

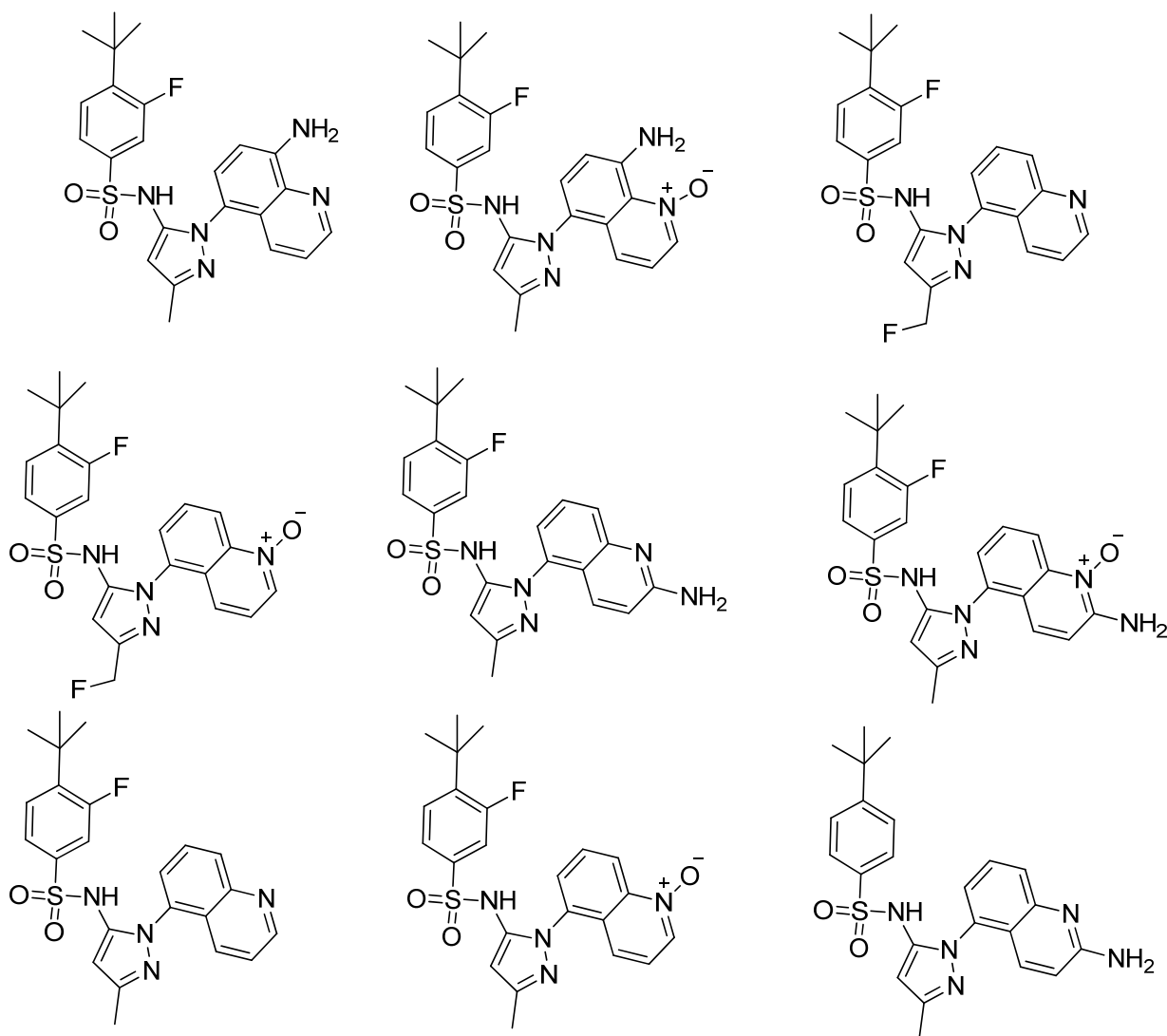
therapeutically effective amount of a CCR9 chemokine receptor inhibitor, a therapeutically effective amount of an anti- $\alpha 4\beta 7$ integrin blocking antibody, and instructions for effective administration.

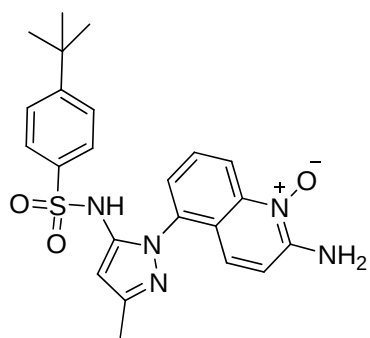
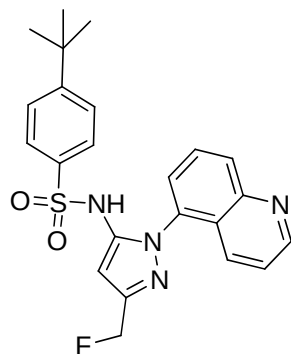
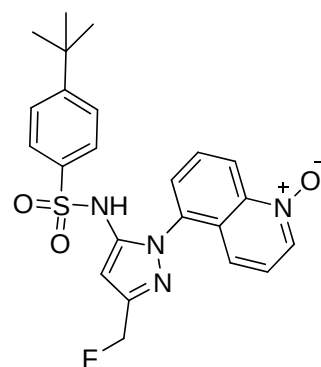
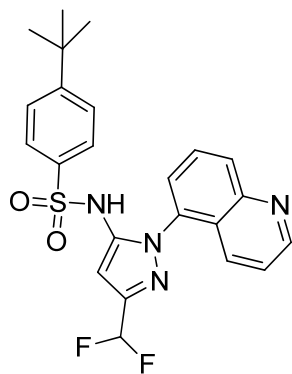
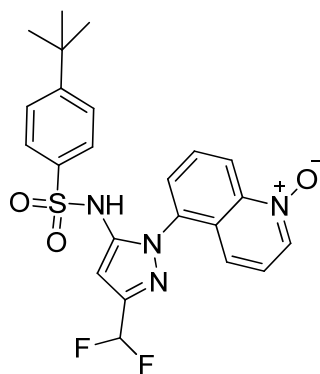
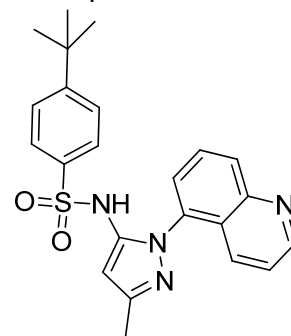
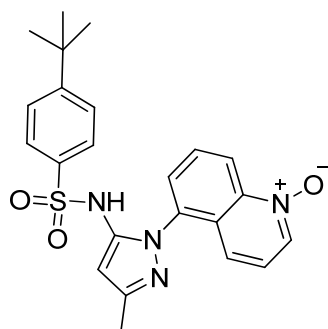
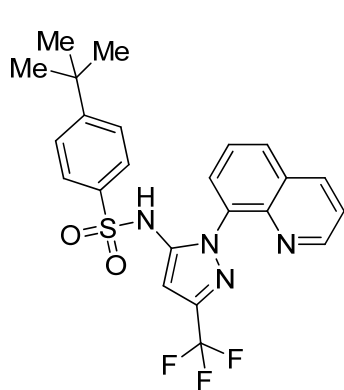
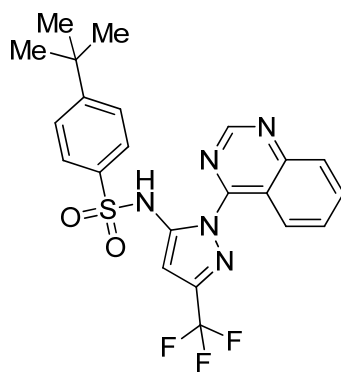
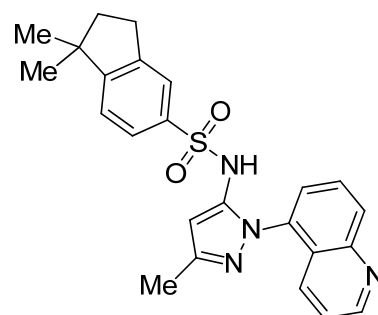
5 **[0018a]** In a third aspect, the present disclosure provides a use of a CCR9 chemokine receptor inhibitor and an anti- $\alpha 4\beta 7$ integrin blocking antibody in the manufacture of a medicament for treating or reducing the development of inflammatory bowel disease in a mammal wherein the CCR9 chemokine receptor inhibitor is vercirnon (Traficet-EN).

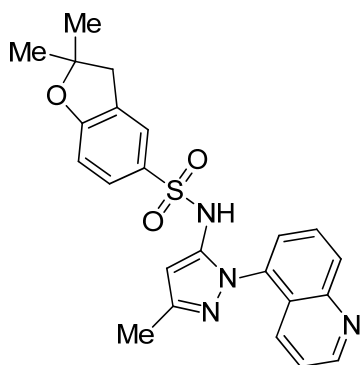
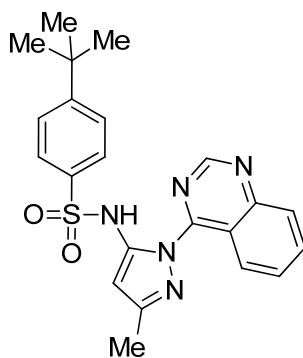
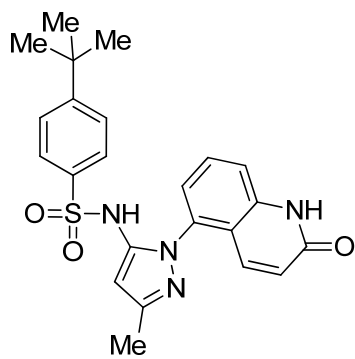
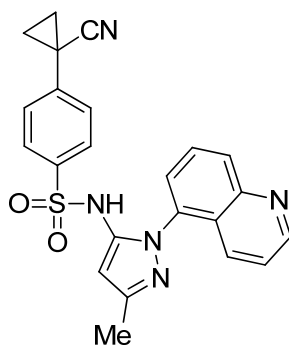
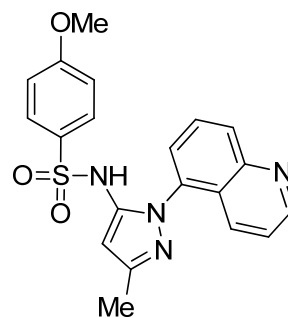
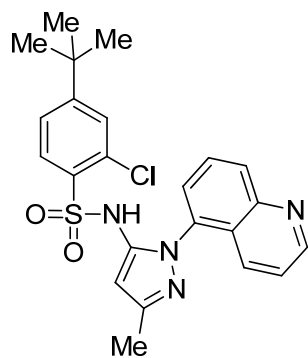
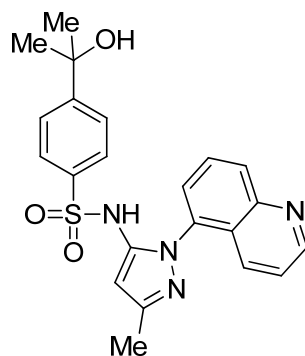
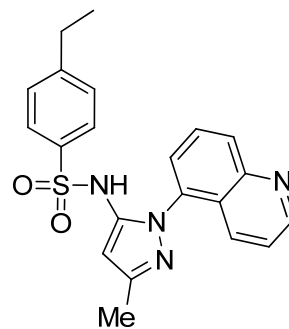
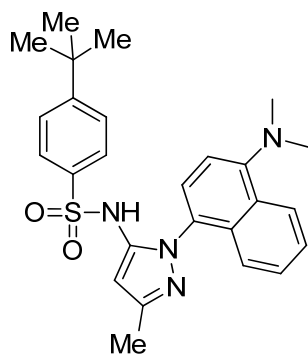
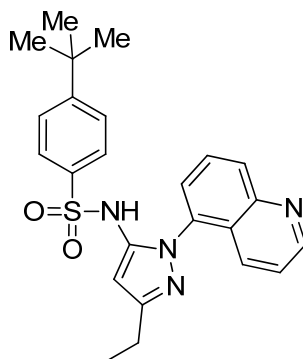
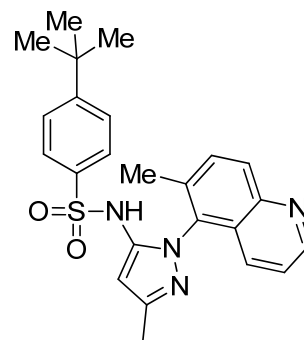
[0019] In some embodiments, the CCR9 chemokine receptor inhibitor and the anti- $\alpha 4\beta 7$ integrin blocking antibody are formulated for sequential administration. In other

