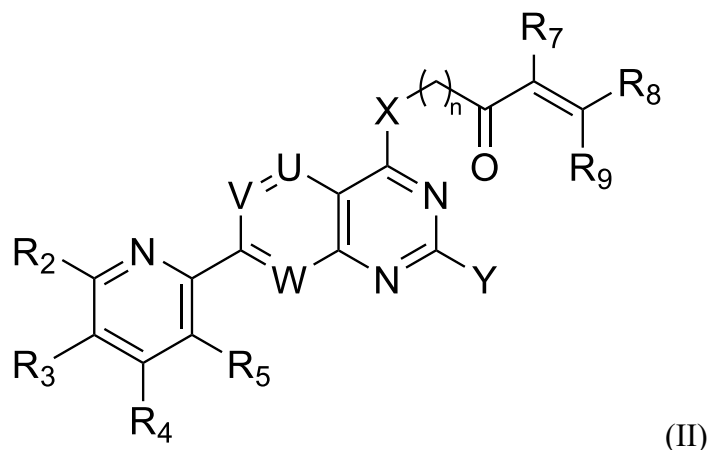


G12D and G13D are other frequent mutations. Mutations of Ras in cancer are associated with poor prognosis. Inactivation of oncogenic Ras in mice results in tumor shrinkage. Thus, Ras is widely considered an oncology target of exceptional importance.

## SUMMARY

[0005a] In an aspect of the present disclosure, there is provided a compound of Formula (II):



or a pharmaceutically acceptable salt thereof;

wherein,

R<sub>2</sub> is NH<sub>2</sub>;

R<sub>3</sub> is H;

R<sub>4</sub> is H or C<sub>1-6</sub> alkyl;

R<sub>5</sub> is CF<sub>3</sub>;

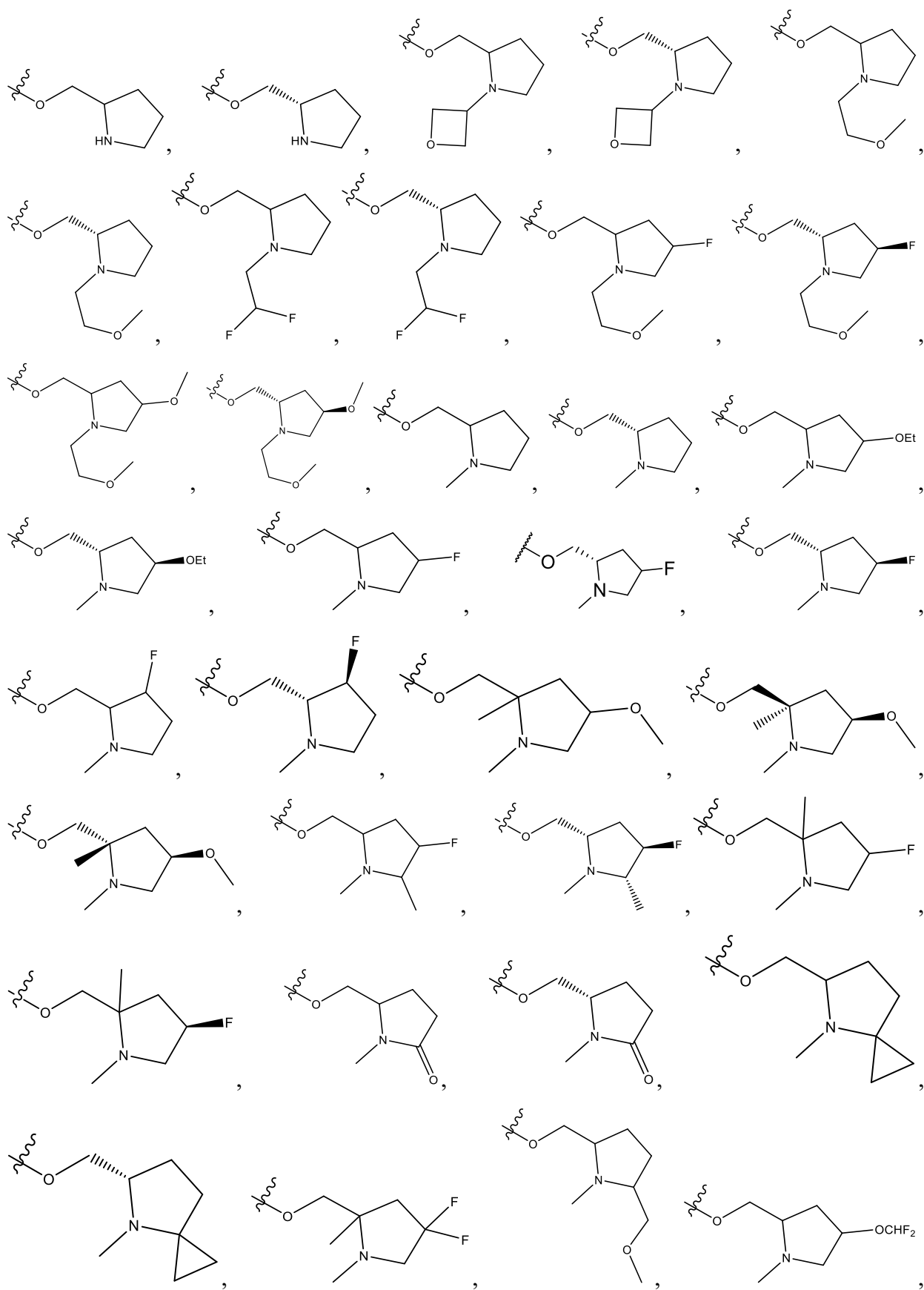
R<sub>7</sub> is selected from the group consisting of H, cyano, and halo;

