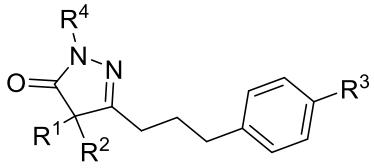
CLAIMS

1. A compound of Formula I

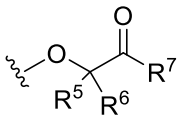


or a pharmaceutically acceptable salt thereof wherein:

R^1 and R^2 are each independently -C_{1-6}alkyl, optionally mono-, di- or tri-substituted with halogen, or

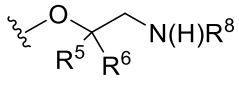
R^1 and R^2 are joined together to form –C_{3-6}cycloalkyl, optionally mono-or di-sustituted with substituents independenlty selected from halogen, –C_{1-6}alkyl and –CF_3;

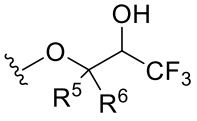
R^3 is selected from the group consisting of

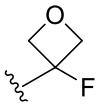
(a)  ,

(b) aryl,

(c) heteroaryl,

(d)  ,

(e)  ,

wherein the aryl of choice (b) and the heteroaryl of choice (c) are optionally mono- or di-substituted with substituents independnetly selected from –N(H)R^8, –C_{1-6}alkyl, –C_{1-6}alkyl-C(=O)OH, C_{1-6}alkoxy, haloC_{1-6}alkyl, halo-C_{1-6}alkoxy, and  ;

R^4 is selected from the group consisting of:

(a) aryl,

(b) heteroaryl,

(c) -C_{1-2}alkyl-aryl, and

(d) -C_{1-2}alkyl-heteroaryl,

wherein the aryl of choices (a) and (c), and the heteroaryl of choices (b) and (d), are optionally mono- or di-substituted with substituents selected from the group consisting of halogen, -C_{1-6}alkyl, -CF_3, -OCF_3, C_{1-6}alkoxy, -C_{3-6}cycloalkoxy, halo-C_{1-6}alkyl, aryl, heteroaryl, heterocyclyl, -C_{3-6}cycloalkyl, and -C_{3-6}cycloalkenyl;

R^5 and R^6 are each independently selected from the group consisting of:

(a) hydrogen,

(b) -C_{1-6}alkyl,

(c) aryl, and

(d) hetereoaryl,

wherein the aryl of choice (c) and heteroaryl of choice (d) are optionally mono- or di-substituted with substituents independently selected from halogen, -C_{1-6}alkyl and -CF_3 or

R^5 and R^6 are joined together to form a -C_{3-6}cycloalkyl optionally mono- or di-substituted with substituents independently selected from halogen, -C_{1-6}alkyl and -CF_3;

R^7 is selected from the group consisting of:

(a) hydroxyl,

(b) -N(H)S(=O)$_2$aryl,

(c) -N(H)S(=O)$_2$heteroaryl,

(d) -N(H)S(=O)$_2$-C_{3-6}cycloalkyl,

(e) -N(H)S(=O)$_2$-C_{1-6}alkyl,

(f) -N(H)-aryl,

(g) -N(H)-heteroaryl,

(h) -N(H)-C_{3-6}cycloalkyl,

(i) -N(H)-C_{1-6}alkyl, and

(j) –CF_3,

wherein the aryl of choices (b) and (f), the heteroaryl of choices (c) and (g), the alkyl portion of choices (e) and (i), and the cycloalkyl portion of choices (d) and (h), are optionally mono- or di-substituted with substituents independently selected from halogen, -C_{1-6}alkyl, -CF_3, -C_{3-6}cycloalkyl, C_{1-6}alkoxy, C_{3-6}cycloalkoxy, aryl, heteroaryl, and hydroxyl; and

R^8 is selected from the group consisting of:

(a) hydrogen,

(b) -S(=O)$_2$aryl,

(c) -S(=O)$_2$heteroaryl,

(d) -C(=O)aryl,

(e) -C(=O)heteroaryl,

(f) -S(=O)$_2$-C$_{1-6}$alkyl,

(g) -S(=O)$_2$-C$_{3-6}$cycloalkyl,

(h) -C(=O)-C$_{1-6}$alkyl, and

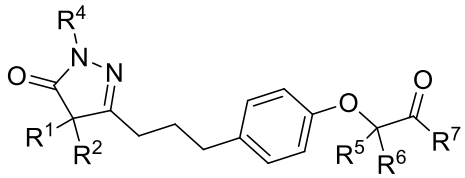
(i) –C(=O)-C$_{3-6}$cycloalkyl,

wherein the aryl of choices (b) and (d), and the heteroaryl of choices (c) and (e), the alkyl portion of choices (f) and (h), and the cycloalkyl portion of choices (g) and (i), are optionally mono- or di-substituted with substituents independently selected from halogen, -C$_{1-6}$alkyl, -CF$_3$, -C$_{3-6}$cycloalkyl, C$_{1-6}$alkoxy, C$_{3-6}$cycloalkoxy, aryl, heteroaryl, and hydroxyl.

