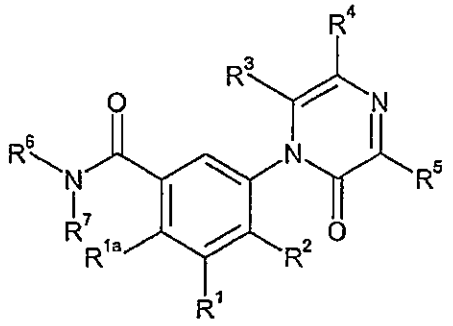
CLAIMS

1. The present invention provides a compound of formula (I):



(I)

wherein:

R^1 and R^2 are independently selected from H, $(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$alkoxy, halo, CF_3, and CN;

R^{1a} is hydrogen;

R^3 is hydrogen;

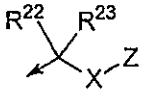
R^4 is selected from H, methyl, ethyl, methoxy, ethoxy, Cl, Br, CN, phenyl and $CONH_2$, wherein methyl is optionally substituted with a $NR^{12}R^{13}$ group;

R^5 is selected from $NR^{16}R^{17}$ and heterocycloalkyl;

R^6 is selected from H, $(C_1\text{-}C_4)$alkyl, $(C_1\text{-}C_4)$alkoxy and $(C_3\text{-}C_6)$cycloalkyl;

R^7 is selected from H, $(C_1\text{-}C_4)$alkyl, $(C_1\text{-}C_4)$alkoxy and $(C_3\text{-}C_6)$cycloalkyl;

R^{16} is selected from H, aryl, $(C_3\text{-}C_7)$cycloalkyl and



, wherein said $(C_3\text{-}C_7)$cycloalkyl may be optionally substituted with an aryl group;

R^{17} is selected from H, $(C_1\text{-}C_6)$alkyl, aryl, heteroaryl, heterocycloalkyl and $(C_3\text{-}C_7)$cycloalkyl, wherein said $(C_1\text{-}C_6)$alkyl may be optionally substituted with 1, 2 or 3 groups independently selected from $(C_1\text{-}C_6)$alkoxy, $(C_3\text{-}C_{10})$cycloalkyl, heterocycloalkyl, heteroaryl and $NR^{20}R^{21}$;

R^{22} is selected from H, $(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$alkoxy, OH, $NR^{29}R^{30}$, heterocycloalkyl and aryl, wherein said $(C_1\text{-}C_6)$alkyl may be optionally substituted with 1, 2 or 3 R^{28} groups;

and wherein said aryl may be optionally substituted with 1, 2 or 3 groups independently selected from $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$alkoxy, halo, CF_3 and OH;

R^{23} is selected from H and $(C_1$-$C_6)$alkyl;

or R^{22} and R^{23} together with the carbon atom to which they are attached form a $(C_3$-$C_7)$cycloalkyl or heterocycloalkyl ring;

X is a bond or a $(CR^{24}R^{25})_n$ group;

R^{24} and R^{25} are independently selected from H, $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$alkoxy, OH, heterocycloalkyl and $NR^{39}R^{40}$; or R^{24} and R^{25} together with the carbon atom to which they are attached may form a heterocycloalkyl ring;

Z is an aryl or heteroaryl ring, wherein said aryl or heteroaryl ring is substituted with R^{26} and R^{27};

R^{26} is selected from H, $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$alkoxy, OH, aryl, O-aryl, halo, heterocycloalkyl, O-heterocycloalkyl, heteroaryl, O-heteroaryl, cycloalkyl, O-cycloalkyl, $S(O)_pR^{34}$, $NR^{34}R^{35}$ and $CONR^{34}R^{35}$, wherein said $(C_1$-$C_6)$alkyl or said $(C_1$-$C_6)$alkoxy may be optionally substituted with 1, 2 or 3 groups independently selected from halo, OH, heterocycloalkyl or $NR^{34}R^{35}$;

R^{27} is selected from H, halo and $(C_1$-$C_6)$alkyl, wherein said $(C_1$-$C_6)$alkyl may be optionally substituted with 1, 2 or 3 halo groups;

or R^{26} and R^{27} together may form a methylenedioxy group, when attached to adjacent carbon atoms of the aryl or heteroaryl ring;

each occurrence of R^{28} is independently selected from $NR^{29}R^{30}$, halo, CH_2CF_3, CF_3, heterocycloalkyl, $(C_1$-$C_6)$alkoxy, OR^{36}, $COOR^{42}$, $CONR^{31}R^{32}$ and $SO_2NR^{37}R^{38}$;

R^{29} and R^{30} are independently selected from H, $(C_1$-$C_6)$alkyl, $(C_3$-$C_7)$cycloalkyl, SO_2R^{41} and $C(O)R^{41}$, wherein said $(C_1$-$C_6)$alkyl may be optionally substituted with, OH, $NR^{56}R^{57}$ or heterocycloalkyl;

R^{31} and R^{32} are independently selected from H, $(C_1$-$C_6)$alkyl and $(C_3$-$C_7)$cycloalkyl; or R^{31} and R^{32} together with the nitrogen atom to which they are attached form a 4 to 7 membered ring, optionally containing a further heteroatom selected from NR^{33}, S and O;

