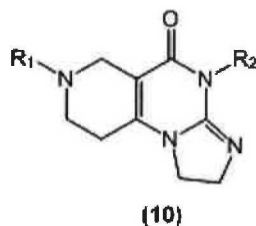


## CLAIMS

1. A compound having formula (10)



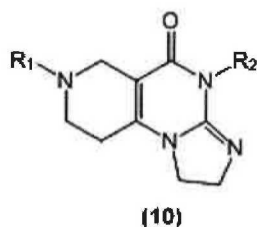
or a pharmaceutically acceptable salt thereof;

wherein  $R_1$  is selected from the group consisting of H,  $C_{1-4}$ alkyl,  $C_{1-4}$ alkylphenyl,  $C_{1-4}$ alkylphenylketone,  $C_{1-4}$ benzyl-piperazine,  $C_{1-4}$ alkylthienyl,  $C_{1-4}$ alkylpyridinyl,  $C_{1-4}$ alkylisoxazolidinyl,  $C_{1-4}$ alkylmorpholinyl,  $C_{1-4}$ alkylthiazolyl, and  $C_{1-4}$ alkylpyrazinyl wherein  $C_{1-4}$ alkyl,  $C_{1-4}$ alkylphenyl,  $C_{1-4}$ alkylphenylketone,  $C_{1-4}$ benzyl-piperazine,  $C_{1-4}$ alkylthienyl,  $C_{1-4}$ alkylpyridinyl,  $C_{1-4}$ alkylisoxazolidinyl,  $C_{1-4}$ alkylmorpholinyl,  $C_{1-4}$ alkylthiazolyl, and  $C_{1-4}$ alkylpyrazinyl are optionally substituted with  $C_{1-4}$ alkyl,  $C_{1-4}$ alkoxyl, hydroxyl, perhalogenated  $C_{1-4}$ alkyl, or halogen, and

wherein  $R_2$  is a substituted or an unsubstituted, heterocycloalkylalkyl.

2. The compound of claim 1, wherein the substituted heterocycloalkylalkyl is a morpholinoalkyl or piperazinylalkyl group.

3. A compound having formula (10)



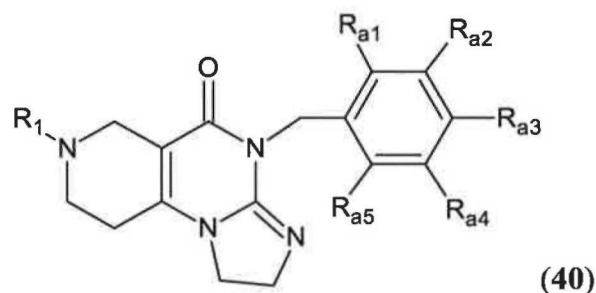
or a pharmaceutically acceptable salt thereof;

wherein  $R_1$  is selected from the group consisting of H,  $C_{1-4}$ alkyl,  $C_{1-4}$ alkylphenyl,  $C_{1-4}$ alkylphenylketone,  $C_{1-4}$ benzyl-piperazine,  $C_{1-4}$ alkylthienyl,  $C_{1-4}$ alkylpyridinyl,  $C_{1-4}$ alkylisoxazolidinyl,  $C_{1-4}$ alkylmorpholinyl,  $C_{1-4}$ alkylthiazolyl, and  $C_{1-4}$ alkylpyrazinyl wherein  $C_{1-4}$ alkyl,  $C_{1-4}$ alkylphenyl,  $C_{1-4}$ alkylphenylketone,  $C_{1-4}$ benzyl-piperazine,  $C_{1-4}$ alkylthienyl,  $C_{1-4}$ alkylpyridinyl,  $C_{1-4}$ alkylisoxazolidinyl,  $C_{1-4}$

<sub>4</sub>alkylmorpholinyl, C<sub>1-4</sub>alkylthiazolyl, and C<sub>1-4</sub>alkylpyrazinyl are optionally substituted with C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkoxyl, hydroxyl, perhalogenated C<sub>1-4</sub>alkyl, or halogen; and

wherein R<sub>2</sub> is a substituted or an unsubstituted heteroarylalkyl, and wherein the substituted heteroarylalkyl is a pyridylalkyl or isoxazolidinylalkyl group.

