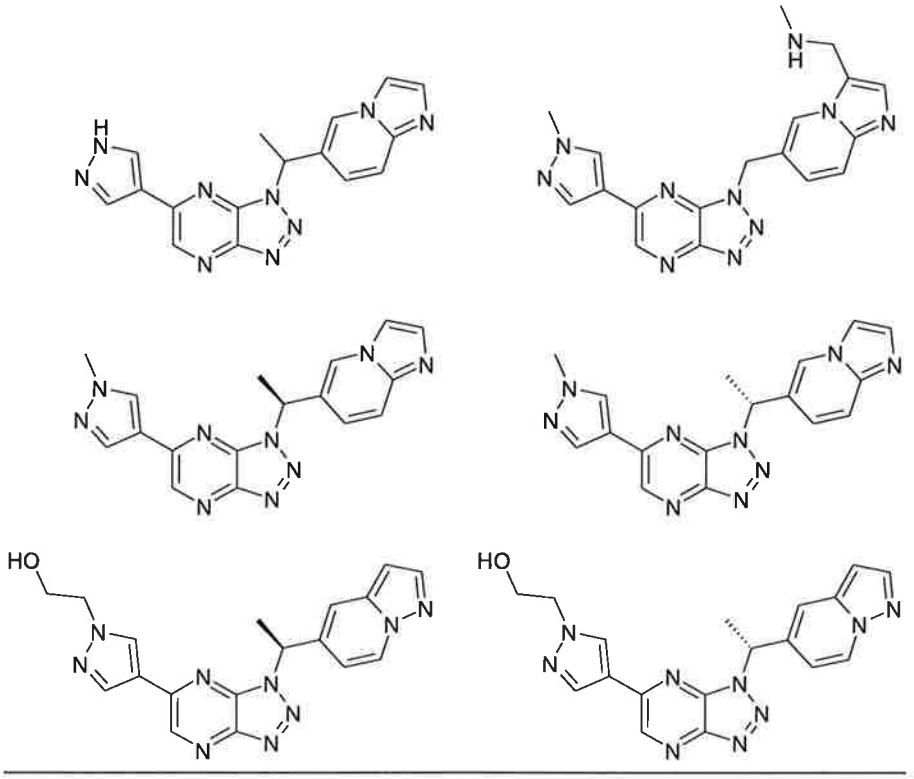




, and

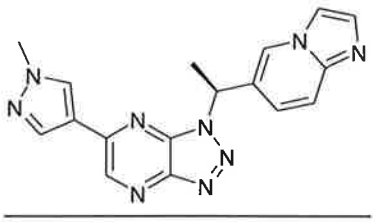


15. A compound of formula 1 as claimed in claim 1 which is selected from:



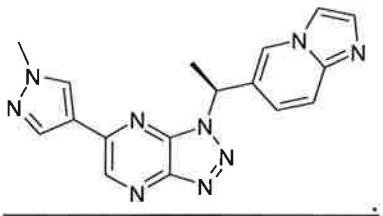
and/or a pharmaceutically acceptable salt thereof.

16. A compound of formula 1 as claimed in claim 1 which is:



and/or a pharmaceutically acceptable salt thereof.

17. A compound of formula 1 as claimed in claim 1 which is:



.

~~21. At least one compound selected from compounds 1 to 332 and/or at least one pharmaceutically acceptable salt thereof.~~

~~22~~18. A composition comprising ~~at least one~~a compound of any one of claims 1 to 16, and/or ~~at least one~~a pharmaceutically acceptable salt thereof and ~~at least one~~a pharmaceutically acceptable carrier.

~~23. A method of inhibiting the activity of c-Met comprising contacting the receptor with an effective amount of at least one compound of any one of claims 1 to 21, and/or at least one pharmaceutically acceptable salt thereof.~~

~~24~~19. Use of ~~at least one~~a compound of formula 1 as claimed in any one of claims 1 to ~~21~~16, and/or ~~at least one~~a pharmaceutically acceptable salt thereof in the manufacture of a medicament for treating cancer responsive to inhibition of c-Met.

~~25~~20. Use of ~~at least one~~a compound of formula 1 as claimed in any one of claims 1 to ~~21~~16, and/or ~~at least one~~a pharmaceutically acceptable salt thereof in the manufacture of a medicament for treating cancer responsive to inhibition of c-Met comprising a step of administering to the subject an amount of an additional anti-neoplastic agent, wherein said anti-neoplastic agent is different from said ~~at least one~~ compound of any one of claims 1 to ~~21~~16, ~~and~~/or ~~at least one~~a pharmaceutically acceptable salt thereof.

21. Use of a compound of formula 1 as claimed in any one of claims 1 to 16, and/or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for treating cancer responsive to inhibition of c-Met, wherein the medicament is administered in combination with Gefitinib.

22. Use of a compound of formula 1 as claimed in any one of claims 1 to 16, and/or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for treating cancer responsive to inhibition of c-Met, wherein the medicament is administered in combination with Docetaxel.