R^{34} and R^{35} are independently selected from H, $(C_1$-$C_6)$alkyl, $(C_3$-$C_7)$cycloalkyl, C-linked heterocycloalkyl and $C(O)O(C_1$-$C_6)$alkyl, wherein said $(C_1$-$C_6)$alkyl may be optionally substituted by OH, halo, $(C_1$-$C_6)$alkoxy, $NR^{58}R^{59}$, C(O)OH and

heterocycloalkyl; or R^{34} and R^{35} together with the nitrogen to which they are attached form a 4 to 7 membered ring;

R^{36} is selected from H, $(C_1$-$C_6)$alkyl and heterocycloalkyl, wherein said $(C_1$-$C_6)$alkyl may be optionally substituted with heterocycloalkyl;

R^{12}, R^{13}, R^{19}, R^{20}, R^{21}, R^{33}, R^{37}, R^{38}, R^{39}, R^{40}, R^{41} and R^{42} are independently selected from H and $(C_1$-$C_6)$alkyl;

n is 1 or 2;

each occurrence of p is independently selected from 0, 1 or 2;

cycloalkyl is a non-aromatic carbocyclic ring, optionally fused to an aryl group, wherein said cycloalkyl ring optionally contains, where possible, up to 2 double bonds; and wherein, unless otherwise stated, said cycloalkyl may be optionally substituted with 1 or 2 substituents independently selected from $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$alkoxy, OH, CN, CF_3, halo and $NR^{43}R^{44}$;

heterocycloalkyl is a C-linked or N-linked 3 to 9 membered non-aromatic, mono- or bi-cyclic ring, optionally fused to an aryl or heteroaryl group, wherein said heterocycloalkyl ring contains:
1 or 2 NR^{45} atoms, or
one N- atom, or
one N- atom and one NR^{45}, or
one N- atom, one NR^{45} and an $S(O)_p$ or an O atom, or
one N- atom and an $S(O)_p$ or an O atom, or
one S atom, or
one O atom;
optionally containing, where possible, 1 or 2 double bonds; and optionally substituted on carbon with 1 or 2 substituents independently selected from $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$alkoxy, OH, CN, CF_3, halo, =O, $NR^{46}R^{47}$, $-C(O)NR^{46}R^{47}$, bivalent substituent $-OCH_2CH_2O-$ (wherein the terminal oxygen atoms are attached to the same ring carbon atom), bivalent substituent $-CH_2NHCH_2-$ wherein the terminal carbon atoms are attached to the same ring carbon atom, a tetrahydro-1,1-dioxido-3-thienyl group, and aryl, wherein said $(C_1$-$C_6)$alkyl may be optionally substituted by aryl, $(C_1$-$C_6)$alkoxy or OH; and wherein each aryl group may be optionally substituted with $(C_1$-$C_6)$alkoxy which in turn may be optionally substituted by $NR^{34}R^{35}$, $(C_1$-$C_6)$alkyl, OH, CF_3 and halo;

aryl is an aromatic ring containing 6 or 10 carbon atoms; wherein, unless otherwise stated, said aryl may be optionally substituted with 1, 2 or 3 substituents independently selected from $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$alkoxy, OH, halo, CN, CF_3 and $NR^{48}R^{49}$;

heteroaryl is a 5, 6, 9 or 10 membered aromatic ring, containing from 1 or 2 N atoms and, optionally, an NR^{50} atom, or one NR^{50} atom and an S or an O atom, or one S atom, or one O atom; wherein, unless otherwise stated, said heteroaryl may be optionally substituted with 1, 2 or 3 substituents independently selected from $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$alkoxy, OH, halo, CN, CF_3 and $NR^{51}R^{52}$;

R^{45} is selected from H, $(C_1$-$C_6)$alkyl, $C(O)(C_1$-$C_6)$alkyl, $C(O)O(C_1$-$C_6)$alkyl and aryl, wherein said $(C_1$-$C_6)$alkyl is optionally substituted with a group selected from $(C_1$-$C_3)$alkoxy, OH, halo, heterocycloalkyl and $NR^{29}R^{30}$; and wherein said $C(O)O(C_1$-$C_6)$alkyl is optionally substituted with an aryl group;

R^{50} is selected from H, $(C_1$-$C_6)$alkyl and $C(O)O(C_1$-$C_6)$alkyl, wherein said $(C_1$-$C_6)$alkyl may be optionally substituted with a group selected from $(C_1$-$C_3)$alkoxy, OH, halo, $(C_3$-$C_6)$cycloalkyl and $NR^{53}R^{54}$;

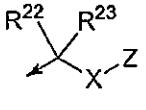
R^{43}, R^{44}, R^{46}, R^{47}, R^{48}, R^{49}, R^{51}, R^{52}, R^{53}, R^{54}, R^{56}, R^{57} and R^{59} are each independently selected from H and $(C_1$-$C_6)$alkyl;

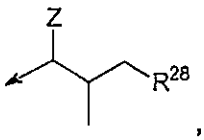
R^{58} is selected from H and $(C_1$-$C_6)$alkyl wherein said $(C_1$-$C_6)$alkyl may be optionally substituted with a group selected from $(C_1$-$C_3)$alkoxy and OH;

or pharmaceutically acceptable salts thereof.