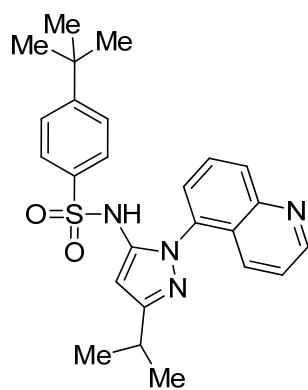
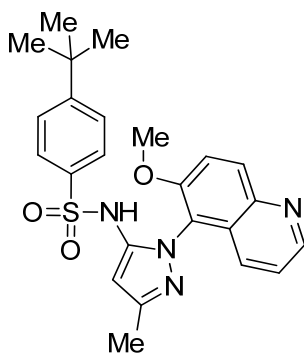
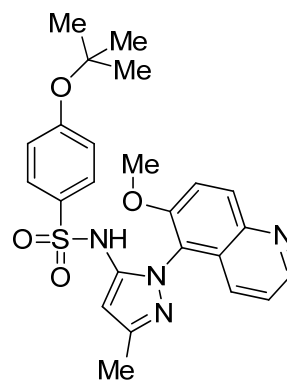
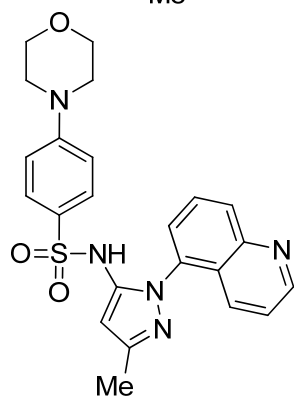
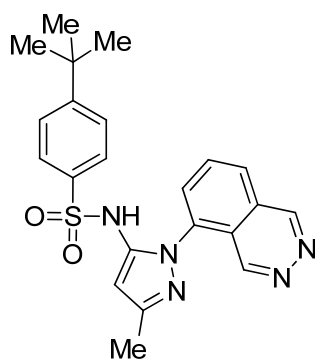
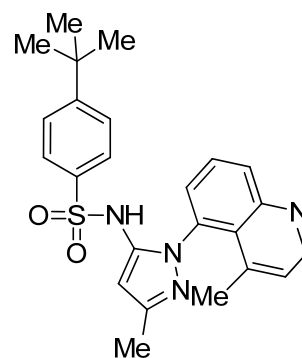
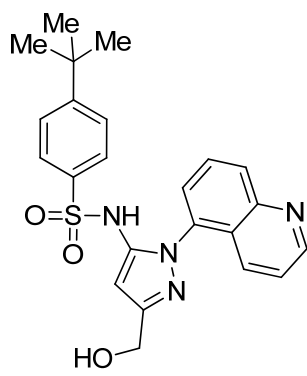
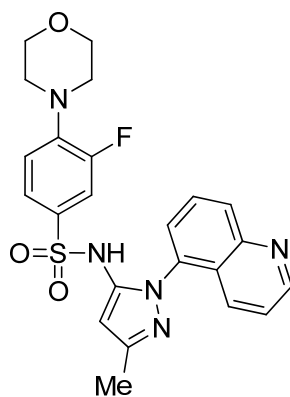
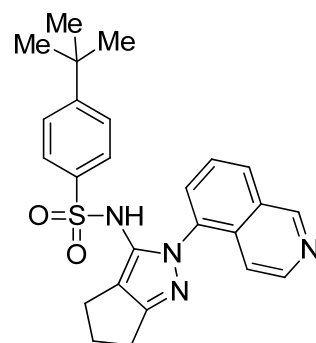
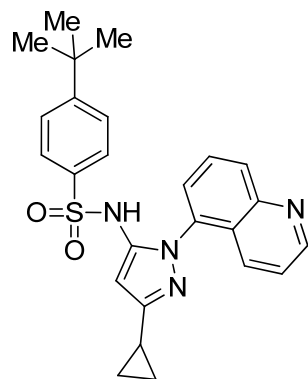
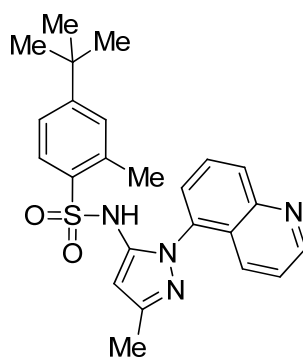
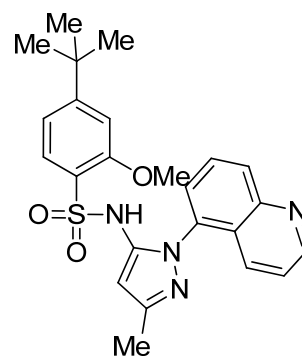
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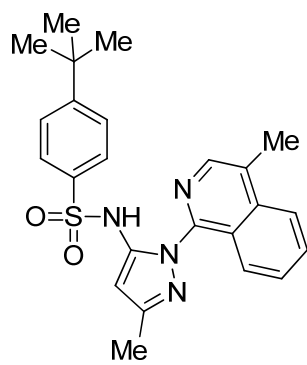
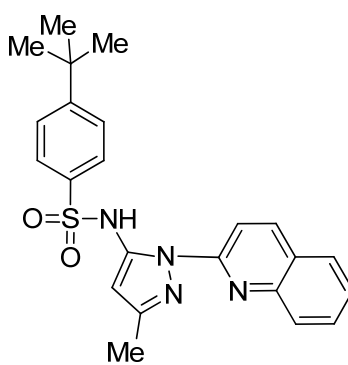
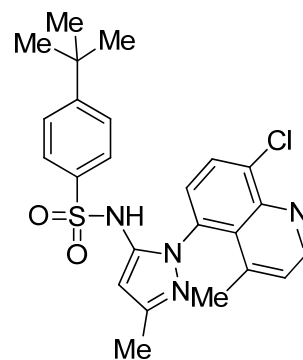
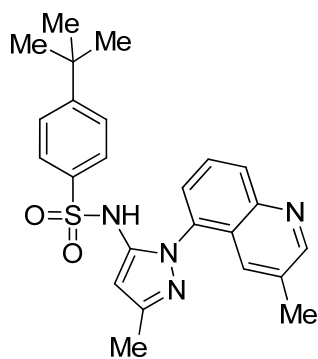
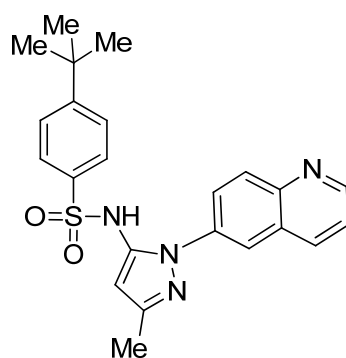
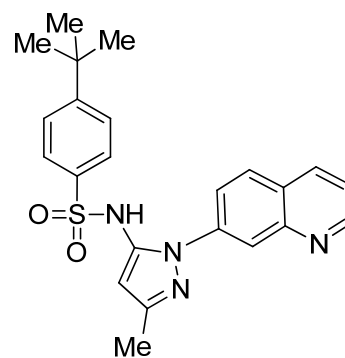
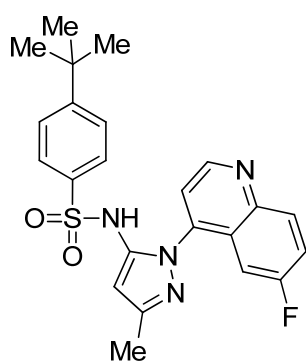
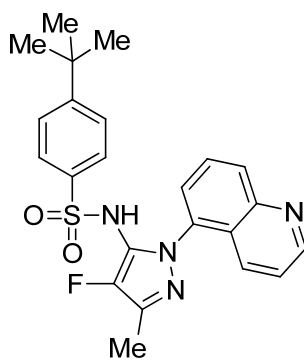
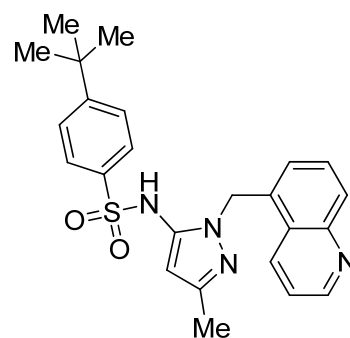
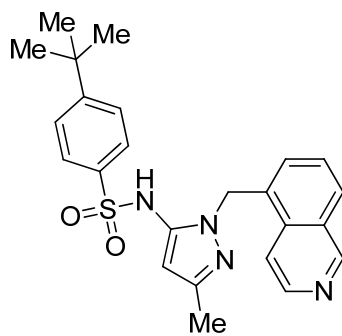
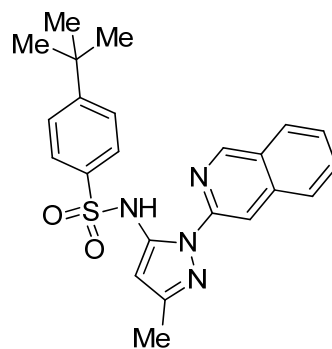
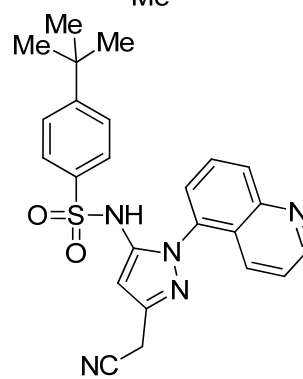
1. Use of a CCR9 chemokine receptor inhibitor and an anti- $\alpha 4\beta 7$ integrin blocking antibody in the manufacture of a medicament for treating or reducing the development of inflammatory bowel disease in a mammal wherein the CCR9 chemokine receptor inhibitor is selected from the group consisting of

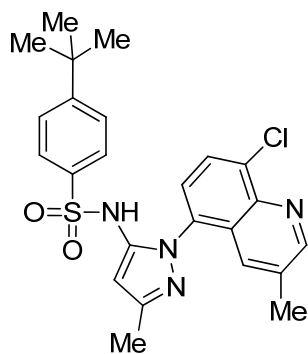
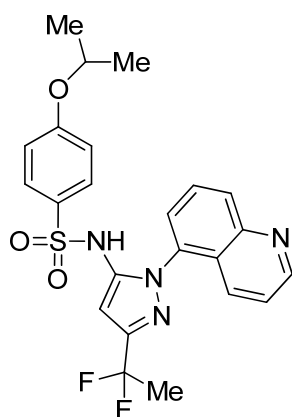
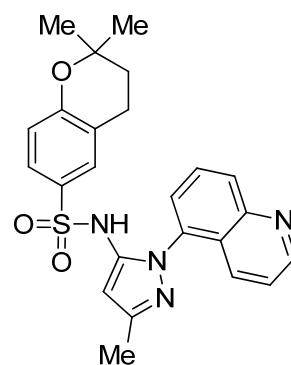
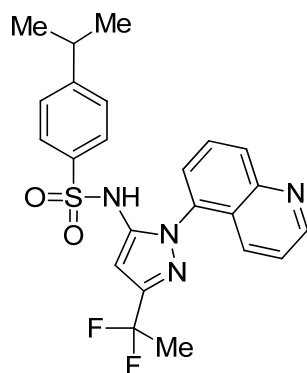
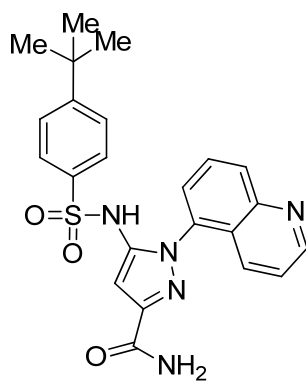
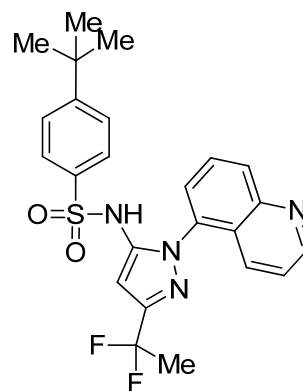
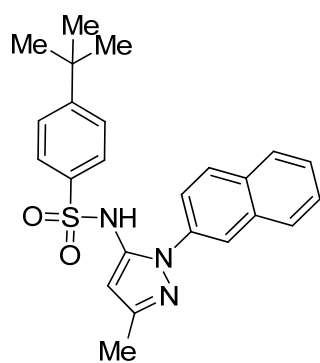
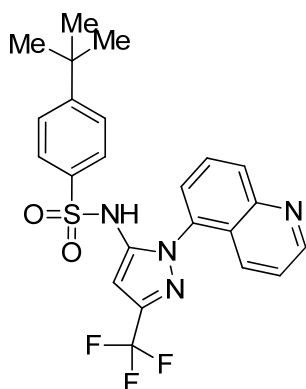
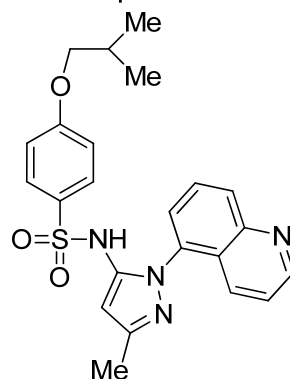
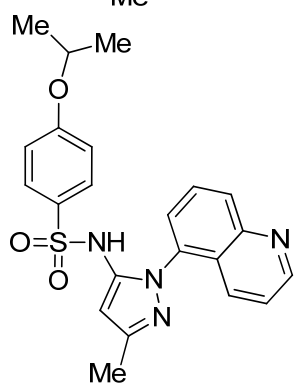
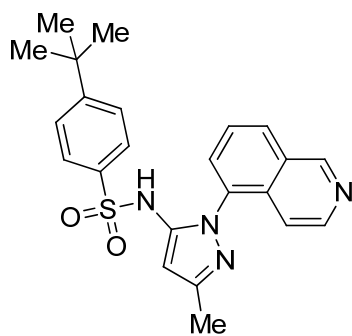
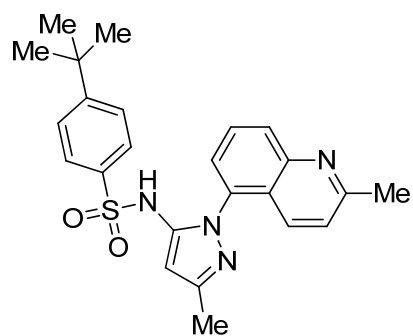


