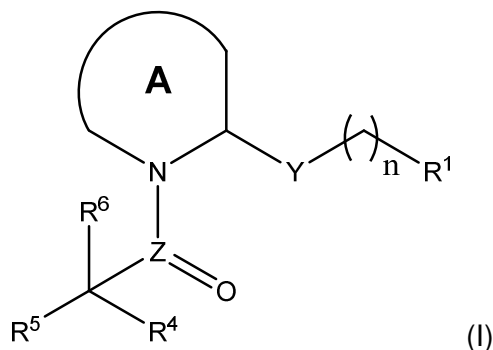


Claims

1. Non-medical A method of modulating of transient receptor potential channel melastatin member 8 (TRPM8) comprising bringing the receptor into contact with a compound of formula (I), a salt or solvate thereof



wherein

n is 0 or 1;

R¹ is selected from

i) ~~halogen~~,

ii) ~~i)~~ C₆ – C₁₀ aryl,

iii) ~~ii)~~ C₅-C₁₀ mono- or bicyclic heteroaryl wherein up to 2 C-atoms are replaced by a hetero atoms independently selected from sulfur, nitrogen, and oxygen,

iv) ~~iii)~~ C₆ – C₁₀ aryl substituted with up to four substituents independently

selected from the group consisting of

halogen; OH; C≡N; NO₂; C₁-C₆ alkyl;

C₁-C₆ alkyl comprising up to 5 halogen atoms;

C₁-C₃ alkyl comprising up to 3 OH groups;

C₂-C₆ alkenyl;

C₁-C₆ alkoxy;

C₁-C₆ alkoxy comprising up to 3 halogen atoms;

C₁-C₃ alkoxy C₁-C₃ alkyl;

C₃-C₇ cycloalkyl;

–C(O)R¹⁰ wherein R¹⁰ is selected from C₁-C₃ alkyl;

–OC(O)R¹¹ wherein R¹¹ is selected from H, and C₁-C₃ alkyl;

–C(O)O-R¹² wherein R¹² is selected from hydrogen and C₁-C₃ alkyl;

– (CH₂)_mN(R¹³)R¹⁴ wherein m is 0 or 1, R¹³ is selected from hydrogen, C₁-C₃ alkyl, and –SO₂R¹⁵ wherein R¹⁵ is C₁-C₃ alkyl, and R¹⁴ is selected from hydrogen, C₁-C₃ alkyl, and –SO₂R¹⁶ wherein R¹⁶ is C₁-C₃ alkyl, or wherein R¹³ and R¹⁴ form together with the N atom to which they are attached morpholine, thiomorpholine, or 1,1-dioxothiomorpholine;

–SR¹⁷ wherein R¹⁷ is selected from hydrogen and C₁-C₃ alkyl; and

–S(O)₂R¹⁸ wherein R¹⁸ is selected from hydrogen and C₁-C₃ alkyl;

with the proviso that when the aryl ring is substituted with two or more substituents, two substituents may form a cyclic ring together with the carbon atoms to which they are attached,

and

~~v~~iv) C₅-C₁₀ mono- or bicyclic heteroaryl wherein up to 2 C-atoms are replaced by a hetero atoms independently selected from sulfur, nitrogen, and oxygen, substituted with up to four substituents selected from the group consisting of

halogen; OH (hydroxyl); C≡N (cyano); NO₂ (nitro); C₁-C₆ alkyl;

C₁-C₆ alkyl comprising up to 5 halogen atoms;

C₂-C₆ alkenyl;

C₁-C₆ alkoxy;

C₁-C₆ alkoxy comprising up to 3 halogen atoms;

C₁-C₃ alkoxy C₁-C₃ alkyl;

C₃-C₇ cycloalkyl;

–C(O)R²⁰ wherein R²⁰ is selected from C₁-C₃ alkyl;

–OC(O)R²¹ wherein R²¹ is selected from H, and C₁-C₃ alkyl;

–C(O)O-R²² wherein R²² is selected from hydrogen and C₁-C₃ alkyl;

–(CH₂)_mN(R²³)R²⁴ wherein m is 0 or 1, R²³ is selected from hydrogen, C₁-C₃ alkyl, and –SO₂R²⁵ wherein R²⁵ is C₁-C₃ alkyl, and R²⁴ is selected from hydrogen, C₁-C₃ alkyl, and –SO₂R²⁶ wherein R²⁶ is C₁-C₃ alkyl, or wherein R²³ and R²⁴ form together with the N atom to which they are attached morpholine, thiomorpholine, or 1,1-dioxothiomorpholine;

–SR²⁷ wherein R²⁷ is selected from hydrogen and C₁-C₃ alkyl; and

–S(O)₂R²⁸ wherein R²⁸ is selected from hydrogen and C₁-C₃ alkyl;

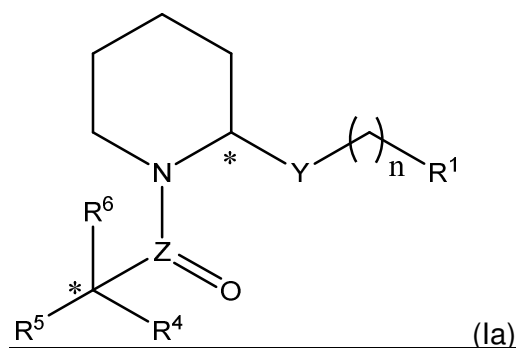
Y is a monocyclic ~~or bicyclic~~, unsaturated or aromatic heterocyclic ring comprising one, two, three or four heteroatoms independently selected from nitrogen, sulfur and oxygen, wherein the ring is optionally mono-, di-, or tri-substituted with a group selected from halogen, methyl, ethyl, $-N(R^{40})R^{41}$, $-\text{CON}(R^{40})R^{41}$, $-\text{[CR}^{40}\text{R}^{41}]_p\text{-C(O)OR}^{40}$, $-\text{C(O)R}^{40}$, and $-\text{SO}_2\text{N}(R^{40})R^{41}$ wherein R^{40} and R^{41} are independently selected from hydrogen and $\text{C}_1\text{-C}_4$ alkyl, and p is 0, 1, or 2;

A is a 5 to 7 membered heterocyclic ring optionally comprising one additional hetero atom selected from oxygen and sulfur, wherein the heterocyclic ring A is optionally substituted by one or two groups selected from $-\text{OH}$ and $=\text{O}$;

Z is ~~either C, S or S(O)~~; and

R^4 , R^5 and R^6 form together with the carbon atom to which they are attached a hydrocarbon group comprising 2 to 15 C-atoms, optionally comprising up to five hetero atoms selected from O, N, S, and F.

2. A non-medical method according to claim 1 wherein the compound of formula (I) is a compound of formula (Ia), a salt or solvate thereof



n is 0 or 1;

R^1 is selected from

i) $\text{C}_6 - \text{C}_{10}$ aryl,

ii) $\text{C}_5\text{-C}_{10}$ mono- or bicyclic heteroaryl wherein up to 2 C-atoms are replaced by a hetero atoms independently selected from sulfur, nitrogen, and oxygen,

iii) $\text{C}_6 - \text{C}_{10}$ aryl substituted with up to four substituents independently selected from the group consisting of halogen; OH ; $\text{C}\equiv\text{N}$; NO_2 ; $\text{C}_1\text{-C}_6$ alky;

C₁-C₆ alkyl comprising up to 5 halogen atoms;

C₁-C₃ alkyl comprising up to 3 OH groups;

C₂-C₆ alkenyl;

C₁-C₆ alkoxy;

5 C₁-C₆ alkoxy comprising up to 3 halogen atoms;

C₁-C₃ alkoxy C₁-C₃ alkyl;

C₃-C₇ cycloalkyl;

-C(O)R¹⁰ wherein R¹⁰ is selected from C₁-C₃ alkyl;

-OC(O)R¹¹ wherein R¹¹ is selected from H, and C₁-C₃ alkyl;

10 -C(O)O-R¹² wherein R¹² is selected from hydrogen and C₁-C₃ alkyl;