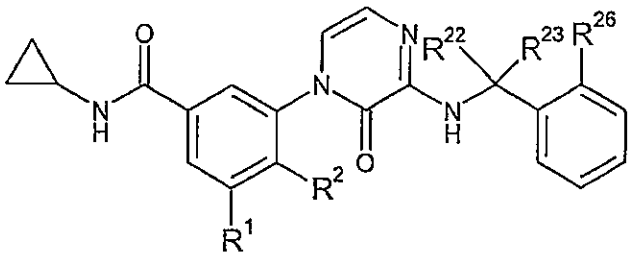
2. A compound according to claim 1, or a pharmaceutically acceptable salt thereof, wherein R^{1a} is H, R^1 is selected from H and F and R^2 is selected from $(C_1$-$C_4)$alkyl and F.

3. A compound according to claim 1 or claim 2, or a pharmaceutically acceptable salt thereof, wherein R^3 and R^4 are H.

4. A compound according to claim 1 or claim 2, or a pharmaceutically acceptable salt thereof, wherein R^{16} is  and Z is an aryl ring substituted with R^{26} and R^{27}.

5. A compound according to claim 1 or claim 2, or a pharmaceutically acceptable salt thereof, wherein R^{16} is  , Z is an aryl ring substituted with R^{26} and R^{27} and R^{28} is heterocycloalkyl.

6. A compound according to claim 1 of formula (IA), or a pharmaceutically acceptable salt thereof



(IA)

wherein:
R^1 and R^2 are independently selected from H, $(C_1$-$C_4)$alkyl and F;
R^{22} and R^{23} are each independently selected from H and $(C_1$-$C_6)$alkyl;
or R^{22} and R^{23} together with the carbon atom to which they are both attached form a $(C_3$-$C_4)$cycloalkyl;
R^{26} is $(C_1$-$C_6)$alkoxy which may be optionally substituted with $NR^{34}R^{35}$; and
R^{34} and R^{35} are independently selected from H and $(C_1$-$C_6)$alkyl wherein said $(C_1$-$C_6)$alkyl may be optionally substituted by OH.

7. A compound according to claim 6, selected from:
N-Cyclopropyl-4-methyl-3-[3-[[1-methyl-1-[2-[2-(methylamino)ethoxy]phenyl]ethyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-benzamide;
N-Cyclopropyl-4-methyl-3-[3-[[1-[2-[2-(methylamino)ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-benzamide;
N-Cyclopropyl-3-fluoro-5-[3-[[1-[2-[2-[(2-hydroxyethyl)amino]ethoxy]phenyl]-1-methylethyl]amino]-2-oxo-1(2H)-pyrazinyl]-4-methyl-benzamide;
N-Cyclopropyl-3-fluoro-5-[3-[[1-[2-[2-[[(2R)-2-hydroxypropyl]amino]ethoxy]phenyl]-1-methylethyl]amino]-2-oxo-1(2H)-pyrazinyl]-4-methyl-benzamide;
N-Cyclopropyl-3-fluoro-5-[3-[[1-[2-[2-[[(2S)-2-hydroxypropyl]amino]ethoxy]phenyl]-1-methylethyl]amino]-2-oxo-1(2H)-pyrazinyl]-4-methyl-benzamide;
N-Cyclopropyl-3-fluoro-4-methyl-5-[3-[[1-[2-[2-(methylamino)ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]- benzamide;
N-Cyclopropyl-3-fluoro-5-[3-[[1-[2-[2-[(2-hydroxyethyl)amino]ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-4-methyl-benzamide;
3-[3-({1-[2-(2-Aminoethoxy)phenyl]-1-methylethyl}amino)-2-oxopyrazin-1(2H)-yl]-N-cyclopropyl-5-fluoro-4-methylbenzamide;
3-[3-({1-[2-(2-Aminoethoxy)phenyl]cyclopropyl}amino)-2-oxopyrazin-1(2H)-yl]-N-cyclopropyl-5-fluoro-4-methylbenzamide;
and
N-Cyclopropyl-3-fluoro-5-[3-{[1-(2-{2-[(2-hydroxyethyl)(methyl)amino]ethoxy}phenyl)cyclopropyl]amino}-2-oxopyrazin-1(2H)-yl]-4-methylbenzamide;

or a pharmaceutically acceptable salt thereof.

8. A compound according to claim 1 which is *N*-cyclopropyl-3-fluoro-4-methyl- 5-[3-[[1-[2-[2-(methylamino)ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-benzamide or a pharmaceutically acceptable salt thereof.

9. A compound according to claim 1 which is *N*-cyclopropyl-3-fluoro-5-[3-[[1-[2-[2- [(2-hydroxyethyl)amino]ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-4-methyl-benzamide or a pharmaceutically acceptable salt thereof.

10. A compound according to claims 8 or 9 wherein the pharmaceutically acceptable salt is acetate, adipate, alginate, ascorbate, aspartate, benzenesulfonate (besylate), benzoate, butyrate, camphorate, camphorsulfonate, camsylate, citrate, p-chlorobenzenesulfonate, cyclopentate, 2,5-dichlorobesylate, digluconate, edisylate, esylate, fumarate, formate, gluconate, glucoheptanoate, glutamate, glutarate, glycerophosphate, glycolate, heptanoate, hexanoate, hippurate, 2-hydroxyethane sulfonate, lactate, lactobionate, laurate, malate, maleate, malonate, mandelate, methanesulfonate, 2-naphthalenesulfonate, napsylate, nicotinate, orotate, oxalate, pantothenate, pamoate, pamoic, pectinate, 3-phenylpropionate, pivalate, propionate, pivalate, saccharin, salicylate, stearate, succinate, tartrate, trans-cinnamate, trifluoroacetate, xinafoate, xylate (p-xylene-2-sulfonic acid), undecanoate, hydrobromide, hydrochloride, hydroiodide, sulphate, bisulfate, phosphate, nitrate, hemisulfate, thiocyanate, persulfate, phosphoric acid or sulfonic acid.