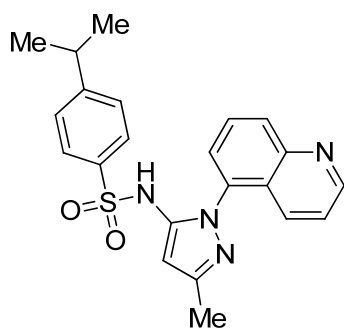
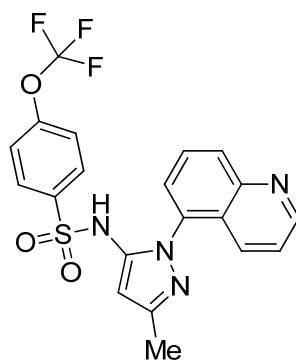
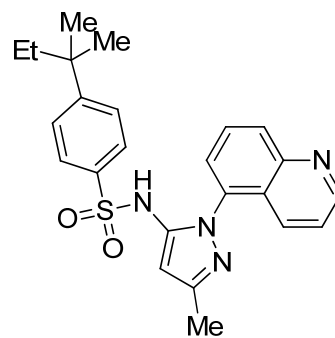
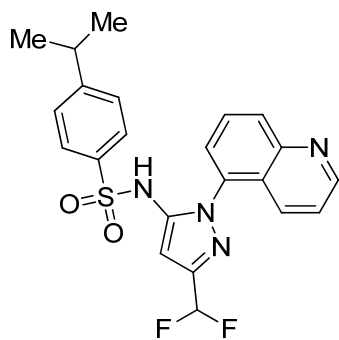
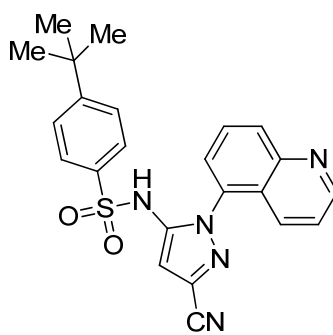
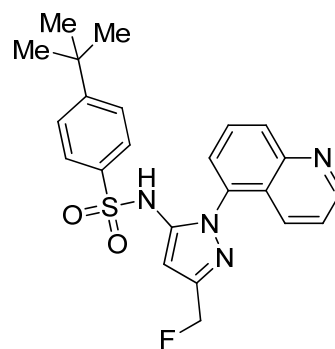
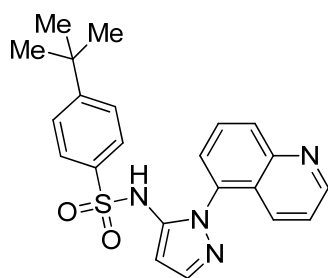
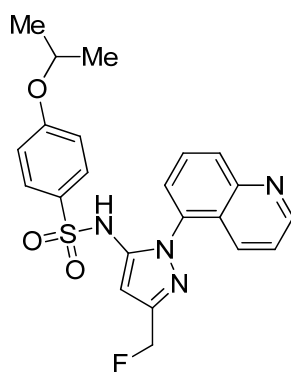
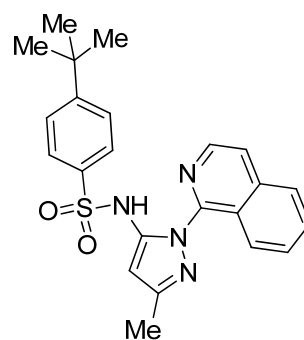
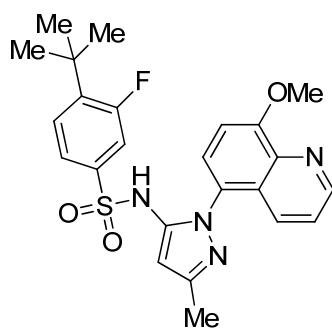
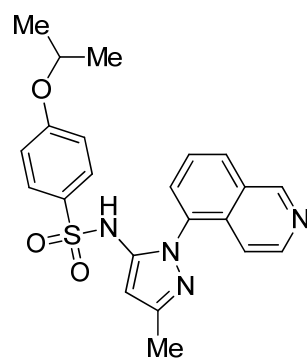
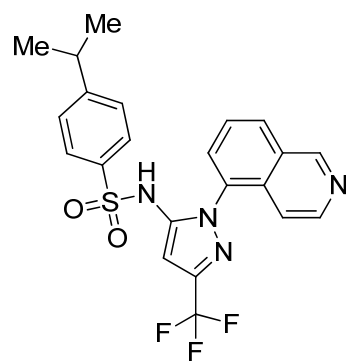


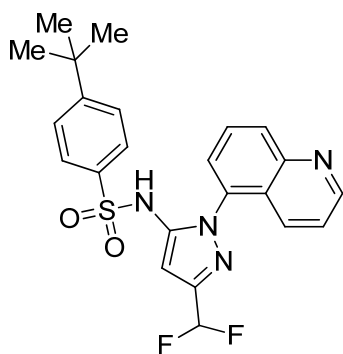
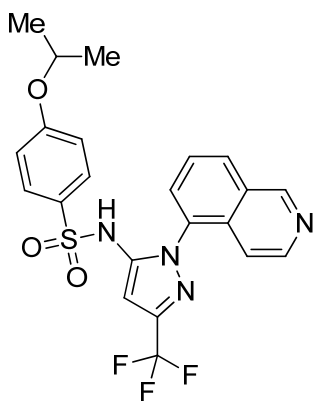
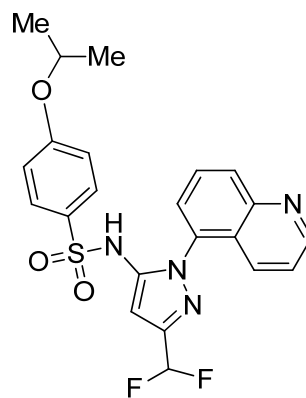
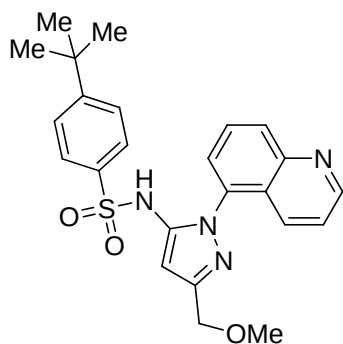
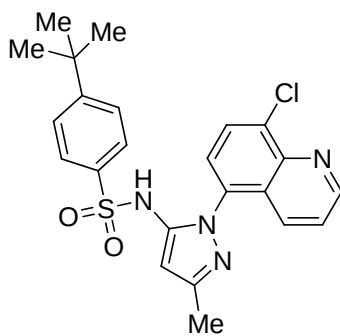
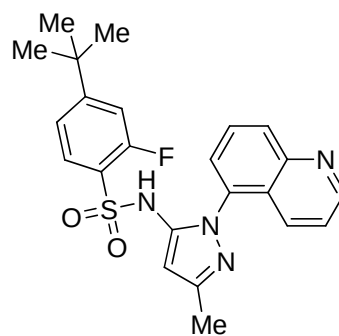
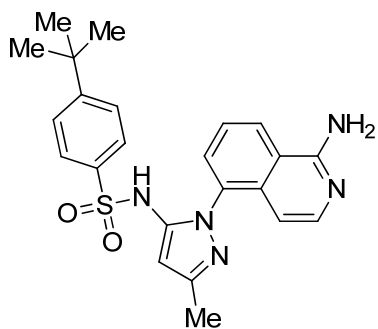
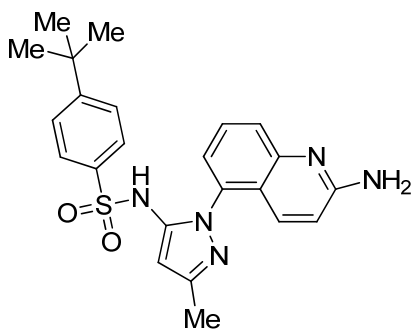
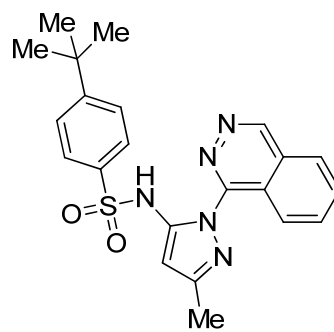
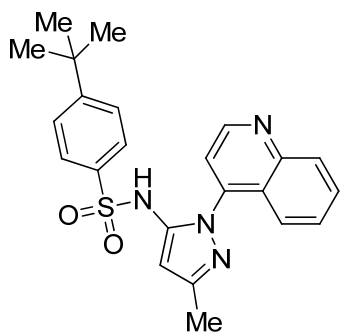
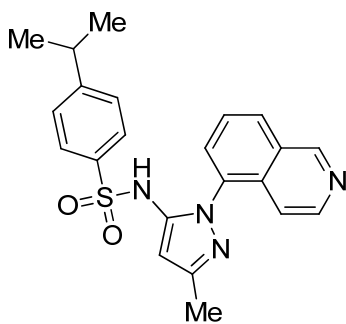
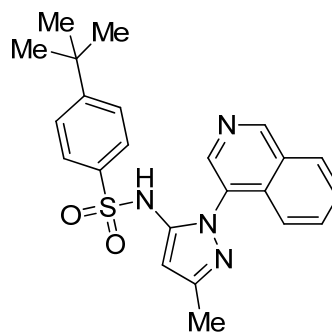
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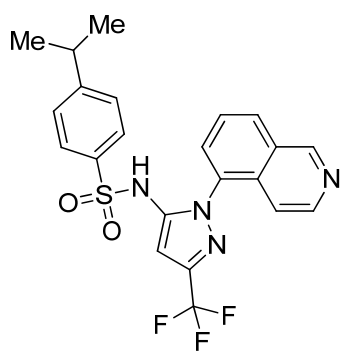
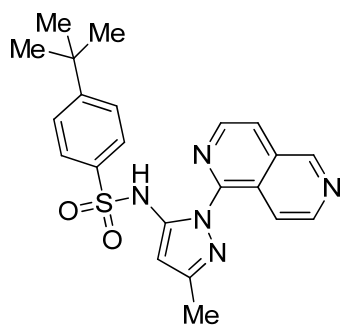
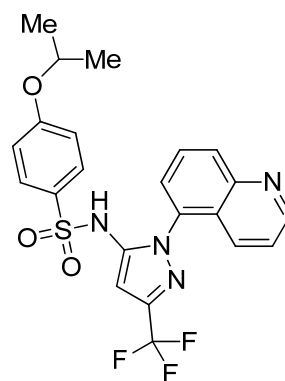
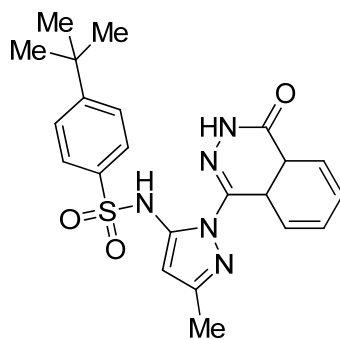
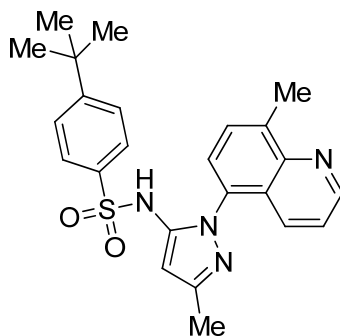
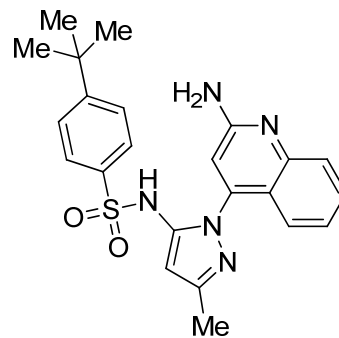
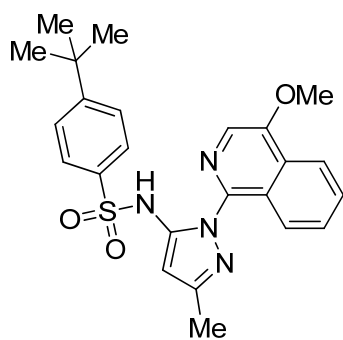
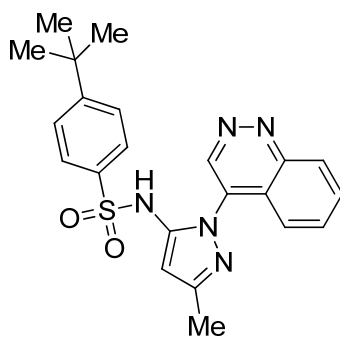
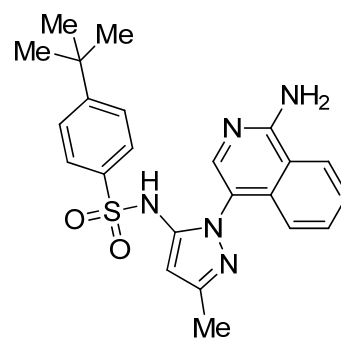
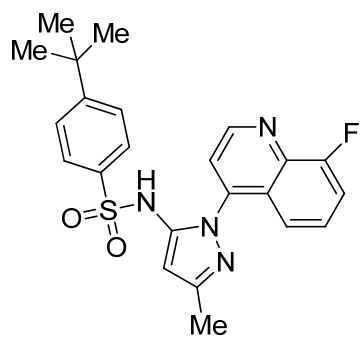
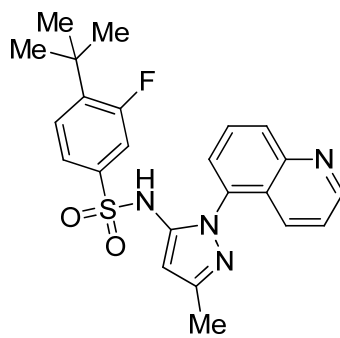
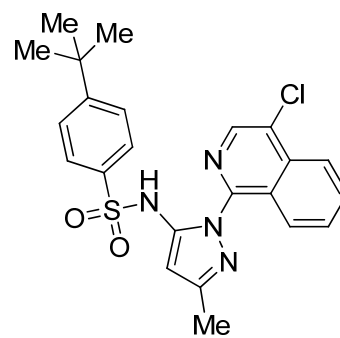