2. A compound according to claim 1 or a pharmaceutically acceptable salt thereof wherein: R^1 and R^2 are each independently methyl, optionally mono-, di- or tri-substituted with halogen or R^1 and R^2 are joined together to form -C$_{3-6}$cycloalkyl, optionally mono or di-substituted with substituents independently selected from halogen, -C$_{1-6}$alkyl and -CF$_3$.

3. A compound according to claim 2 or a pharmaceutically acceptable salt thereof wherein: R^1 and R^2 are each independently methyl, optionally mono-, di- or tri-substituted with halogen.

4. A compound according to claim 1 of formula Ia:



Ia

or a pharmaceutically acceptable salt thereof.

5. A compound according to claim 1 or a pharmaceutically acceptable salt thereof wherein: R^4 is selected from the group consisting of:

(a) -phenyl,

(b) -pyridyl,

(c) -CH_2-phenyl, and

(d) -CH_2-pyridyl,

wherein the phenyl portion of choices (a) and (c), and the pyridyl portion of choices (b) and (d), are optionally mono- or di-substituted with substituents selected from the group consisting of halogen, -C_{1-6}alkyl, -CF_3, -OCF_3, -C_{1-6}alkoxy, -C_{3-6}cycloalkyl , C_{3-6}cycloalkoxy, and halo-C_{1-6}alkyl.

6. A compound according to claim 1 or a pharmaceutically acceptable salt thereof wherein: R^5 and R^6 are joined together to form a -C_{3-6}cycloalkyl.

7. A compound according to claim 1 or a pharmaceutically acceptable salt thereof wherein: R^7 is selected from the group consisting of:

(a) hydroxyl,

(b) -N(H)S(=O)$_2$aryl,

(c) -N(H)S(=O)$_2$heteroaryl,

(d) -N(H)S(=O)$_2$-C_{3-6}cycloalkyl, and

(e) -N(H)S(=O)$_2$-C_{1-6}alkyl,

wherein the aryl portion of choice (b), the heteroaryl portion of choice (c), the cycloalkyl portion of choice (d) and the alkyl portion of choice (e) are optionally mono- or di-substituted with substituents independently selected from halogen, -C_{1-6}alkyl, -CF_3, -C_{3-6}cycloalkyl, C_{1-6}alkoxy, C_{3-6}cycloalkoxy, aryl, heteroaryl, and hydroxyl.

8. A compound according to claim 7 or a pharmaceutically acceptable salt thereof wherein: R^7 is hydroxyl.

9. A compound according to claim 1 or a pharmaceutically acceptable salt thereof wherein:

R^8 is selected from the group consisting of:

(a) hydrogen,

(b) -S(=O)$_2$aryl,

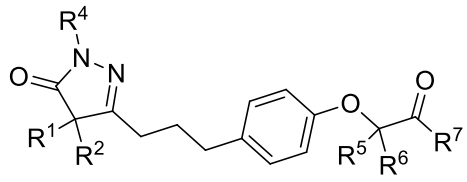
(c) -S(=O)$_2$heteroaryl,

(d) -C(=O)aryl, and

(e) -C(=O)heteroaryl,

wherein the aryl of choices (b) and (d), and the heteroaryl of choices (c) and (e), are optionally mono- or di-substituted with substituents independently selected from halogen, -C_{1-6}alkyl, -CF_3, -C_{3-6}cycloalkyl, C_{1-6}alkoxy, C_{3-6}cycloalkoxy, aryl, heteroaryl, and hydroxyl.

10. A compound according to claim 1 of formula Ia:



Ia

or a pharmaceutically acceptable salt thereof wherein:

R^1 and R^2 are each independently methyl, optionally mono-, di- or tri-substituted with halogen, or

R^1 and R^2 are joined together to form -C_{3-6}cycloalkyl, optionally mono or di-substituted with substituents independently selected from halogen, -C_{1-6}alkyl and -CF_3;

R^4 is selected from the group consisting of:

(a) -phenyl,

(b) -pyridyl,

(c) -CH_2-phenyl, and

(d) -CH_2-pyridyl,

wherein the phenyl portion of choices (a) and (c), and the pyridyl portion of choices (b) and (d), are optionally mono- or di-substituted with substituents selected from the group consisting of halogen, -C_{1-6}alkyl, -CF_3, -OCF_3, C_{1-6}alkoxy, -C_{3-6}cycloalkyl , C_{3-6}cycloalkoxy, and halo-C_{1-6}alkyl;