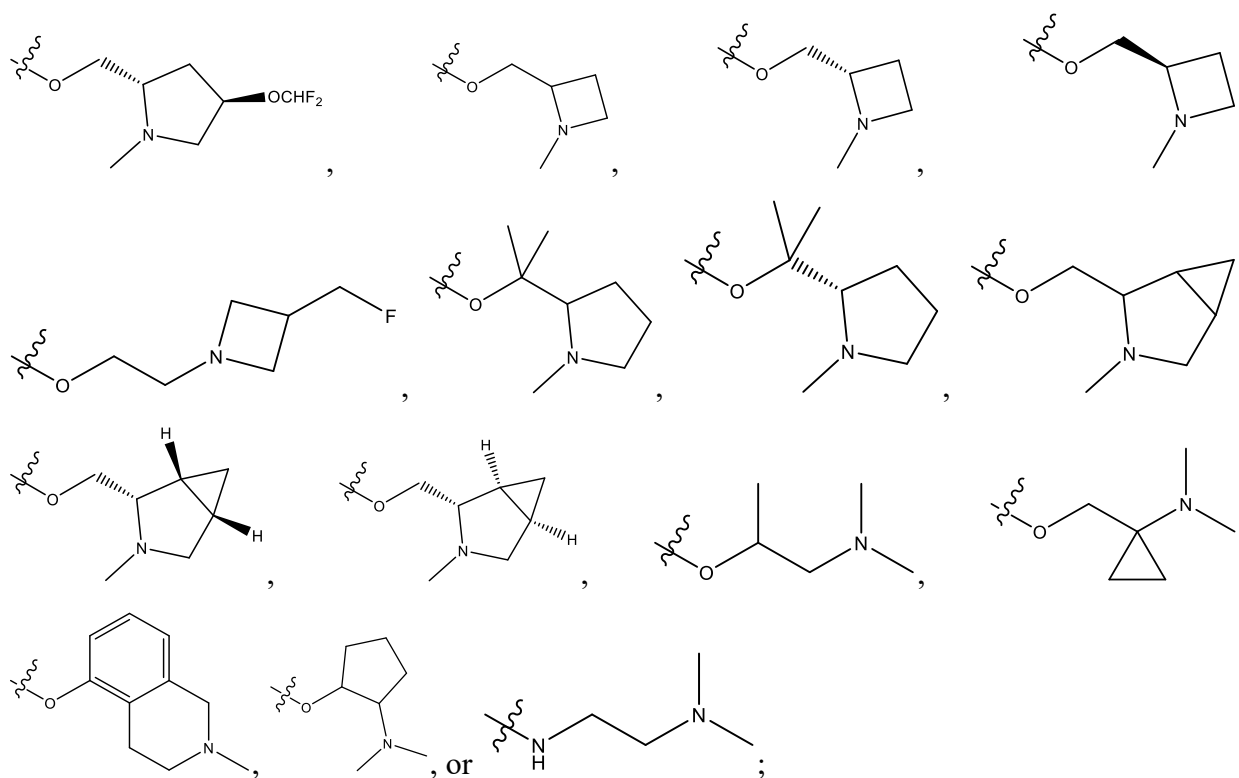
R<sub>8</sub> and R<sub>9</sub> are each independently selected from the group consisting of H, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> hydroxyalkyl, cyano, and halo; wherein C<sub>1-6</sub> alkyl is optionally substituted with one substituent selected from the group consisting of: methanesulfonyl (mesyl), p-toluenesulfonyl (tosyl), an alkyl or aryl sulfonate leaving group, C<sub>1-6</sub> alkanoylamino, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkylamino, C<sub>1-6</sub> alkylsulfonylamino, C<sub>6-12</sub> dialkylamino, and C<sub>1-6</sub> haloalkoxy;

X is piperazinyl optionally substituted with 1 to 4 substituents, wherein each substituent is independently selected from the group consisting of cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> cyanoalkyl, and C<sub>1-6</sub> haloalkyl;

Y is

2a





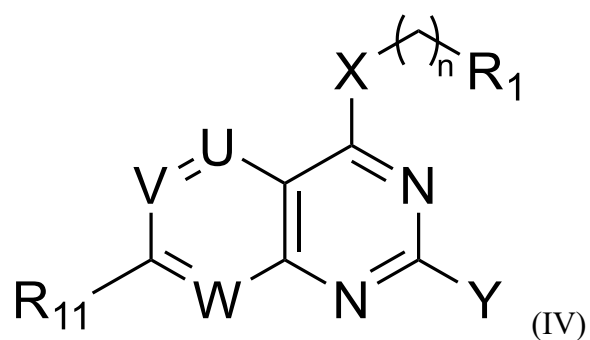
U is C(R<sub>6a</sub>), wherein R<sub>6a</sub> is H;

V is C(R<sub>6b</sub>); wherein R<sub>6b</sub> is H or halo;

W is C(R<sub>6c</sub>), wherein R<sub>6c</sub> is H or halo; and

n is 0.

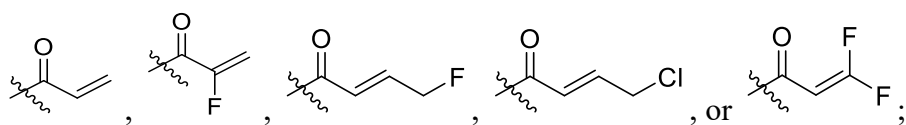
[0005b] In another aspect of the present disclosure, there is provided a compound of Formula (IV):



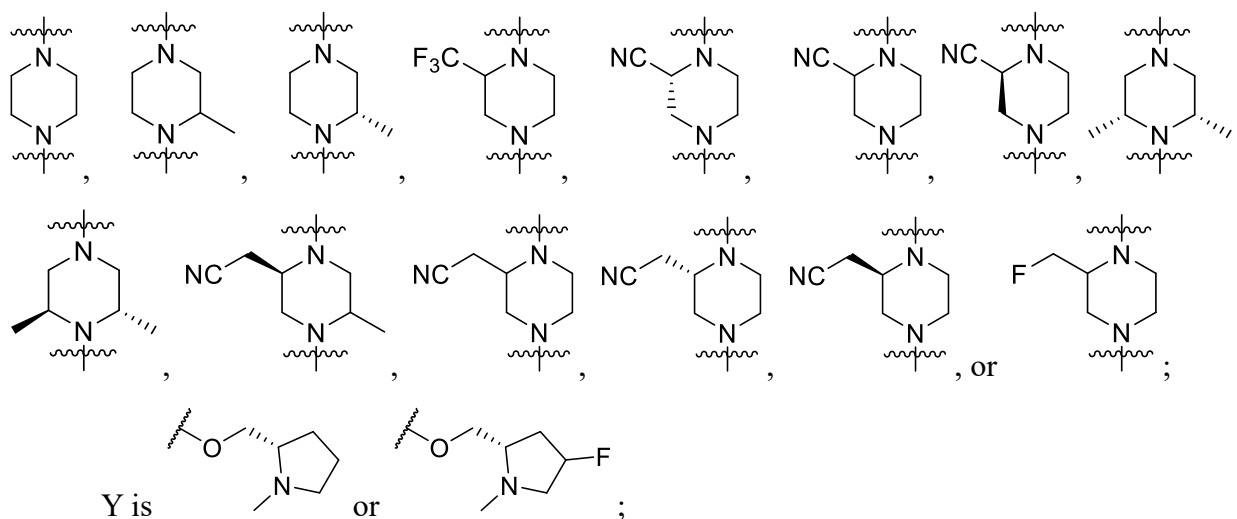
or a pharmaceutically acceptable salt thereof;

wherein,

R<sub>1</sub> is:



X is:



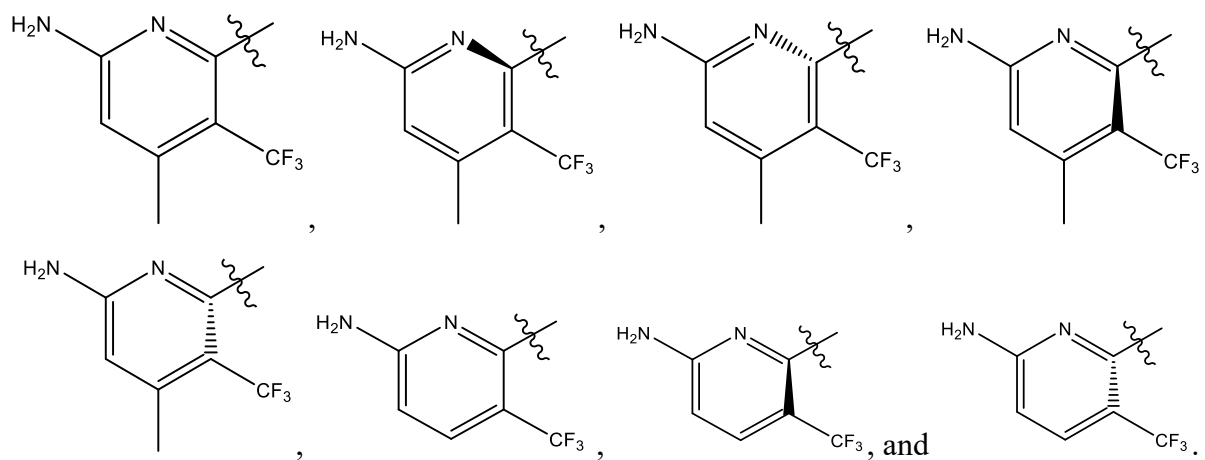
U is C(R<sub>6a</sub>), wherein R<sub>6a</sub> is H;

V is C(R<sub>6b</sub>), wherein R<sub>6b</sub> is H or halo;

W is C(R<sub>6c</sub>), wherein R<sub>6c</sub> is H or halo;