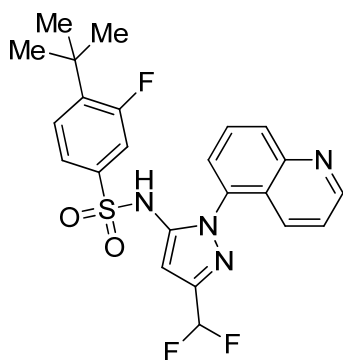
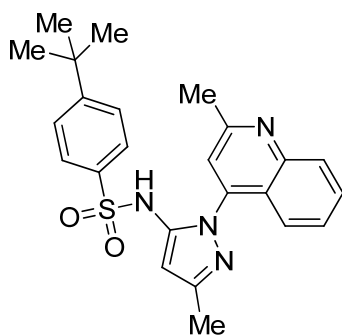
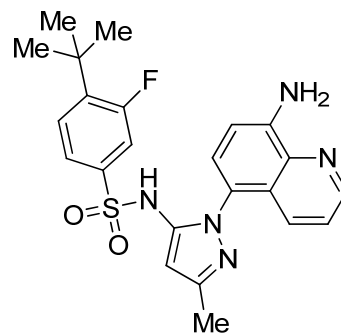
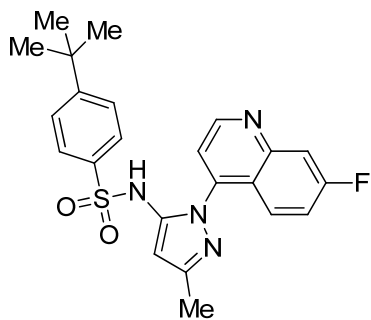
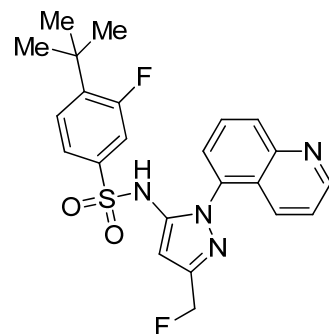
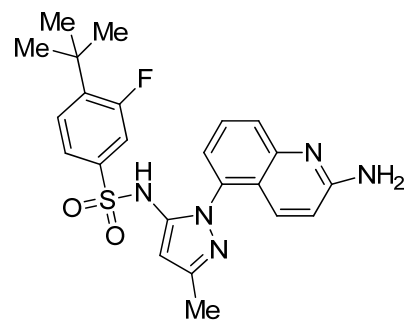
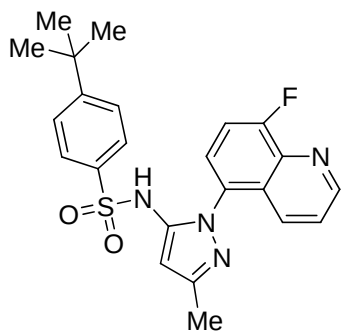
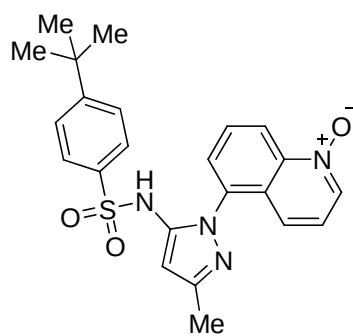
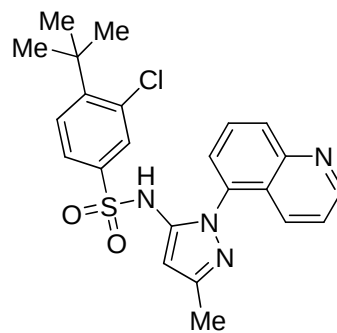
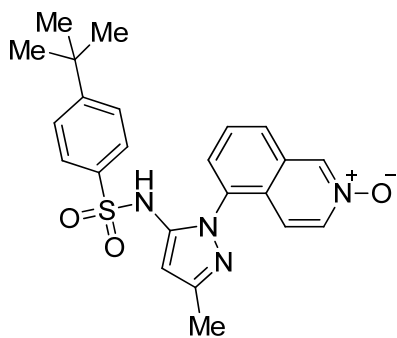
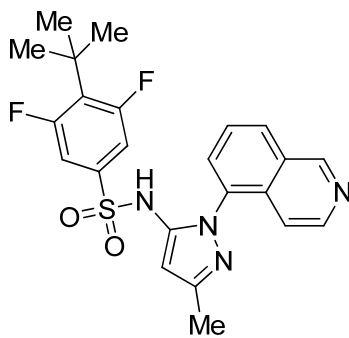
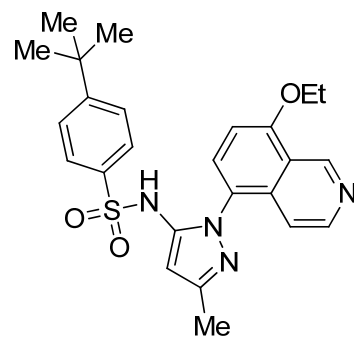


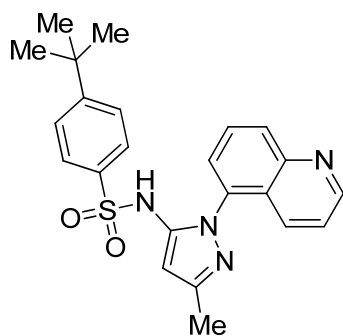
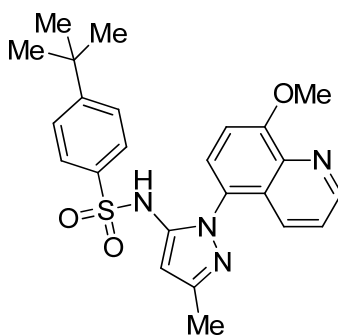
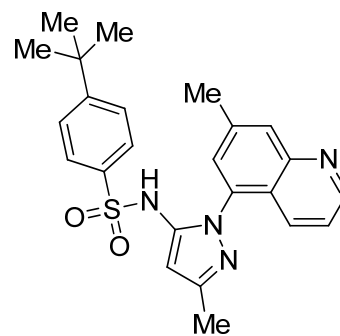
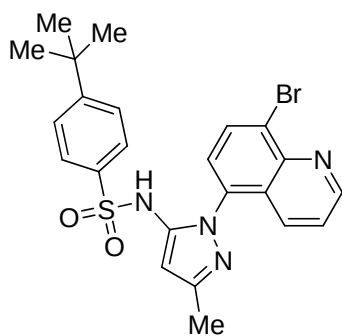
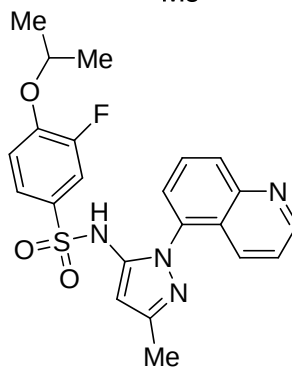
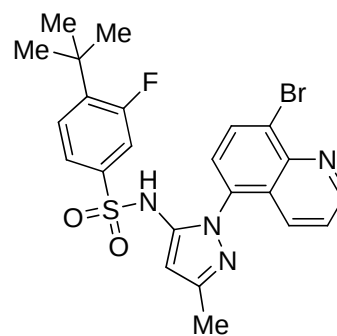
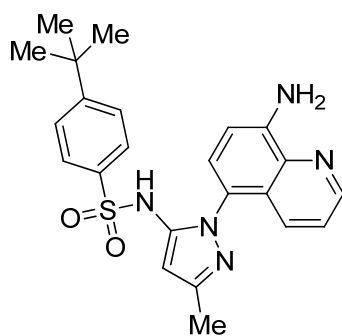
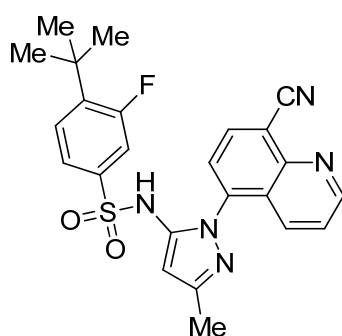
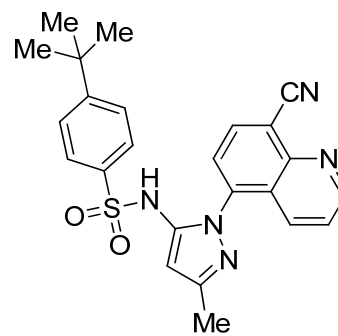




57h







and a pharmaceutically acceptable salt or N-oxide thereof..

2. The use of claim 1, wherein the inflammatory bowel disease is Crohn's disease (CD) or ulcerative colitis (UC).

3. The use of claim 1, wherein the anti- $\alpha 4\beta 7$ integrin blocking antibody is vedolizumab (ENYVIO[®]), or a biosimilar, or bioequivalent thereof.