R^5 and R^6 are joined together to form a -C_{3-6}cycloalkyl; and

R^7 is selected from the group consisting of:

(a) hydroxyl,

(b) -N(H)S(=O)$_2$aryl,

(c) -N(H)S(=O)$_2$heteroaryl,

(d) -N(H)S(=O)$_2$-C_{3-6}cycloalkyl, and

(e) -N(H)S(=O)$_2$-C_{1-6}alkyl,

wherein the aryl portion of choice (b), the heteroaryl portion of choice (c), the cycloalkyl portion of choice (d) and the alkyl portion of choice (e) are optionally mono- or di-substituted with substituents independently selected from halogen, -C_{1-6}alkyl, -CF_3, -C_{3-6}cycloalkyl, -C_{1-6}alkoxy, C_{3-6}cycloalkoxy, aryl, heteroaryl, and hydroxyl.

11. A compound according to claim 10 or a pharmaceutically acceptable salt thereof wherein: R^7 is hydroxyl.

12. A compound according to claim 1 selected from the group consisting of

2-(4-(3-(1-(4-(*tert*-butyl)benzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(1-(4-(*tert*-butyl)benzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methyl-*N*-(phenylsulfonyl)propanamide,

N-benzyl-2-(4-(3-(1-(4-(*tert*-butyl)benzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanamide,

2-(4-(3-(1-(4-(*tert*-butyl)benzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methyl-*N*-(pyridin-2-ylmethyl)propanamide,

2-(4-(3-(1-(4-(*tert*-butyl)benzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methyl-*N*-(pyridin-4-ylmethyl)propanamide,

2-(4-(3-(1-(4-(*tert*-butyl)benzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-*N*-(cyclohexylmethyl)-2-methylpropanamide,

2-(4-(3-(4,4-dimethyl-5-oxo-1-(3-(trifluoromethyl)benzyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(4,4-dimethyl-5-oxo-1-(4-(trifluoromethyl)benzyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(4,4-dimethyl-5-oxo-1-phenethyl-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(4,4-dimethyl-5-oxo-1-phenyl-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(1-(4-(*tert*-butyl)phenyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(1-(4-isopropylbenzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(1-(4-bromobenzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(1-([1,1'-biphenyl]-4-ylmethyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(4,4-dimethyl-5-oxo-1-((2',3',4',5'-tetrahydro-[1,1'-biphenyl]-4-yl)methyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(1-(4-cyclopropylbenzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(1-(4-cyclohexylbenzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(1-(3-fluoro-4-(trifluoromethyl)benzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(4,4-dimethyl-5-oxo-1-(4-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(4,4-dimethyl-5-oxo-1-(3-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(4,4-dimethyl-5-oxo-1-(5-(trifluoromethyl)pyridin-2-yl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-(4-(3-(4,4-dimethyl-5-oxo-1-(4-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-methyl-*N*-(phenylsulfonyl)propanamide,

2-(4-(3-(3-(4-(*tert*-butyl)benzyl)-4-oxo-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-methyl-2-(4-(3-(4-oxo-3-(4-(trifluoromethyl)phenyl)-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)propanoic acid,

2-methyl-2-(4-(3-(4-oxo-3-(4-(trifluoromethyl)phenyl)-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)-*N*-(phenylsulfonyl)propanamide,

N-cyclopropyl-2-methyl-2-(4-(3-(4-oxo-3-(4-(trifluoromethyl)phenyl)-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)propanamide,

2-methyl-2-(4-(3-(4-oxo-3-(4-(trifluoromethyl)phenyl)-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)-*N*-(2,2,2-trifluoroethyl)propanamide,

2-methyl-2-(4-(3-(4-oxo-3-(4-(trifluoromethoxy)phenyl)-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)propanoic acid,

N-cyclopropyl-2-methyl-2-(4-(3-(4-oxo-3-(4-(trifluoromethoxy)phenyl)-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)propanamide,

2-methyl-2-(4-(3-(4-oxo-3-(4-(trifluoromethoxy)phenyl)-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)-*N*-(2,2,2-trifluoroethyl)propanamide,

2-(4-(3-(3-(3,4-dimethylphenyl)-4-oxo-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)-2-methylpropanoic acid,

N-cyclopropyl-2-(4-(3-(3-(3,4-dimethylphenyl)-4-oxo-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)-2-methylpropanamide,

2-(4-(3-(3-(3,4-dimethylphenyl)-4-oxo-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)-2-methyl-*N*-(2,2,2-trifluoroethyl)propanamide,

2-methyl-2-(4-(3-(4-oxo-3-(4-(trifluoromethyl)benzyl)-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)propanoic acid,

2-methyl-2-(4-(3-(4-oxo-3-(3-(trifluoromethyl)phenyl)-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)propanoic acid,