-(CH₂)_mN(R¹³)R¹⁴ wherein m is 0 or 1, R¹³ is selected from hydrogen,

C₁-C₃ alkyl, and -SO₂R¹⁵ wherein R¹⁵ is C₁-C₃ alkyl, and R¹⁴ is

selected from hydrogen, C₁-C₃ alkyl, and -SO₂R¹⁶ wherein R¹⁶ is

C₁-C₃ alkyl, or wherein R¹³ and R¹⁴ form together with the N atom to

15 which they are attached morpholine, thiomorpholine, or

1,1-dioxothiomorpholine;

-SR¹⁷ wherein R¹⁷ is selected from hydrogen and C₁-C₃ alkyl; and

-S(O)₂R¹⁸ wherein R¹⁸ is selected from hydrogen and C₁-C₃ alkyl;

with the proviso that when the aryl ring is substituted with two or more

20 substituents, two substituents may form a cyclic ring together with the

carbon atoms to which they are attached,

and

iv) C₅-C₁₀ mono- or bicyclic heteroaryl wherein up to 2 C-atoms are replaced by

a hetero atoms independently selected from sulfur, nitrogen, and oxygen,

25 substituted with up to four substituents selected from the group consisting of

halogen; OH (hydroxyl); C≡N (cyano); NO₂ (nitro); C₁-C₆ alky;

C₁-C₆ alky comprising up to 5 halogen atoms;

C₂-C₆ alkenyl;

C₁-C₆ alkoxy;

30 C₁-C₆ alkoxy comprising up to 3 halogen atoms;

C₁-C₃ alkoxy C₁-C₃ alkyl;

C₃-C₇ cycloalkyl;

-C(O)R²⁰ wherein R²⁰ is selected from C₁-C₃ alkyl;

-OC(O)R²¹ wherein R²¹ is selected from H, and C₁-C₃ alkyl;

–C(O)O-R²² wherein R²² is selected from hydrogen and C₁-C₃ alkyl;
–(CH₂)_mN(R²³)R²⁴ wherein m is 0 or 1, R²³ is selected from hydrogen,
C₁-C₃ alkyl, and –SO₂R²⁵ wherein R²⁵ is C₁-C₃ alkyl, and R²⁴ is selected
from hydrogen, C₁-C₃ alkyl, and –SO₂R²⁶ wherein R²⁶ is C₁-C₃ alkyl, or
wherein R²³ and R²⁴ form together with the N atom to which they are
attached morpholine, thiomorpholine, or 1,1-dioxothiomorpholine;
–SR²⁷ wherein R²⁷ is selected from hydrogen and C₁-C₃ alkyl; and
–S(O)₂R²⁸ wherein R²⁸ is selected from hydrogen and C₁-C₃ alkyl;

Y is a monocyclic, unsaturated or aromatic heterocyclic ring comprising one,
two, three or four heteroatoms independently selected from nitrogen, sulfur and
oxygen, wherein the ring is optionally mono-, di-, or tri-substituted with a group
selected from halogen, methyl, ethyl, –N(R⁴⁰)R⁴¹, –CON(R⁴⁰)R⁴¹, –
[CR⁴⁰R⁴¹]_p–C(O)OR⁴⁰, –C(O)R⁴⁰, and –SO₂N(R⁴⁰)R⁴¹ wherein R⁴⁰ and R⁴¹ are
independently selected from hydrogen and C₁-C₄ alkyl, and p is 0, 1, or 2;

Z is C; and

R⁴, R⁵ and R⁶ form together with the carbon atom to which they are attached a
hydrocarbon group comprising 2 to 15 C-atoms, optionally comprising up to five
hetero atoms selected from O, N, S, and F.

2-3. A non-medical method according to claim 1 wherein the compound of
formula (I) is selected from the group consisting of (2-(4-phenyl-1H-imidazol-2-
yl)piperidin-1-yl)(1,2,3-thiadiazol-5-yl)methanone, (2-(4-phenyl-1H-imidazol-2-
yl)piperidin-1-yl)(thietan-3-yl)methanone, (2,2-dimethylcyclopropyl)(2-(4-phenyl-
1H-imidazol-2-yl)piperidin-1-yl)methanone, (2-ethoxycyclopropyl)(2-(4-phenyl-
1H-imidazol-2-yl)piperidin-1-yl)methanone, (2-methoxycyclopropyl)(2-(4-phenyl-
1H-imidazol-2-yl)piperidin-1-yl)methanone, (2-methylcyclopropyl)(2-(4-phenyl-
1H-imidazol-2-yl)piperidin-1-yl)methanone, (2S)-2-methyl-1-(2-(5-(p-tolyl)-1H-
imidazol-2-yl)piperidin-1-yl)butan-1-one, (5-methyltetrahydrofuran-3-yl)(2-(4-
phenyl-1H-imidazol-2-yl)piperidin-1-yl)methanone, (E)-1-(2-(5-(3,4-
difluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbut-2-en-1-one, (E)-2-
methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)but-2-en-1-one, (E)-2-
methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)pent-3-en-1-one, (R)-2-
(methylthio)-1-((R)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one,

(S)-2-(methylthio)-1-((R)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, (S)-2-(methylthio)-1-((S)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, (S)-2-methyl-1-((R)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, (tetrahydrofuran-3-yl)(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)methanone, 1-(2-(1H-benzo[d]imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(1-methyl-1H-pyrazol-4-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2,2-difluorobenzo[d][1,3]dioxol-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2,3-dihydrobenzofuran-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2,3-dihydrobenzofuran-6-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2,5-dimethylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2-chlorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2-cyclopropyloxazol-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2-hydroxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(3-((dimethylamino)methyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(3,5-difluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(3,5-dimethylisoxazol-4-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(3-chloro-4-methylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(3-methylfuran-2-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-((1,1-dioxidothiomorpholino)methyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-(1-hydroxyethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-(difluoromethoxy)-3-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-(difluoromethyl)thiophen-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-(methylsulfonyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-(tert-butyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-cyclobutylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-cyclopropyl-2-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-

(4-(4-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-hydroxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-isopropylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-methyl-3-(trifluoromethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(5-((dimethylamino)methyl)thiophen-2-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(5-methylfuran-2-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(5-methylpyridin-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(6-methylpyridin-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(benzo[b]thiophen-6-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-methyl-5-phenyl-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)-2-((trifluoromethyl)thio)ethan-1-one, 1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)hexa-3,5-dien-1-one, 1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)pent-4-en-1-one, 1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 1-(2-(5-(2,3-difluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(2,4-difluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(2,5-difluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(2-fluoro-4-methoxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(2-fluoro-4-methylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(2-methoxypyrimidin-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3-(methylamino)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3,4-difluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3,4-difluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbut-3-en-1-one, 1-(2-(5-(3,4-dimethoxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3,4-dimethylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3-fluoro-4-(methoxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3-fluoro-4-methylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one,

1-(2-(5-(3-methoxyisothiazol-4-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3-methoxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-((methylamino)methyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-(2-methoxyethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-(aminomethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-(dimethylamino)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-acetylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-aminophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-chloro-3-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-chlorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-ethylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-fluorophenyl)-4H-1,2,4-triazol-3-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-methoxy-2-methylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-methoxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-methyl-6-(methylthio)pyridin-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(5-(methoxymethyl)thiophen-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(6-methoxypyridin-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(benzo[d][1,3]dioxol-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 1-(2-(5-benzyl-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, ~~1-(2-(5-bromo-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one~~, 2-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzonitrile, 2-(2-(4-phenyl-1H-imidazol-2-yl)piperidine-1-carbonyl)cyclopropane-1-carbonitrile, 2-(5-methylfuran-2-yl)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(allylthio)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(dimethylamino)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-(dimethylamino)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(ethylthio)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(furan-2-yl)-1-(2-(4-phenyl-1H-

