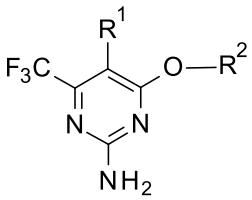
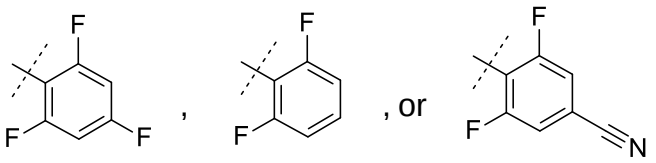
Summary

In one aspect of the present disclosure, there is provided a compound of the formula:



wherein R^1 is hydrogen or methyl; and

R^2 is:



or a pharmaceutically acceptable salt thereof.

In another aspect of the present disclosure, there is provided a compound or pharmaceutically acceptable salt thereof disclosed herein for use in therapy.

In a further aspect of the present disclosure, there is provided a compound or pharmaceutically acceptable salt thereof disclosed herein for use in treating pain.

In another aspect of the present disclosure, there is provided a compound or pharmaceutically acceptable salt thereof, disclosed herein for use in treating chronic pain.

In a further aspect of the present disclosure, there is provided a compound or pharmaceutically acceptable salt thereof, disclosed herein for use in treating chronic lower back pain.

In another aspect of the present disclosure, there is provided a compound or pharmaceutically acceptable salt thereof, disclosed herein for use in treating diabetic peripheral neuropathic pain.

In a further aspect of the present disclosure, there is provided a compound or pharmaceutically acceptable salt thereof, disclosed herein for use in treating osteoarthritis pain.

In another aspect of the present disclosure, there is provided a use of a compound, or a pharmaceutically acceptable salt thereof, disclosed herein in the manufacture of a medicament for treating pain.

In a further aspect of the present disclosure, there is provided a use of a compound, or a pharmaceutically acceptable salt thereof, disclosed herein in the manufacture of a medicament for treating chronic pain.

In another aspect of the present disclosure, there is provided a use of a compound, or a pharmaceutically acceptable salt thereof, disclosed herein in the manufacture of a medicament for treating chronic lower back pain.

In a further aspect of the present disclosure, there is provided a use of a compound, or a pharmaceutically acceptable salt thereof, disclosed herein in the manufacture of a medicament for treating diabetic peripheral neuropathic pain.

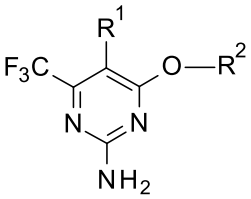
In another aspect of the present disclosure, there is provided a use of a compound, or a pharmaceutically acceptable salt thereof, disclosed herein in the manufacture of a medicament for treating osteoarthritis pain.

In a further aspect of the present disclosure, there is provided a pharmaceutical composition, comprising a compound or a pharmaceutically acceptable salt thereof, disclosed herein with one or more pharmaceutically acceptable carriers, diluents, or excipients.

In another aspect of the present disclosure, there is provided a process for preparing a pharmaceutical composition, comprising admixing a compound or a pharmaceutically acceptable salt thereof disclosed herein with one or more pharmaceutically acceptable carriers, diluents, or excipients.

Description

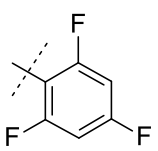
Accordingly, in one embodiment, the present invention provides a compound of Formula I:

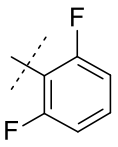


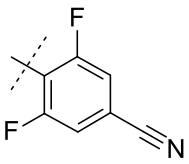
Formula I

wherein R^1 is hydrogen or methyl; and

R^2 is:



,


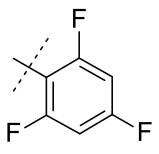
, or


or a pharmaceutically acceptable salt thereof.

In an embodiment, R^1 is hydrogen.

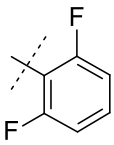
In an embodiment, R^1 is methyl.

In an embodiment, R^2 is:



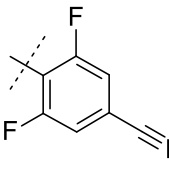
.

In an embodiment, R^2 is:



.