4. The use of claim 1, wherein the anti- $\alpha 4\beta 7$ integrin blocking antibody is vedolizumab (ENYVIO[®]).

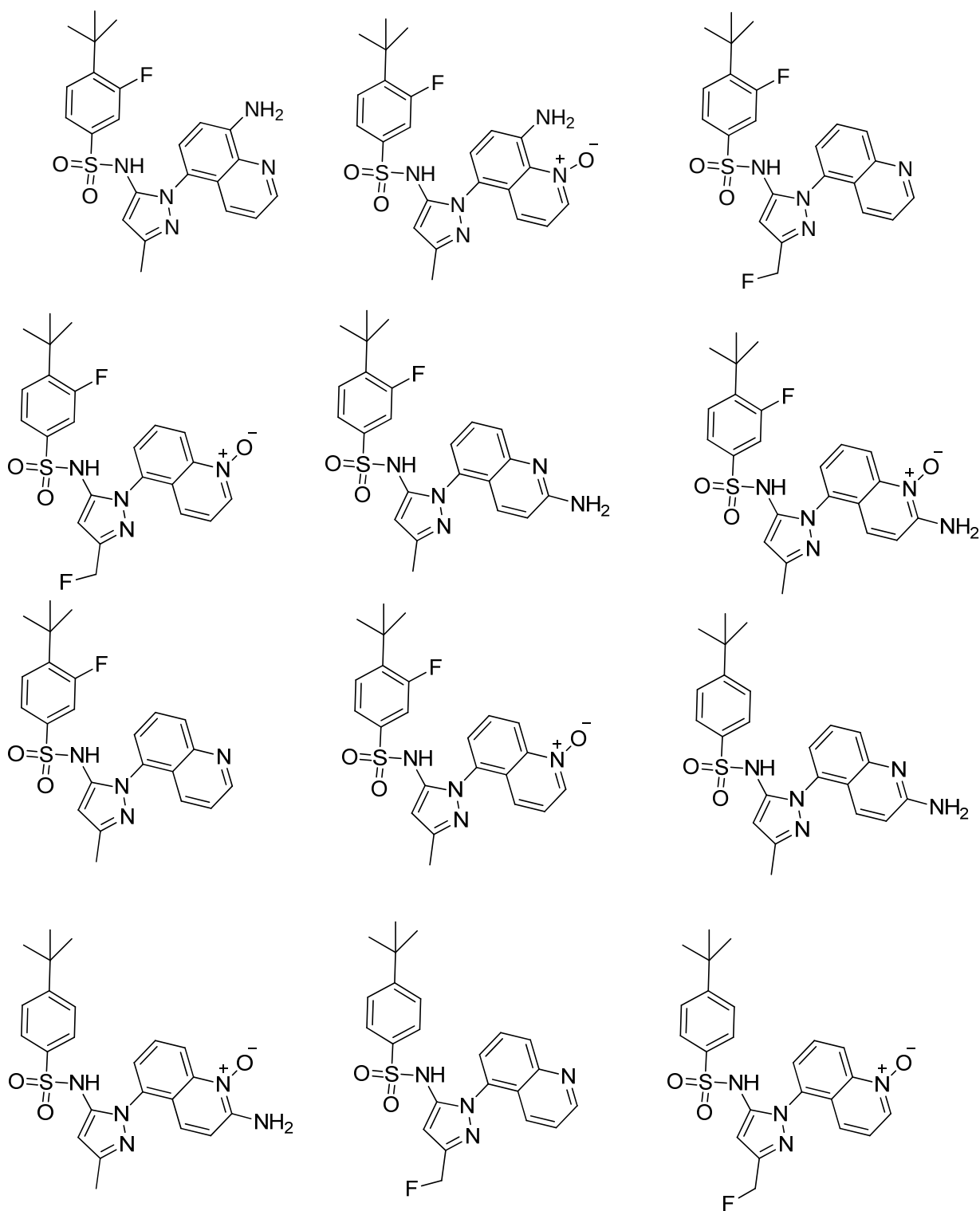
5. The use of claim 1, wherein the CCR9 chemokine receptor inhibitor and the anti- $\alpha 4\beta 7$ integrin blocking antibody are to be administered in a combination formulation.

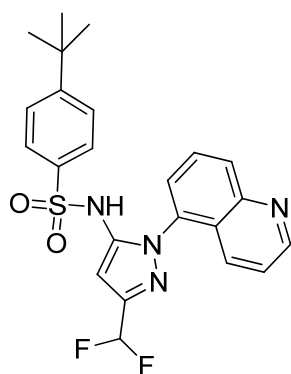
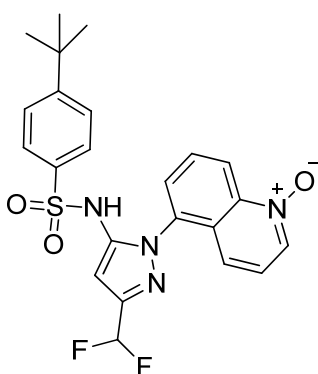
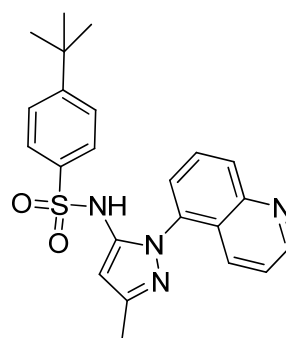
6. The use of claim 1, wherein the CCR9 chemokine receptor inhibitor and the anti- $\alpha 4\beta 7$ integrin blocking antibody are to be administered sequentially.

7. The use of claim 6, wherein the CCR9 chemokine receptor inhibitor is to be administered prior to the anti- $\alpha 4\beta 7$ integrin blocking antibody.

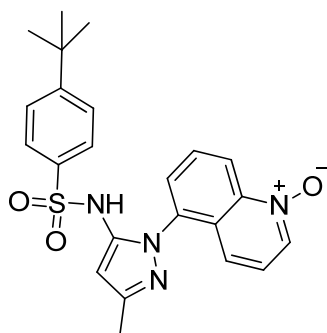
8. The use of claim 6, wherein the CCR9 chemokine receptor inhibitor is to be administered after administration of the anti- $\alpha 4\beta 7$ integrin blocking antibody.

9. The use of claim 1, wherein the CCR9 chemokine receptor inhibitor is selected from the group consisting of



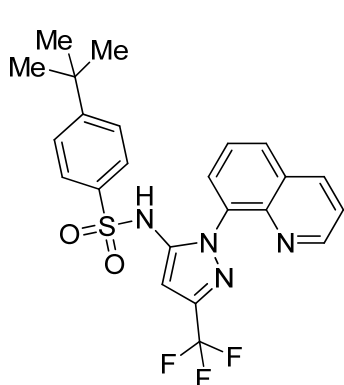
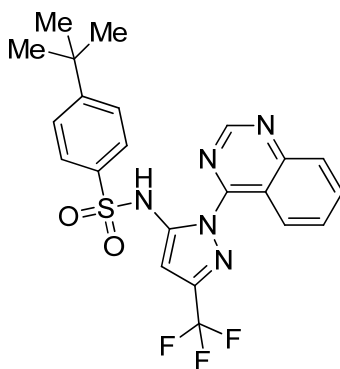
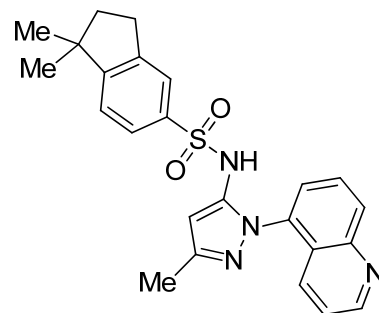
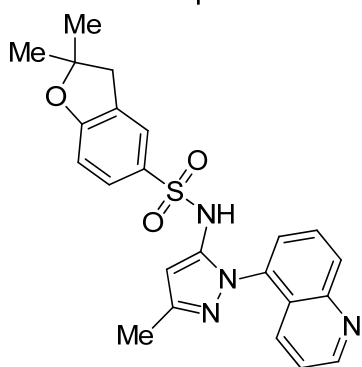
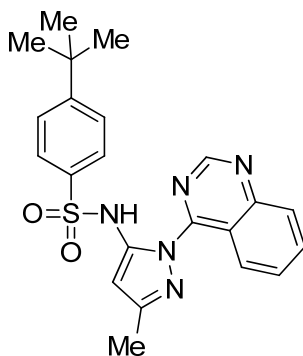
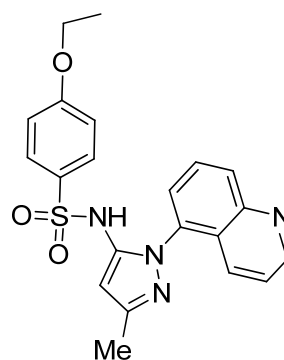