11. A compound according to claim 1 which is *N*-cyclopropyl-3-fluoro-4-methyl- 5-[3-[[1-[2-[2-(methylamino)ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-benzamide as a free base.

12. A compound according to claim 1 which is *N*-cyclopropyl-3-fluoro-5-[3-[[1-[2-[2- [(2-hydroxyethyl)amino]ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-4-methyl-benzamide as a free base.

13. A crystalline form of *N*-Cyclopropyl-3-fluoro-4-methyl-5-[3-[[1-[2-[2-(methylamino) ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-benzamide having an X-ray diffraction pattern substantially as shown in figure 3.

14. A crystalline form of *N*-Cyclopropyl-3-fluoro-5-[3-[[1-[2-[2-[(2-hydroxyethyl) amino]ethoxy] phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-4-methyl-benzamide having an X-ray diffraction pattern substantially as shown in figure 4.

15. A compound of formula (I) as defined in any one of claims 1 to 12, or a pharmaceutically acceptable salt thereof, for use in therapy.

16. The use of a compound of formula (I) as defined in any one of claims 1 to 12,

or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for use in the treatment of chronic obstructive pulmonary disease (COPD).

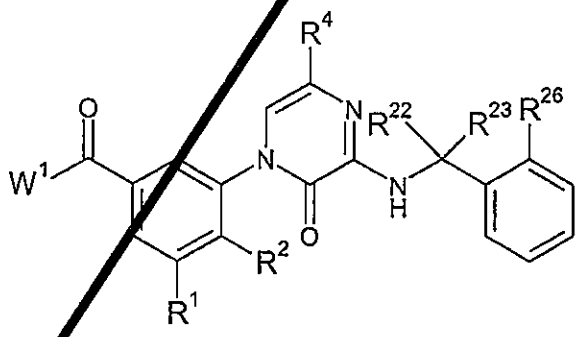
17. The use of a compound of formula (I) as defined in any one of claims 1 to 12, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for use in the treatment of asthma.

18. A pharmaceutical composition that comprises a compound of formula (I) as defined in any one of claims 1 to 12, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable adjuvant, diluent or carrier.

19. A pharmaceutical product comprising, in combination, a first active ingredient which is a compound of formula (I) as defined in any one of claims 1 to 12, or a pharmaceutically acceptable salt thereof, and at least one further active ingredient selected from:-

- a phosphodiesterase inhibitor;
- a β2 adrenoceptor agonist;
- a modulator of chemokine receptor function;
- a protease inhibitor;
- a steroidal glucocorticoid receptor agonist;
- an anticholinergic agent; and
- a non-steroidal glucocorticoid receptor agonist.

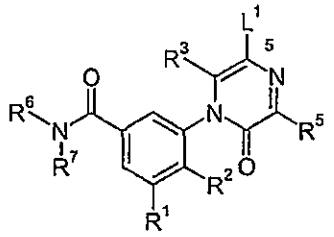
20. A compound of formula (VA) or a salt thereof



(VA)

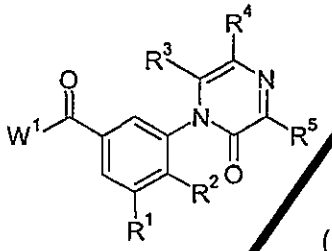
wherein:
W^1 is OH or (C_1-C_4)alkoxy;
R^1 and R^2 are independently selected from H, (C_1-C_4)alkyl and F;
R^4 is H or Br;
R^{22} and R^{23} each independently represent methyl, or R^{22} and R^{23} together with the carbon atom to which they are both attached form a cyclopropyl ring; and
R^{26} is selected from OH, OCH_2Ph or OCH_2CH_2Cl.

21. A process for preparing a compound of formula (I) as defined in claim 1, or a pharmaceutically acceptable salt thereof, which comprises:
(a) a functionalisation of a compound of formula (II)



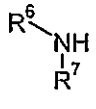
(II)

wherein R^1, R^2, R^3, R^5, R^6 and R^7 are as defined in claim 1 and L_1 is a leaving group; or
(b) reacting a compound of formula (III)



(III)

wherein R^1, R^2, R^3, R^4 and R^5 are as defined in claim 1 and W^1 represents a leaving group, with a compound of formula (IV),

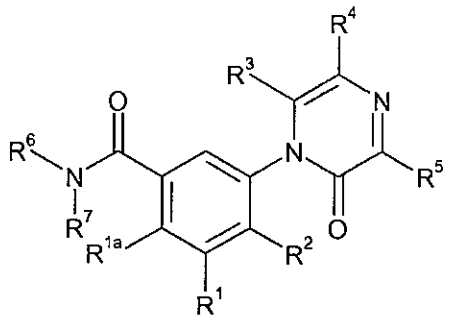


(IV)

Wherein R^6 and R^7 are as defined in claim 1;
and optionally carrying out one or more of the following:
(i) converting the compound to another compound of formula (I); or
(ii) forming a pharmaceutically-acceptable salts of the compound.

