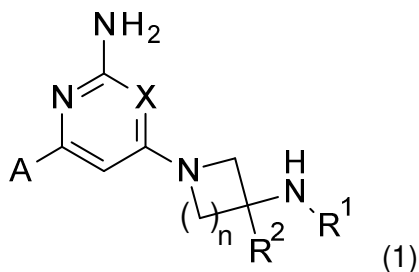


Claims

1. A compound of the formula (1):



or a salt thereof, wherein;

X is CH or N;

n is 1 or 2;

R¹ is selected from H or C₁₋₃ alkyl, wherein the C₁₋₃ alkyl group may be cyclised back onto the ring to which NHR¹ is attached to form a second ring;

R² is H or methyl; and

A represents an optionally substituted pyrazole ring which is linked to the ring containing X by a carbon-carbon bond;

having H4 receptor activity; and

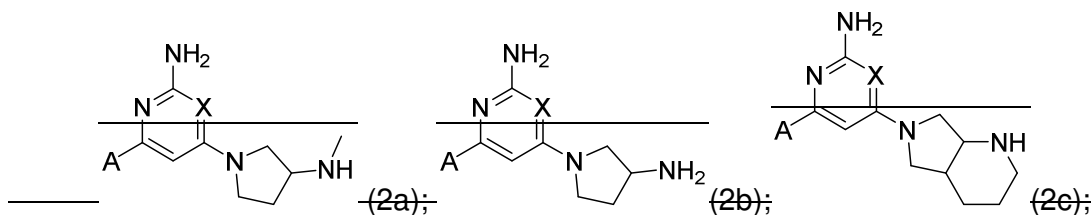
exhibits low hERG activity.

~~2. The compound according to claim 1, wherein X is N.~~

~~3. The compound according to claim 1 or claim 2, wherein R¹ is H or methyl.~~

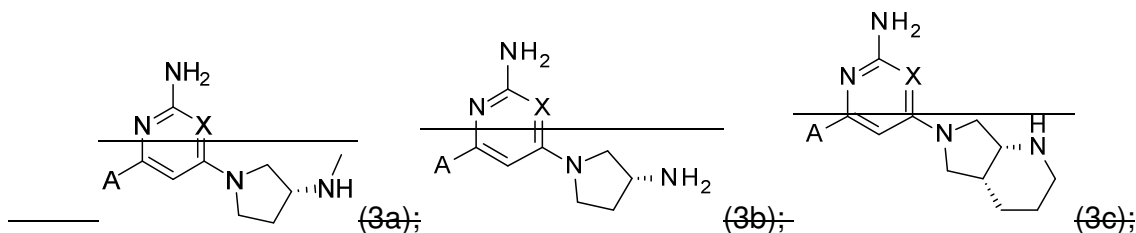
~~4. The compound according to any one of claims 1 to 3, wherein R² is H.~~

~~5. The compound according to claim 1 which is a compound of formula (2a), (2b) or (2c):~~



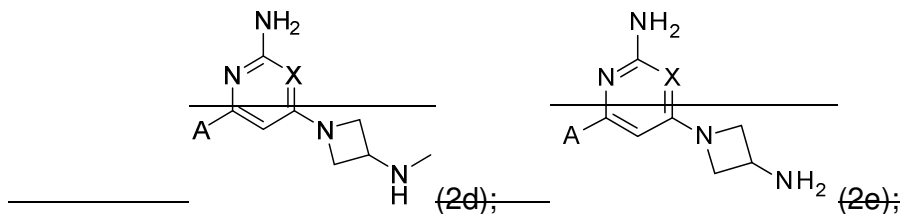
~~or a salt thereof.~~

6. ~~The compound according to claim 5 which is a compound of formula (3a), (3b) or (3c):~~



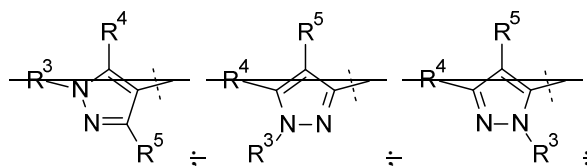
~~or a salt thereof.~~

7. ~~The compound according to claim 1 which is a compound of formula (2d) or (2e):~~



~~or a salt thereof.~~

8. ~~The compound according to any one of claims 1 to 7 wherein A is an optionally substituted pyrazole ring selected from~~



