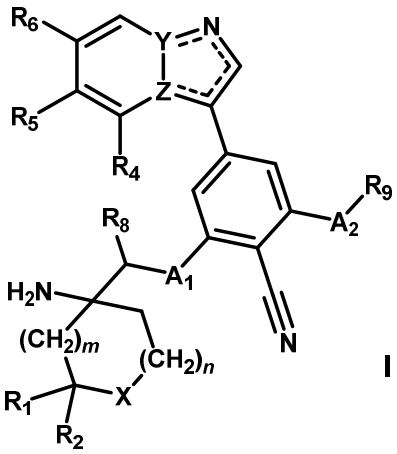
Claims

1. A compound of formula **I** having the structure:



I

or a pharmaceutically acceptable salt thereof, wherein

A_1 and A_2 are independently O or S;

X is selected from CH_2, CD_2, NR_3, O, and S, where R_3 is selected from hydrogen, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, and hydroxyl(C_1-C_4)linear or branched chain alkyl;

Y and Z are selected from C and N, where when Y is C, then Z is N, and when Y is N, then Z is C;

R_1 and R_2 are independently selected from hydrogen, deuterium, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, hydroxyl(C_1-C_4)linear or branched chain alkyl, cyano(C_1-C_4)linear or branched chain alkyl, and C_1-C_3 alkoxy(C_1-C_4)linear or branched chain alkyl; or a C_1-C_2 alkyl substituted with a C_3-C_5 cycloalkyl ring; or taken together to form a C_3-C_6 cycloalkyl ring; or where X is CH_2 or CD_2, then R_1 and R_2 are independently selected from hydrogen, deuterium, halogen, hydroxyl, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, hydroxyl(C_1-C_4)linear or branched chain alkyl, cyano(C_1-C_4)linear or branched chain alkyl, and C_1-C_3 alkoxy(C_1-C_4)linear or branched chain alkyl, and a C_1-C_2 alkyl substituted with a C_3-C_5 cycloalkyl ring;

R_4 is selected from hydrogen, deuterium, cyano, halogen, (C_1-C_3) alkoxy, halo(C_1-C_3) alkoxy, C_1-C_3 alkyl-substituted thiol, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, and a hydroxyl(C_1-C_4)linear or branched chain alkyl;

R_5 is selected from hydrogen, deuterium, halogen, C_1-C_3 alkoxy, amino, (C_1-C_4 linear or branched chain alkyl)amino, di(C_1-C_4 linear or branched chain alkyl)amino, (4-6 membered)heterocyclic, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, and a hydroxyl(C_1-C_4)linear or branched chain alkyl;

R_6 is selected from hydrogen, deuterium, halogen, C_1-C_4 linear or branched chain alkoxy, $CONH_2$, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl,

hydroxyl(C_1-C_4)linear or branched chain alkyl, and CO_2R_7 where R_7 is selected from H and C_1-C_4 linear or branched chain alkyl;
R_8 is selected from hydrogen, deuterium, and C_1-C_3 linear or branched chain alkyl;
R_9 is selected from C_1-C_3 linear or branched chain alkyl, and a halo(C_1-C_3)linear or branched chain alkyl; and,
n and *m* are independently selected from 0, 1 and 2.

2. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein A_1 is O.

3. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein A_2 is O or S.

4. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R_1 and R_2 are independently selected from ethyl, methyl, and H.

5. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R_4 is cyano or methoxy.

6. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R_5 is H, azetidine, pyrrolidine, or dimethylamino.

7. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R_6 is H.

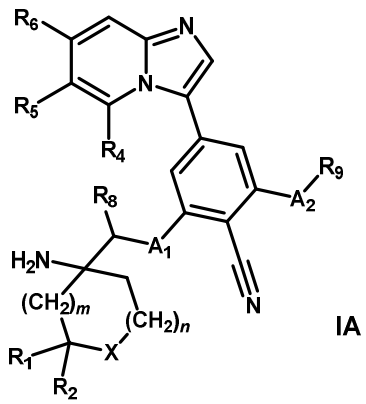
8. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R_8 is H.

9. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R_9 is methyl.

10. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein X is O or CH_2.

11. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein *m* is 0 and *n* is 1; or *m* is 1 and *n* is 1.

12. A compound of formula **IA** having the structure:



IA

or a pharmaceutically acceptable salt thereof, wherein

A_1 and A_2 are independently O or S;

X is selected from CH_2, CD_2, NR_3, O, and S, where R_3 is selected from hydrogen, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, and hydroxyl(C_1-C_4)linear or branched chain alkyl;

R_1 and R_2 are independently selected from hydrogen, deuterium, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, hydroxyl(C_1-C_4)linear or branched chain alkyl, cyano(C_1-C_4)linear or branched chain alkyl, and C_1-C_3 alkoxy(C_1-C_4)linear or branched chain alkyl; or a C_1-C_2 alkyl substituted with a C_3-C_5 cycloalkyl ring; or taken together to form a C_3-C_6 cycloalkyl ring; or where X is CH_2 or CD_2, then R_1 and R_2 are independently selected from hydrogen, deuterium, halogen, hydroxyl, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, hydroxyl(C_1-C_4)linear or branched chain alkyl, cyano(C_1-C_4)linear or branched chain alkyl, and C_1-C_3 alkoxy(C_1-C_4)linear or branched chain alkyl, and a C_1-C_2 alkyl substituted with a C_3-C_5 cycloalkyl ring;

R_4 is selected from hydrogen, deuterium, cyano, halogen, (C_1-C_3) alkoxy, halo(C_1-C_3) alkoxy, C_1-C_3 alkyl-substituted thiol, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, and a hydroxyl(C_1-C_4)linear or branched chain alkyl;

R_5 is selected from hydrogen, deuterium, halogen, C_1-C_3 alkoxy, amino, (C_1-C_4 linear or branched chain alkyl)amino, di(C_1-C_4 linear or branched chain alkyl)amino, (4-6 membered)heterocyclic, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, and a hydroxyl(C_1-C_4)linear or branched chain alkyl;

R_6 is selected from hydrogen, deuterium, halogen, C_1-C_4 linear or branched chain alkoxy, $CONH_2$, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, hydroxyl(C_1-C_4)linear or branched chain alkyl, and CO_2R_7 where R_7 is selected from H and C_1-C_4 linear or branched chain alkyl;

R_8 is selected from hydrogen, deuterium, and C_1-C_3 linear or branched chain alkyl;

R_9 is selected from C_1-C_3 linear or branched chain alkyl, and a halo(C_1-C_3)linear or branched chain alkyl; and,

n and *m* are independently selected from 0, 1 and 2.

13. The compound of claim 12 or a pharmaceutically acceptable salt thereof, wherein at least one of:

A_1 is O;

A_2 is O or S;

R_1 and R_2 are both H;

R_4 is cyano;

R_5 is H;

R_6 is H;

R_8 is H;

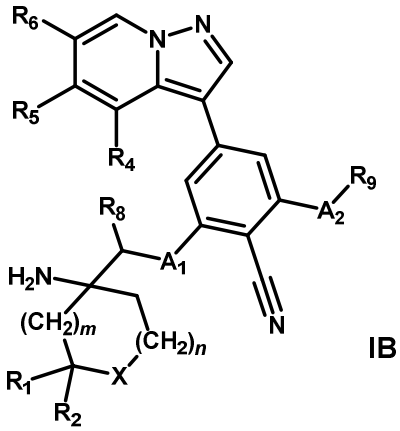
R_9 is methyl;

X is CH_2;

X is O; or

wherein *m* is 0 and *n* is 1, or *m* is 1 and *n* is 1.