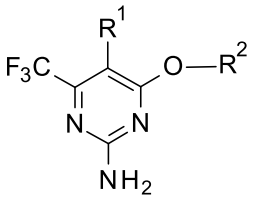
In an embodiment, R^2 is:



.

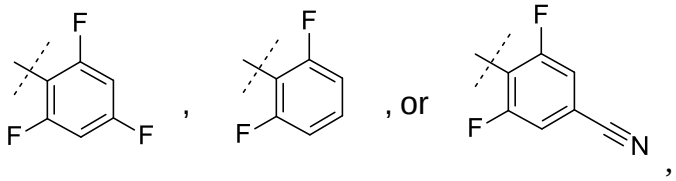
WE CLAIM:

1. A compound of the formula:



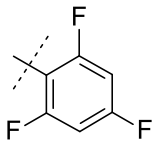
wherein R^1 is hydrogen or methyl; and

R^2 is:



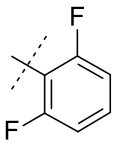
or a pharmaceutically acceptable salt thereof.

2. The compound according to claim 1 wherein R^1 is hydrogen, or a pharmaceutically acceptable salt thereof.
3. The compound according to claim 1 wherein R^1 is methyl, or a pharmaceutically acceptable salt thereof.
4. The compound according to claim 1 wherein R^2 is:



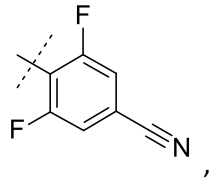
or a pharmaceutically acceptable salt thereof.

5. The compound according to claim 1 wherein R^2 is:



or a pharmaceutically acceptable salt thereof.

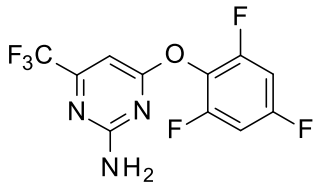
6. The compound according to claim 1 wherein R^2 is:



,

or a pharmaceutically acceptable salt thereof.

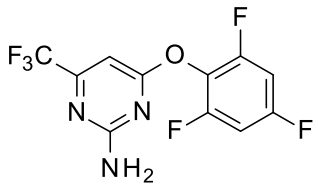
7. The compound according to claim 1 wherein the compound is:



,

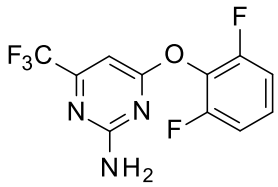
or a pharmaceutically acceptable salt thereof.

8. The compound according to claim 7 which is:



.

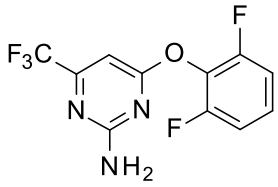
9. The compound according to claim 1 wherein the compound is:



,

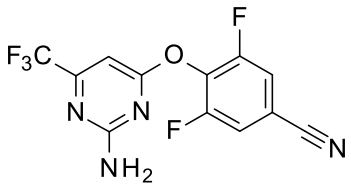
or a pharmaceutically acceptable salt thereof.

10. The compound according to claim 9 which is:



.

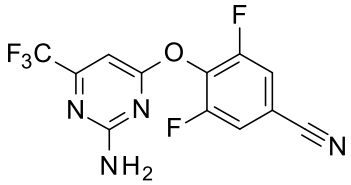
11. The compound according to claim 1 wherein the compound is:



,

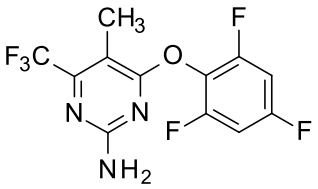
or a pharmaceutically acceptable salt thereof.

12. The compound according to claim 11 which is:



.

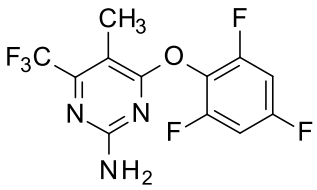
13. The compound according to claim 1 wherein the compound is:



,

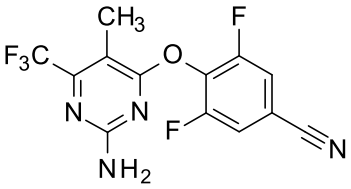
or a pharmaceutically acceptable salt thereof.