imidazol-2-yl)piperidin-1-yl)ethan-1-one, 2-(furan-2-yl)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(furan-3-yl)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)ethan-1-one, 2-(furan-3-yl)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylamino)-N-(4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)phenyl)acetamide, 2-(methylsulfinyl)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylsulfonyl)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)ethan-1-one, 2-(methylsulfonyl)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(2-(p-tolyl)-2H-tetrazol-5-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(3-phenyl-1,2,4-oxadiazol-5-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(1-(trifluoromethyl)-1H-pyrazol-4-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(4-(morpholinomethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(5-(trifluoromethyl)furan-2-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(5-(trifluoromethyl)thiophen-2-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(5-methylthiophen-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(m-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(o-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(pyridin-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(pyridin-4-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(pyrimidin-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(quinoxalin-6-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(thiophen-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)ethan-1-one, 2-(methylthio)-1-(2-(5-(2-(trifluoromethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(2,3,4-trifluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(2,4,5-trifluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(3-(trifluoromethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(4-(trifluoromethoxy)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(4-(trifluoromethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(4-propylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-

one, 2-(methylthio)-1-(2-(5-(4-vinylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(5-methylthiophen-2-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)-1,3,4-oxadiazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)azepan-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)-4H-1,2,4-triazol-3-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)isoxazol-3-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)oxazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)thiazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-phenyl-1H-imidazol-2-yl)pyrrolidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-phenyl-4H-1,2,4-triazol-3-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-phenyloxazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(4-(5-(p-tolyl)-1H-imidazol-2-yl)thiazolidin-3-yl)propan-1-one, 2,2,3-trimethyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)but-3-en-1-one, 2,2,3-trimethyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2,2-dimethyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)but-3-en-1-one, 2,2-dimethyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2,3-dimethoxy-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2,3-dimethyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2,5-difluoro-4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-4-yl)benzonitrile, 2-amino-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-cyclobutyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-cyclopentyl-2-ethoxy-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)ethan-1-one, 2-cyclopropyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)ethan-1-one, 2-cyclopropyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-cyclopropyl-2-methoxy-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)ethan-1-one, 2-ethoxy-1-(2-(5-(3-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-ethyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)but-2-en-1-one, 2-ethyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-fluoro-4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzonitrile, 2-mercapto-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-methoxy-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-methoxy-1-(2-(4-phenyl-

1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-methoxy-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-methyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-methyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)but-3-en-1-one, 2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butane-1,3-dione, 2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)pentan-1-one, 2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)prop-2-en-1-one, 2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-methyl-2-(methylthio)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-methyl-3-(methylthio)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-methylene-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 3-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-4-yl)benzonitrile, 3,3,3-trifluoro-2-methyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 3,3,4,4,4-pentafluoro-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 3,3-difluoro-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 3-fluoro-4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzonitrile, 3-methyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)but-2-en-1-one, 3-methyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-4-yl)benzonitrile, 4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzaldehyde, 4,4,4-trifluoro-2-methyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, bicyclo[1.1.1]pentan-1-yl(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)methanone, cyclobutyl(2-(5-(3-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)methanone, cyclopentyl(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)methanone, cyclopropyl(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)methanone, methyl 4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzoate, N-(2-hydroxyethyl)-4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-4-yl)benzenesulfonamide, 2-(methylthio)-1-(2-(5-(3-nitrophenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, N-(4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-4-yl)phenyl)methane-sulfonamide, 2-(methylthio)-1-(2-(5-(4-nitrophenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 1-(sec-butylsulfinyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(sec-butylsulfonyl)-2-(5-(p-tolyl)-1H-

imidazol-2-yl)piperidine, 1-(isopropylsulfinyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(isopropylsulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-((1-(methylthio)ethyl)sulfinyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-((1-(methylthio)ethyl)sulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-((2-(methylthio)propan-2-yl)sulfinyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-((2-(methylthio)propan-2-yl)sulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(but-3-en-2-ylsulfinyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(but-3-en-2-ylsulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(pent-3-en-2-ylsulfinyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(pent-3-en-2-ylsulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-((2-methylbut-3-en-2-yl)sulfinyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-((2-methylbut-3-en-2-yl)sulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(2-(5-(4-(hydroxymethyl)-phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 2-(methylsulfonyl)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 1-(4-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(5-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(4-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(5-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfonyl)propan-1-one, 1-(4-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfonyl)propan-1-one, 1-(5-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfonyl)propan-1-one, 1-(2-hydroxy-6-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-hydroxy-6-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(2-hydroxy-6-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfonyl)propan-1-one, 1-(3-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(3-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(3-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfonyl)propan-1-one, 1-(2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfinyl)propan-1-one, 1-(4-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfinyl)propan-1-one, 1-(5-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfinyl)propan-1-one, 1-(2-hydroxy-6-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfinyl)propan-1-one, 1-(3-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-

yl)piperidin-1-yl)-2-(methylsulfinyl)propan-1-one, 1-(2-hydroxy-6-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(5-hydroxy-2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(4-hydroxy-2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(3-hydroxy-2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-hydroxy-6-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(5-hydroxy-2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(4-hydroxy-2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(3-hydroxy-2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 4-(2-(1-(2-methylbutanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzaldehyde, 4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzoic acid, 4-(2-(1-(2-methylbutanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzoic acid, (2,2-dimethylcyclopropyl)(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)methanone, ~~1-(2-(5-bromo-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one~~, 1-(2-(5-(4-chlorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 2-(4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)phenyl)acetonitrile, 2-(4-(2-(1-(2-methylbutanoyl)piperidin-2-yl)-1H-imidazol-5-yl)phenyl)acetonitrile, 2,3-dimethyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-methyl-1-(2-(5-(o-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-methyl-1-(2-(5-(m-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 1-(2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, ~~1-(isopropylsulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine~~, ~~1-(sec-butylsulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine~~, 2-methyl-1-(2-(5-(5-methylthiophen-2-yl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperazin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(p-tolyl)oxazol-2-yl)piperidin-1-yl)propan-1-one, ~~and 2-methyl-1-(2-(4-(p-tolyl)oxazol-2-yl)piperidin-1-yl)butan-1-one~~, 2-(furan-2-yl)-1-(2-(5-phenylimidazol-2-yl)piperidin-1-yl)ethan-1-one, cyclopentyl(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)methanone, (E)-2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)pent-3-en-1-one, (tetrahydrofuran-3-yl)(2-(4-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-

yl)methanone, 1-(2-(4-(4-ethylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-methoxy-2-methylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2-methoxypyrimidin-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 2-(methylthio)-1-(2-(4-(4-vinylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 1-(2-(4-(2-fluoro-4-methoxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-methyl-6-(methylthio)pyridin-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 2-(methylthio)-1-(2-(4-(4-propylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 1-(2-(4-(4-(2-methoxyethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(5-(methoxymethyl)thiophen-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(3-(methylamino)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(6-methoxypyridin-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, and 1-(2-(4-(3-fluoro-4-(methoxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one.

~~3.4.~~_____A non-medical method of inducing a cooling sensation in a human or animal comprising contacting the human or animal with a compound of formula (I), or a salt or solvate thereof, as defined in claim 1 ~~or claim 2~~ to 4.

~~4.5.~~_____A method of achieving a cooling effect on the skin or mucosa comprising contacting the skin or mucosa with a product comprising one or more compounds of formula (I) as defined in claim 1 ~~or claim 2~~ to 4.

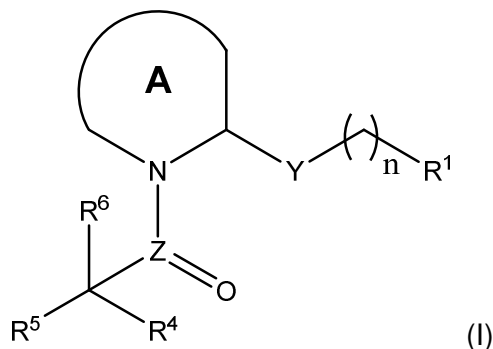
~~5.6.~~_____A consumer product comprising one or more compounds of formula (I) as defined in claim 1 ~~or claim 2~~ to 4.

~~6.7.~~_____A pharmaceutical composition comprising one or more compounds of formula (I) as defined in claim 1 ~~or claim 2~~ to 4.

~~7.8.~~_____The compound of formula (I) as defined in claim 1 ~~or claim 2~~ to 4, for use in providing cooling sensation.