CLAIMS

1. A compound of formula (I):



(I)

wherein:

R^1 and R^2 are independently selected from H, $(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$alkoxy, halo, CF_3, and CN;

R^{1a} is hydrogen;

R^3 is hydrogen;

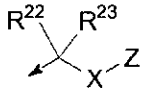
R^4 is selected from H, methyl, ethyl, methoxy, ethoxy, Cl, Br, CN, phenyl and $CONH_2$, wherein methyl is optionally substituted with a $NR^{12}R^{13}$ group;

R^5 is selected from $NR^{16}R^{17}$ and heterocycloalkyl;

R^6 is selected from H, $(C_1\text{-}C_4)$alkyl, $(C_1\text{-}C_4)$alkoxy and $(C_3\text{-}C_6)$cycloalkyl;

R^7 is selected from H, $(C_1\text{-}C_4)$alkyl, $(C_1\text{-}C_4)$alkoxy and $(C_3\text{-}C_6)$cycloalkyl;

R^{16} is selected from H, aryl, $(C_3\text{-}C_7)$cycloalkyl and



, wherein said $(C_3\text{-}C_7)$cycloalkyl may be optionally substituted with an aryl group;

R^{17} is selected from H, $(C_1\text{-}C_6)$alkyl, aryl, heteroaryl, heterocycloalkyl and $(C_3\text{-}C_7)$cycloalkyl, wherein said $(C_1\text{-}C_6)$alkyl may be optionally substituted with 1, 2 or 3 groups independently selected from $(C_1\text{-}C_6)$alkoxy, $(C_3\text{-}C_{10})$cycloalkyl, heterocycloalkyl, heteroaryl and $NR^{20}R^{21}$;

R^{22} is selected from H, $(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$alkoxy, OH, $NR^{29}R^{30}$, heterocycloalkyl and aryl, wherein said $(C_1\text{-}C_6)$alkyl may be optionally substituted with 1, 2 or 3 R^{28} groups;

and wherein said aryl may be optionally substituted with 1, 2 or 3 groups independently selected from $(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$alkoxy, halo, CF_3 and OH;

R^{23} is selected from H and $(C_1\text{-}C_6)$alkyl;

or R^{22} and R^{23} together with the carbon atom to which they are attached form a $(C_3\text{-}C_7)$cycloalkyl or heterocycloalkyl ring;

X is a bond or a $(CR^{24}R^{25})_n$ group;

R^{24} and R^{25} are independently selected from H, $(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$alkoxy, OH, heterocycloalkyl and $NR^{39}R^{40}$; or R^{24} and R^{25} together with the carbon atom to which they are attached may form a heterocycloalkyl ring;

Z is an aryl or heteroaryl ring, wherein said aryl or heteroaryl ring is substituted with R^{26} and R^{27};

R^{26} is selected from H, $(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$alkoxy, OH, aryl, O-aryl, halo, heterocycloalkyl, O-heterocycloalkyl, heteroaryl, O-heteroaryl, cycloalkyl, O-cycloalkyl, $S(O)_pR^{34}$, $NR^{34}R^{35}$ and $CONR^{34}R^{35}$, wherein said $(C_1\text{-}C_6)$alkyl or said $(C_1\text{-}C_6)$alkoxy may be optionally substituted with 1, 2 or 3 groups independently selected from halo, OH, heterocycloalkyl or $NR^{34}R^{35}$;

R^{27} is selected from H, halo and $(C_1\text{-}C_6)$alkyl, wherein said $(C_1\text{-}C_6)$alkyl may be optionally substituted with 1, 2 or 3 halo groups;

or R^{26} and R^{27} together may form a methylenedioxy group, when attached to adjacent carbon atoms of the aryl or heteroaryl ring;

each occurrence of R^{28} is independently selected from $NR^{29}R^{30}$, halo, CH_2CF_3, CF_3, heterocycloalkyl, $(C_1\text{-}C_6)$alkoxy, OR^{36}, $COOR^{42}$, $CONR^{31}R^{32}$ and $SO_2NR^{37}R^{38}$;

R^{29} and R^{30} are independently selected from H, $(C_1\text{-}C_6)$alkyl, $(C_3\text{-}C_7)$cycloalkyl, SO_2R^{41} and $C(O)R^{41}$, wherein said $(C_1\text{-}C_6)$alkyl may be optionally substituted with, OH, $NR^{56}R^{57}$ or heterocycloalkyl;

R^{31} and R^{32} are independently selected from H, $(C_1\text{-}C_6)$alkyl and $(C_3\text{-}C_7)$cycloalkyl; or R^{31} and R^{32} together with the nitrogen atom to which they are attached form a 4 to 7 membered ring, optionally containing a further heteroatom selected from NR^{33}, S and O;

R^{34} and R^{35} are independently selected from H, $(C_1\text{-}C_6)$alkyl, $(C_3\text{-}C_7)$cycloalkyl, C-linked heterocycloalkyl and $C(O)O(C_1\text{-}C_6)$alkyl, wherein said $(C_1\text{-}C_6)$alkyl may be optionally substituted by OH, halo, $(C_1\text{-}C_6)$alkoxy, $NR^{58}R^{59}$, C(O)OH and

heterocycloalkyl; or R^{34} and R^{35} together with the nitrogen to which they are attached form a 4 to 7 membered ring;