14. A compound of formula **IB** having the structure:



IB

or a pharmaceutically acceptable salt thereof, wherein

A_1 and A_2 are independently O or S;

X is selected from CH_2, CD_2, NR_3, O, and S, where R_3 is selected from hydrogen, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, and hydroxyl(C_1-C_4)linear or branched chain alkyl;

R_1 and R_2 are independently selected from hydrogen, deuterium, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, hydroxyl(C_1-C_4)linear or branched chain alkyl, cyano(C_1-C_4)linear or branched chain alkyl, and C_1-C_3 alkoxy(C_1-C_4)linear or branched chain alkyl; or a C_1-C_2 alkyl substituted with a C_3-C_5 cycloalkyl ring; or taken together to form a C_3-C_6 cycloalkyl ring; or where X is CH_2 or CD_2, then R_1 and R_2 are independently selected from hydrogen, deuterium, halogen, hydroxyl, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, hydroxyl(C_1-C_4)linear or branched chain alkyl, cyano(C_1-C_4)linear or

branched chain alkyl, and C_1-C_3 alkoxy(C_1-C_4)linear or branched chain alkyl, and a C_1-C_2 alkyl substituted with a C_3-C_5 cycloalkyl ring;
R_4 is selected from hydrogen, deuterium, cyano, halogen, (C_1-C_3) alkoxy, halo(C_1-C_3) alkoxy, C_1-C_3 alkyl-substituted thiol, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, and a hydroxyl(C_1-C_4)linear or branched chain alkyl;
R_5 is selected from hydrogen, deuterium, halogen, C_1-C_3 alkoxy, amino, (C_1-C_4 linear or branched chain alkyl)amino, di(C_1-C_4 linear or branched chain alkyl)amino, (4-6 membered)heterocyclic, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, and a hydroxyl(C_1-C_4)linear or branched chain alkyl;
R_6 is selected from hydrogen, deuterium, halogen, C_1-C_4 linear or branched chain alkoxy, $CONH_2$, C_1-C_4 linear or branched chain alkyl, halo(C_1-C_4)linear or branched chain alkyl, hydroxyl(C_1-C_4)linear or branched chain alkyl, and CO_2R_7 where R_7 is selected from H and C_1-C_4 linear or branched chain alkyl;
R_8 is selected from hydrogen, deuterium, and C_1-C_3 linear or branched chain alkyl;
R_9 is selected from C_1-C_3 linear or branched chain alkyl, and a halo(C_1-C_3)linear or branched chain alkyl; and,
n and *m* are independently selected from 0, 1 and 2.

15. The compound of claim 14 or a pharmaceutically acceptable salt thereof, wherein at least one of:
A_1 is O;
A_2 is O or S;
R_1 and R_2 are independently selected from ethyl, methyl, and H;
R_4 is cyano or methoxy;
R_5 is H, azetidine, pyrrolidine, or dimethylamino;
R_6 is H;
R_8 is H;
R_9 is methyl;
X is CH_2;
X is O; or
wherein *m* is 0 and *n* is 1, or *m* is 1 and *n* is 1.

16. The compound of claim 1 selected from the group consisting of:
2-((1-Aminocyclopentyl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
2-(((1S,2R)-1-Amino-2-ethylcyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;

2-(((1R,2S)-1-Amino-2-ethylcyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
2-((1-Amino-3-ethylcyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
2-(((1R,3R)-1-Amino-3-ethylcyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
2-(((1S,3S)-1-Amino-3-ethylcyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
2-(((1R,3S)-1-Amino-3-ethylcyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
2-(((1S,3R)-1-Amino-3-ethylcyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
2-(((1S,2S)-1-Amino-2-ethylcyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
2-(((1R,2R)-1-Amino-2-ethylcyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
3-(3-(((1S,2R)-1-Amino-2-ethylcyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-(((1R,2S)-1-Amino-2-ethylcyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;
2-((1-Amino-2-ethylcyclopentyl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
2-(((1S,2R)-1-Amino-2-ethylcyclopentyl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
2-(((1R,2S)-1-amino-2-ethylcyclopentyl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
2-(((2S,3R)-3-Amino-2-ethyltetrahydrofuran-3-yl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
2-(((2R,3R)-3-Amino-2-ethyltetrahydrofuran-3-yl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
2-(((2R,3S)-3-Amino-2-ethyltetrahydrofuran-3-yl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)-benzonitrile;
2-(((2S,3S)-3-Amino-2-ethyltetrahydrofuran-3-yl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
(R)-3-(3-((1-Amino-3,3-difluorocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;
(S)-3-(3-((1-amino-3,3-difluorocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;