~~8.9.~~_____The compound of formula (I) as defined in claim 1 ~~or claim 2~~ to 4 for use as medicament.

9.10. _____ A composition comprising a cool sensation wherein the composition comprises a compound of formula (I)



5 wherein

n is 0 or 1;

R¹ is selected from

i) ~~halogen,~~

ii) C₆ – C₁₀ aryl,

10 ~~iii) ii)~~ C₅-C₁₀ mono- or bicyclic heteroaryl wherein up to 2 C-atoms are replaced by a hetero atoms independently selected from sulfur, nitrogen, and oxygen,

~~iv) iii)~~ C₆ – C₁₀ aryl substituted with up to four substituents independently selected from the group consisting of

halogen; OH; C≡N; NO₂; C₁-C₆ alkyl;

15 C₁-C₆ alkyl comprising up to 5 halogen atoms;

C₁-C₃ alkyl comprising up to 3 OH groups;

C₂-C₆ alkenyl;

C₁-C₆ alkoxy;

C₁-C₆ alkoxy comprising up to 3 halogen atoms;

20 C₁-C₃ alkoxy C₁-C₃ alkyl;

C₃-C₇ cycloalkyl;

–C(O)R¹⁰ wherein R¹⁰ is selected from C₁-C₃ alkyl;

–OC(O)R¹¹ wherein R¹¹ is selected from H, and C₁-C₃ alkyl;

–C(O)O-R¹² wherein R¹² is selected from hydrogen and C₁-C₃ alkyl;

25 – (CH₂)_mN(R¹³)R¹⁴ wherein m is 0 or 1, R¹³ is selected from hydrogen,

C₁-C₃ alkyl, and –SO₂R¹⁵ wherein R¹⁵ is C₁-C₃ alkyl, and R¹⁴ is selected from hydrogen, C₁-C₃ alkyl, and –SO₂R¹⁶ wherein R¹⁶ is C₁-C₃ alkyl, or

wherein R^{13} and R^{14} form together with the N atom to which they are attached morpholine, thiomorpholine, or 1,1-dioxothiomorpholine;
 $-SR^{17}$ wherein R^{17} is selected from hydrogen and C_1-C_3 alkyl; and
 $-S(O)_2R^{18}$ wherein R^{18} is selected from hydrogen and C_1-C_3 alkyl;

5 with the proviso that when the aryl ring is substituted with two or more substituents, two substituents may form a cyclic ring together with the carbon atoms to which they are attached,

and

10 ~~v)~~iv) C_5-C_{10} mono- or bicyclic heteroaryl wherein up to 2 C-atoms are replaced by a hetero atoms independently selected from sulfur, nitrogen, and oxygen, substituted with up to four substituents selected from the group consisting of

halogen; OH (hydroxyl); $C\equiv N$ (cyano); NO_2 (nitro); C_1-C_6 alkyl;
 C_1-C_6 alkyl comprising up to 5 halogen atoms;
15 C_2-C_6 alkenyl;
 C_1-C_6 alkoxy;
 C_1-C_6 alkoxy comprising up to 3 halogen atoms;
 C_1-C_3 alkoxy C_1-C_3 alkyl;
 C_3-C_7 cycloalkyl;
20 $-C(O)R^{20}$ wherein R^{20} is selected from C_1-C_3 alkyl;
 $-OC(O)R^{21}$ wherein R^{21} is selected from H, and C_1-C_3 alkyl;
 $-C(O)O-R^{22}$ wherein R^{22} is selected from hydrogen and C_1-C_3 alkyl;
 $-(CH_2)_mN(R^{23})R^{24}$ wherein m is 0 or 1, R^{23} is selected from hydrogen, C_1-C_3 alkyl, and $-SO_2R^{25}$ wherein R^{25} is C_1-C_3 alkyl, and R^{24} is selected
25 from hydrogen, C_1-C_3 alkyl, and $-SO_2R^{26}$ wherein R^{26} is C_1-C_3 alkyl, or wherein R^{23} and R^{24} form together with the N atom to which they are attached morpholine, thiomorpholine, or 1,1-dioxothiomorpholine;
 $-SR^{27}$ wherein R^{27} is selected from hydrogen and C_1-C_3 alkyl; and
 $-S(O)_2R^{28}$ wherein R^{28} is selected from hydrogen and C_1-C_3 alkyl;

30 Y is a monocyclic or bicyclic, unsaturated or aromatic heterocyclic ring comprising one, two, three or four heteroatoms independently selected from nitrogen, sulfur and oxygen, wherein the ring is optionally mono-, di-, or tri-substituted with a group selected from halogen, methyl, ethyl, $-N(R^{40})R^{41}$,

$-\text{CON}(\text{R}^{40})\text{R}^{41}$, $-\text{[CR}^{40}\text{R}^{41}]_p-\text{C}(\text{O})\text{OR}^{40}$, $-\text{C}(\text{O})\text{R}^{40}$, and $-\text{SO}_2\text{N}(\text{R}^{40})\text{R}^{41}$ wherein R^{40} and R^{41} are independently selected from hydrogen and $\text{C}_1\text{-C}_4$ alkyl, and p is 0, 1, or 2;

A is a 5 to 7 membered heterocyclic ring optionally comprising one additional hetero atom selected from oxygen and sulfur, wherein the heterocyclic ring A is optionally substituted by one or two groups selected from $-\text{OH}$ and $=\text{O}$;

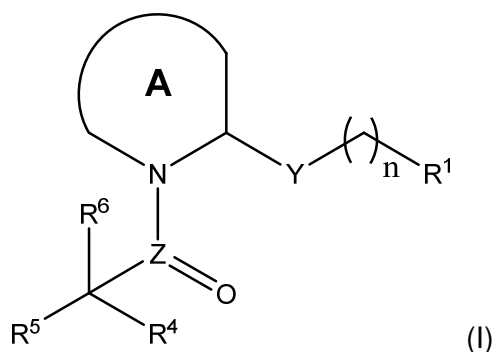
Z is either $-\text{C}-$, $-\text{S}-$ or $-\text{S}(\text{O})-$; and

R^4 , R^5 and R^6 form together with the carbon atom to which they are attached a hydrocarbon group comprising 2 to 15 C-atoms, optionally comprising up to five hetero atoms selected from O, N, S, and F.

~~10-11.~~ 11. A composition according to claim ~~9-10~~ comprising at least one compound of formula (I), a salt or solvate thereof, and a further cooling compound.

~~11-12.~~ 12. A composition according to claim ~~10-11~~, wherein the further cooling compound is selected from menthol, menthone, p-menthanecarboxamides, N-2,3-trimethyl-2-isopropyl-butanamide, menthyl lactate, menthone glycerol acetal, 3-(1-menthoxy)-propane-1,2-diol, p-menthane-3,8-diol, isopulegol, monomenthyl succinate, monomenthyl glutarate, o-menthylglycerol, menthyl N,N-dimethylsuccinamate, 2-(sec-butyl)cyclohexan-1-one, N-(pyrazol-3-yl)-N-(thiophen-2-ylmethyl)-2-(p-tolyloxy)acetamide, 2-(4-ethylphenoxy)-N-(pyrazol-3-yl)-N-(thiophen-2-ylmethyl)acetamide, 3-(benzo[d][1,3]dioxol-5-yl)-N,N-diphenylacrylamide, 4-(2-(4-allyl-2,6-dimethoxyphenoxy)-1-ethoxypropyl)-2-methoxyphenol, 4-(2-(4-allyl-2,6-dimethoxyphenoxy)-1-((2-isopropyl-5-methylcyclohexyl)oxy)propyl)-2-methoxyphenol, N-(2-Hydroxy-2-phenylethyl)-2-isopropyl-5,5-dimethylcyclohexane-1-carboxamide, N-(4-(Cyanomethyl)phenyl)-2-isopropyl-5,5-dimethylcyclohexanecarboxamide and N-(3-Hydroxy-4-methoxyphenyl)-2-isopropyl-5,5-dimethylcyclohexanecarboxamide.