R^{36} is selected from H, $(C_1$-$C_6)$alkyl and heterocycloalkyl, wherein said $(C_1$-$C_6)$alkyl may be optionally substituted with heterocycloalkyl;

R^{12}, R^{13}, R^{20}, R^{21}, R^{33}, R^{37}, R^{38}, R^{39}, R^{40}, R^{41} and R^{42} are independently selected from H and $(C_1$-$C_6)$alkyl;

n is 1 or 2;

each occurrence of p is independently selected from 0, 1 or 2;

cycloalkyl is a non-aromatic carbocyclic ring, optionally fused to an aryl group, wherein said cycloalkyl ring optionally contains, where possible, up to 2 double bonds; and wherein, unless otherwise stated, said cycloalkyl may be optionally substituted with 1 or 2 substituents independently selected from $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$alkoxy, OH, CN, CF_3, halo and $NR^{43}R^{44}$;

heterocycloalkyl is a C-linked or N-linked 3 to 9 membered non-aromatic, mono- or bi-cyclic ring, optionally fused to an aryl or heteroaryl group, wherein said heterocycloalkyl ring contains:
1 or 2 NR^{45} atoms, or
one N- atom, or
one N- atom and one NR^{45}, or
one N- atom, one NR^{45} and an $S(O)_p$ or an O atom, or
one N- atom and an $S(O)_p$ or an O atom, or
one S atom, or
one O atom;
optionally containing, where possible, 1 or 2 double bonds; and optionally substituted on carbon with 1 or 2 substituents independently selected from $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$alkoxy, OH, CN, CF_3, halo, =O, $NR^{46}R^{47}$, $-C(O)NR^{46}R^{47}$, bivalent substituent $-OCH_2CH_2O-$ (wherein the terminal oxygen atoms are attached to the same ring carbon atom), bivalent substituent $-CH_2NHCH_2-$ (wherein the terminal carbon atoms are attached to the same ring carbon atom), a tetrahydro-1,1-dioxido-3-thienyl group, and aryl, wherein said $(C_1$-$C_6)$alkyl may be optionally substituted by aryl, $(C_1$-$C_6)$alkoxy or OH; and wherein each aryl group may be optionally substituted with $(C_1$-$C_6)$alkoxy (which in turn may be optionally substituted by $NR^{34}R^{35}$), $(C_1$-$C_6)$alkyl, OH, CF_3 and halo;

aryl is an aromatic ring containing 6 or 10 carbon atoms; wherein, unless otherwise stated, said aryl may be optionally substituted with 1, 2 or 3 substituents independently selected from $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$alkoxy, OH, halo, CN, CF_3 and $NR^{48}R^{49}$;

heteroaryl is a 5, 6, 9 or 10 membered aromatic ring, containing from 1 or 2 N atoms and, optionally, an NR^{50} atom, or one NR^{50} atom and an S or an O atom, or one S atom, or one O atom; wherein, unless otherwise stated, said heteroaryl may be optionally substituted with 1, 2 or 3 substituents independently selected from $(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$alkoxy, OH, halo, CN, CF_3 and $NR^{51}R^{52}$;

R^{45} is selected from H, $(C_1\text{-}C_6)$alkyl, $C(O)(C_1\text{-}C_6)$alkyl, $C(O)O(C_1\text{-}C_6)$alkyl and aryl, wherein said $(C_1\text{-}C_6)$alkyl is optionally substituted with a group selected from $(C_1\text{-}C_3)$alkoxy, OH, halo, heterocycloalkyl and $NR^{29}R^{30}$; and wherein said $C(O)O(C_1\text{-}C_6)$alkyl is optionally substituted with an aryl group;

R^{50} is selected from H, $(C_1\text{-}C_6)$alkyl and $C(O)O(C_1\text{-}C_6)$alkyl, wherein said $(C_1\text{-}C_6)$alkyl may be optionally substituted with a group selected from $(C_1\text{-}C_3)$alkoxy, OH, halo, $(C_3\text{-}C_6)$cycloalkyl and $NR^{53}R^{54}$;

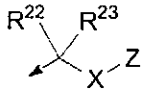
R^{43}, R^{44}, R^{46}, R^{47}, R^{48}, R^{49}, R^{51}, R^{52}, R^{53}, R^{54}, R^{56}, R^{57} and R^{59} are each independently selected from H and $(C_1\text{-}C_6)$alkyl;

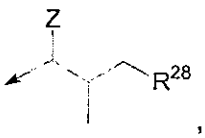
R^{58} is selected from H and $(C_1\text{-}C_6)$alkyl wherein said $(C_1\text{-}C_6)$alkyl may be optionally substituted with a group selected from $(C_1\text{-}C_3)$alkoxy and OH;

or a pharmaceutically acceptable salt thereof.