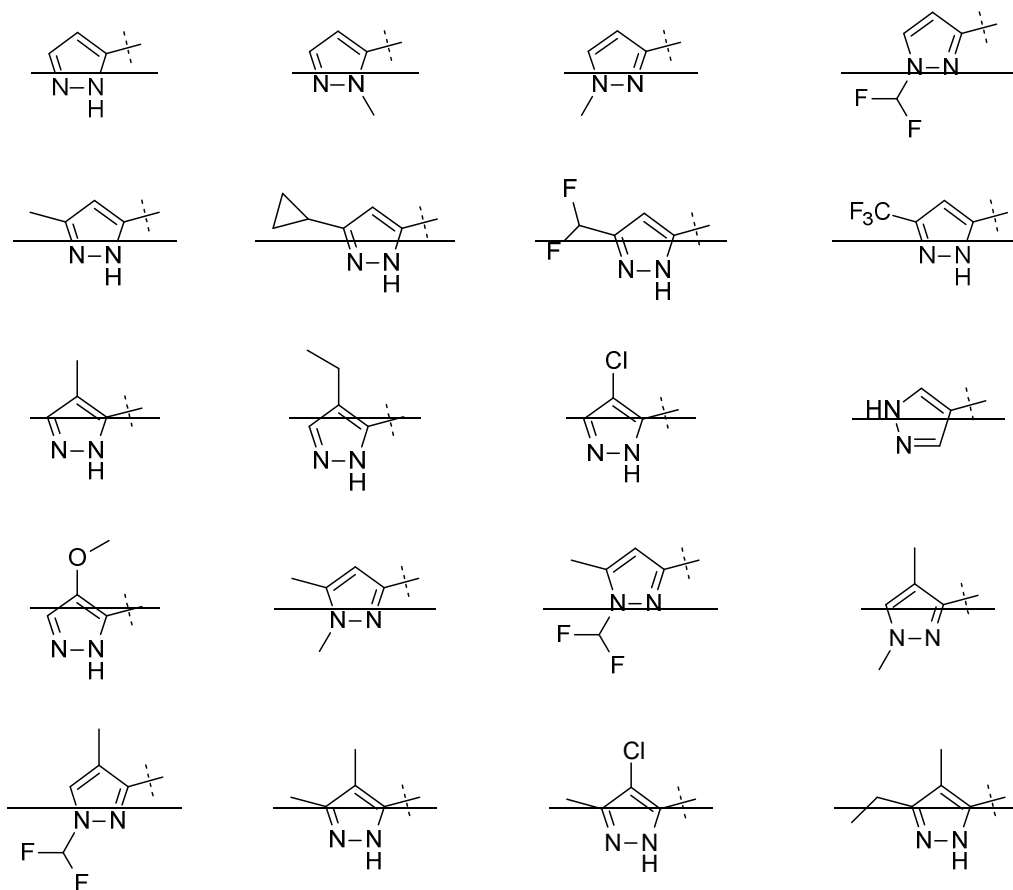
~~wherein R^3 is selected from H; a C_{1-6} non-aromatic hydrocarbon group optionally substituted with 1 to 6 fluorine atoms; $(CH_2)_m R^6$, wherein m is 1 to 3 and R^6 is selected from CN, OH, C_1-C_3 alkoxy and a group SR^8 or oxidized forms thereof, wherein R^8 is C_1-C_3 alkyl; an optionally substituted 4 to 6 membered saturated heterocyclic ring containing 1 heteroatom selected from O and N, wherein the optional substituent is $CO_2 R^7$, wherein R^7 is C_{1-3} alkyl; wherein R^4 and R^5 are independently selected from: a C_{1-6} non-aromatic hydrocarbon group optionally substituted with 1 to 6 fluorine atoms; $(CH_2)_p R^9$, wherein p is 0 to 3 and R^9 is selected from CN, halo, OH, C_1-C_3 alkoxy and a group SR^8 or oxidized forms thereof, wherein R^8 is C_1-C_3 alkyl; or R^4 and~~

