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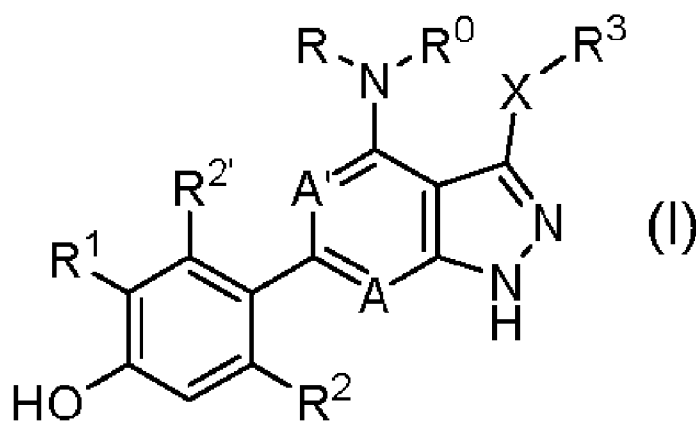
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(54) Title: PYRAZOLOPYRIDINES AND PYRAZOLOPYRIMIDINES



(57) Abstract: A compound having the structure: A compound having the structure (I) or a pharmaceutically acceptable salt thereof, or a pharmaceutically acceptable solvate of said compound or pharmaceutically acceptable salt, wherein A and A' are independently C or N, where C may be unsubstituted or substituted by halo or C₁-C₆ alkyl; R and R⁰ are independently selected from the group consisting of H, C₁-C₆ alkyl, hydroxy(C₁-C₆ alkyl), phenyl(C₁-C₆ alkyl), and -(CH₂)_n-W, where W is C₃-C₈ cycloalkyl, phenyl, naphthyl, 5- or 6-membered heteroaryl or heterocyclic containing 1 -3 N, S and/or O atoms, -SO₂-R', -NHSO₂-R', -NR''SO₂-R' and SR', where R' and R'' are independently C₁-C₆ alkyl or C₃-C₈ cycloalkyl, etc.; wherein each of said alkyl, cycloalkyl, heterocyclic, phenyl, naphthyl or heteroaryl may be unsubstituted or substituted by phenyl, heteroaryl, etc.; or, R and R₀ and the N atom to which they are bonded together form a monocyclic or bicyclic heterocyclic ring which may be unsubstituted or substituted by (a) halo, hydroxy, heteroaryl, C₁-C₆ alkyl, C₁-C₆ alkoxy, etc., or (b) -(CH₂)_n-W, where W is C₃-C₈cycloalkyl, phenyl, etc.; R¹ is H, halo or cyano; R² and R² are independently H, C₁-C₆ alkyl, cyano, C₁-C₆ alkoxy, C₁-C₆ alkylthio, or C₃-C₈ cycloalkyl where alkyl, alkoxy, or cycloalkyl is optionally substituted by one or more fluorine atoms; X is a bond, -CO-, -CONH-, -SO₂-, -SONH-, or -(CH₂)_m-; R³ is H, C₁-C₄ alkyl, phenyl, naphthyl, 5- or 6-membered heteroaryl or heterocyclic containing 1 -3 N atoms, a 5-membered heteroaryl or heterocyclic, etc., or (c) 2 O or S atoms and 0-2 N atoms; wherein each of

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SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

— as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
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said phenyl, naphthyl, heteroaryl or heterocyclic is optionally substituted by alkyl, 1 substituent -Y-R⁴ and/or 1 -4 substituents each independently selected from R⁵; with the proviso that when X is -CO- or -SO₂-, R³ is not H; Y is a bond, -(CH₂)_m- or -O-; R⁴ is (a) H, C₁-C₆ alkyl, C₃-C₈ cycloalkyl, halo, oxo, -OR⁶, -NR⁷R⁸, -SR⁶, -SOR⁹, -SO₂R⁹, -COR⁶, -OCOR⁶, -COOR⁶, -NR⁶COR⁶, -CONR⁷R⁸, etc.; (b) phenyl or naphthyl, said phenyl and naphthyl being optionally substituted with 1 -5 substituents selected from C₁-C₆ alkyl, C₃-C₈ cycloalkyl, halo, cyano, -OR⁶, -NR⁷R⁸, etc.; or (c) a 3 to 8-membered saturated or partially unsaturated monocyclic heteroaryl, etc.; R⁶ is H, C₁-C₆ alkyl or C₃-C₈ cycloalkyl, etc.; R⁷ and R⁸ are each independently H, C₁-C₆ alkyl or C₃-C₈ cycloalkyl or are taken together with the nitrogen atom to which they are attached to form a 4-, 5- or 6-membered saturated heterocyclic ring containing 1 -2 nitrogen atoms or 1 nitrogen and 1 oxygen atom, said C₁-C₆ alkyl is optionally substituted by C₃-C₈ cycloalkyl, halo, etc., and said heterocyclic ring being optionally substituted by one or more C₁-C₆ alkyl or C₃-C₈ cycloalkyl groups; R⁹ is C₁-C₆ alkyl or C₃-C₈ cycloalkyl; and, *m* and *n* are independently 0, 1, 2 or 3. The invention also relates to pharmaceutically acceptable salts of these compounds and to pharmaceutically acceptable solvates thereof; to compositions containing such compounds; and to the uses of such compounds in the treatment of various diseases, particularly asthma and COPD.