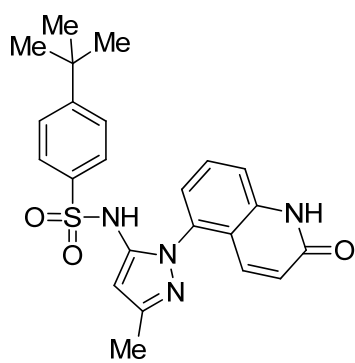
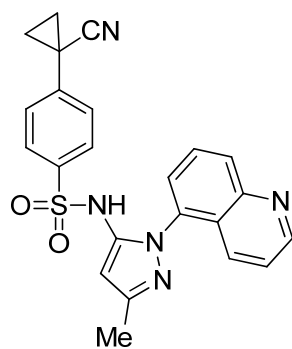
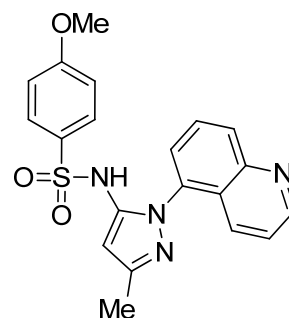
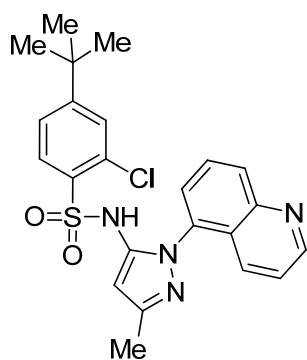
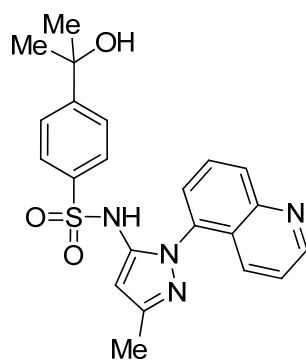
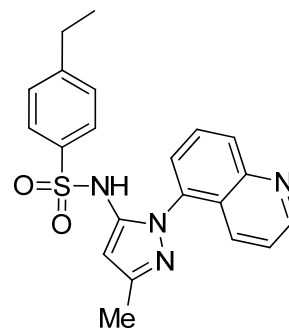
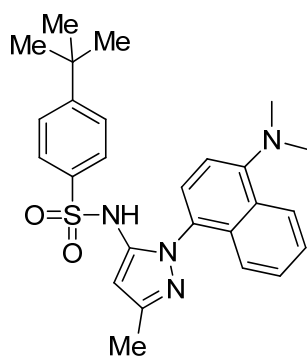
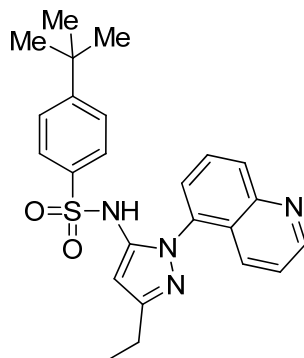
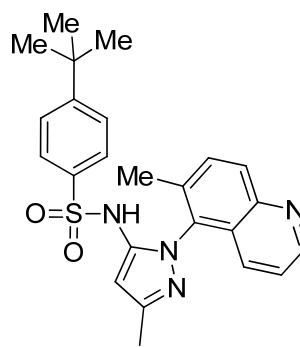
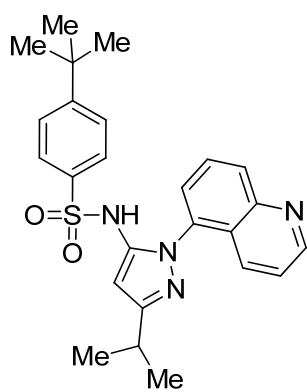
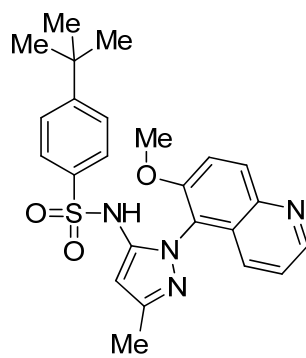
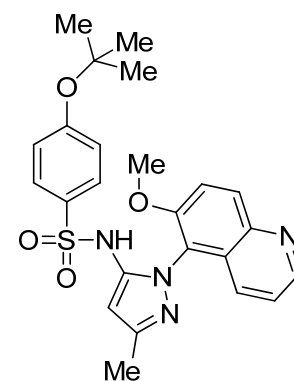
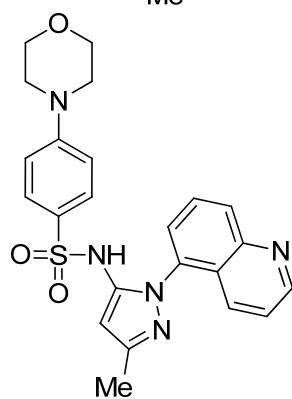
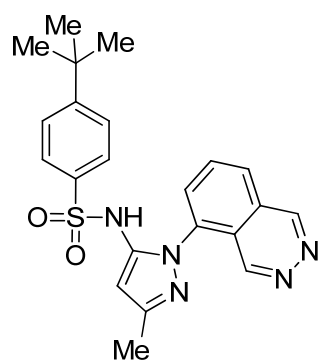
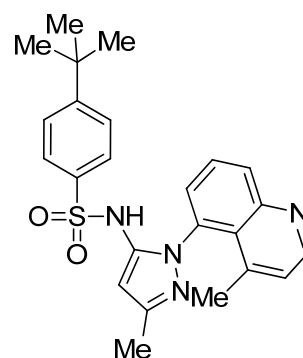
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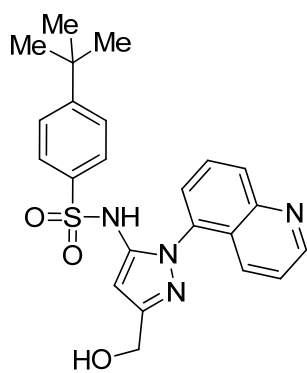
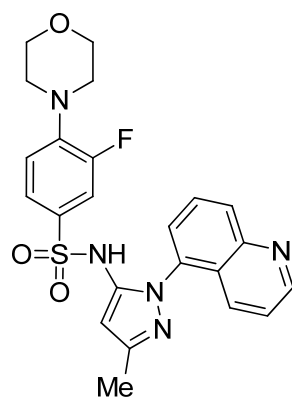
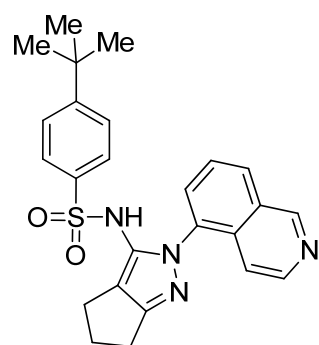
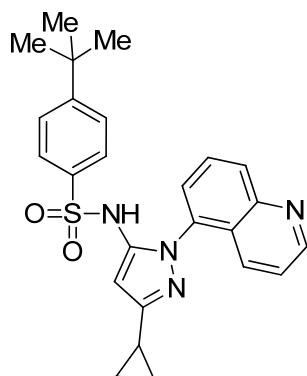
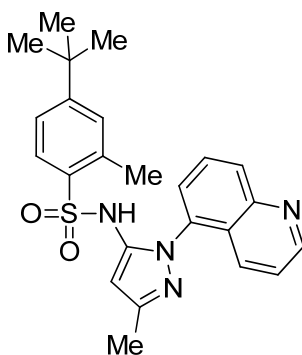
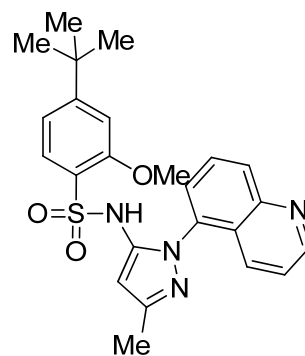
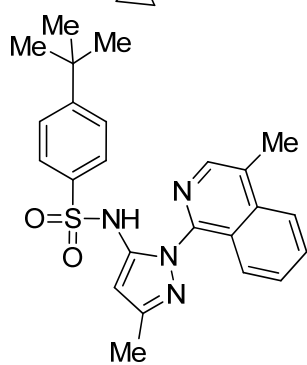
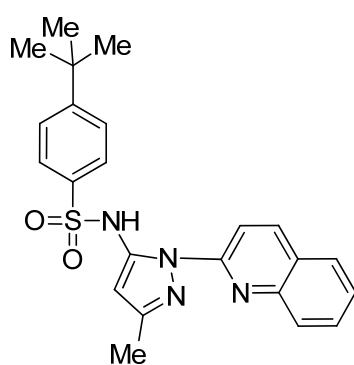
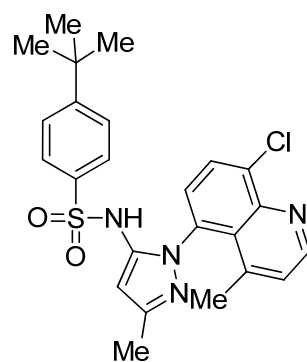
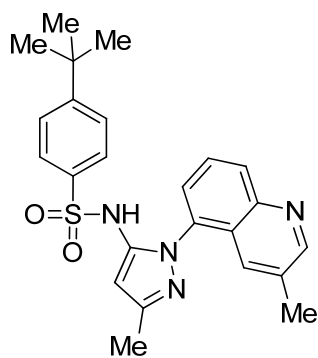
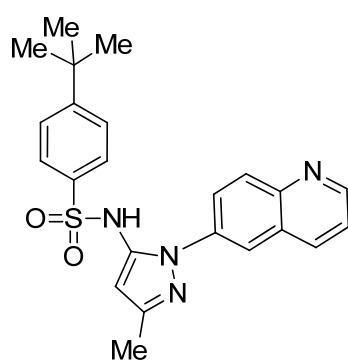
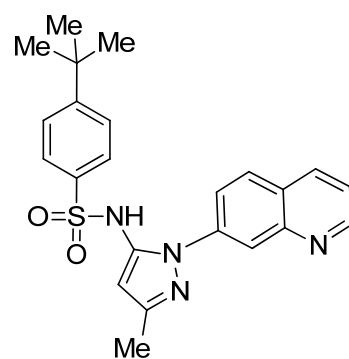
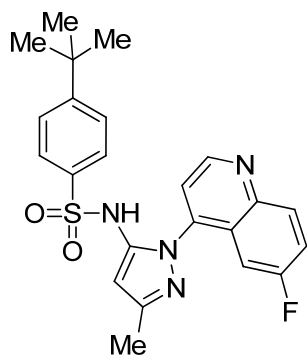
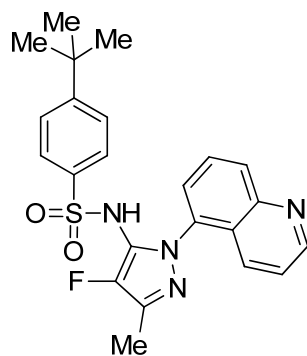
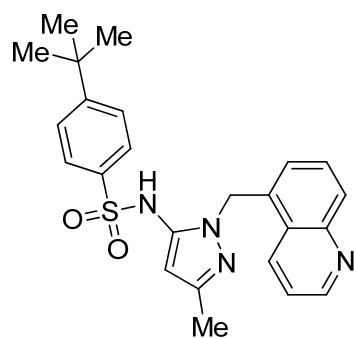


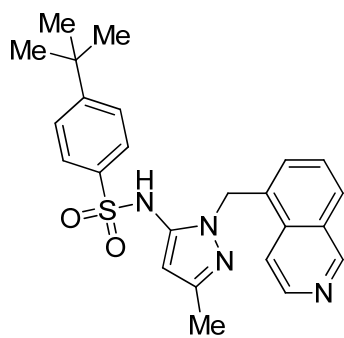
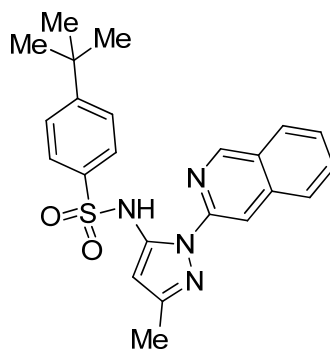
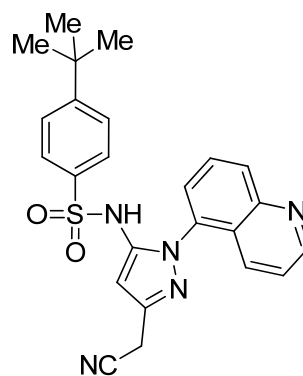
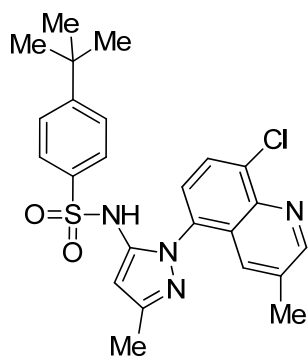
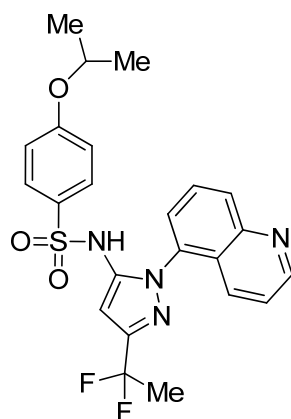
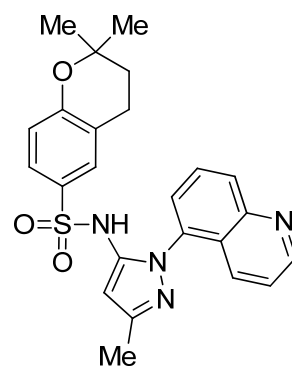
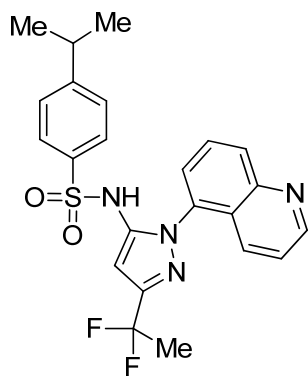
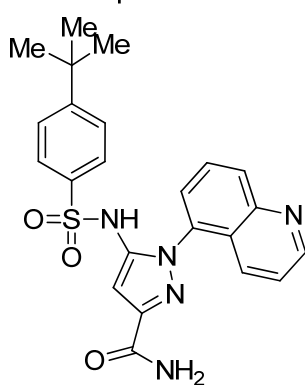
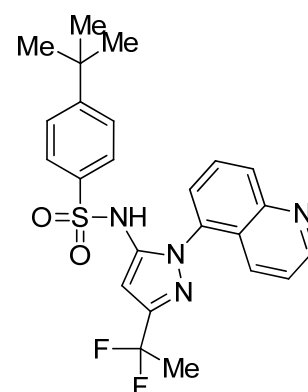
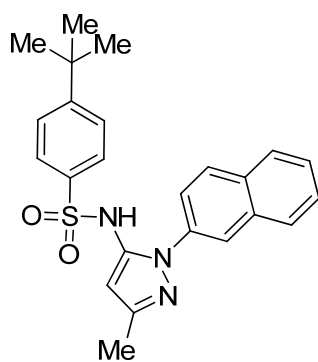
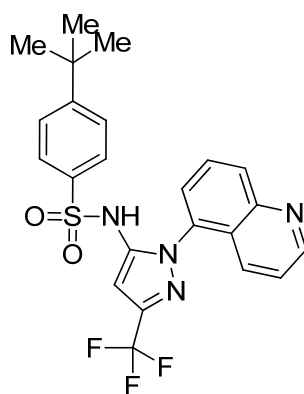
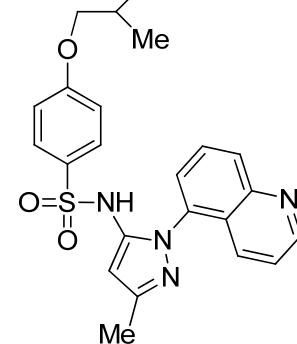
or a pharmaceutically acceptable salt thereof.