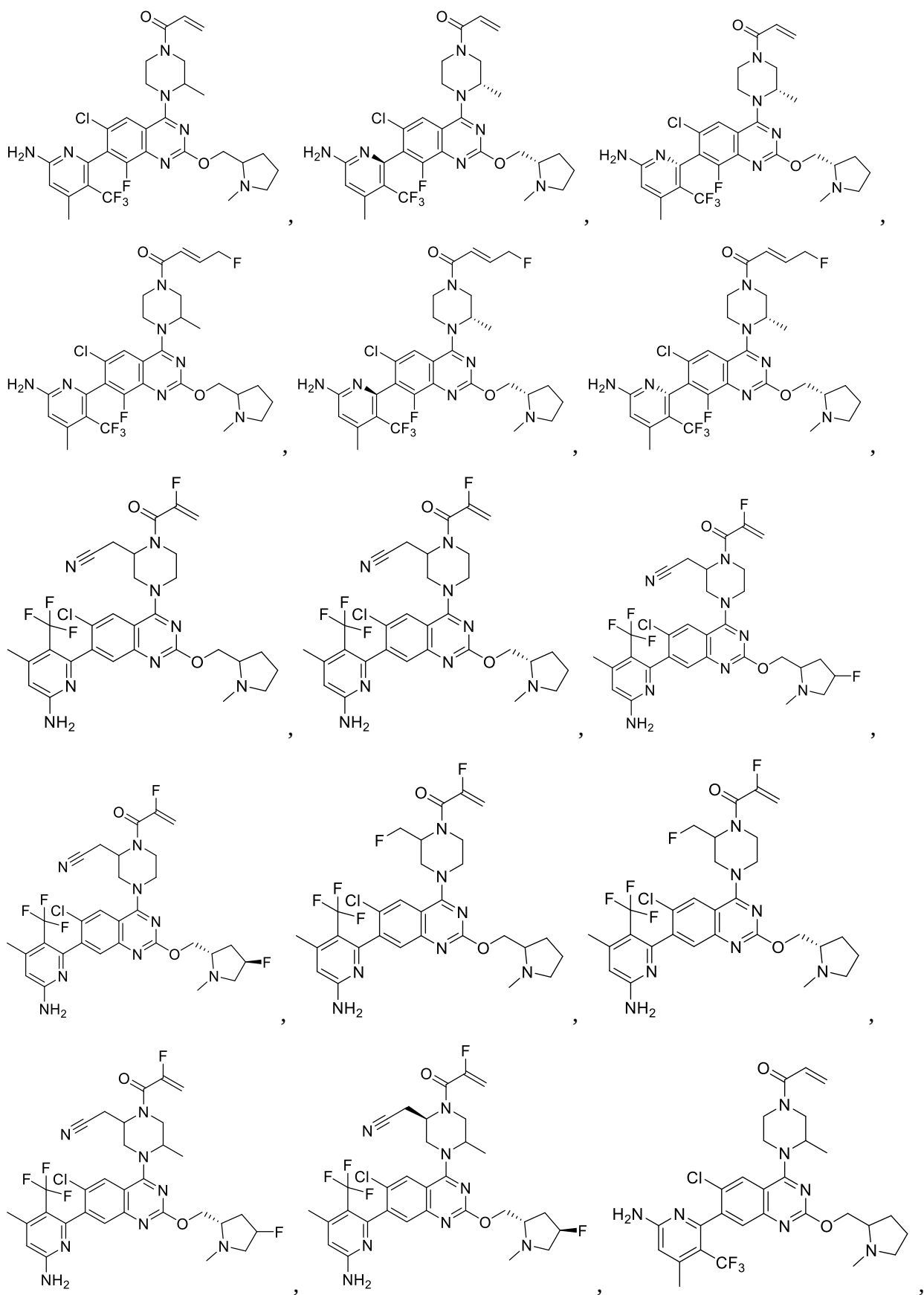
n is 0; and

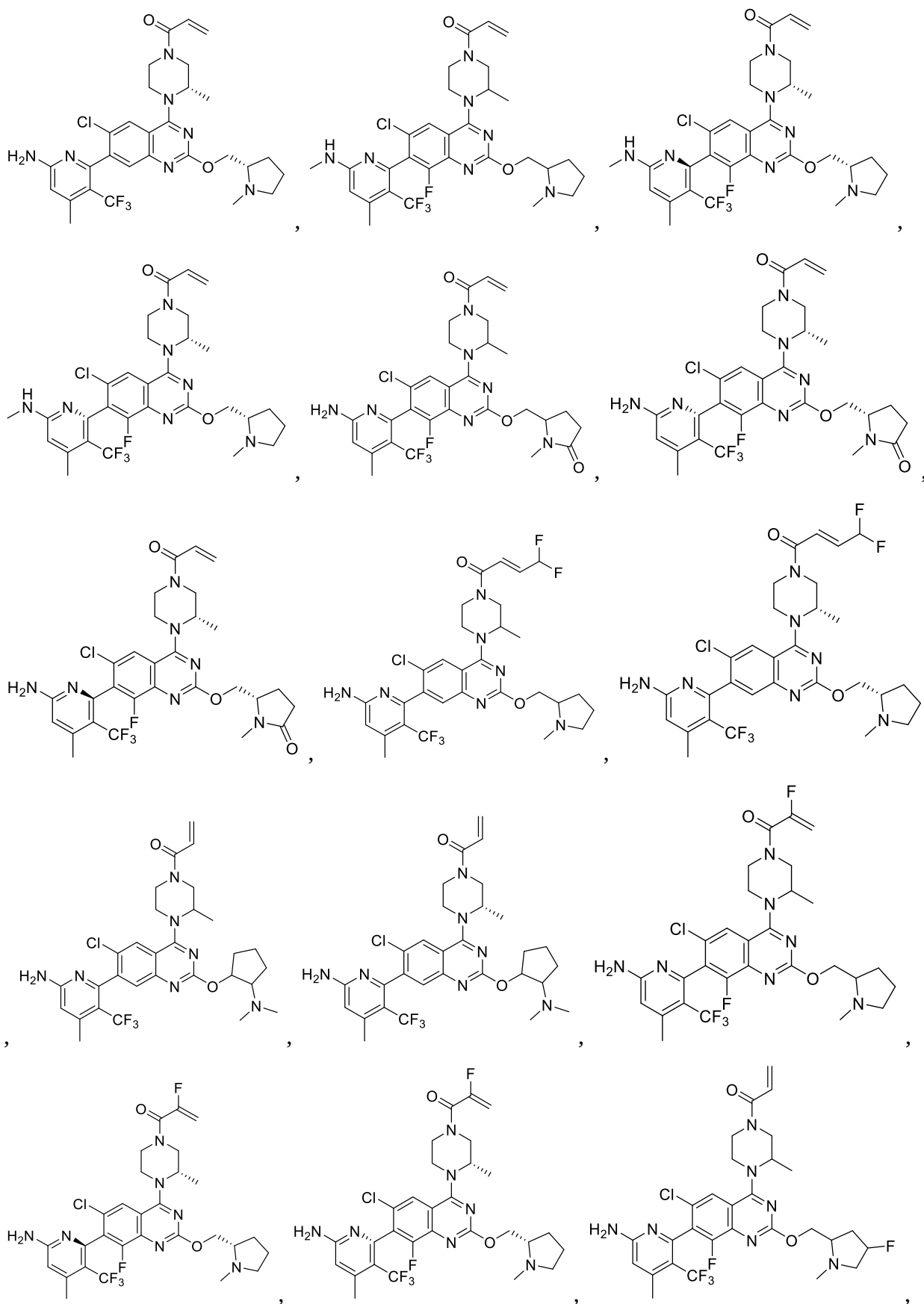
R<sub>11</sub> is selected from the group consisting of:

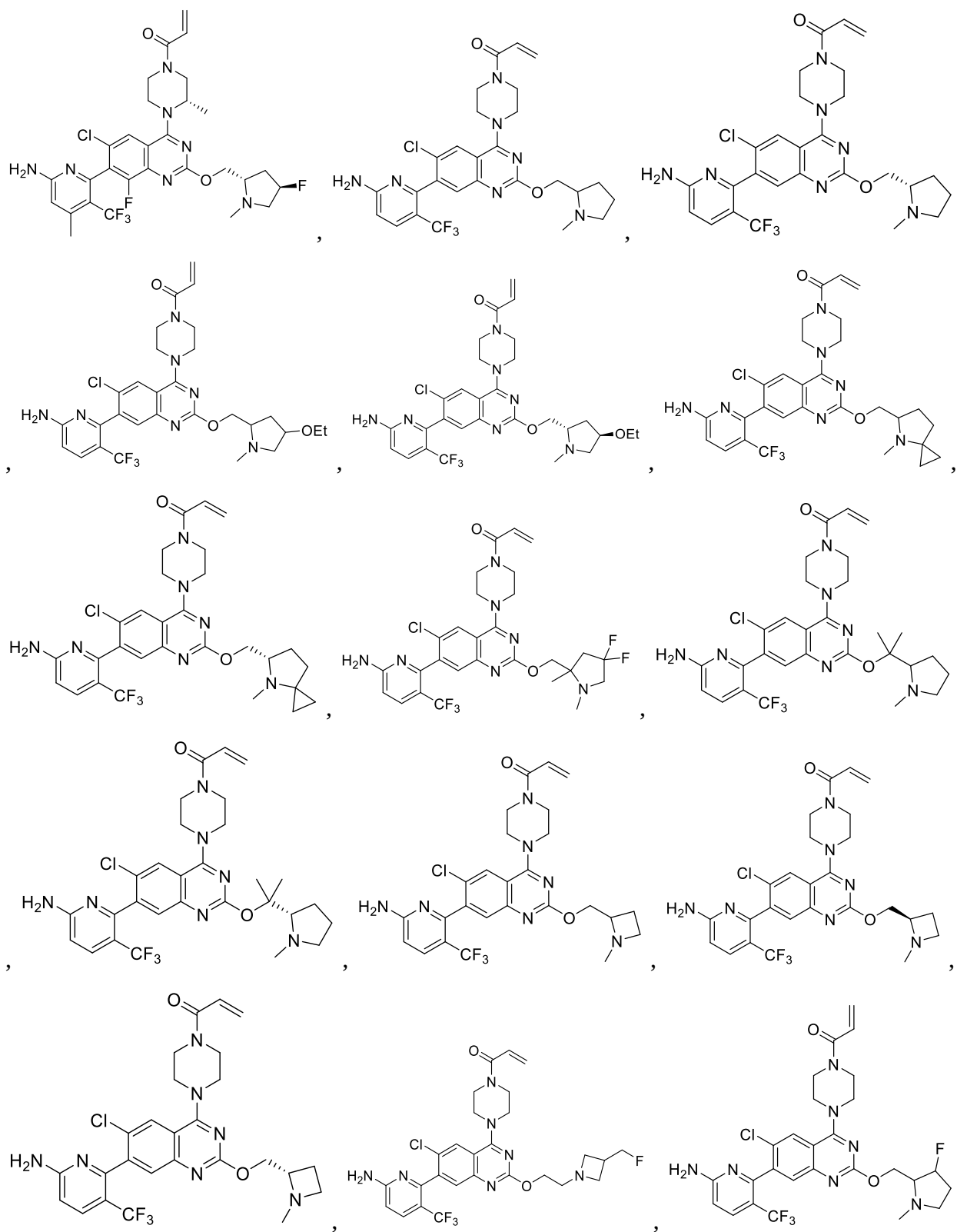


[0005c] In a further aspect of the present disclosure, there is provided a compound having formula:

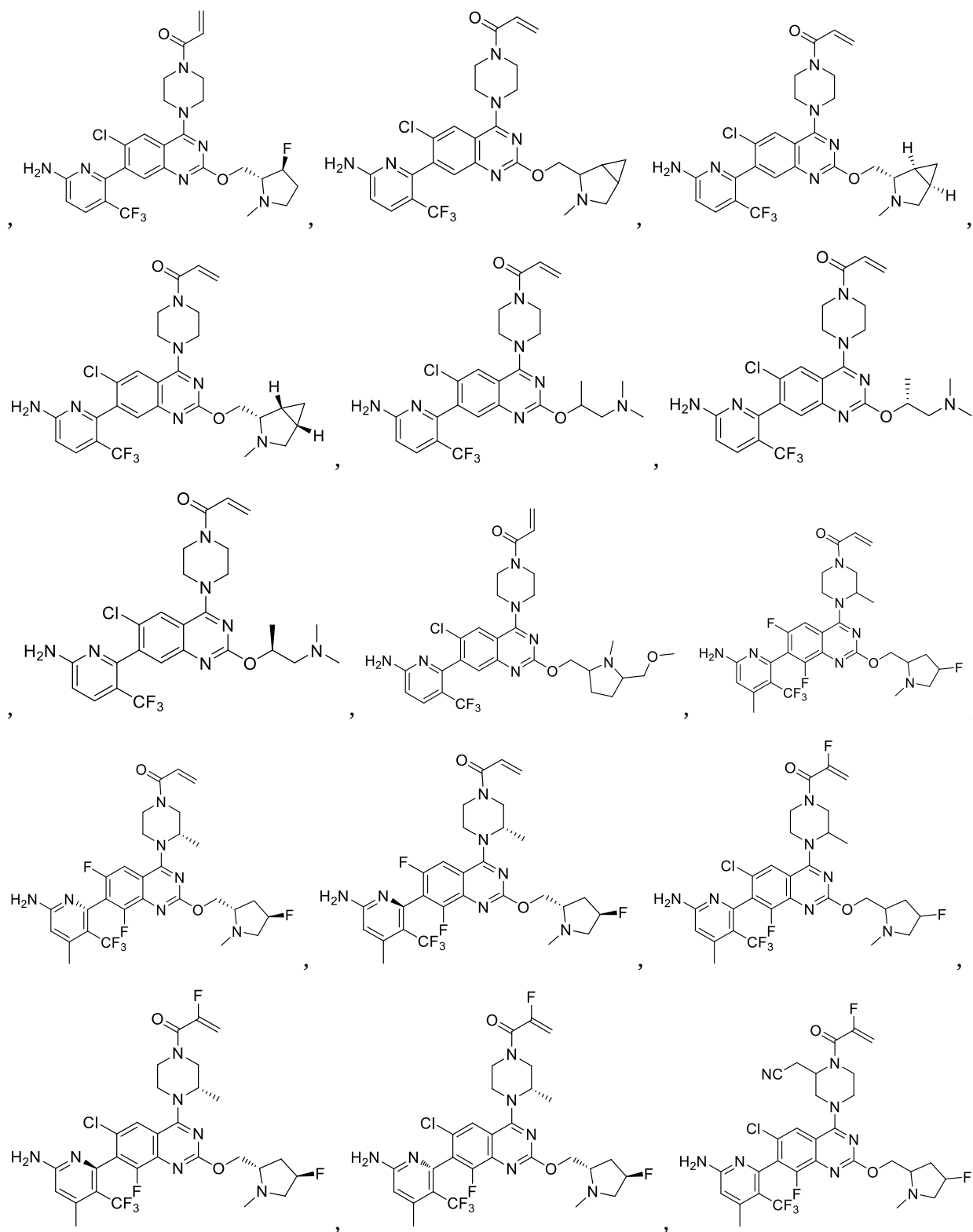
2d



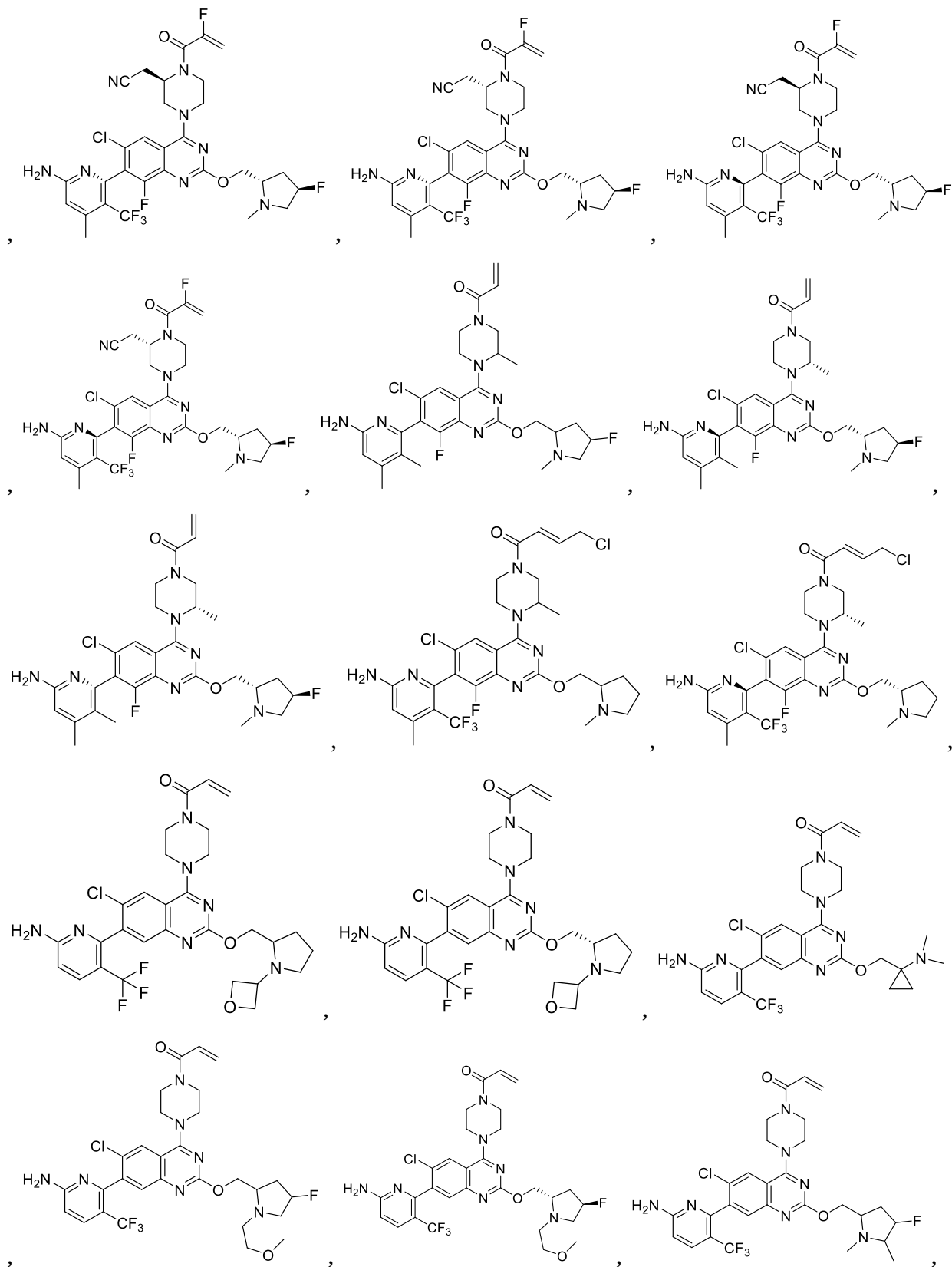


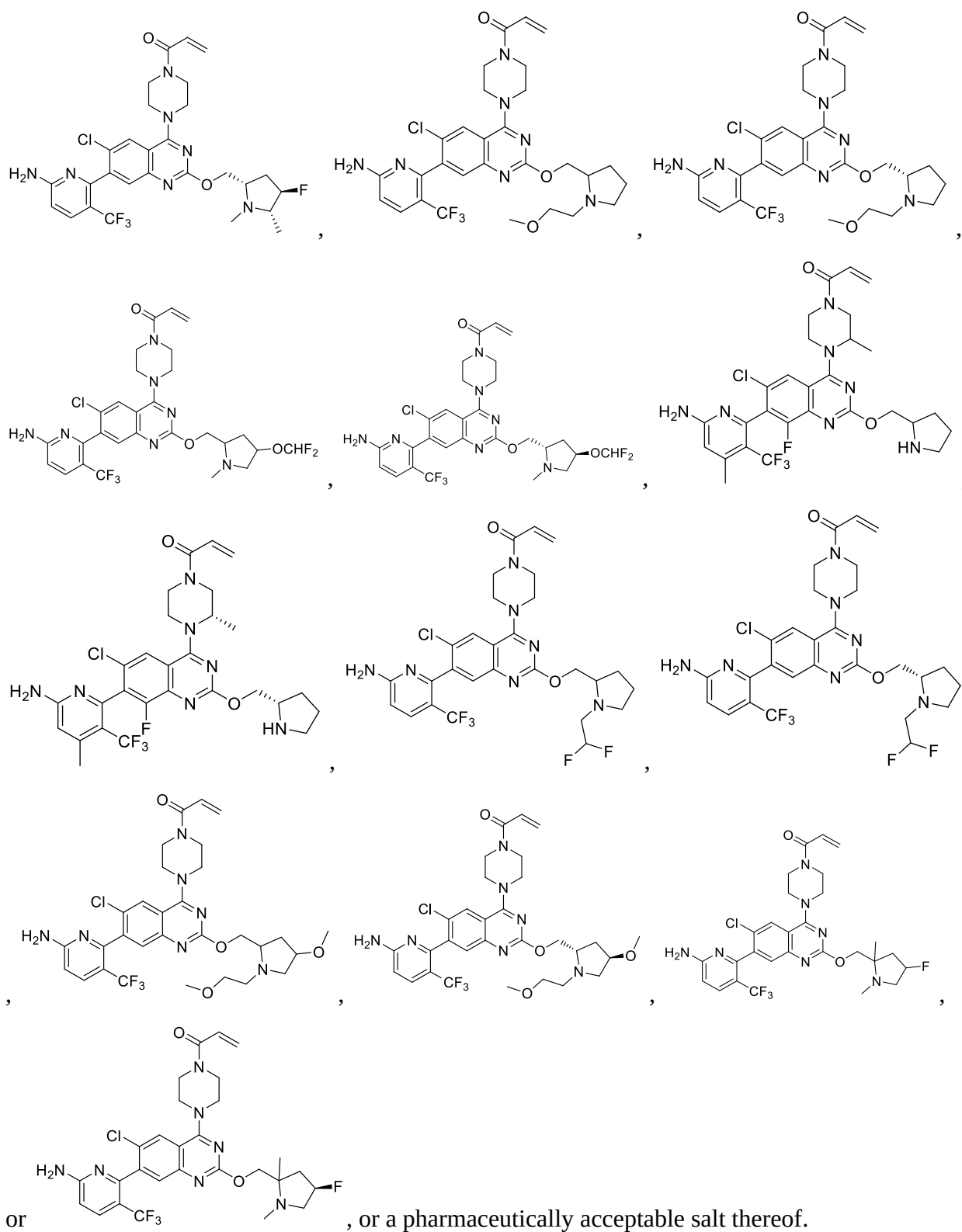