14. The compound according to claim 13 which is:



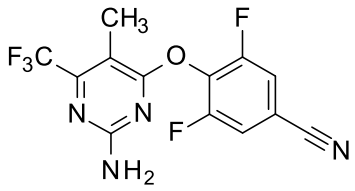
.

15. The compound according to claim 1 wherein the compound is:



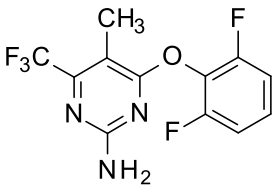
or a pharmaceutically acceptable salt thereof.

16. The compound according to claim 15 which is:



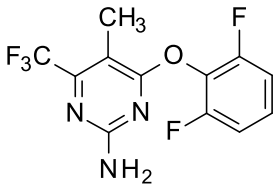
.

17. The compound according to claim 1 wherein the compound is:



or a pharmaceutically acceptable salt thereof.

18. The compound according to claim 17 wherein the compound is:



.

~~19. A method of treating pain in a patient, comprising administering to a patient in need of such treatment an effective amount of a compound according to any one of claims 1 to 18, or a pharmaceutically acceptable salt thereof.~~

~~20. A method of treating chronic pain in a patient, comprising administering to a patient in need of such treatment an effective amount of a compound according to any one of claims 1 to 18, or a pharmaceutically acceptable salt thereof.~~

~~21. A method of treating chronic lower back pain in a patient, comprising administering to a patient in need of such treatment an effective amount of a compound according to any one of claims 1 to 18, or a pharmaceutically acceptable salt thereof.~~

~~22. A method of treating diabetic peripheral neuropathic pain in a patient, comprising administering to a patient in need of such treatment an effective~~

~~amount of a compound according to any one of claims 1 to 18, or a pharmaceutically acceptable salt thereof.~~

~~23. A method of treating osteoarthritis pain in a patient, comprising administering to a patient in need of such treatment an effective amount of a compound according to any one of claims 1 to 18, or a pharmaceutically acceptable salt thereof.~~

~~24.~~19. A compound or pharmaceutically acceptable salt thereof according to any one of claims 1 to 18 for use in therapy.

~~25.~~20. A compound or pharmaceutically acceptable salt thereof according to any one of claims 1 to 18 for use in treating pain.

~~26.~~21. A compound or pharmaceutically acceptable salt thereof, according to any one of claims 1 to 18 for use in treating chronic pain.

~~27.~~22. A compound or pharmaceutically acceptable salt thereof, according to any one of claims 1 to 18 for use in treating chronic lower back pain.

~~28.~~23. A compound or pharmaceutically acceptable salt thereof, according to any one of claims 1 to 18 for use in treating diabetic peripheral neuropathic pain.

~~29.~~24. A compound or pharmaceutically acceptable salt thereof, according to any one of claims 1 to 18 for use in treating osteoarthritis pain.

~~30.~~25. Use~~The use~~ of a compound, or a pharmaceutically acceptable salt thereof, according to any one of claims 1 to 18 in~~for~~ the manufacture of a medicament for treating pain.

~~31.~~26. Use~~The use~~ of a compound, or a pharmaceutically acceptable salt thereof, according to any one of claims 1 to 18 in~~for~~ the manufacture of a medicament for treating chronic pain.

~~32.~~27. Use~~The use~~ of a compound, or a pharmaceutically acceptable salt thereof, according to any one of claims 1 to 18 in~~for~~ the manufacture of a medicament for treating chronic lower back pain.

~~33.~~28. Use~~The use~~ of a compound, or a pharmaceutically acceptable salt thereof, according to any one of claims 1 to 18 in~~for~~ the manufacture of a medicament for treating diabetic peripheral neuropathic pain.

~~34.~~29. Use~~The use~~ of a compound, or a pharmaceutically acceptable salt thereof, according to any one of claims 1 to 18 in~~for~~ the manufacture of a medicament for treating osteoarthritis pain.

~~35.~~30. A pharmaceutical composition, comprising a compound or a pharmaceutically acceptable salt thereof, according to any one of claims 1 to 18 with one or more pharmaceutically acceptable carriers, diluents, or excipients.

~~36.~~31. A process for preparing a pharmaceutical composition, comprising admixing a compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 18 with one or more pharmaceutically acceptable carriers, diluents, or excipients.