~~12-13.~~ 13. A compound of formula (I), a salt or solvate thereof



wherein

n is 0 or 1;

R¹ is selected from

5

i) ~~halogen,~~

ii) C₆ – C₁₀ aryl,

iii) C₅-C₁₀ mono- or bicyclic heteroaryl wherein up to 2 C-atoms are replaced by a hetero atoms independently selected from sulfur, nitrogen, and oxygen,

10

iv) C₆ – C₁₀ aryl substituted with up to four substituents independently selected from the group consisting of

halogen; OH; C≡N; NO₂; C₁-C₆ alkyl;

C₁-C₆ alkyl comprising up to 5 halogen atoms;

C₁-C₃ alkyl comprising up to 3 OH groups;

C₂-C₆ alkenyl;

15

C₁-C₆ alkoxy;

C₁-C₆ alkoxy comprising up to 3 halogen atoms;

C₁-C₃ alkoxy C₁-C₃ alkyl;

C₃-C₇ cycloalkyl;

–C(O)R¹⁰ wherein R¹⁰ is selected from C₁-C₃ alkyl;

20

–OC(O)R¹¹ wherein R¹¹ is selected from H, and C₁-C₃ alkyl;

–C(O)O-R¹² wherein R¹² is selected from hydrogen and C₁-C₃ alkyl;

–(CH₂)_mN(R¹³)R¹⁴ wherein m is 0 or 1, R¹³ is selected from hydrogen,

C₁-C₃ alkyl, and –SO₂R¹⁵ wherein R¹⁵ is C₁-C₃ alkyl, and R¹⁴ is

selected from hydrogen, C₁-C₃ alkyl, and –SO₂R¹⁶ wherein R¹⁶ is

25

C₁-C₃ alkyl, or wherein R¹³ and R¹⁴ form together with the N atom to

which they are attached morpholine, thiomorpholine, or
1,1-dioxothiomorpholine;

–SR¹⁷ wherein R¹⁷ is selected from hydrogen and C₁–C₃ alkyl; and

–S(O)₂R¹⁸ wherein R¹⁸ is selected from hydrogen and C₁–C₃ alkyl;

5 with the proviso that when the aryl ring is substituted with two or more
substituents, two substituents may form a cyclic ring together with the
carbon atoms to which they are attached,

and

~~iv)~~ C₅–C₁₀ mono- or bicyclic heteroaryl wherein up to 2 C-atoms are replaced by

10 a hetero atoms independently selected from sulfur, nitrogen, and oxygen,
substituted with up to four substituents selected from the group consisting of
halogen; OH (hydroxyl); C≡N (cyano); NO₂ (nitro); C₁–C₆ alkyl;

C₁–C₆ alkyl comprising up to 5 halogen atoms;

C₂–C₆ alkenyl;

15 C₁–C₆ alkoxy;

C₁–C₆ alkoxy comprising up to 3 halogen atoms;

C₁–C₃ alkoxy C₁–C₃ alkyl;

C₃–C₇ cycloalkyl;

–C(O)R²⁰ wherein R²⁰ is selected from C₁–C₃ alkyl;

20 –OC(O)R²¹ wherein R²¹ is selected from H, and C₁–C₃ alkyl;

–C(O)O–R²² wherein R²² is selected from hydrogen and C₁–C₃ alkyl;

–(CH₂)_mN(R²³)R²⁴ wherein m is 0 or 1, R²³ is selected from hydrogen,
C₁–C₃ alkyl, and –SO₂R²⁵ wherein R²⁵ is C₁–C₃ alkyl, and R²⁴ is selected

25 from hydrogen, C₁–C₃ alkyl, and –SO₂R²⁶ wherein R²⁶ is C₁–C₃ alkyl, or
wherein R²³ and R²⁴ form together with the N atom to which they are
attached morpholine, thiomorpholine, or 1,1-dioxothiomorpholine;

–SR²⁷ wherein R²⁷ is selected from hydrogen and C₁–C₃ alkyl; and

–S(O)₂R²⁸ wherein R²⁸ is selected from hydrogen and C₁–C₃ alkyl;

Y is a monocyclic or bicyclic, unsaturated or aromatic heterocyclic ring

30 comprising one, two, three or four heteroatoms independently selected from
nitrogen, sulfur and oxygen, wherein the ring is optionally mono-, di-, or tri-
substituted with a group selected from halogen, methyl, ethyl, –N(R⁴⁰)R⁴¹,

–CON(R⁴⁰)R⁴¹, –[CR⁴⁰R⁴¹]_p–C(O)OR⁴⁰, –C(O)R⁴⁰, and –SO₂N(R⁴⁰)R⁴¹ wherein

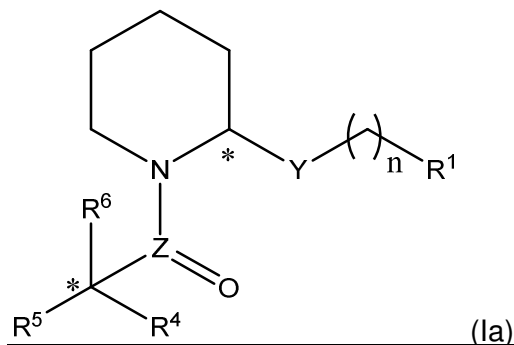
R^{40} and R^{41} are independently selected from hydrogen and C_1 - C_4 alkyl, and p is 0, 1, or 2;

A is a 5 to 7 membered heterocyclic ring optionally comprising one additional hetero atom selected from oxygen and sulfur, wherein the heterocyclic ring A is optionally substituted by one or two groups selected from $-OH$ and $=O$;

Z is ~~either C, S or S(O)~~; and

R^4 , R^5 and R^6 form together with the carbon atom to which they are attached a hydrocarbon group comprising 2 to 15 C-atoms, optionally comprising up to five hetero atoms selected from O, N, S, and F.

14. The compound according to claim 13 wherein the compound is a compound of formula (Ia), a salt or solvate thereof



n is 0 or 1;

R^1 is selected from

i) $C_6 - C_{10}$ aryl,

ii) C_5 - C_{10} mono- or bicyclic heteroaryl wherein up to 2 C-atoms are replaced by a hetero atoms independently selected from sulfur, nitrogen, and oxygen,

iii) $C_6 - C_{10}$ aryl substituted with up to four substituents independently selected from the group consisting of

halogen; OH ; $C\equiv N$; NO_2 ; C_1 - C_6 alkyl;

C_1 - C_6 alkyl comprising up to 5 halogen atoms;

C_1 - C_3 alkyl comprising up to 3 OH groups;

C_2 - C_6 alkenyl;

C_1 - C_6 alkoxy;

C₁-C₆ alkoxy comprising up to 3 halogen atoms;

C₁-C₃ alkoxy C₁-C₃ alkyl;

C₃-C₇ cycloalkyl;

-C(O)R¹⁰ wherein R¹⁰ is selected from C₁-C₃ alkyl;

-OC(O)R¹¹ wherein R¹¹ is selected from H, and C₁-C₃ alkyl;

-C(O)O-R¹² wherein R¹² is selected from hydrogen and C₁-C₃ alkyl;

-(CH₂)_mN(R¹³)R¹⁴ wherein m is 0 or 1, R¹³ is selected from hydrogen,

C₁-C₃ alkyl, and -SO₂R¹⁵ wherein R¹⁵ is C₁-C₃ alkyl, and R¹⁴ is

selected from hydrogen, C₁-C₃ alkyl, and -SO₂R¹⁶ wherein R¹⁶ is

C₁-C₃ alkyl, or wherein R¹³ and R¹⁴ form together with the N atom to

which they are attached morpholine, thiomorpholine, or

1,1-dioxothiomorpholine;

-SR¹⁷ wherein R¹⁷ is selected from hydrogen and C₁-C₃ alkyl; and

-S(O)₂R¹⁸ wherein R¹⁸ is selected from hydrogen and C₁-C₃ alkyl;

with the proviso that when the aryl ring is substituted with two or more substituents, two substituents may form a cyclic ring together with the carbon atoms to which they are attached,

and

iv) C₅-C₁₀ mono- or bicyclic heteroaryl wherein up to 2 C-atoms are replaced by

a hetero atoms independently selected from sulfur, nitrogen, and oxygen,

substituted with up to four substituents selected from the group consisting of

halogen; OH (hydroxyl); C≡N (cyano); NO₂ (nitro); C₁-C₆ alky;

C₁-C₆ alky comprising up to 5 halogen atoms;

C₂-C₆ alkenyl;

C₁-C₆ alkoxy;

C₁-C₆ alkoxy comprising up to 3 halogen atoms;

C₁-C₃ alkoxy C₁-C₃ alkyl;

C₃-C₇ cycloalkyl;

-C(O)R²⁰ wherein R²⁰ is selected from C₁-C₃ alkyl;

-OC(O)R²¹ wherein R²¹ is selected from H, and C₁-C₃ alkyl;

-C(O)O-R²² wherein R²² is selected from hydrogen and C₁-C₃ alkyl;

-(CH₂)_mN(R²³)R²⁴ wherein m is 0 or 1, R²³ is selected from hydrogen,

C₁-C₃ alkyl, and -SO₂R²⁵ wherein R²⁵ is C₁-C₃ alkyl, and R²⁴ is selected

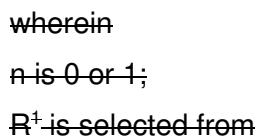
from hydrogen, C₁-C₃ alkyl, and -SO₂R²⁶ wherein R²⁶ is C₁-C₃ alkyl, or

Y is a monocyclic, unsaturated or aromatic heterocyclic ring comprising one, two, three or four heteroatoms independently selected from nitrogen, sulfur and oxygen, wherein the ring is optionally mono-, di-, or tri-substituted with a group selected from halogen, methyl, ethyl, $-\text{N}(\text{R}^{40})\text{R}^{41}$, $-\text{CON}(\text{R}^{40})\text{R}^{41}$, $-\text{CR}^{40}\text{R}^{41}$, $-\text{C}(\text{O})\text{OR}^{40}$, $-\text{C}(\text{O})\text{R}^{40}$, and $-\text{SO}_2\text{N}(\text{R}^{40})\text{R}^{41}$ wherein R^{40} and R^{41} are independently selected from hydrogen and $\text{C}_1\text{-C}_4$ alkyl, and p is 0, 1, or 2;

Z is C; and

R^4 , R^5 and R^6 form together with the carbon atom to which they are attached a hydrocarbon group comprising 2 to 15 C-atoms, optionally comprising up to five hetero atoms selected from O, N, S, and F.

~~14. The compound according to claim 12 or claim 13 wherein the compound is selected from a compound of formula (Ib)~~



- i) ~~C₆-aryl or heteroaryl wherein up to 2 C atoms are replaced by a N atom, substituted with 1-4 (e.g. 2 or 3) substituents selected from the group consisting of~~
~~halogen; OH (hydroxyl); C≡N (cyano); NO₂ (nitro); C₁-C₆ alkyl;~~
~~C₁-C₆ alkyl comprising up to 5 halogen atoms;~~
~~C₂-C₆ alkenyl;~~
~~C₁-C₆ alkoxy;~~
~~C₁-C₆ alkoxy comprising up to 3 halogen atoms;~~
~~C₁-C₃ alkoxy C₁-C₃ alkyl;~~
~~C₃-C₇ cycloalkyl;~~
~~-C(O)R²⁰ wherein R²⁰ is selected from C₁-C₃ alkyl;~~
~~-OC(O)R²¹ wherein R²¹ is selected from H, and C₁-C₃ alkyl;~~
~~-C(O)O-R²² wherein R²² is selected from hydrogen and C₁-C₃ alkyl;~~
~~-(CH₂)_mN(R²³)R²⁴ wherein m is 0 or 1, R²³ is selected from hydrogen, C₁-C₃ alkyl, and~~
~~SO₂R²⁵ wherein R²⁵ is C₁-C₃ alkyl, and R²⁴ is selected from~~
~~hydrogen, C₁-C₃ alkyl, and SO₂R²⁶ wherein R²⁶ is C₁-C₃ alkyl, or wherein~~
~~R²³ and R²⁴ form together with the N atom to which they are attached~~
~~morpholine, thiomorpholine, or 1,1-dioxothiomorpholine;~~
~~-SR²⁷ wherein R²⁷ is selected from hydrogen and C₁-C₃ alkyl; and~~
~~-S(O)₂R²⁸ wherein R²⁸ is selected from hydrogen and C₁-C₃ alkyl;~~
~~with the proviso that one substituent is attached to the para-position relative~~
~~to the attachment of R¹ to the rest of the formula (Ib) (e.g. R¹ is para-tolyl);~~
~~and~~
- ii) ~~thiophene, substituted with up to three substituents selected from the group consisting of~~
~~halogen; OH (hydroxyl); C≡N (cyano); NO₂ (nitro); C₁-C₆ alkyl;~~
~~C₁-C₆ alkyl comprising up to 5 halogen atoms;~~
~~C₂-C₆ alkenyl;~~
~~C₁-C₆ alkoxy;~~
~~C₁-C₆ alkoxy comprising up to 3 halogen atoms;~~
~~C₁-C₃ alkoxy C₁-C₃ alkyl;~~
~~C₃-C₇ cycloalkyl;~~
~~-C(O)R²⁰ wherein R²⁰ is selected from C₁-C₃ alkyl;~~
~~-OC(O)R²¹ wherein R²¹ is selected from H, and C₁-C₃ alkyl;~~

~~—C(O)O—R²² wherein R²² is selected from hydrogen and C₁–C₃-alkyl;~~
~~—(CH₂)_mN(R²³)R²⁴ wherein m is 0 or 1, R²³ is selected from hydrogen, C₁–C₃-alkyl, and —SO₂R²⁵ wherein R²⁵ is C₁–C₃-alkyl, and R²⁴ is selected from hydrogen, C₁–C₃-alkyl, and —SO₂R²⁶ wherein R²⁶ is C₁–C₃-alkyl, or wherein R²³ and R²⁴ form together with the N atom to which they are attached morpholine, thiomorpholine, or 1,1-dioxothiomorpholine;~~
~~—SR²⁷ wherein R²⁷ is selected from hydrogen and C₁–C₃-alkyl; and~~
~~—S(O)₂R²⁸ wherein R²⁸ is selected from hydrogen and C₁–C₃-alkyl;~~

~~A is a 5 to 7 membered heterocyclic ring optionally comprising one additional hetero atom selected from oxygen and sulfur, wherein the heterocyclic ring A is optionally substituted by one or two groups selected from —OH and =O;~~

~~Z is either C, S or S(O);~~

~~X¹ is NH, O, or S;~~

~~X² and X³ are independently selected from C, N, and O, with the proviso that either X² or X³ is not C;~~

~~R⁴ is selected from hydrogen and methyl;~~

~~R⁵ is selected from hydrogen, C₁–C₂-alkyl, C₂–C₃-alkenyl;~~

~~R⁶ is selected from C₁–C₄-alkyl, C₂–C₅-alkenyl containing one or two double bonds, —C₁–C₃-alkoxy, C₁–C₄-alkyl-C(O)—, C₁–C₄-alkyl-S—, C₁–C₄-alkyl-SCH₂—, C₁–C₄-alkenyl-S—, C₁–C₄-alkyl-S(O)—, C₁–C₄-alkyl-S(O)₂—, C₁–C₄-alkenyl-S(O)—, C₁–C₄-alkenyl-S(O)₂—, —SH, CF₃S—, cyclopropyl, cyclobutyl, furyl (e.g. 2-furyl or 3-furyl) optionally substituted with methyl-, C₁–C₆-fluoro-alkyl (such as pentafluoroethyl, difluoromethyl, trifluoromethyl, 2,2,2-trifluoroethyl or difluoroethyl), and —NR³⁰R³¹ wherein R³⁰ and R³¹ are independently selected from hydrogen and C₁–C₃-alkyl;~~
~~or~~