2g

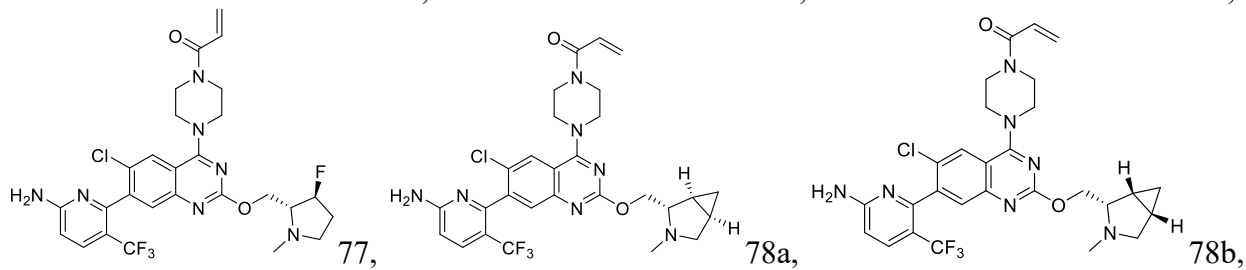
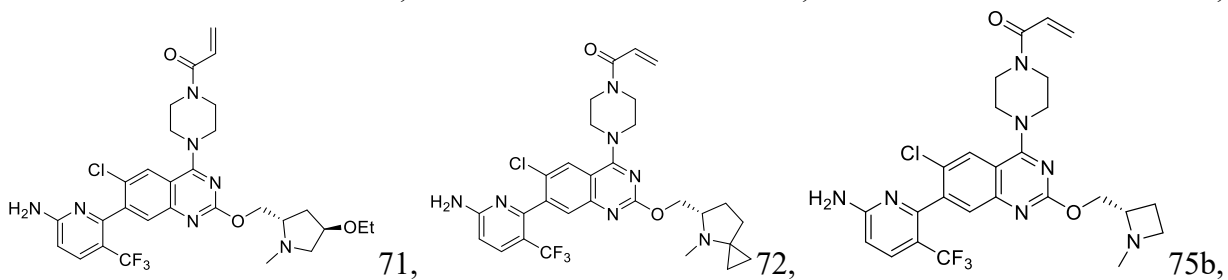
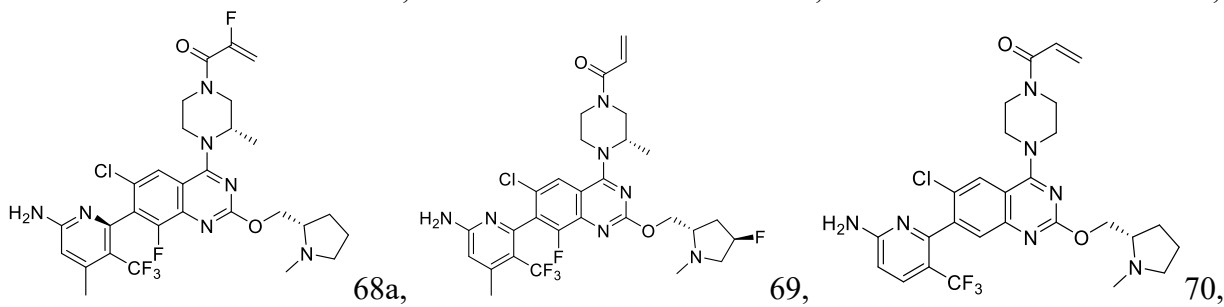
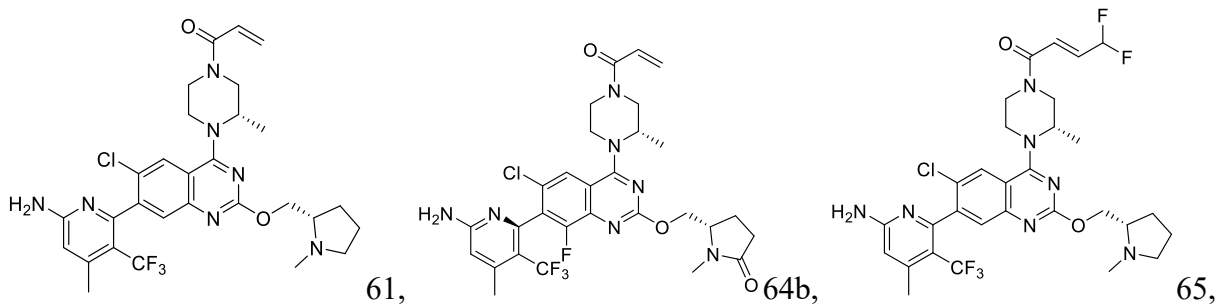
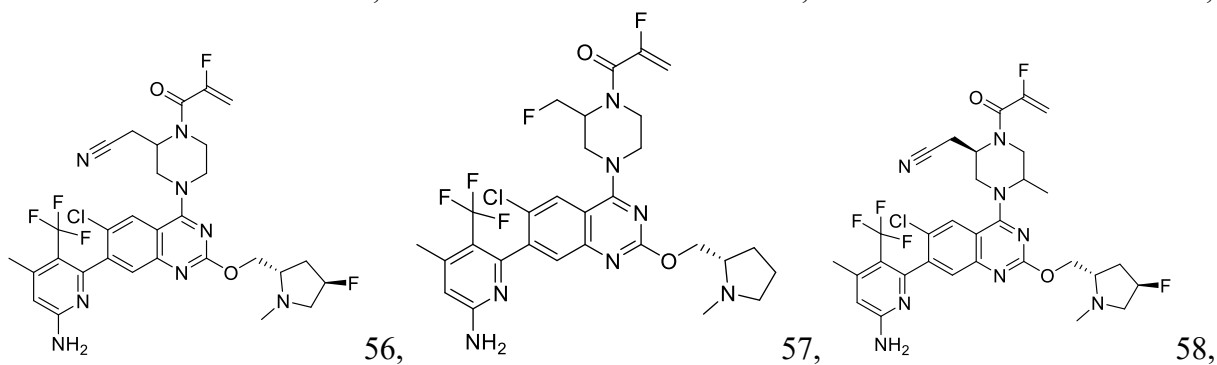
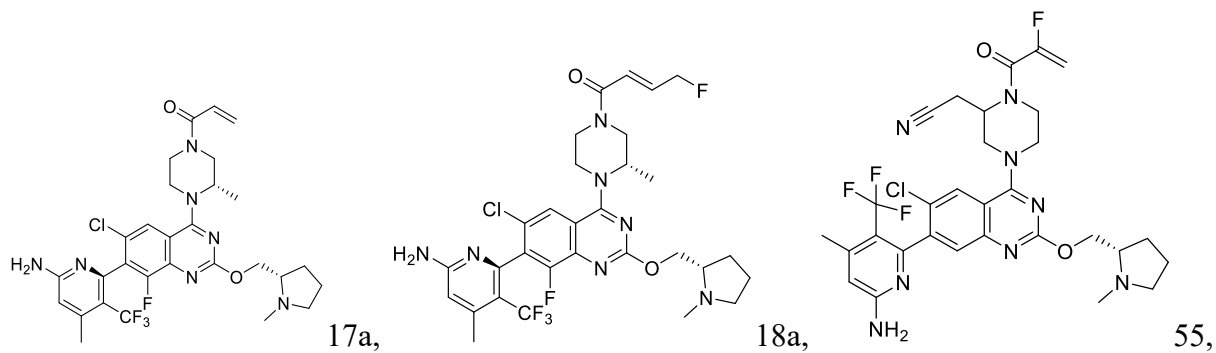