2-methyl-2-(4-(3-(4-oxo-3-(3-(trifluoromethoxy)phenyl)-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)propanoic acid,

2-methyl-2-(4-(3-(3-(naphthalen-2-yl)-4-oxo-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)propanoic acid,

2-(4-(3-(3-([1,1'-biphenyl]-3-yl)-4-oxo-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-methyl-2-(4-(3-(3-(4-methyl-3-(trifluoromethyl)phenyl)-4-oxo-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)propanoic acid,

2-(4-(3-(3-(3-(*tert*-butyl)phenyl)-4-oxo-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)-2-methylpropanoic acid,

2-methyl-2-(4-(3-(5-oxo-4,4-dipropyl-1-(4-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)propanoic acid,

2-methyl-2-(4-(3-(5-oxo-4,4-dipropyl-1-(3-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)propanoic acid,

4,4-dimethyl-3-(3-(4-((4,4,4-trifluoro-3-hydroxy-2-methylbutan-2-yl)oxy)phenyl)propyl)-1-(4-(trifluoromethyl)phenyl)-1*H*-pyrazol-5(4*H*)-one,

4,4-dimethyl-3-(3-(4-((4,4,4-trifluoro-2-methyl-3-oxobutan-2-yl)oxy)phenyl)propyl)-1-(4-(trifluoromethyl)phenyl)-1*H*-pyrazol-5(4*H*)-one,

4-(3-(4-((1-amino-2-methylpropan-2-yl)oxy)phenyl)propyl)-2-(4-(trifluoromethyl)phenyl)-2,3-diazaspiro[4,4]non-3-en-1-one,

N-(2-methyl-2-(4-(3-(4-oxo-3-(4-(trifluoromethyl)phenyl)-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)propyl)benzenesulfonamide,

N-(2-methyl-2-(4-(3-(4-oxo-3-(4-(trifluoromethyl)phenyl)-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)propyl)benzamide,

2-(4-(3-(4,4-dimethyl-5-oxo-1-(4-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-phenylacetic acid,

2-(4-(3-(4,4-dimethyl-5-oxo-1-(4-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)acetic acid,

1-(4-(3-(4,4-dimethyl-5-oxo-1-(4-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)cyclobutanecarboxylic acid,

1-(4-(3-(4,4-dimethyl-5-oxo-1-(3-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)cyclobutanecarboxylic acid,

1-(4-(3-(4,4-dimethyl-5-oxo-1-(4-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)cyclopentanecarboxylic acid,

2-(4-(3-(4,4-dimethyl-5-oxo-1-(4-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-phenylpropanoic acid,

2-(4-(3-(4,4-dimethyl-5-oxo-1-(3-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-phenylpropanoic acid,

2-(4'-(3-(1-(4-(*tert*-butyl)benzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)-4-ethoxy-[1,1'-biphenyl]-3-yl)acetic acid,

2-(4'-(3-(4,4-dimethyl-5-oxo-1-(4-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)-4-ethoxy-[1,1'-biphenyl]-3-yl)acetic acid,

3-(3-(4'-(3-fluorooxetan-3-yl)-[1,1'biphenyl]-4-yl)propyl)-4,4-dimethyl-1-(4-(trifluoromethyl)phenyl)-1*H*-pyrazol-5(4*H*)-one,

N-(6-(4-(3-(1-(4-(*tert*-butyl)benzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenyl)pyridin-3-yl)benzenesulfonamide, and

N-(6-(4-(3-(1-(4-(*tert*-butyl)benzyl)-4,4-dimethyl-5-oxo-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenyl)-3-methoxypyridin-2-yl)benzenesulfonamide,

or a pharaceutically acceptable salt of the foregoing.

13. A pharmaceutical composition comprising a compound according to claim 1, or a pharmaceutically acceptable salt thereof, and at least one pharmaceutically acceptable carrier.

14. The compound of claim 1, selected from the group consisting of:

2-methyl-2-(4-(3-(4-oxo-3-(4-(trifluoromethyl)phenyl)-2,3-diazaspiro[4,4]non-1-en-1-yl)propyl)phenoxy)propanoic acid;

1-(4-(3-(4,4-dimethyl-5-oxo-1-(4-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)cyclobutanecarboxylic acid;

1-(4-(3-(4,4-dimethyl-5-oxo-1-(4-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)cyclopentanecarboxylic acid;

2-(4-(3-(4,4-dimethyl-5-oxo-1-(4-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-phenylpropanoic acid; and

2-(4-(3-(4,4-dimethyl-5-oxo-1-(3-(trifluoromethyl)phenyl)-4,5-dihydro-1*H*-pyrazol-3-yl)propyl)phenoxy)-2-phenylpropanoic acid,

or a pharmaceutically acceptable salt thereof.