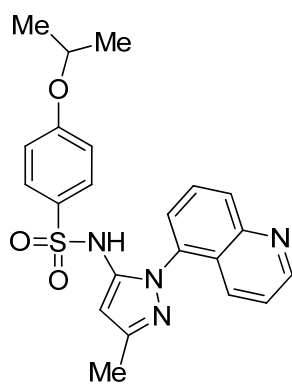
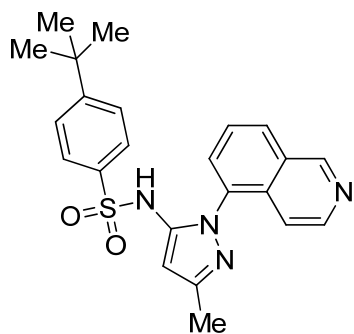
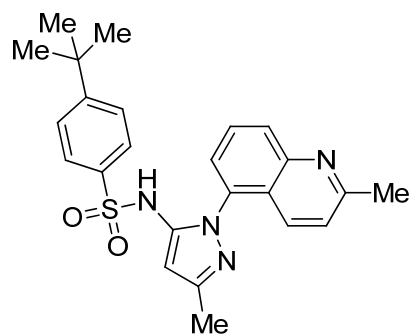
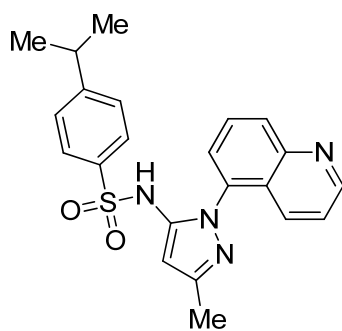
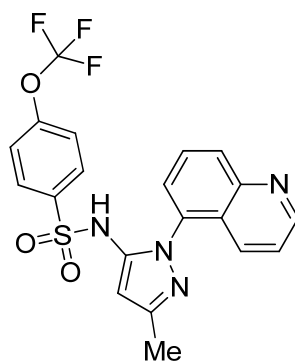
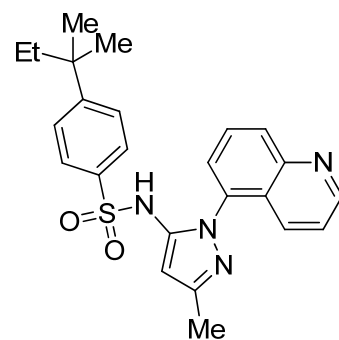
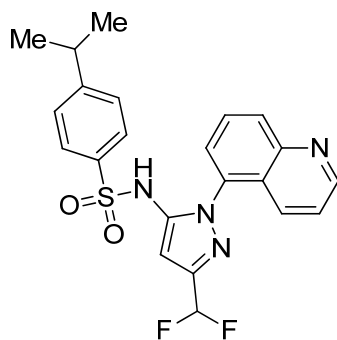
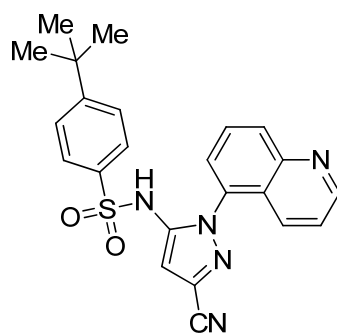
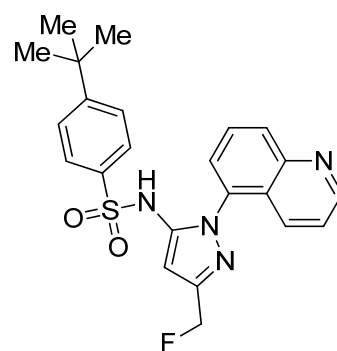
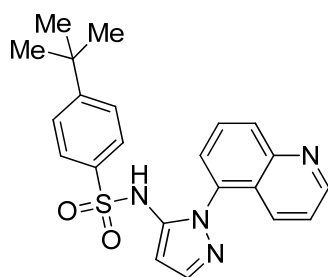
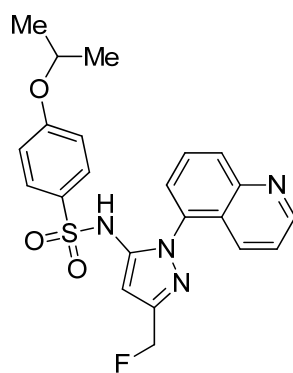
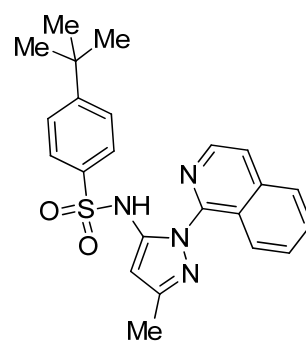
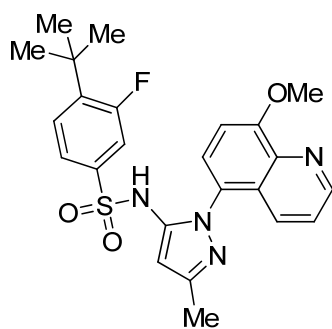
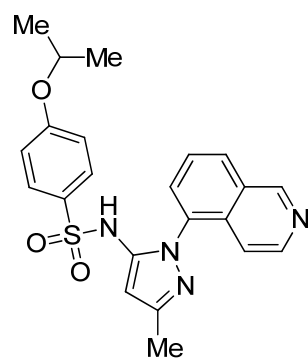
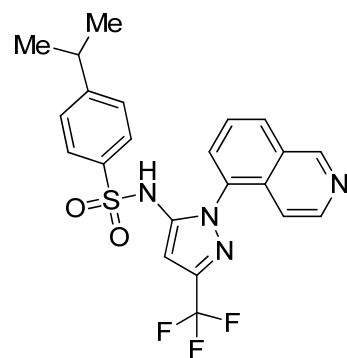
10. The use of claim 1, wherein the compound is selected from the group consisting of

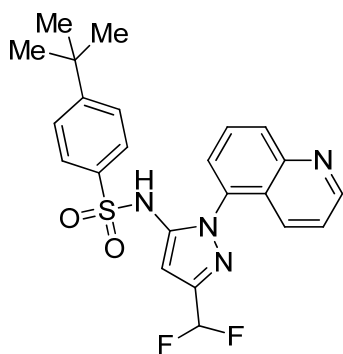
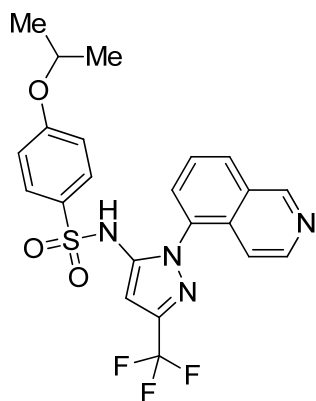
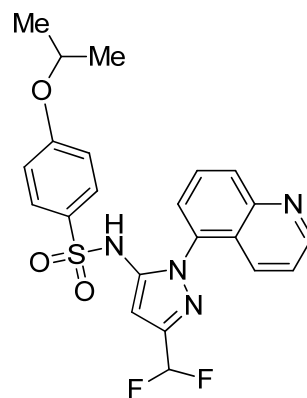
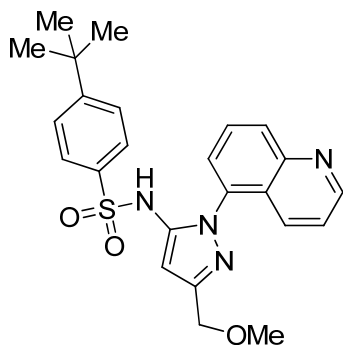
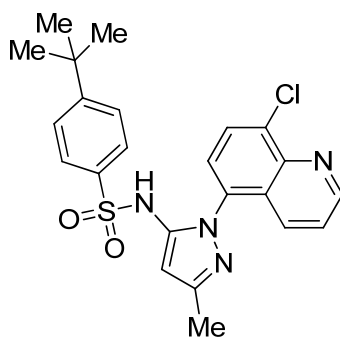
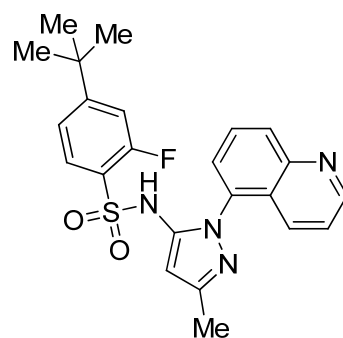
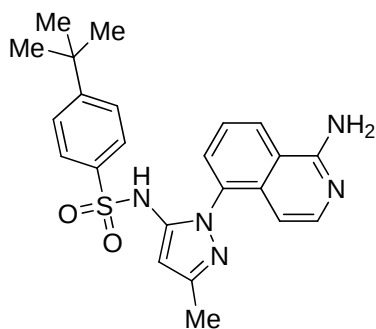
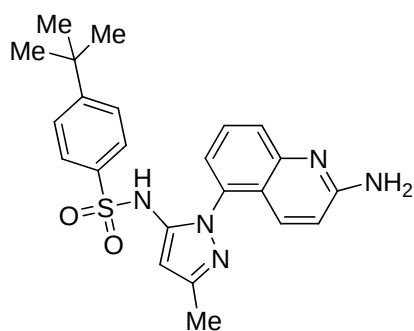
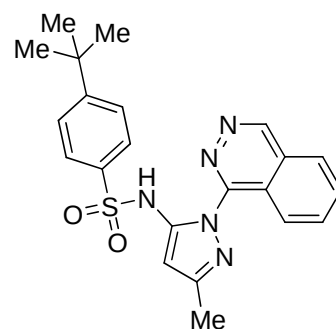
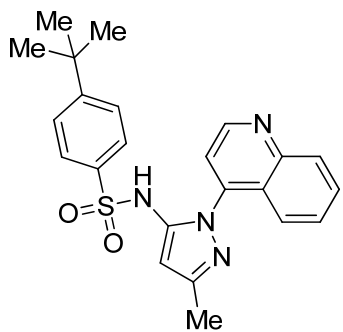
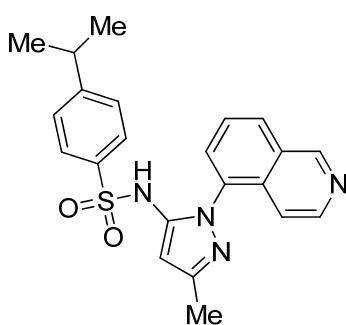
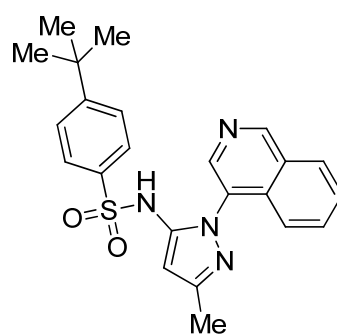
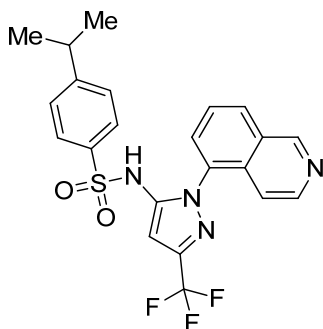
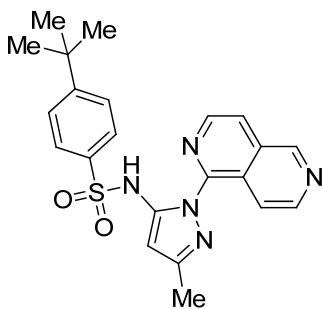
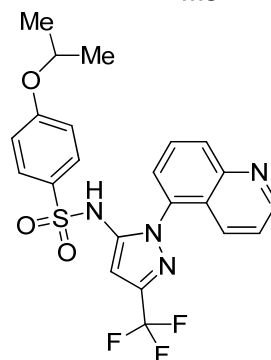