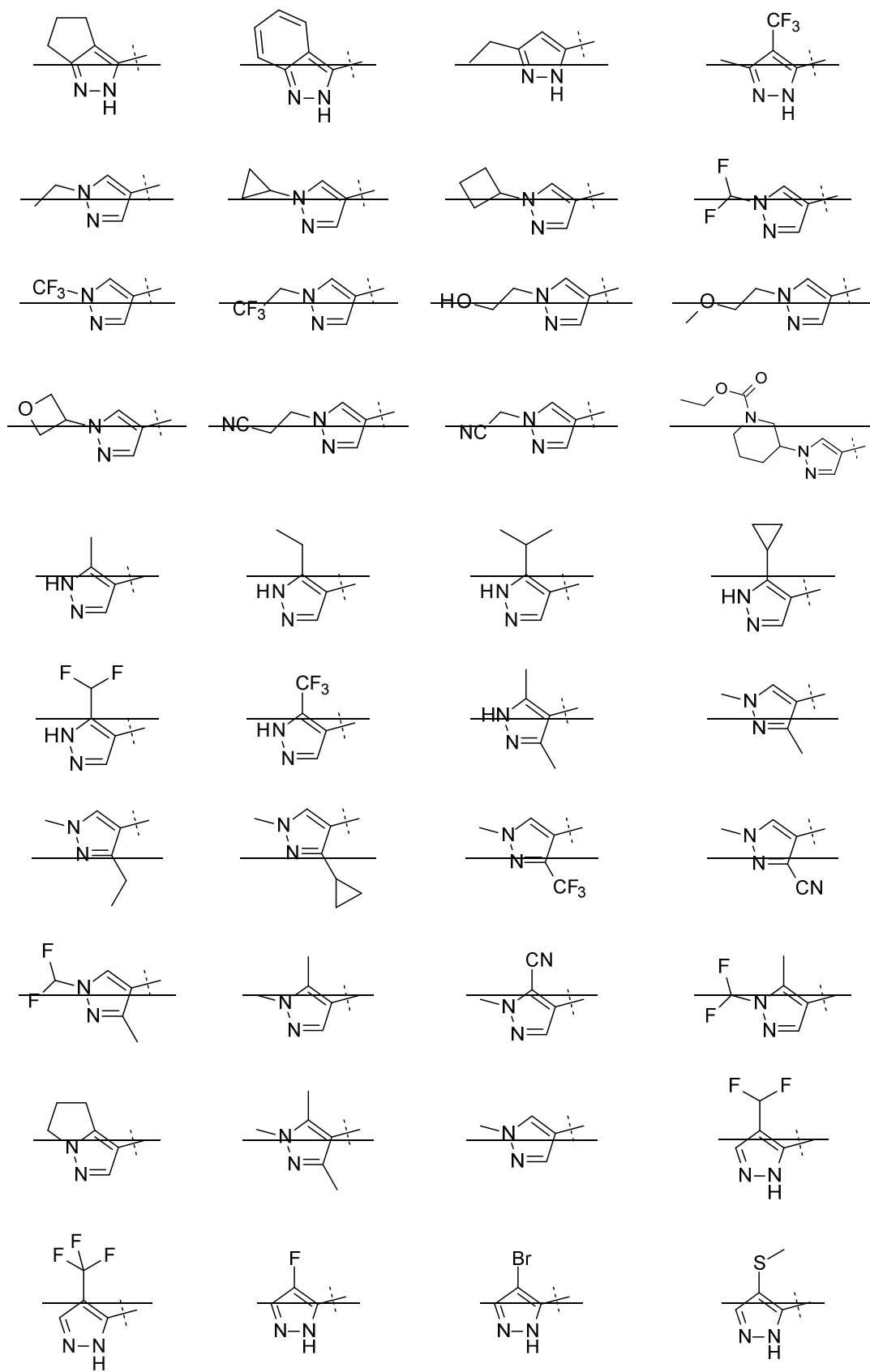
R^5 may be optionally joined to form a fused 5 or 6 membered ring; or R^4 and R^3 may be optionally joined to form a fused 5 or 6 membered ring.

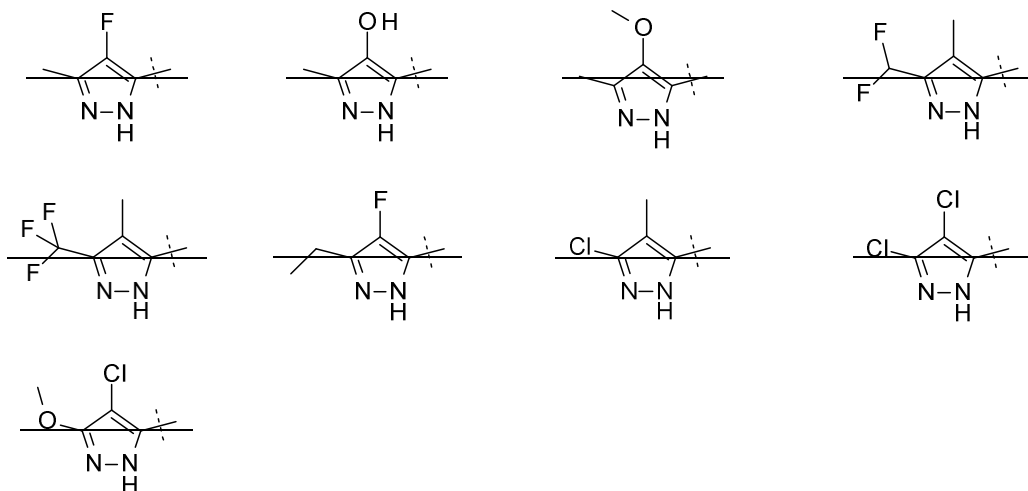
9. The compound according to claim 8 wherein R^3 is selected from H, methyl, CF_3 , CF_2H , ethyl, cyclopropyl, cyclobutyl, CH_2CF_3 , CH_2CH_2OH , $CH_2CH_2OCH_3$, CH_2CH_2CN , CH_2CN , oxetane, ethyl-piperidine-carboxylate or R^4 and R^3 are joined to form a fused 5 membered aliphatic ring.