~~R⁶ and R⁵ form together with the carbon atom to which they are attached a carbonyl group (C=O), a vinyl group (C=CR³²R³³ wherein R³² and R³³ are independently selected from H or C₁–C₃-alkyl), or 2,2-dimethylcyclopropyl;~~
~~with the proviso that R⁵ and R⁶ together with the carbon atom to which they are attached comprises at least 4 C-atoms wherein one C-atom is optionally replaced by one heteroatom selected from S and N.~~

16. ~~15.~~—A compound according to claim ~~12~~ 13 wherein the compound is selected from selected from the group consisting of (2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)(1,2,3-thiadiazol-5-yl)methanone, (2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)(thietan-3-yl)methanone, (2,2-dimethylcyclopropyl)(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)methanone, (2-ethoxycyclopropyl)(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)methanone, (2-methoxycyclopropyl)(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)methanone, (2-methylcyclopropyl)(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)methanone, (2S)-2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, (5-methyltetrahydrofuran-3-yl)(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)methanone, (E)-1-(2-(5-(3,4-difluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbut-2-en-1-one, (E)-2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)but-2-en-1-one, (E)-2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)pent-3-en-1-one, (R)-2-(methylthio)-1-((R)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, (S)-2-(methylthio)-1-((R)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, (S)-2-(methylthio)-1-((S)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, (S)-2-methyl-1-((R)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, (tetrahydrofuran-3-yl)(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)methanone, 1-(2-(1H-benzo[d]imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(1-methyl-1H-pyrazol-4-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2,2-difluorobenzo[d][1,3]dioxol-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2,3-dihydrobenzofuran-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2,3-dihydrobenzofuran-6-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2,5-dimethylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2-chlorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2-cyclopropyloxazol-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2-hydroxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(3-((dimethylamino)methyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(3,5-difluorophenyl)-1H-imidazol-2-

yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(3,5-dimethylisoxazol-4-yl)-
 1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(3-chloro-4-
 methylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-
 (4-(3-methylfuran-2-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-
 5 one, 1-(2-(4-(4-((1,1-dioxidothiomorpholino)methyl)phenyl)-1H-imidazol-2-
 yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-(1-hydroxyethyl)phenyl)-
 1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-
 (difluoromethoxy)-3-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-
 (methylthio)propan-1-one, 1-(2-(4-(4-(difluoromethyl)thiophen-3-yl)-1H-imidazol-
 10 2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-
 (methylsulfonyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-
 one, 1-(2-(4-(4-(tert-butyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-
 (methylthio)propan-1-one, 1-(2-(4-(4-cyclobutylphenyl)-1H-imidazol-2-
 yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-cyclopropyl-2-
 15 fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-
 (4-(4-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one,
 1-(2-(4-(4-hydroxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-
 1-one, 1-(2-(4-(4-isopropylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-
 (methylthio)propan-1-one, 1-(2-(4-(4-methyl-3-(trifluoromethyl)phenyl)-1H-
 20 imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(5-
 ((dimethylamino)methyl)thiophen-2-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-
 (methylthio)propan-1-one, 1-(2-(4-(5-methylfuran-2-yl)-1H-imidazol-2-
 yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(5-methylpyridin-3-yl)-1H-
 imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(6-
 25 methylpyridin-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one,
 1-(2-(4-(benzo[b]thiophen-6-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-
 (methylthio)propan-1-one, 1-(2-(4-methyl-5-phenyl-1H-imidazol-2-yl)piperidin-1-
 yl)-2-(methylthio)propan-1-one, 1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)-2-
 ((trifluoromethyl)thio)ethan-1-one, 1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-
 30 yl)butan-1-one, 1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)hexa-3,5-dien-1-
 one, 1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)pent-4-en-1-one, 1-(2-(4-
 phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 1-(2-(5-(2,3-
 difluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-
 (5-(2,4-difluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-

one, 1-(2-(5-(2,5-difluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(2-fluoro-4-methoxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(2-fluoro-4-methylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(2-methoxypyrimidin-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3-(methylamino)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3,4-difluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3,4-difluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbut-3-en-1-one, 1-(2-(5-(3,4-dimethoxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3,4-dimethylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3-fluoro-4-(methoxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3-fluoro-4-methylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3-methoxyisothiazol-4-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(3-methoxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-((methylamino)methyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-(2-methoxyethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-(aminomethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-(dimethylamino)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-acetylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-aminophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-chloro-3-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-chlorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-ethylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-fluorophenyl)-4H-1,2,4-triazol-3-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-methoxy-2-methylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-methoxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(4-methyl-6-(methylthio)pyridin-3-yl)-1H-imidazol-2-yl)piperidin-1-

yl)-2-(methylthio)propan-1-one, 1-(2-(5-(5-(methoxymethyl)thiophen-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(6-methoxypyridin-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(benzo[d][1,3]dioxol-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 1-(2-(5-benzyl-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, ~~1-(2-(5-bromo-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one~~, 2-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzonitrile, 2-(2-(4-phenyl-1H-imidazol-2-yl)piperidine-1-carbonyl)cyclopropane-1-carbonitrile, 2-(5-methylfuran-2-yl)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(allylthio)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(dimethylamino)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-(dimethylamino)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(ethylthio)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(furan-2-yl)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)ethan-1-one, 2-(furan-2-yl)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(furan-3-yl)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)ethan-1-one, 2-(furan-3-yl)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylamino)-N-(4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)phenyl)acetamide, 2-(methylsulfinyl)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylsulfonyl)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)ethan-1-one, 2-(methylsulfonyl)-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(2-(p-tolyl)-2H-tetrazol-5-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(3-phenyl-1,2,4-oxadiazol-5-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(1-(trifluoromethyl)-1H-pyrazol-4-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(4-(morpholinomethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(5-(trifluoromethyl)furan-2-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(5-(trifluoromethyl)thiophen-2-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(5-methylthiophen-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(m-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(o-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-

(methylthio)-1-(2-(4-(pyridin-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one,
 2-(methylthio)-1-(2-(4-(pyridin-4-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one,
 2-(methylthio)-1-(2-(4-(pyrimidin-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-
 one, 2-(methylthio)-1-(2-(4-(quinoxalin-6-yl)-1H-imidazol-2-yl)piperidin-1-
 5 yl)propan-1-one, 2-(methylthio)-1-(2-(4-(thiophen-3-yl)-1H-imidazol-2-
 yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-phenyl-1H-imidazol-2-
 yl)piperidin-1-yl)ethan-1-one, 2-(methylthio)-1-(2-(5-(2-(trifluoromethyl)phenyl)-
 1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(2,3,4-
 trifluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-
 10 (2-(5-(2,4,5-trifluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-
 (methylthio)-1-(2-(5-(3-(trifluoromethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-
 yl)propan-1-one, 2-(methylthio)-1-(2-(5-(4-(trifluoromethoxy)phenyl)-1H-imidazol-
 2-yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(4-
 (trifluoromethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-
 15 (methylthio)-1-(2-(5-(4-propylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-
 one, 2-(methylthio)-1-(2-(5-(4-vinylphenyl)-1H-imidazol-2-yl)piperidin-1-
 yl)propan-1-one, 2-(methylthio)-1-(2-(5-(5-methylthiophen-2-yl)-1H-imidazol-2-
 yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)-1,3,4-oxadiazol-2-
 yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)-1H-imidazol-2-
 20 yl)azepan-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)-1H-imidazol-2-
 yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)-4H-1,2,4-triazol-3-
 yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)isoxazol-3-
 yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)oxazol-2-
 yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)thiazol-2-
 25 yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-phenyl-1H-imidazol-2-
 yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-phenyl-1H-imidazol-2-
 yl)pyrrolidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-phenyl-4H-1,2,4-triazol-3-
 yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(5-phenyloxazol-2-
 yl)piperidin-1-yl)propan-1-one, 2-(methylthio)-1-(4-(5-(p-tolyl)-1H-imidazol-2-
 30 yl)thiazolidin-3-yl)propan-1-one, 2,2,3-trimethyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-
 yl)piperidin-1-yl)but-3-en-1-one, 2,2,3-trimethyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-
 yl)piperidin-1-yl)butan-1-one, 2,2-dimethyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-
 yl)piperidin-1-yl)but-3-en-1-one, 2,2-dimethyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-
 yl)piperidin-1-yl)butan-1-one, 2,3-dimethoxy-1-(2-(4-phenyl-1H-imidazol-2-