4. A compound having formula (40)



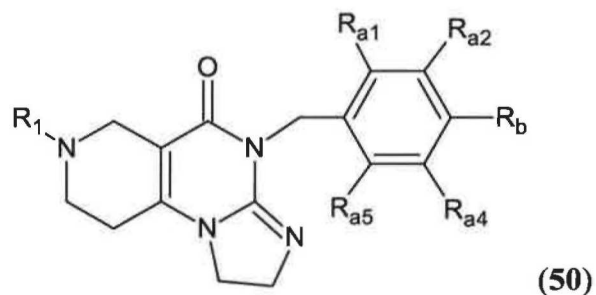
or a pharmaceutically acceptable salt thereof; wherein

wherein R<sub>1</sub> is selected from the group consisting of H, C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkylphenyl, C<sub>1-4</sub>alkylphenylketone, C<sub>1-4</sub>benzyl-piperazine, C<sub>1-4</sub>alkylthienyl, C<sub>1-4</sub>alkylpyridinyl, C<sub>1-4</sub>alkylisoxazolidinyl, C<sub>1-4</sub>alkylmorpholinyl, C<sub>1-4</sub>alkylthiazolyl, and C<sub>1-4</sub>alkylpyrazinyl wherein C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkylphenyl, C<sub>1-4</sub>alkylphenylketone, C<sub>1-4</sub>benzyl-piperazine, C<sub>1-4</sub>alkylthienyl, C<sub>1-4</sub>alkylpyridinyl, C<sub>1-4</sub>alkylisoxazolidinyl, C<sub>1-4</sub>alkylmorpholinyl, C<sub>1-4</sub>alkylthiazolyl, and C<sub>1-4</sub>alkylpyrazinyl are optionally substituted with C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkoxyl, hydroxyl, perhalogenated C<sub>1-4</sub>alkyl, or halogen; and

wherein R<sub>a1</sub>, R<sub>a3</sub>, and R<sub>a5</sub> are each hydrogen; and

wherein R<sub>a2</sub> and R<sub>a4</sub> are fluorine.

5. A compound having formula (50)



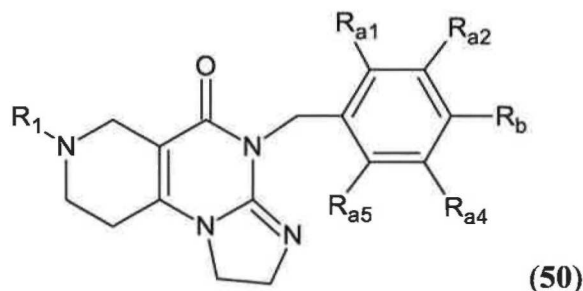
or a pharmaceutically acceptable salt thereof; wherein

R<sub>1</sub> is selected from the group consisting of H, C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkylphenyl, C<sub>1-4</sub>alkylphenylketone, C<sub>1-4</sub>benzyl-piperazine, C<sub>1-4</sub>alkylthienyl, C<sub>1-4</sub>alkylpyridinyl, C<sub>1-4</sub>alkylisoxazolidinyl, C<sub>1-4</sub>alkylmorpholinyl, C<sub>1-4</sub>alkylthiazolyl, and C<sub>1-4</sub>alkylpyrazinyl

wherein C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkylphenyl, C<sub>1-4</sub>alkylphenylketone, C<sub>1-4</sub>benzyl-piperazine, C<sub>1-4</sub>alkylthienyl, C<sub>1-4</sub>alkylpyridinyl, C<sub>1-4</sub>alkylisoxazolidinyl, C<sub>1-4</sub>alkylmorpholinyl, C<sub>1-4</sub>alkylthiazolyl, and C<sub>1-4</sub>alkylpyrazinyl are optionally substituted with C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkoxyl, hydroxyl, perhalogenated C<sub>1-4</sub>alkyl, or halogen; and

wherein R<sub>a2</sub>, R<sub>a4</sub>, R<sub>a5</sub>, are each hydrogen, R<sub>b</sub> is a fluorine and R<sub>a1</sub> is a methyl.

6. A compound having formula (50)

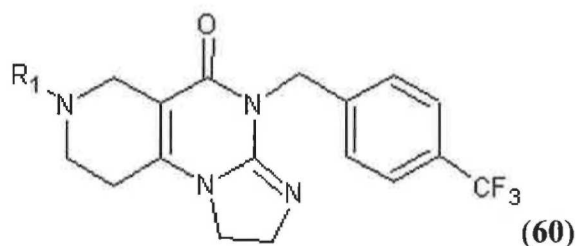


or a pharmaceutically acceptable salt thereof; wherein

R<sub>1</sub> is selected from the group consisting of H, C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkylphenyl, C<sub>1-4</sub>alkylphenylketone, C<sub>1-4</sub>benzyl-piperazine, C<sub>1-4</sub>alkylthienyl, C<sub>1-4</sub>alkylpyridinyl, C<sub>1-4</sub>alkylisoxazolidinyl, C<sub>1-4</sub>alkylmorpholinyl, C<sub>1-4</sub>alkylthiazolyl, and C<sub>1-4</sub>alkylpyrazinyl wherein C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkylphenyl, C<sub>1-4</sub>alkylphenylketone, C<sub>1-4</sub>benzyl-piperazine, C<sub>1-4</sub>alkylthienyl, C<sub>1-4</sub>alkylpyridinyl, C<sub>1-4</sub>alkylisoxazolidinyl, C<sub>1-4</sub>alkylmorpholinyl, C<sub>1-4</sub>alkylthiazolyl, and C<sub>1-4</sub>alkylpyrazinyl are optionally substituted with C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkoxyl, hydroxyl, perhalogenated C<sub>1-4</sub>alkyl, or halogen; and

wherein R<sub>a1</sub>, R<sub>a4</sub>, R<sub>a5</sub>, are each hydrogen, and wherein R<sub>b</sub> and R<sub>a2</sub> are each selected from fluorine or chlorine.