10. The compound according to claim 8 or claim 9 wherein R^4 or R^5 is selected from methyl, ethyl, cyclopropyl, cyclobutyl, propyl, isopropyl, CF_3 , CF_2H , fluoro, chloro, bromo, cyano, methoxy, or R^4 and R^5 are joined to form a fused 5 or 6 membered ring or R^4 and R^3 are joined to form a fused 5 membered aliphatic ring.

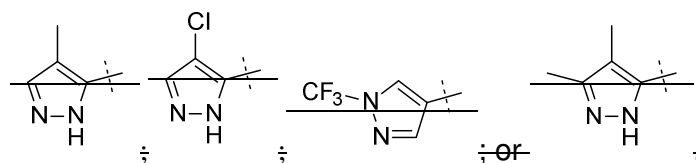
11. The compound according to any one of claims 1 to 10 wherein A is selected from the group consisting of:



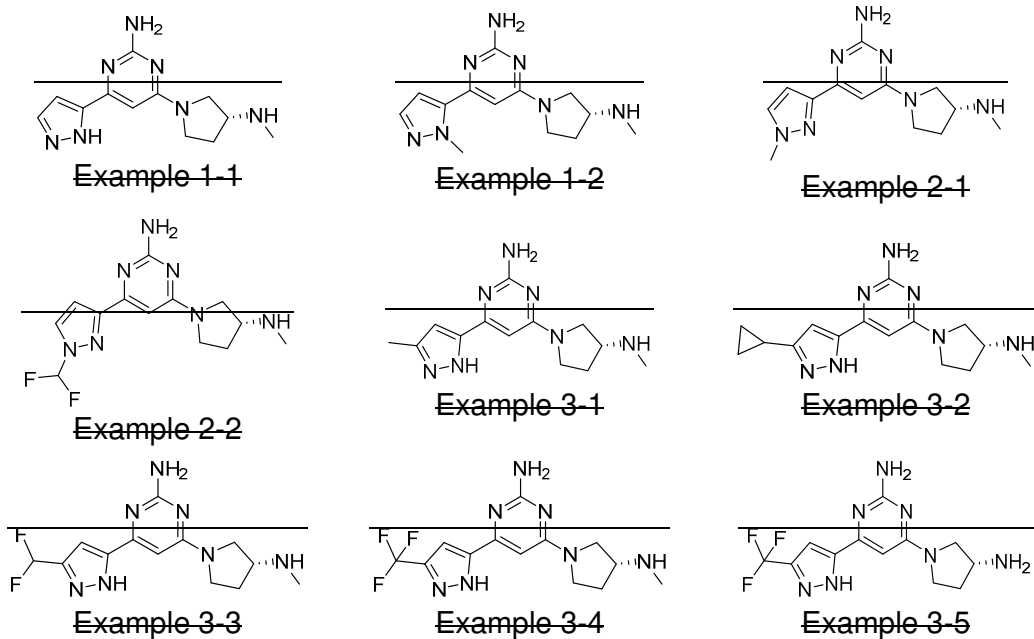


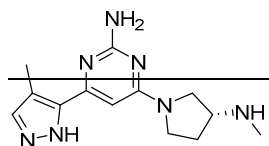
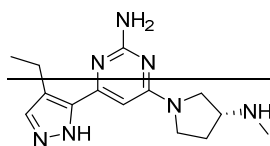
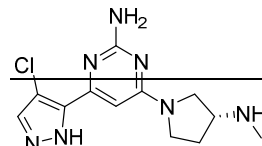
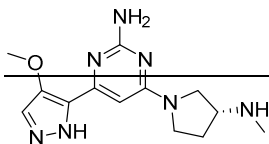
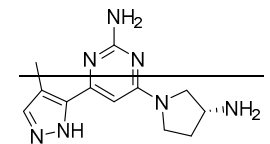
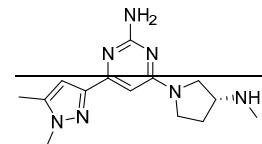
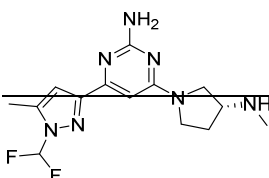
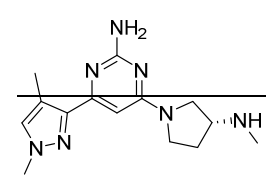
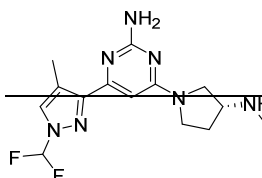
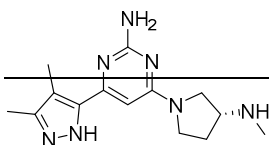
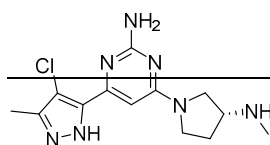
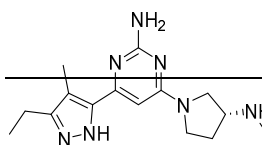
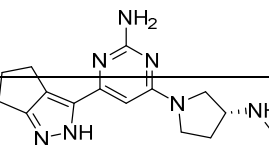
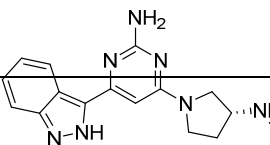
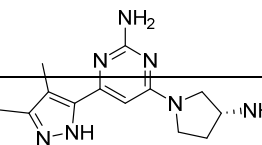
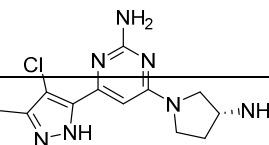
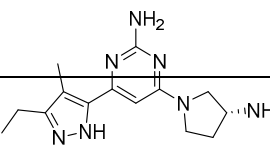
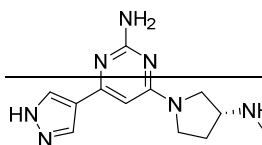
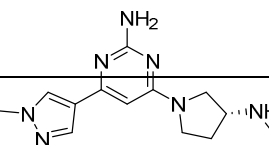
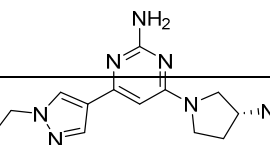
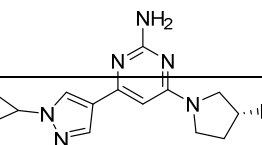
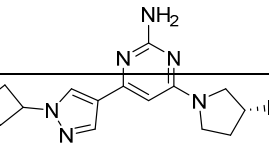
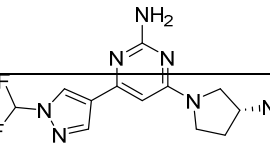
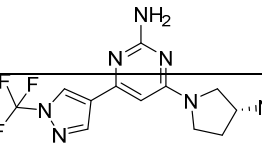