(R)-2-((1-Amino-3,3-difluorocyclopentyl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
(S)-2-((1-Amino-3,3-difluorocyclopentyl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
(R)-3-(3-((1-Amino-3,3-dimethylcyclohexyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;
(S)-3-(3-((1-amino-3,3-dimethylcyclohexyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;
2-(((1R,3R)-1-Amino-3-ethylcyclohexyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
2-(((1S,3S)-1-Amino-3-ethylcyclohexyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
3-(3-(((1S,3S)-1-Amino-3-ethylcyclohexyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-(((1R,3R)-1-Amino-3-ethylcyclohexyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;
(S)-2-((1-Aminospiro[4.4]nonan-1-yl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
(R)-2-((1-Aminospiro[4.4]nonan-1-yl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
(S)-2-((3-Amino-1-(2,2,2-trifluoroethyl)piperidin-3-yl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
(R)-2-((3-Amino-1-(2,2,2-trifluoroethyl)piperidin-3-yl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
(R)-2-((3-Aminotetrahydrothiophen-3-yl)methoxy)-4-(imidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
(S)-2-((3-Aminotetrahydrothiophen-3-yl)methoxy)-4-(imidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
(R)-2-((3-Aminotetrahydrofuran-3-yl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
(S)-2-((3-Aminotetrahydrofuran-3-yl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
(R)-2-((1-Amino-3,3-difluorocyclopentyl)methoxy)-4-(imidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
(S)-2-((1-Amino-3,3-difluorocyclopentyl)methoxy)-4-(imidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
(R)-3-(3-((3-Aminotetrahydrothiophen-3-yl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;

(S)-3-(3-((3-Aminotetrahydrothiophen-3-yl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;
2-((1-Aminocyclohexyl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
(R)-2-((3-Aminotetrahydrothiophen-3-yl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
(S)-2-((3-Aminotetrahydrothiophen-3-yl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
2-(((1S)-1-Amino-3-(methoxymethyl)cyclohexyl)methoxy)-4-(imidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
2-(((1R)-1-Amino-3-(methoxymethyl)-cyclohexyl)methoxy)-4-(imidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
2-(((1S,2S)-1-Amino-2-(cyclopropylmethyl)cyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
2-(((1R,2R)-1-Amino-2-(cyclopropylmethyl)cyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
2-(((1S,2R)-1-Amino-2-(cyclopropylmethyl)cyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
2-(((1R,2S)-1-Amino-2-(cyclopropylmethyl)cyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
2-(((1S,3S)-1-Amino-3-(trifluoromethyl)cyclohexyl)methoxy)-4-(imidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
2-(((1R,3R)-1-Amino-3-(trifluoromethyl)cyclohexyl)methoxy)-4-(imidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
2-(((1R,3S)-1-Amino-3-(trifluoromethyl)cyclohexyl)methoxy)-4-(imidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
2-(((1S,3R)-1-Amino-3-(trifluoromethyl)cyclohexyl)methoxy)-4-(imidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
3-(3-((1-Aminocyclohexyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)pyrazolo[1,5-a]pyridine-4-carbonitrile;
Ethyl 3-(3-((1-aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)-5-cyanoimidazo[1,2-a]pyridine-7-carboxylate;
3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)-6-methoxyimidazo[1,2-a]pyridine-5-carbonitrile;

3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)-7-methylimidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)-6-(dimethylamino)imidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)-6-ethylimidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)-6-methylimidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)-7-chloroimidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclohexyl)methoxy)-4-cyano-5-(methylthio)phenyl)pyrazolo[1,5-a]pyridine-4-carbonitrile;
6-Amino-3-(3-((1-aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)-6-(azetidin-1-yl)imidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)-6-(pyrrolidin-1-yl)imidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-methoxyphenyl)-6-(dimethylamino)imidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclohexyl)methoxy)-4-cyano-5-(methylthio)phenyl)-6-methoxyimidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)-7-methoxyimidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclohexyl)methoxy)-4-cyano-5-(methylthio)phenyl)-7-methoxyimidazo[1,2-a]pyridine-5-carbonitrile;
3-(3-((1-Aminocyclohexyl)methoxy)-4-cyano-5-methoxyphenyl)-7-methoxyimidazo[1,2-a]pyridine-5-carbonitrile; and
3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)-6-(methylamino)imidazo[1,2-a]pyridine-5-carbonitrile
or, a pharmaceutically acceptable salt thereof.

17. 3-(3-((1-Aminocyclohexyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile; or, a pharmaceutically acceptable salt thereof.

18. 2-(((1S,2R)-1-Amino-2-ethylcyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile; or, a pharmaceutically acceptable salt thereof.

19. 2-(((2S,3R)-3-Amino-2-ethyltetrahydrofuran-3-yl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile; or, a pharmaceutically acceptable salt thereof.

20. 3-(3-(((1S,2R)-1-Amino-2-ethylcyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile; or, a pharmaceutically acceptable salt thereof.

21. 3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)-6-(dimethylamino)imidazo[1,2-a]pyridine-5-carbonitrile; or, a pharmaceutically acceptable salt thereof.

22. A pharmaceutical composition comprising a compound according to claim 1, or a pharmaceutically acceptable salt thereof, or a pharmaceutically acceptable solvate of said compound or salt, and a pharmaceutically acceptable excipient.

23. Use of a compound of any of claims 1 to 21, or a pharmaceutically acceptable salt thereof, or a pharmaceutically acceptable solvate of said compound or salt, in the manufacture of a medicament for treating a disease or condition selected from inflammation, autoimmune disease, neuroinflammation, arthritis, rheumatoid arthritis, spondyloarthropathies, systemic lupus erythematous, lupus nephritis, osteoarthritis, gouty arthritis, pain, fever, pulmonary sarcoidosis, silicosis, cardiovascular disease, atherosclerosis, myocardial infarction, thrombosis, congestive heart failure and cardiac reperfusion injury, cardiomyopathy, stroke, ischemia, reperfusion injury, brain edema, brain trauma, neurodegeneration, liver disease, inflammatory bowel disease, Crohn’s disease, ulcerative colitis, nephritis, retinitis, retinopathy, macular degeneration, glaucoma, diabetes (type 1 and type 2), diabetic neuropathy, viral and bacterial infection, myalgia, endotoxic shock, toxic shock syndrome, osteoporosis, multiple sclerosis, endometriosis, menstrual cramps, vaginitis, candidiasis, cancer, gastrointestinal cancer, fibrosis, obesity, muscular dystrophy, polymyositis, dermatomyositis, autoimmune hepatitis, primary biliary cirrhosis, primary sclerosing cholangitis, vitiligo, Alzheimer’s disease, skin flushing, eczema, psoriasis, atopic dermatitis, sunburn, keloid, hypertrophic scar, rheumatic diseases, urticaria, discoid lupus, cutaneous lupus, central nervous system lupus, psoriatic arthritis, asthma, allergic asthma, type I interferonopathies including Aicardi–Goutières syndrome and other mendelian diseases of overexpression of type I interferon, primary progressive multiple sclerosis, relapsing remitting multiple sclerosis, non-alcoholic fatty liver disease, non-alcoholic steatohepatitis, scleroderma, alopecia areata, scarring alopecia, prurigo, prurigo nodularis, CPUO, lichen diseases, lichen planus, Steven’s Johnson’s syndrome, spondylopathy, myositis, vasculitis, pemphigus, lupus, major depression disorder, allergy, dry eye syndrome, transplant rejection, cancer, septic shock, cardiopulmonary dysfunction, acute

respiratory disease, ankylosing spondylitis, cachexia, chronic graft-versus-host disease, acute graft-versus-host disease, Celiac Sprue, idiopathic thrombocytopenic thrombotic purpura, thrombotic thrombocytopenic purpura, myasthenia gravis, Sjogren's syndrome, epidermal hyperplasia, cartilage inflammation, bone degradation, juvenile arthritis, juvenile rheumatoid arthritis, pauciarticular juvenile rheumatoid arthritis, polyarticular juvenile rheumatoid arthritis, systemic onset juvenile rheumatoid arthritis, juvenile ankylosing spondylitis, juvenile enteropathic arthritis, juvenile Reter's Syndrome, SEA Syndrome, juvenile dermatomyositis, juvenile psoriatic arthritis, juvenile scleroderma, juvenile systemic lupus erythematosus, juvenile vasculitis, pauciarticular rheumatoid arthritis, polyarticular rheumatoid arthritis, systemic onset rheumatoid arthritis, enteropathic arthritis, reactive arthritis, Reter's Syndrome, myolitis, polymyolitis, dermatomyolitis, polyarteritis nodosa, Wegener's granulomatosis, arteritis, polymyalgia rheumatica, sarcoidosis, sclerosis, primary biliary sclerosis, sclerosing cholangitis, dermatitis, Still's disease, chronic obstructive pulmonary disease, Guillain-Barre disease, Graves' disease, Addison's disease, Raynaud's phenomenon, psoriatic epidermal hyperplasia, plaque psoriasis, guttate psoriasis, inverse psoriasis, pustular psoriasis, erythrodermic psoriasis, an immune disorder associated with or arising from activity of pathogenic lymphocytes, noninfectious uveitis, Behcet’s disease and Vogt–Koyanagi–Harada syndrome.

24. Use of a compound of any of claims 1 to 21, or a pharmaceutically acceptable salt thereof, or a pharmaceutically acceptable solvate of said compound or salt, in the manufacture of a medicament for treating inflammatory bowel disease, Crohn’s disease, ulcerative colitis, or gastrointestinal cancer.

25. The use of claim 23, wherein the compound is selected from the group consisting of:
3-(3-((1-Aminocyclohexyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile;
2-(((1S,2R)-1-Amino-2-ethylcyclopentyl)methoxy)-6-methoxy-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)benzonitrile;
2-(((2S,3R)-3-Amino-2-ethyltetrahydrofuran-3-yl)methoxy)-4-(5-methoxyimidazo[1,2-a]pyridin-3-yl)-6-(methylthio)benzonitrile;
3-(3-(((1S,2R)-1-Amino-2-ethylcyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)imidazo[1,2-a]pyridine-5-carbonitrile; and
3-(3-((1-Aminocyclopentyl)methoxy)-4-cyano-5-(methylthio)phenyl)-6-(dimethylamino)imidazo[1,2-a]pyridine-5-carbonitrile;
or, a pharmaceutically acceptable salt thereof.

26. Use of a compound according to any of claims 1 to 21, in the manufacture of a medicament for the treatment of a disorder for which an SIK inhibitor is indicated.

27. Use of a compound according to any of claims 1 to 21, in the manufacture of a medicament for the treatment of inflammatory bowel disease, Crohn's disease, ulcerative colitis, or gastrointestinal cancer.

28. A compound according to any of claims 1 to 21, for use in therapy.