7. A compound having formula (60)

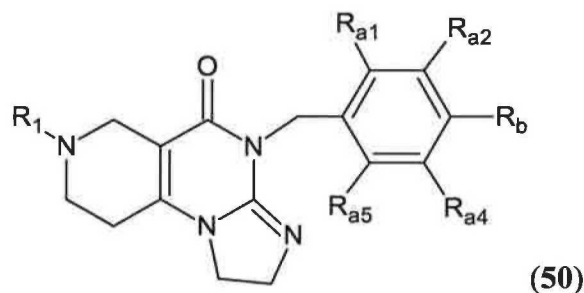


or a pharmaceutically acceptable salt thereof;

wherein R<sub>1</sub> is selected from the group consisting of H, C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkylphenyl, C<sub>1-4</sub>alkylphenylketone, C<sub>1-4</sub>benzyl-piperazine, C<sub>1-4</sub>alkylthienyl, C<sub>1-4</sub>alkylpyridinyl, C<sub>1-4</sub>alkylisoxazolidinyl, C<sub>1-4</sub>alkylmorpholinyl, C<sub>1-4</sub>alkylthiazolyl, and C<sub>1-4</sub>alkylpyrazinyl wherein C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkylphenyl, C<sub>1-4</sub>alkylphenylketone, C<sub>1-4</sub>

<sub>4</sub>benzyl-piperazine, C<sub>1-4</sub>alkylthienyl, C<sub>1-4</sub>alkylpyridinyl, C<sub>1-4</sub>alkylisoxazolidinyl, C<sub>1-4</sub>alkylmorpholinyl, C<sub>1-4</sub>alkylthiazolyl, and C<sub>1-4</sub>alkylpyrazinyl are optionally substituted with C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkoxyl, hydroxyl, perhalogenated C<sub>1-4</sub>alkyl, or halogen.

8. A compound having formula (50)



or a pharmaceutically acceptable salt thereof; wherein

R<sub>1</sub> is selected from the group consisting of H, C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkylphenyl, C<sub>1-4</sub>alkylphenylketone, C<sub>1-4</sub>benzyl-piperazine, C<sub>1-4</sub>alkylthienyl, C<sub>1-4</sub>alkylpyridinyl, C<sub>1-4</sub>alkylisoxazolidinyl, C<sub>1-4</sub>alkylmorpholinyl, C<sub>1-4</sub>alkylthiazolyl, and C<sub>1-4</sub>alkylpyrazinyl wherein C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkylphenyl, C<sub>1-4</sub>alkylphenylketone, C<sub>1-4</sub>benzyl-piperazine, C<sub>1-4</sub>alkylthienyl, C<sub>1-4</sub>alkylpyridinyl, C<sub>1-4</sub>alkylisoxazolidinyl, C<sub>1-4</sub>alkylmorpholinyl, C<sub>1-4</sub>alkylthiazolyl, and C<sub>1-4</sub>alkylpyrazinyl are optionally substituted with C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkoxyl, hydroxyl, perhalogenated C<sub>1-4</sub>alkyl, or halogen; and

wherein R<sub>a1</sub>, R<sub>a4</sub>, R<sub>a5</sub>, are each hydrogen, R<sub>b</sub> is Cl, and R<sub>a1</sub> is Cl.

9. A composition comprising a salt of a compound of claim 6.
10. The composition according to claim 9, wherein the salt is a di-salt.
11. The composition according to claim 10, wherein the di-salt is a hydrochloride di-salt.
12. A pharmaceutical composition comprising a compound according to claim 6 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier.
13. The compound of claim 6, wherein R<sub>b</sub> and R<sub>a2</sub> are each fluorine.
14. The compound of claim 7, wherein R<sub>1</sub> is a benzyl.
15. A composition comprising a salt of a compound of claim 7.

16. The composition according to claim 15, wherein the salt is a di-salt.
17. The composition according to claim 16, wherein the di-salt is a hydrochloride di-salt.
18. A pharmaceutical composition comprising a compound according to claim 7 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier.
19. A composition comprising a salt of a compound of claim 13.
20. The composition according to claim 19, wherein the salt is a di-salt.
21. The composition according to claim 20, wherein the di-salt is a hydrochloride di-salt.
22. A pharmaceutical composition comprising a compound according to claim 13 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier.
23. A composition comprising a salt of a compound of claim 22.
24. The composition according to claim 23, wherein the salt is a di-salt.
25. The composition according to claim 24, wherein the di-salt is a hydrochloride di-salt.
26. A pharmaceutical composition comprising a compound according to claim 13 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier.