

Claims

1. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof for the treatment of a disease associated with elevated blood uric acid levels.
2. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof as defined in claim 1 wherein the disease associated with elevated blood uric acid levels is hyperuricemia.
3. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof as defined in claim 1 wherein the disease associated with elevated blood uric acid levels is gout.
4. Use of 4-[2-(5-amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof for the manufacture of a medicament for the treatment of a disease associated with elevated blood uric acid levels.
5. The use according to claim 4 wherein the disease associated with elevated blood uric acid levels is hyperuricemia.
6. The use according to claim 4 wherein the disease associated with elevated blood uric acid levels is gout.
7. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof in combination with one or more additional pharmaceutically active agents for the treatment of a disease associated with elevated blood uric acid levels.
8. The combination according to claim 7 wherein the one or more additional pharmaceutically active agents is/are selected from:

- an anti-inflammatory drug such as an NSAID (e.g. celecoxib), colchicine or a steroid;
 - a xanthine oxidase inhibitor (e.g. allopurinol, febuxostat or tisopurine) or a purine nucleoside phosphorylase (PNP) inhibitor (e.g. ulodesine);
 - a uricase (e.g. pegloticase or rasburicase); or a
 - a uricosuric, such as an agent that inhibits the transporters responsible for renal reabsorption of uric acid back into the blood, such as benzbromarone, isobromindione, probenecid and sulphinpyrazone, or a URAT-1 inhibitor (e.g. benzbromarone).
9. The combination according to any one of claims 7 or 8 wherein the disease associated with elevated blood uric acid levels is hyperuricemia.
 10. The method according to any one of claims 7 or 8 wherein the disease associated with elevated blood uric acid levels is gout.
 11. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate.
 12. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to claim 11 which is a crystalline solid.
 13. The crystalline solid according to claim 12 characterised by a Powder X-Ray Diffraction pattern (PXRD) pattern which shows any of three, four, five or six characteristic two-theta (2θ) peaks selected from the group consisting of 9.0, 9.3, 10.0, 10.7, 11.6, 12.5, 12.9, 13.2, 13.8, 14.4, 16.0, 16.6, 17.5, 17.8, 18.1, 21.4 and 23.4° ($\pm 0.2^\circ 2\theta$) by using CuKalpha1 X-ray radiation (wavelength = 1.5406 Å).
 14. A pharmaceutical composition comprising 4-[2-(5-amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide

tosylate according to any one of claims 11 to 13 and a pharmaceutically acceptable carrier.

15. The pharmaceutically composition according to claim 14 which is in the form of a tablet or capsule.
16. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to any one of claims 11 to 13 for use as a medicament.
17. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to claim 16 for use in the treatment of a disorder for which a $\text{Na}_v1.7$ inhibitor is indicated.
18. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to claim 17 wherein the disorder for which a $\text{Na}_v1.7$ inhibitor is indicated is pain, preferably neuropathic, nociceptive or inflammatory pain.
19. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to claim 16 for use in the treatment of a disease associated with elevated blood uric acid levels.
20. Use of 4-[2-(5-amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to any one of claims 11 to 13 for the manufacture of a medicament for the treatment of pain, preferably neuropathic, nociceptive or inflammatory pain.
21. Use of 4-[2-(5-amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to any one of claims 11 to 13 for the manufacture of a medicament for the treatment of a disease associated with elevated blood uric acid levels.

Claims

1. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof for the treatment of a disease associated with elevated blood uric acid levels.
2. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof as defined in claim 1 wherein the disease associated with elevated blood uric acid levels is hyperuricemia.
3. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof as defined in claim 1 wherein the disease associated with elevated blood uric acid levels is gout.
4. Use of 4-[2-(5-amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof for the manufacture of a medicament for the treatment of a disease associated with elevated blood uric acid levels, wherein the disease is hyperuricemia.
5. Use of 4-[2-(5-amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof for the manufacture of a medicament for the treatment of a disease associated with elevated blood uric acid levels, wherein the disease is gout.
6. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof in combination with one or more additional pharmaceutically active agents for the treatment of a disease associated with elevated blood uric acid levels.
7. The combination according to claim 6 wherein the one or more additional pharmaceutically active agents is/are selected from:

- an anti-inflammatory drug such as an NSAID (e.g. celecoxib), colchicine or a steroid;
 - a xanthine oxidase inhibitor (e.g. allopurinol, febuxostat or tisopurine) or a purine nucleoside phosphorylase (PNP) inhibitor (e.g. ulodesine);
 - a uricase (e.g. pegloticase or rasburicase); or a
 - a uricosuric, such as an agent that inhibits the transporters responsible for renal reabsorption of uric acid back into the blood, such as benzbromarone, isobromindione, probenecid and sulphinpyrazone, or a URAT-1 inhibitor (e.g. benzbromarone).
8. The combination according to any one of claims 6 or 7 wherein the disease associated with elevated blood uric acid levels is hyperuricemia.
 9. The method according to any one of claims 6 or 7 wherein the disease associated with elevated blood uric acid levels is gout.
 10. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate.
 11. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to claim 10 which is a crystalline solid.
 12. The crystalline solid according to claim 11 characterised by a Powder X-Ray Diffraction pattern (PXRD) pattern which shows any of three, four, five or six characteristic two-theta (2θ) peaks selected from the group consisting of 9.0, 9.3, 10.0, 10.7, 11.6, 12.5, 12.9, 13.2, 13.8, 14.4, 16.0, 16.6, 17.5, 17.8, 18.1, 21.4 and 23.4° ($\pm 0.2^\circ 2\theta$) by using CuK α 1 X-ray radiation (wavelength = 1.5406 Å).
 13. A pharmaceutical composition comprising 4-[2-(5-amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide

tosylate according to any one of claims 10 to 12 and a pharmaceutically acceptable carrier.

14. The pharmaceutically composition according to claim 13 which is in the form of a tablet or capsule.
15. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to any one of claims 10 to 12 for use as a medicament.
16. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to claim 15 for use in the treatment of a disorder for which a $Na_v1.7$ inhibitor is indicated.
17. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to claim 16 wherein the disorder for which a $Na_v1.7$ inhibitor is indicated is pain, preferably neuropathic, nociceptive or inflammatory pain.
18. 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to claim 15 for use in the treatment of a disease associated with elevated blood uric acid levels.
19. Use of 4-[2-(5-amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to any one of claims 10 to 12 for the manufacture of a medicament for the treatment of neuropathic pain.
20. Use of 4-[2-(5-amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to any one of claims 10 to 12 for the manufacture of a medicament for the treatment of nociceptive pain.
21. Use of 4-[2-(5-amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to any one of claims 10

to 12 for the manufacture of a medicament for the treatment of inflammatory pain.

22. Use of 4-[2-(5-amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to any one of claims 10 to 12 for the manufacture of a medicament for the treatment of a disease associated with elevated blood uric acid levels, wherein the disease is hyperuricemia.
23. Use of 4-[2-(5-amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide tosylate according to any one of claims 10 to 12 for the manufacture of a medicament for the treatment of a disease associated with elevated blood uric acid levels, wherein the disease is gout.