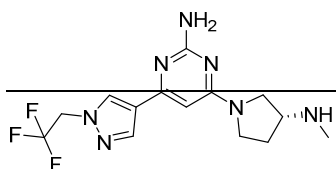
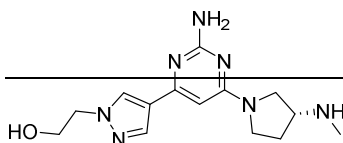
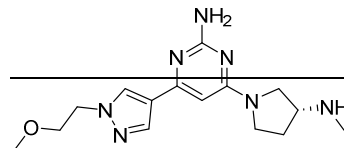
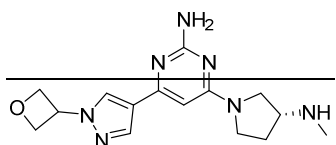
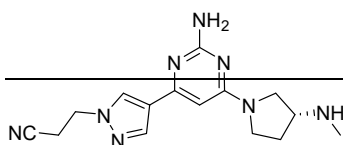
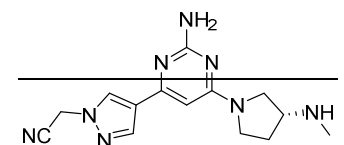
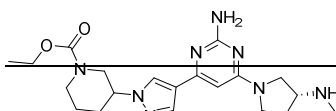
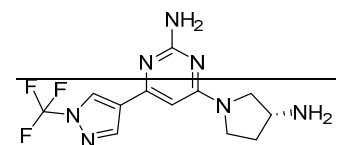
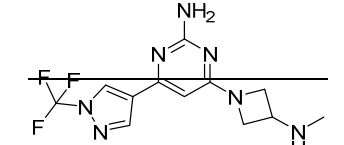
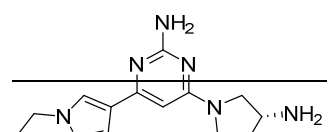
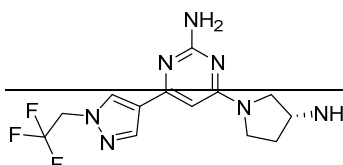
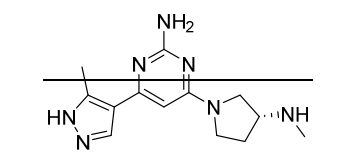
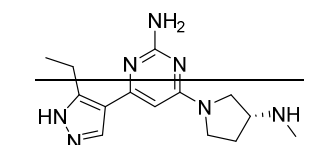
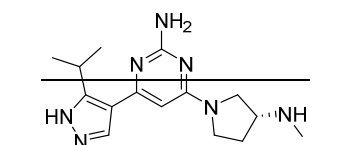
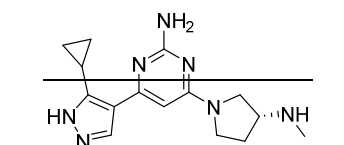
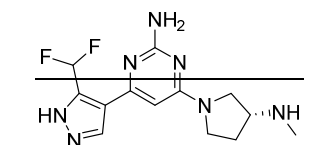
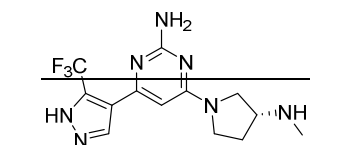
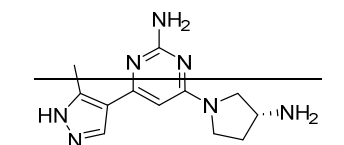
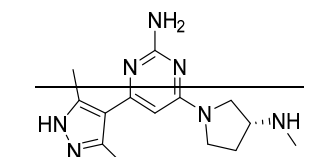
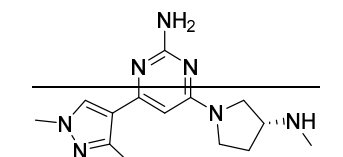
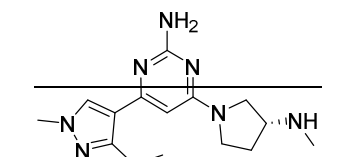
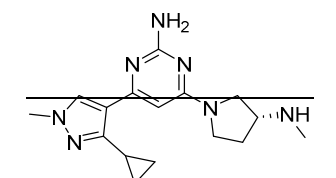
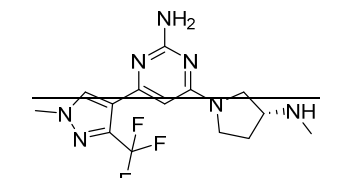
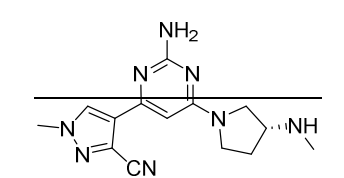
12. The compound according to claim 11 wherein A is:

