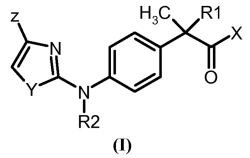
CLAIMS

1. Use of an IL-8 inhibitor

wherein the IL-8 inhibitor is a compound of formula (I)



(I)

or a pharmaceutically acceptable salt thereof,

wherein:

-R1 is hydrogen or CH_3;

-R2 is hydrogen or linear C_1-C_4 alkyl, preferably it is hydrogen;

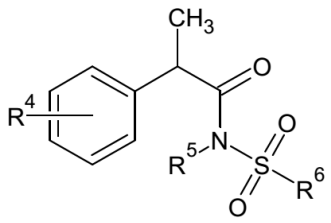
-Y is S;

-Z is selected from halogen, linear or branched C_1-C_4 alkyl, C_2-C_4 alkenyl, C_2-C_4 alkynyl, C_1-C_4 alkoxy, hydroxyl, carboxyl, C_1-C_4 acyloxy, phenoxy, cyano, nitro, amino, C_1-C_4 acylamino, halo C_1-C_3 alkyl, halo C_1-C_3 alkoxy, benzoyl, linear or branched C_1-C_8 alkanesulfonate, linear or branched C_1-C_8 alkanesulfonamide, linear or branched C_1-C_8 alkylsulfonylmethyl; preferably it is trifluoromethyl;

-X is OH, NHR_3, or SO_2R4; wherein R_3 is selected from hydrogen, hydroxyl, linear or branched C_1-C_6 alkyl, C_3-C_6 cycloalkyl, C_2-C_6 alkenyl, C_1-C_5 alkoxy, or C_1-C_6 phenylalkyl, wherein alkyl, cycloalkyl or alkenyl group can be substituted by a COOH and R4 is C_1-C_2 alkyl, C_3-C_6 cycloalkyl, C_1-C_3 haloalkyl;

or

wherein the IL-8 inhibitor is a compound of formula (II)



(II)

or a pharmaceutically acceptable salt thereof,

wherein:

R^4 is linear or branched C_1-C_6 alkyl, benzoyl, phenoxy, trifluoromethanesulfonyloxy; preferably it is selected from 3-benzoyl, 4-isobutyl or 4-trifluoromethanesulfonyloxy;

R^5 is H or linear or branched C_1-C_3 alkyl, preferably it is H;

R^6 is linear or branched C_1-C_6 alkyl or trifluoromethyl; preferably, it is a linear or branched C_1-C_6 alkyl, more preferably it is CH_3;

in the manufacture of a medicament for the prevention and/or treatment of chemotherapy-induced neuropathy wherein the medicament is for the prevention and/or treatment of chemotherapy-induced peripheral neuropathy induced by a chemotherapeutic agent selected from oxaliplatin or paclitaxel.

2. The use according to claim 1, wherein the medicament is for the prevention and/or treatment of chemotherapy-induced peripheral neuropathy or chemotherapy-induced optic neuropathy.

3. The use according to claim 2, wherein the medicament is for the prevention and/or treatment of allodynia associated to chemotherapy-induced peripheral neuropathy.

4. The use according to any of the previous claims, wherein the IL-8 inhibitor is selected from small molecular weight molecules and antibodies.

5. The use according to any of the previous claims, wherein the IL-8 inhibitor is an inhibitor of the activity of IL-8 mediated by the CXCR1 receptor.

6. The use according to any of the previous claims, wherein the IL-8 inhibitor is an inhibitor of the activity of IL-8 mediated by both the CXCR1 and CXCR2 receptor.

7. The use according to any one of the preceding claims, wherein: R1 is hydrogen or CH_3;

X is OH;

R2 is hydrogen or linear C_1-C_4 alkyl,

Y is a heteroatom selected from S, O and N;

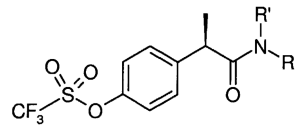
Z is selected from linear or branched C_1-C_4 alkyl, linear or branched C_1-C_4 alkoxy, halo C_1-C_3 alkyl and halo C_1-C_3 alkoxy.

8. The use according to any one of claims 1-6, wherein R1 is hydrogen, the chiral carbon atom of the phenylproprionic group is in the S configuration.

9. The use according to any one of claims 1 to 6, wherein the IL-8 inhibitor is selected from 2-methyl-2-(4-{[4-(trifluoromethyl)-1,3-thiazol-2-yl]amino} phenyl) propanoic acid and pharmaceutically acceptable salts thereof, preferably its sodium salt.

10. The use according to any one of the previous claims, wherein the IL-8 inhibitor is (2S)-2-(4-{[4-(trifluoromethyl)-1,3-thiazol-2-yl] amino} phenyl) propanoic acid and pharmaceutically acceptable salts thereof, preferably its sodium salt.

11. The use according to any one of the previous claims, wherein the IL-8 inhibitor is a compound of formula (III)



(III)

or a pharmaceutically acceptable salts thereof,

wherein

R' is hydrogen;

R is SO_2Ra wherein Ra is linear or branched C_1-C_4 alkyl or halo C_1-C_3 alkyl, preferably it is CH_3.

12. The use according to any one of the preceding claims, wherein the chiral carbon atom of the phenylpropionic group is in the R configuration.

13. The use according to any one of the preceding claims, wherein the IL-8 inhibitor is selected from R-(-)-2-(4-isobutylphenyl)propionyl methanesulfonamide and pharmaceutically acceptable salts thereof, preferably the lysine *in situ* salt.

14. The use according to any one of the preceding claims, wherein the IL-8 inhibitor is R(-)-2-(4-trifluoromethanesulfonyloxy)phenyl]-N-methanesulfonyl propionamide and pharmaceutically acceptable salts thereof, preferably its sodium salt.