yl)piperidin-1-yl)propan-1-one, 2,3-dimethyl-1-(2-(4-phenyl-1H-imidazol-2-
 yl)piperidin-1-yl)butan-1-one, 2,5-difluoro-4-(2-(1-(2-
 (methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-4-yl)benzonitrile, 2-amino-1-(2-
 5 (5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-cyclobutyl-1-(2-(4-
 phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-cyclopentyl-2-ethoxy-1-
 (2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)ethan-1-one, 2-cyclopropyl-1-(2-(4-
 phenyl-1H-imidazol-2-yl)piperidin-1-yl)ethan-1-one, 2-cyclopropyl-1-(2-(4-
 phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-cyclopropyl-2-methoxy-1-
 (2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)ethan-1-one, 2-ethoxy-1-(2-(5-(3-
 10 fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-ethyl-1-(2-(4-
 phenyl-1H-imidazol-2-yl)piperidin-1-yl)but-2-en-1-one, 2-ethyl-1-(2-(4-phenyl-1H-
 imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-fluoro-4-(2-(1-(2-
 (methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzonitrile, 2-mercapto-
 1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-methoxy-1-(2-(4-
 15 phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-methoxy-1-(2-(4-phenyl-
 1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-methoxy-1-(2-(5-(p-tolyl)-1H-
 imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-methyl-1-(2-(4-phenyl-1H-imidazol-
 2-yl)piperidin-1-yl)butan-1-one, 2-methyl-1-(2-(4-phenyl-1H-imidazol-2-
 yl)piperidin-1-yl)propan-1-one, 2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-
 20 yl)piperidin-1-yl)but-3-en-1-one, 2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-
 yl)piperidin-1-yl)butan-1-one, 2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-
 yl)piperidin-1-yl)butane-1,3-dione, 2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-
 yl)piperidin-1-yl)pentan-1-one, 2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-
 yl)piperidin-1-yl)prop-2-en-1-one, 2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-
 25 yl)piperidin-1-yl)propan-1-one, 2-methyl-2-(methylthio)-1-(2-(5-(p-tolyl)-1H-
 imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-methyl-3-(methylthio)-1-(2-(4-
 phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 2-methylene-1-(2-(5-(p-
 tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 3-(2-(1-(2-
 (methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-4-yl)benzonitrile, 3,3,3-
 30 trifluoro-2-methyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one,
 3,3,4,4-pentafluoro-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one,
 3,3-difluoro-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 3-fluoro-
 4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzonitrile, 3-
 methyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)but-2-en-1-one, 3-methyl-

1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-4-yl)benzonitrile, 4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzaldehyde, 4,4,4-trifluoro-2-methyl-1-(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 5 bicyclo[1.1.1]pentan-1-yl(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)methanone, cyclobutyl(2-(5-(3-fluorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)methanone, cyclopentyl(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)methanone, cyclopropyl(2-(4-phenyl-1H-imidazol-2-yl)piperidin-1-yl)methanone, methyl 4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzoate, N-(2-10 hydroxyethyl)-4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-4-yl)benzenesulfonamide, 2-(methylthio)-1-(2-(5-(3-nitrophenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, N-(4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-4-yl)phenyl)methane-sulfonamide, 2-(methylthio)-1-(2-(5-(4-nitrophenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 1-(~~sec-butylsulfinyl~~)-2-15 ~~(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(sec-butylsulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(isopropylsulfinyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(isopropylsulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-((1-(methylthio)ethyl)sulfinyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-((1-(methylthio)ethyl)sulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-((2-(methylthio)propan-2-yl)sulfinyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-((2-(methylthio)propan-2-yl)sulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-((but-3-en-2-yl)sulfinyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(but-3-en-2-ylsulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(pent-3-en-2-ylsulfinyl)-2-~~20 ~~(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(pent-3-en-2-ylsulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-((2-methylbut-3-en-2-yl)sulfinyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-((2-methylbut-3-en-2-yl)sulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(2-(5-(4-(hydroxymethyl)-phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 2-(methylsulfonyl)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 1-(4-hydroxy-2-(5-(p-tolyl)-1H-~~25 ~~imidazol-2-yl)piperidine, 1-(5-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(4-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(5-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-~~30

(methylsulfonyl)propan-1-one, 1-(4-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfonyl)propan-1-one, 1-(5-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfonyl)propan-1-one, 1-(2-hydroxy-6-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-hydroxy-6-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(2-hydroxy-6-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfonyl)propan-1-one, 1-(3-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(3-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(3-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfonyl)propan-1-one, 1-(2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfinyl)propan-1-one, 1-(4-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfinyl)propan-1-one, 1-(5-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfinyl)propan-1-one, 1-(2-hydroxy-6-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfinyl)propan-1-one, 1-(3-hydroxy-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylsulfinyl)propan-1-one, 1-(2-hydroxy-6-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(5-hydroxy-2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(4-hydroxy-2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(3-hydroxy-2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-hydroxy-6-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(5-hydroxy-2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(4-hydroxy-2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(3-hydroxy-2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 4-(2-(1-(2-methylbutanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzaldehyde, 4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzoic acid, 4-(2-(1-(2-methylbutanoyl)piperidin-2-yl)-1H-imidazol-5-yl)benzoic acid, (2,2-dimethylcyclopropyl)(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)methanone, 1-(2-(5-bromo-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 1-(2-(5-(4-chlorophenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, 2-(4-(2-(1-(2-(methylthio)propanoyl)piperidin-2-yl)-1H-imidazol-5-yl)phenyl)acetonitrile, 2-(4-(2-(1-(2-methylbutanoyl)piperidin-2-yl)-1H-

imidazol-5-yl)phenyl)acetonitrile, 2-(4-(2-(1-(2-methylbutanoyl)piperidin-2-yl)-1H-imidazol-5-yl)phenyl)acetonitrile, 2,3-dimethyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-methyl-1-(2-(5-(o-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-methyl-1-(2-(5-(m-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 1-(2-(5-(4-(hydroxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-methylbutan-1-one, ~~1-(isopropylsulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine, 1-(sec-butylsulfonyl)-2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidine,~~ 2-methyl-1-(2-(5-(5-methylthiophen-2-yl)-1H-imidazol-2-yl)piperidin-1-yl)butan-1-one, 2-(methylthio)-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperazin-1-yl)propan-1-one, 2-(methylthio)-1-(2-(4-(p-tolyl)oxazol-2-yl)piperidin-1-yl)propan-1-one, ~~and 2-methyl-1-(2-(4-(p-tolyl)oxazol-2-yl)piperidin-1-yl)butan-1-one, 2-(furan-2-yl)-1-(2-(5-phenylimidazol-2-yl)piperidin-1-yl)ethan-1-one, cyclopentyl(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)methanone, (E)-2-methyl-1-(2-(5-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)pent-3-en-1-one, (tetrahydrofuran-3-yl)(2-(4-(p-tolyl)-1H-imidazol-2-yl)piperidin-1-yl)methanone, 1-(2-(4-(4-ethylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-methoxy-2-methylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(2-methoxypyrimidin-5-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 2-(methylthio)-1-(2-(4-(4-vinylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 1-(2-(4-(2-fluoro-4-methoxyphenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(4-methyl-6-(methylthio)pyridin-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 2-(methylthio)-1-(2-(4-(4-propylphenyl)-1H-imidazol-2-yl)piperidin-1-yl)propan-1-one, 1-(2-(4-(4-(2-methoxyethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(5-(methoxymethyl)thiophen-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(3-(methylamino)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, 1-(2-(4-(6-methoxypyridin-3-yl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one, and 1-(2-(4-(3-fluoro-4-(methoxymethyl)phenyl)-1H-imidazol-2-yl)piperidin-1-yl)-2-(methylthio)propan-1-one.~~