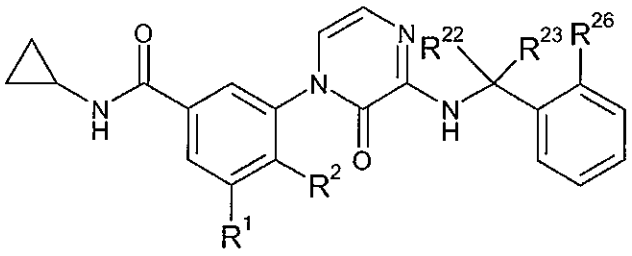
2. A compound according to claim 1, or a pharmaceutically acceptable salt thereof, wherein R^{1a} is H, R^1 is selected from H and F and R^2 is selected from $(C_1\text{-}C_4)$alkyl and F.

3. A compound according to claim 1 or claim 2, or a pharmaceutically acceptable salt thereof, wherein R^3 and R^4 are H.

4. A compound according to claim 1 or claim 2, or a pharmaceutically acceptable salt thereof, wherein R^{16} is  and Z is an aryl ring substituted with R^{26} and R^{27}.

5. A compound according to claim 1 or claim 2, or a pharmaceutically acceptable salt thereof, wherein R^{16} is , Z is an aryl ring substituted with R^{26} and R^{27} and R^{28} is heterocycloalkyl.

6. A compound according to claim 1 of formula (IA), or a pharmaceutically acceptable salt thereof



(IA)

wherein:
R^1 and R^2 are independently selected from H, $(C_1$-$C_4)$alkyl and F;
R^{22} and R^{23} are each independently selected from H and $(C_1$-$C_6)$alkyl;
or R^{22} and R^{23} together with the carbon atom to which they are both attached form a $(C_3$-$C_4)$cycloalkyl;
R^{26} is $(C_1$-$C_6)$alkoxy which may be optionally substituted with $NR^{34}R^{35}$; and
R^{34} and R^{35} are independently selected from H and $(C_1$-$C_6)$alkyl wherein said $(C_1$-$C_6)$alkyl may be optionally substituted by OH.

7. A compound according to claim 6, selected from:
N-Cyclopropyl-4-methyl-3-[3-[[1-methyl-1-[2-[2-(methylamino)ethoxy]phenyl]ethyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-benzamide;
N-Cyclopropyl-4-methyl-3-[3-[[1-[2-[2-(methylamino)ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-benzamide;
N-Cyclopropyl-3-fluoro-5-[3-[[1-[2-[2-[(2-hydroxyethyl)amino]ethoxy]phenyl]-1-methylethyl]amino]-2-oxo-1(2H)-pyrazinyl]-4-methyl-benzamide;
N-Cyclopropyl-3-fluoro-5-[3-[[1-[2-[2-[[(2R)-2-hydroxypropyl]amino]ethoxy]phenyl]-1-methylethyl]amino]-2-oxo-1(2H)-pyrazinyl]-4-methyl-benzamide;
N-Cyclopropyl-3-fluoro-5-[3-[[1-[2-[2-[[(2S)-2-hydroxypropyl]amino]ethoxy]phenyl]-1-methylethyl]amino]-2-oxo-1(2H)-pyrazinyl]-4-methyl-benzamide;
N-Cyclopropyl-3-fluoro-4-methyl-5-[3-[[1-[2-[2-(methylamino)ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]- benzamide;
N-Cyclopropyl-3-fluoro-5-[3-[[1-[2-[2-[(2-hydroxyethyl)amino]ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-4-methyl-benzamide;
3-[3-({1-[2-(2-Aminoethoxy)phenyl]-1-methylethyl}amino)-2-oxopyrazin-1(2H)-yl]-N-cyclopropyl-5-fluoro-4-methylbenzamide;
3-[3-({1-[2-(2-Aminoethoxy)phenyl]cyclopropyl}amino)-2-oxopyrazin-1(2H)-yl]-N-cyclopropyl-5-fluoro-4-methylbenzamide;
and
N-Cyclopropyl-3-fluoro-5-[3-{[1-(2-{2-[(2-hydroxyethyl)(methyl)amino]ethoxy}phenyl)cyclopropyl]amino}-2-oxopyrazin-1(2H)-yl]-4-methylbenzamide;
or a pharmaceutically acceptable salt thereof.

8. A compound according to claim 1 which is *N*-cyclopropyl-3-fluoro-4-methyl-5-[3-[[1-[2-[2-(methylamino)ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-benzamide or a pharmaceutically acceptable salt thereof.

9. A compound according to claim 1 which is *N*-cyclopropyl-3-fluoro-5-[3-[[1-[2-[2-[(2-hydroxyethyl)amino]ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-4-methyl-benzamide or a pharmaceutically acceptable salt thereof.

10. A compound according to claims 8 or 9 wherein the pharmaceutically acceptable salt is acetate, adipate, alginate, ascorbate, aspartate, benzenesulfonate (besylate), benzoate, butyrate, camphorate, camphorsulfonate, camsylate, citrate, p-chlorobenzenesulfonate, cyclopentate, 2,5-dichlorobesylate, digluconate, edisylate, esylate, fumarate, formate, gluconate, glucoheptanoate, glutamate, glutarate, glycerophosphate, glycolate, heptanoate, hexanoate, hippurate, 2-hydroxyethane sulfonate, lactate, lactobionate, laurate, malate, maleate, malonate, mandelate, methanesulfonate, 2-naphthalenesulfonate, napsylate, nicotinate, orotate, oxalate, pantothenate, pamoate, pamoic, pectinate, 3-phenylpropionate, pivalate, propionate, pivalate, saccharin, salicylate, stearate, succinate, tartrate, trans-cinnamate, trifluoroacetate, xinafoate, xylate (p-xylene-2-sulfonic acid), undecanoate, hydrobromide, hydrochloride, hydroiodide, sulphate, bisulfate, phosphate, nitrate, hemisulfate, thiocyanate, persulfate, phosphoric acid or sulfonic acid.