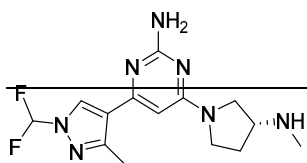
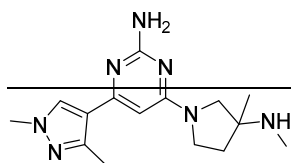
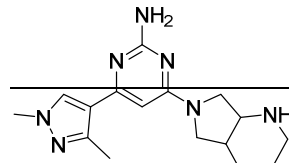
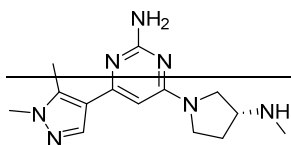
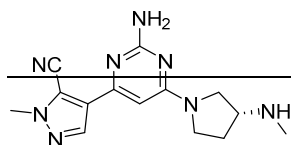
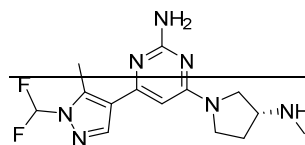
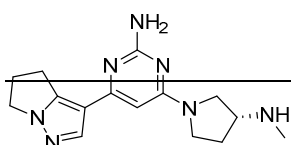
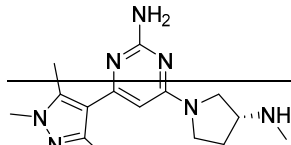
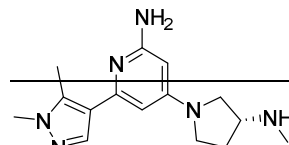
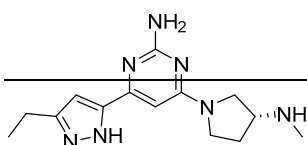
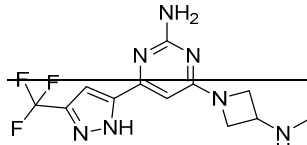
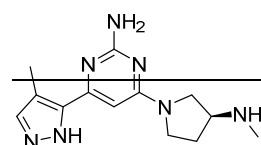
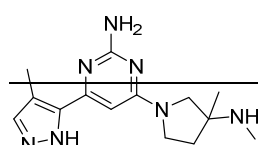
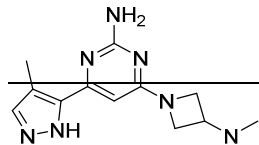
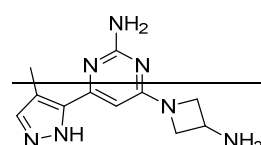
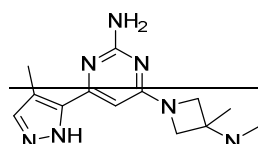
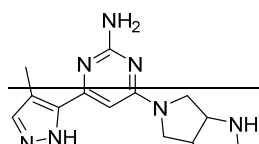
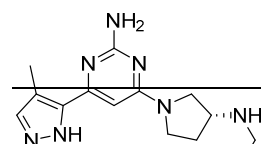
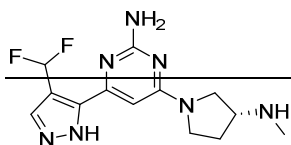
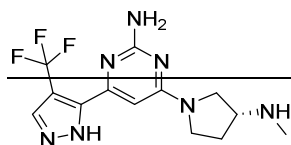
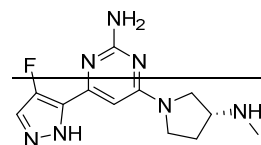
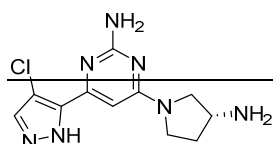
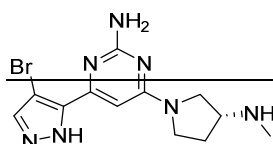