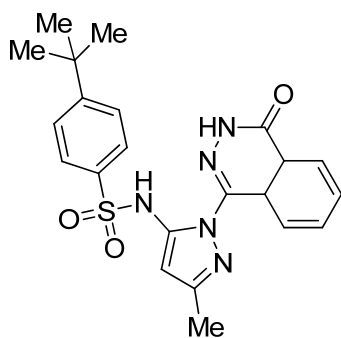
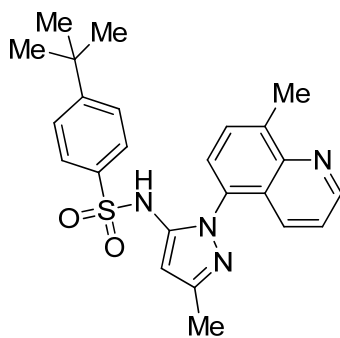
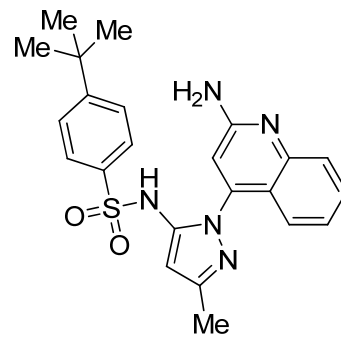
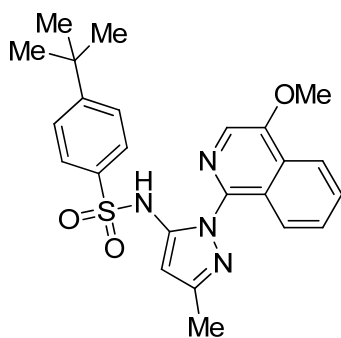
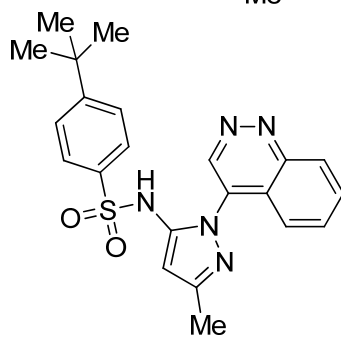
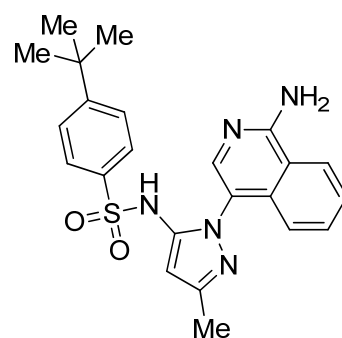
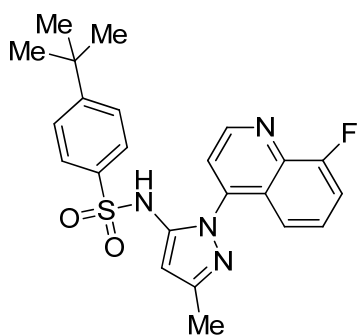
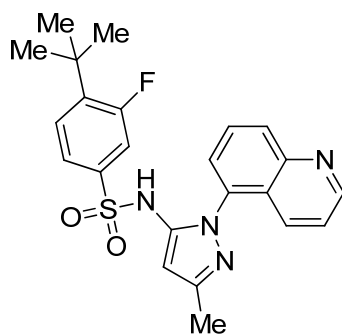
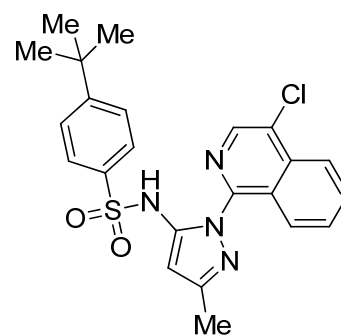
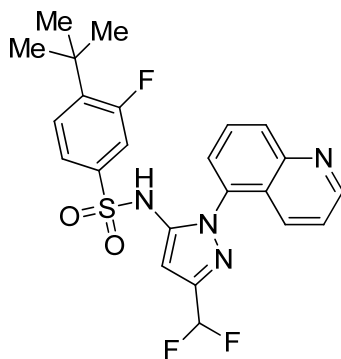
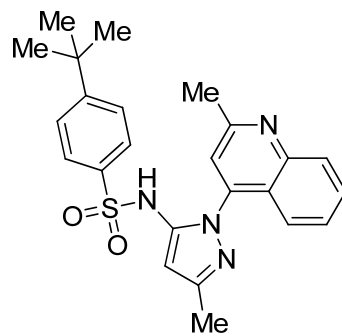
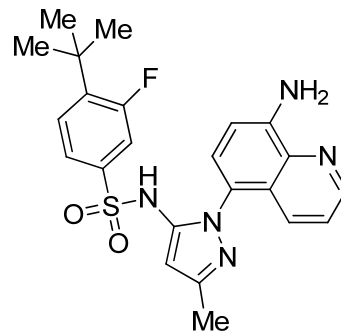
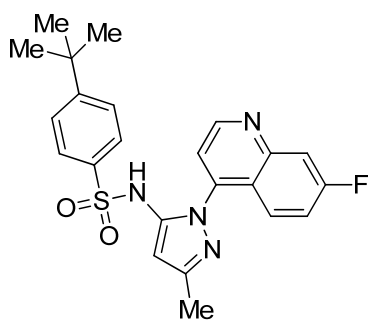
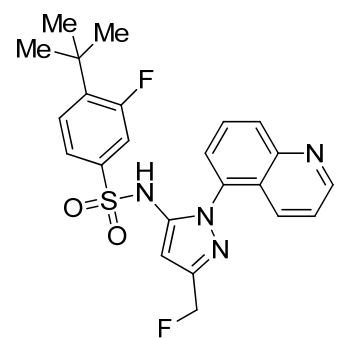
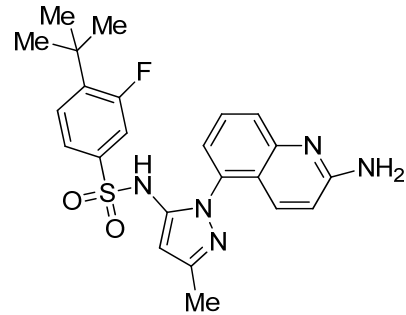


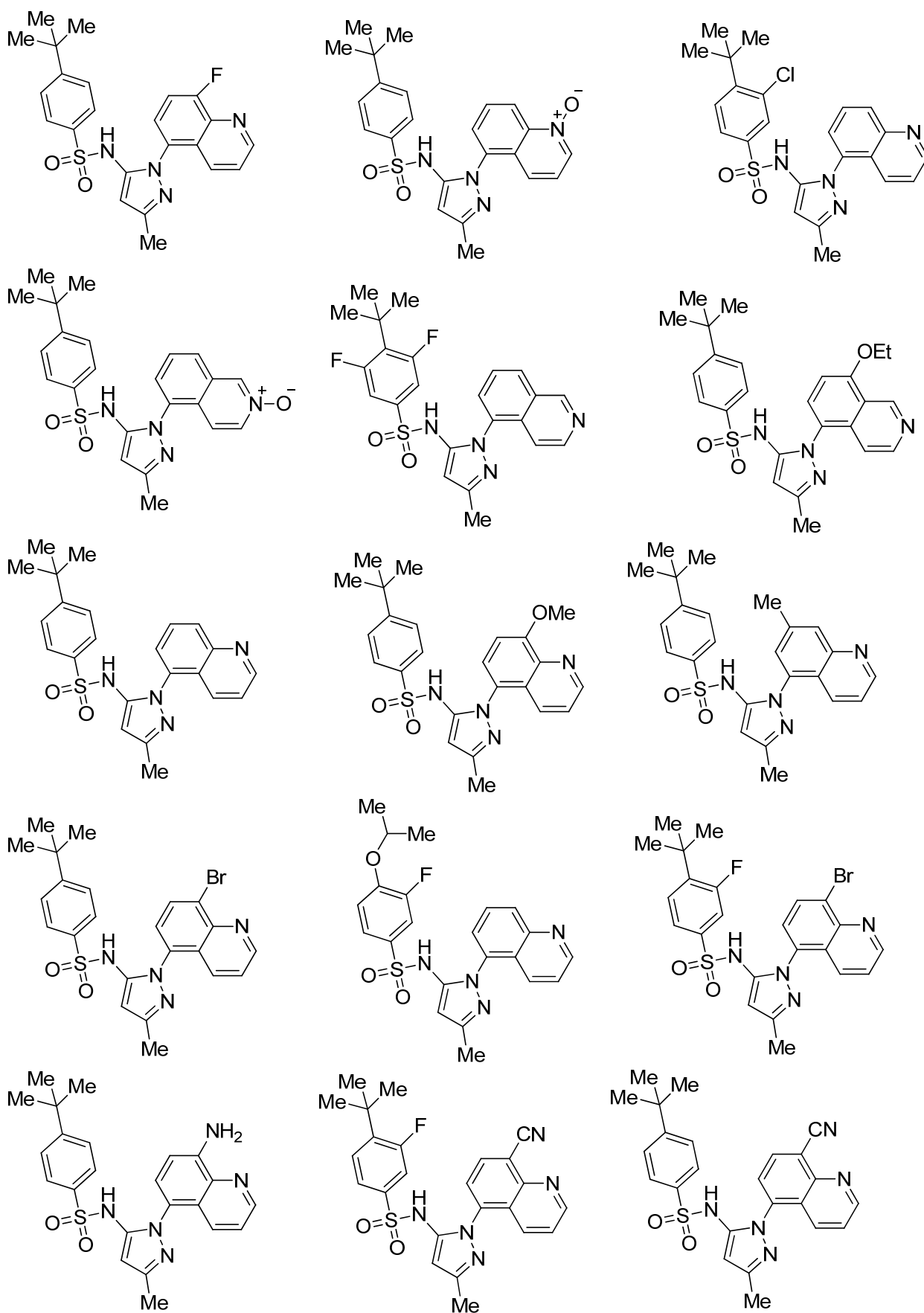






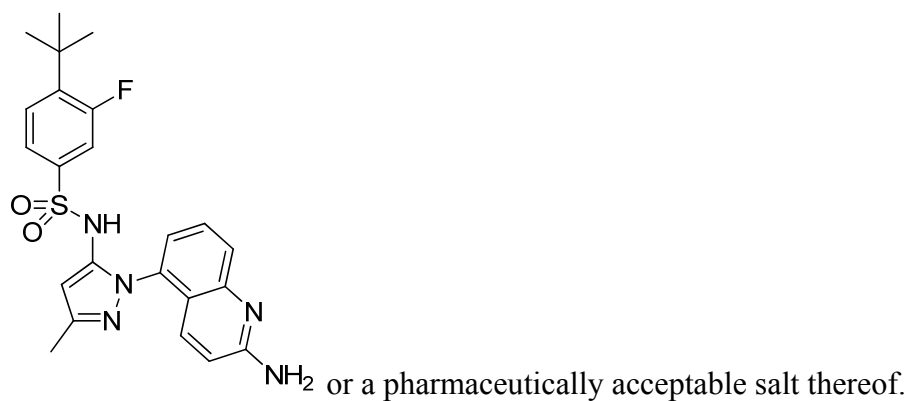






and a pharmaceutically acceptable salt or and N-oxides thereof.

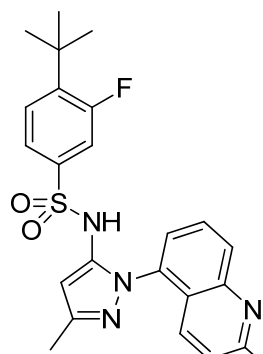
11. The use of claim 1, wherein the compound is



12. A composition for use in treating or reducing the development of inflammatory bowel disease in a mammal, said composition comprising a therapeutically effective amount of a CCR9 chemokine receptor inhibitor, a therapeutically effective amount of an anti- $\alpha 4\beta 7$ integrin blocking antibody, and a pharmaceutically acceptable carrier or excipient,

wherein the CCR9 chemokine receptor inhibitor is selected from the compounds in claim 1.

13. The composition for use of claim 12, wherein the CCR9 chemokine



receptor inhibitor is or a pharmaceutically acceptable salt thereof.

14. The composition for use of claim 12, wherein the anti- $\alpha 4\beta 7$ integrin blocking antibody is vedolizumab (ENYVIO[®]), or a biosimilar, or bioequivalent thereof.

15. The composition for use of claim 12, wherein the anti- $\alpha 4\beta 7$ integrin blocking antibody is vedolizumab (ENYVIO[®]).

16. Use of a CCR9 chemokine receptor inhibitor and an anti- $\alpha 4\beta 7$ integrin blocking antibody in the manufacture of a medicament for treating or reducing the development of inflammatory bowel disease in a mammal wherein the CCR9 chemokine receptor inhibitor is vercirnon (Traficet-EN).

17. The use of claim 16, wherein the inflammatory bowel disease is Crohn's disease (CD) or ulcerative colitis (UC).

18. The use of claim 16, wherein the anti- $\alpha 4\beta 7$ integrin blocking antibody is vedolizumab (ENYVIO[®]), or a biosimilar, or bioequivalent thereof.

19. The use of claim 16, wherein the anti- $\alpha 4\beta 7$ integrin blocking antibody is vedolizumab (ENYVIO[®]).

20. The use of claim 16, wherein the CCR9 chemokine receptor inhibitor and the anti- $\alpha 4\beta 7$ integrin blocking antibody are to be administered in a combination formulation.

21. The use of claim 16, wherein the CCR9 chemokine receptor inhibitor and the anti- $\alpha 4\beta 7$ integrin blocking antibody are to be administered sequentially.

22. The use of claim 21, wherein the CCR9 chemokine receptor inhibitor is to be administered prior to the anti- $\alpha 4\beta 7$ integrin blocking antibody.

23. The use of claim 21, wherein the CCR9 chemokine receptor inhibitor is to be administered after administration of the anti- $\alpha 4\beta 7$ integrin blocking antibody.