11. A compound according to claim 1 which is *N*-cyclopropyl-3-fluoro-4-methyl-5-[3-[[1-[2-[2-(methylamino)ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-benzamide as a free base.

12. A compound according to claim 1 which is *N*-cyclopropyl-3-fluoro-5-[3-[[1-[2-[2-[(2-hydroxyethyl)amino]ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-4-methyl-benzamide as a free base.

13. A crystalline form of *N*-Cyclopropyl-3-fluoro-4-methyl-5-[3-[[1-[2-[2-(methylamino)ethoxy]phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-benzamide having an X-ray diffraction pattern substantially as shown in figure 3.

14. A crystalline form of *N*-Cyclopropyl-3-fluoro-5-[3-[[1-[2-[2-[(2-hydroxyethyl)amino]ethoxy] phenyl]cyclopropyl]amino]-2-oxo-1(2*H*)-pyrazinyl]-4-methyl-benzamide having an X-ray diffraction pattern substantially as shown in figure 4.

15. A compound of formula (I) as defined in any one of claims 1 to 14, or a pharmaceutically acceptable salt thereof, for use in therapy.

16. A compound of formula (I) as defined in any one of claims 1 to 14, or a pharmaceutically acceptable salt thereof, for use in the treatment of chronic obstructive pulmonary disease (COPD).

17. The use of a compound of formula (I) as defined in any one of claims 1 to 14, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for use in the treatment of chronic obstructive pulmonary disease (COPD).

18. A compound of formula (I) as defined in any one of claims 1 to 14, or a pharmaceutically acceptable salt thereof, for use in the treatment of asthma.

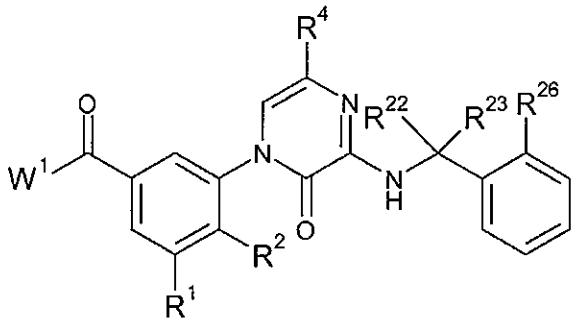
19. The use of a compound of formula (I) as defined in any one of claims 1 to 14, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for use in the treatment of asthma.

20. A pharmaceutical composition that comprises a compound of formula (I) as defined in any one of claims 1 to 14, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable adjuvant, diluent or carrier.

21. A pharmaceutical product comprising, in combination, a first active ingredient which is a compound of formula (I) as defined in any one of claims 1 to 14, or a pharmaceutically acceptable salt thereof, and at least one further active ingredient selected from:-

- a phosphodiesterase inhibitor;
- a β2 adrenoceptor agonist;
- a modulator of chemokine receptor function;
- a protease inhibitor;
- a steroidal glucocorticoid receptor agonist;
- an anticholinergic agent; and
- a non-steroidal glucocorticoid receptor agonist.

22. A compound of formula (VA) or a salt thereof

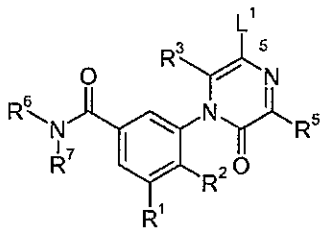


(VA)

wherein:
W^1 is OH or $(C_1$-$C_4)$alkoxy;
R^1 and R^2 are independently selected from H, $(C_1$-$C_4)$alkyl and F;
R^4 is H or Br;

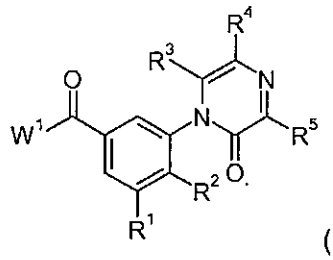
R^{22} and R^{23} each independently represent methyl, or R^{22} and R^{23} together with the carbon atom to which they are both attached form a cyclopropyl ring; and
R^{26} is selected from OH, OCH_2Ph or OCH_2CH_2Cl.

23. A process for preparing a compound of formula (I) as defined in claim 1, or a pharmaceutically acceptable salt thereof, which comprises:
(a) a functionalisation of a compound of formula (II)



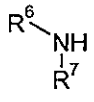
(II)

wherein R^1, R^2, R^3, R^5, R^6 and R^7 are as defined in claim 1 and L_1 is a leaving group; or
(b) reacting a compound of formula (III)



(III)

wherein R^1, R^2, R^3, R^4 and R^5 are as defined in claim 1 and W^1 represents a leaving group, with a compound of formula (IV),



(IV)

wherein R^6 and R^7 are as defined in claim 1;
and optionally carrying out one or more of the following:
(i) converting the compound to another compound of formula (I); or
(ii) forming a pharmaceutically-acceptable salts of the compound.