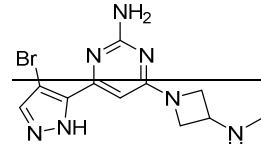


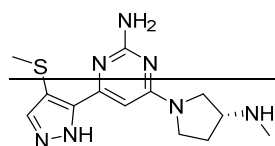
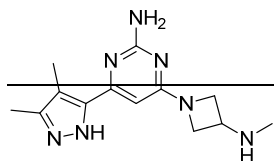
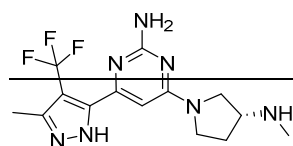
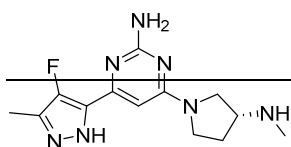
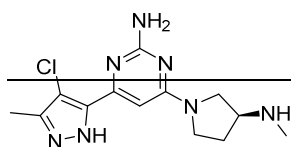
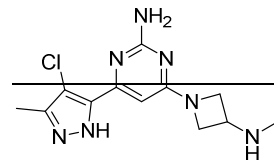
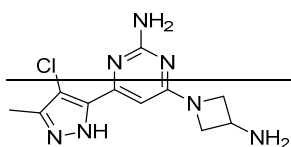
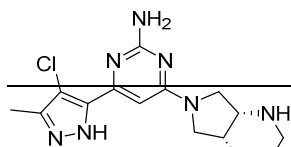
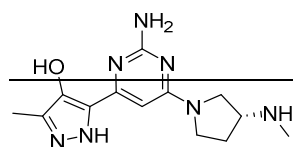
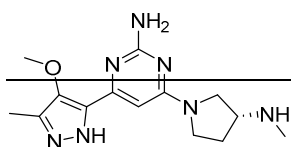
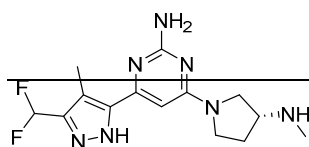
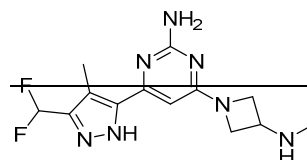
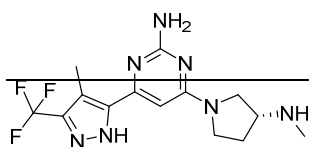
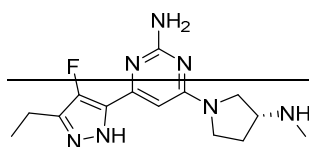
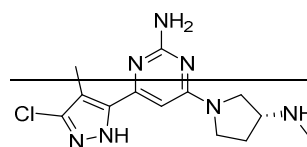
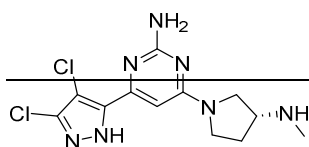
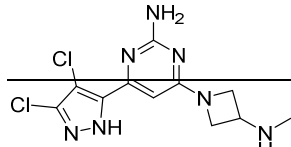
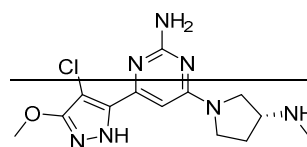
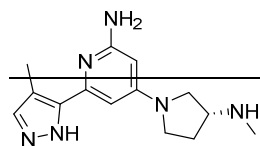
13. The compound according to claim 1 which is selected from the group consisting of:



**Example 4-1****Example 4-2****Example 4-3****Example 4-4****Example 4-5****Example 5-1****Example 5-2****Example 6-1****Example 6-2****Example 7-1****Example 7-2****Example 7-3****Example 7-4****Example 7-5****Example 7-6****Example 7-7****Example 7-8****Example 8-1****Example 8-2****Example 8-3****Example 8-4****Example 8-5****Example 8-6****Example 8-7**

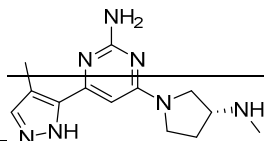
**Example 8-8****Example 8-9****Example 8-10****Example 8-11****Example 8-12****Example 8-13****Example 8-14****Example 8-15****Example 8-16****Example 8-17****Example 8-18****Example 9-1****Example 9-2****Example 9-3****Example 9-4****Example 9-5****Example 9-6****Example 9-7****Example 10-1****Example 11-1****Example 11-2****Example 11-3****Example 11-4****Example 11-5**

**Example 11-6****Example 11-7****Example 11-8****Example 12-1****Example 12-2****Example 12-3****Example 12-4****Example 13-1****Example 14-1****Example 15-1****Example 15-2****Example 16-1****Example 16-2****Example 16-3****Example 16-4****Example 16-5****Example 16-6****Example 16-7****Example 16-8****Example 16-9****Example 16-10****Example 16-11****Example 16-12****Example 16-13**

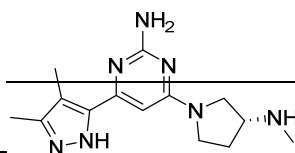
~~Example 16-14~~~~Example 17-1~~~~Example 17-2~~~~Example 17-3~~~~Example 17-4~~~~Example 17-5~~~~Example 17-6~~~~Example 17-7~~~~Example 17-8~~~~Example 17-9~~~~Example 17-10~~~~Example 17-11~~~~Example 17-12~~~~Example 17-13~~~~Example 17-14~~~~Example 17-15~~~~Example 17-16~~~~Example 17-17~~~~Example 18-1~~

or a salt thereof.

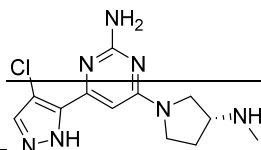
14. The compound according to claim 1 which is:



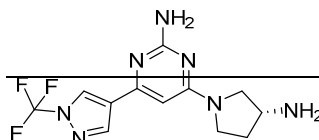
15. ~~The compound according to claim 1 which is:~~



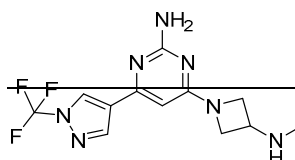
16. ~~The compound according to claim 1 which is:~~



17. ~~The compound according to claim 1 which is:~~



18. ~~The compound according to claim 1 which is:~~



19. ~~The compound according to any one of claims 1 to 18 having H4 receptor activity.~~

20. ~~The compound according to claim 19 which exhibits low hERG activity.~~

21. ~~A pharmaceutical composition comprising a compound as defined in any one of claims 1 to 20 and a pharmaceutically acceptable excipient.~~

22. ~~The compound or composition according to any one of claims 1 to 21 for use in medicine.~~

23. ~~The compound or composition according to any one of claims 1 to 21 for use in the treatment of inflammatory disorders including asthma, chronic pruritus, dermatitis, rheumatoid arthritis, gastric ulcerogenesis and colitis.~~