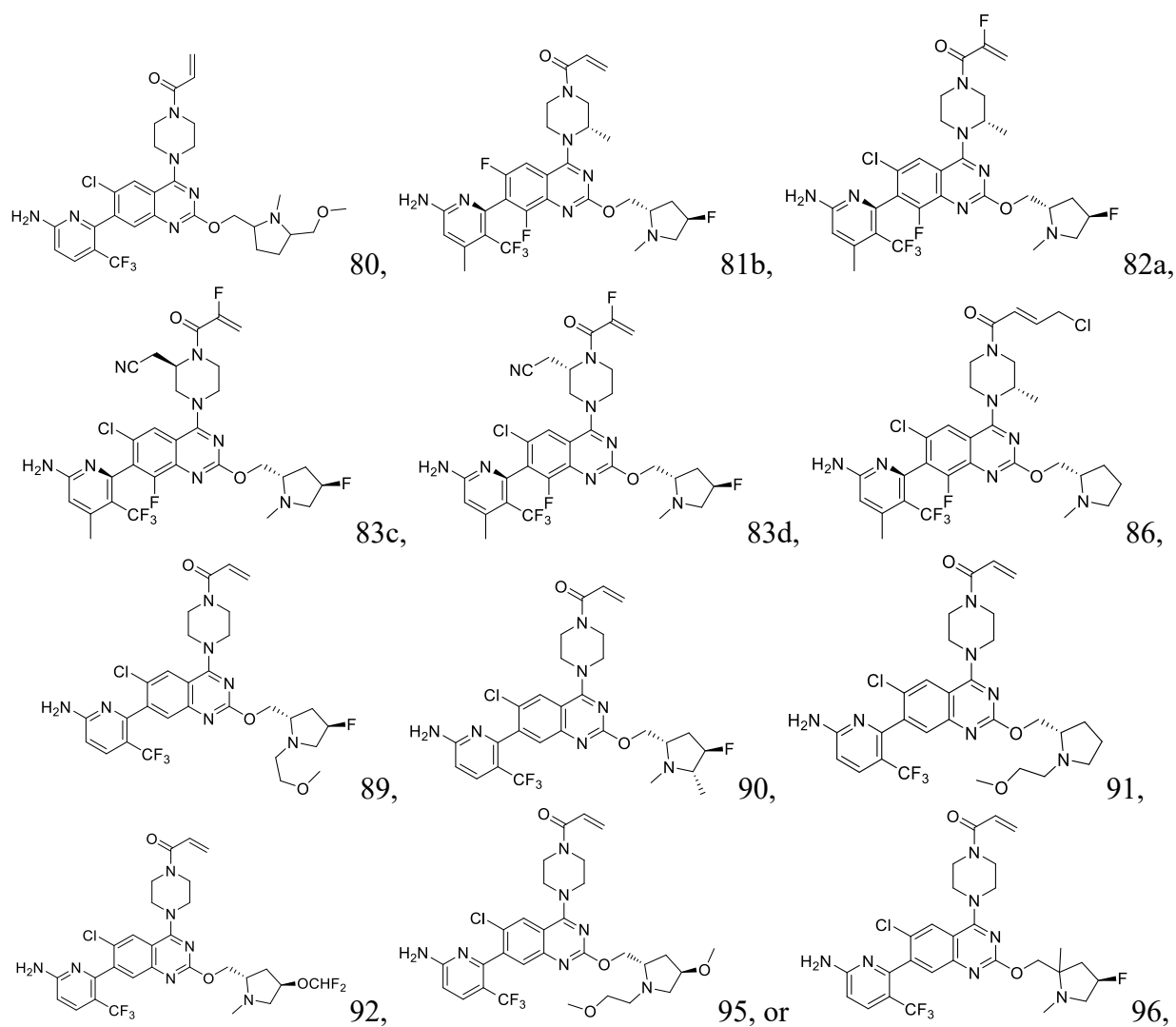
2h





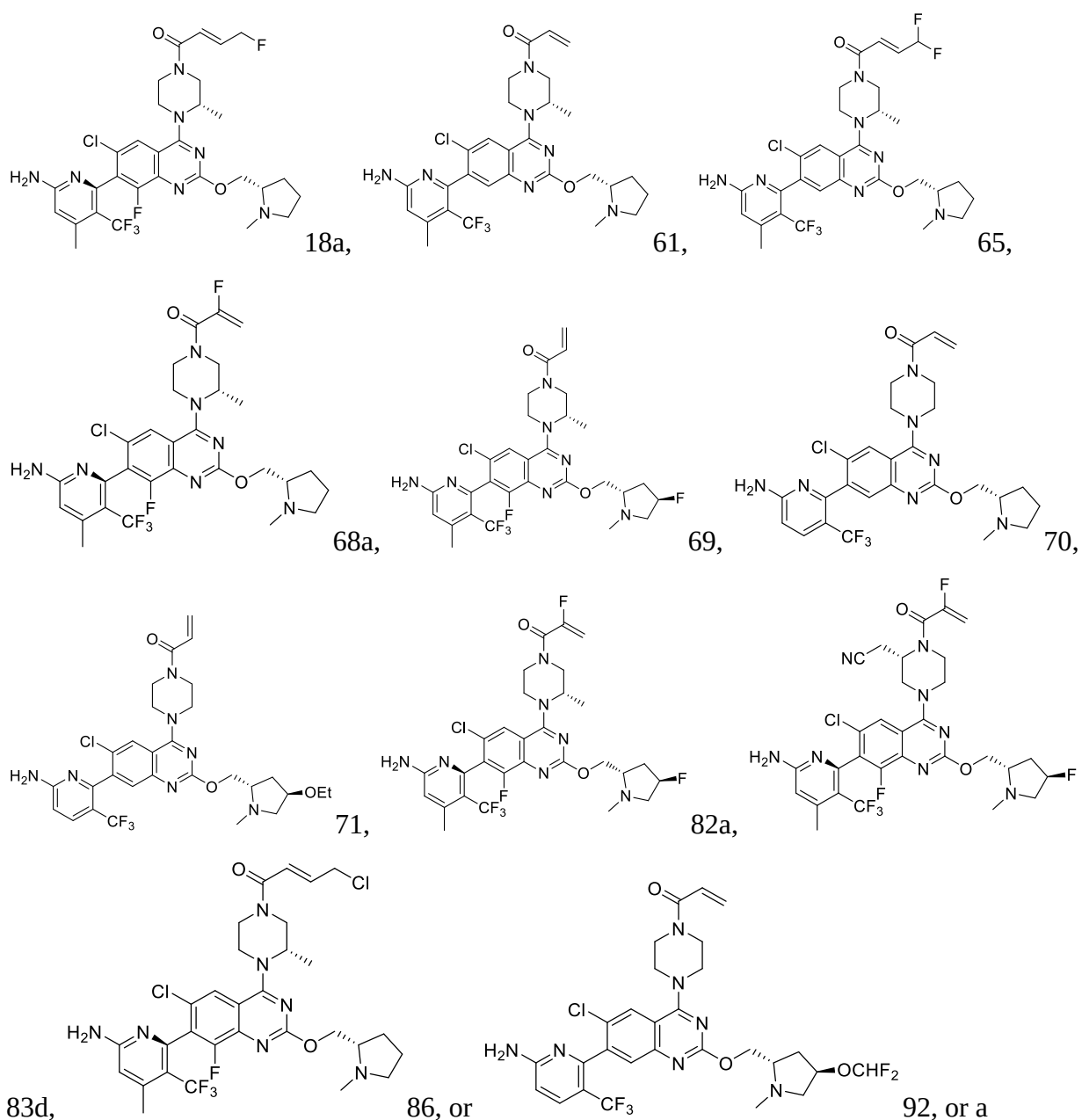
[0005d] In another aspect of the present disclosure, there is provided a compound of formula:





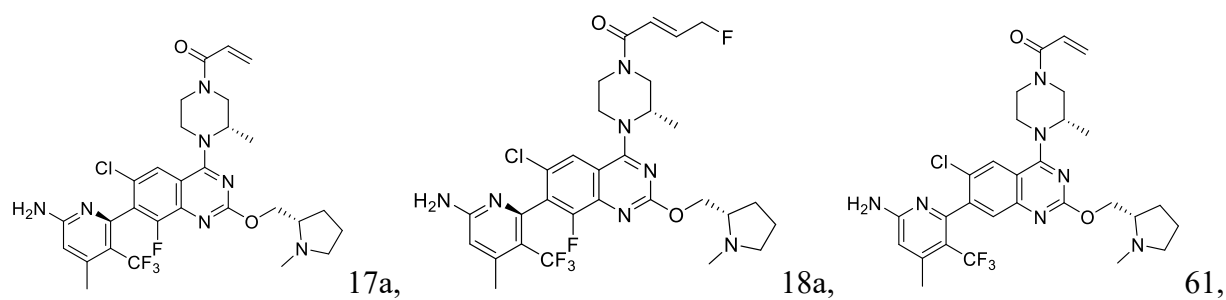
or a pharmaceutically acceptable salt thereof.

[0005e] In a further aspect of the present disclosure, there is provided a compound of formula:

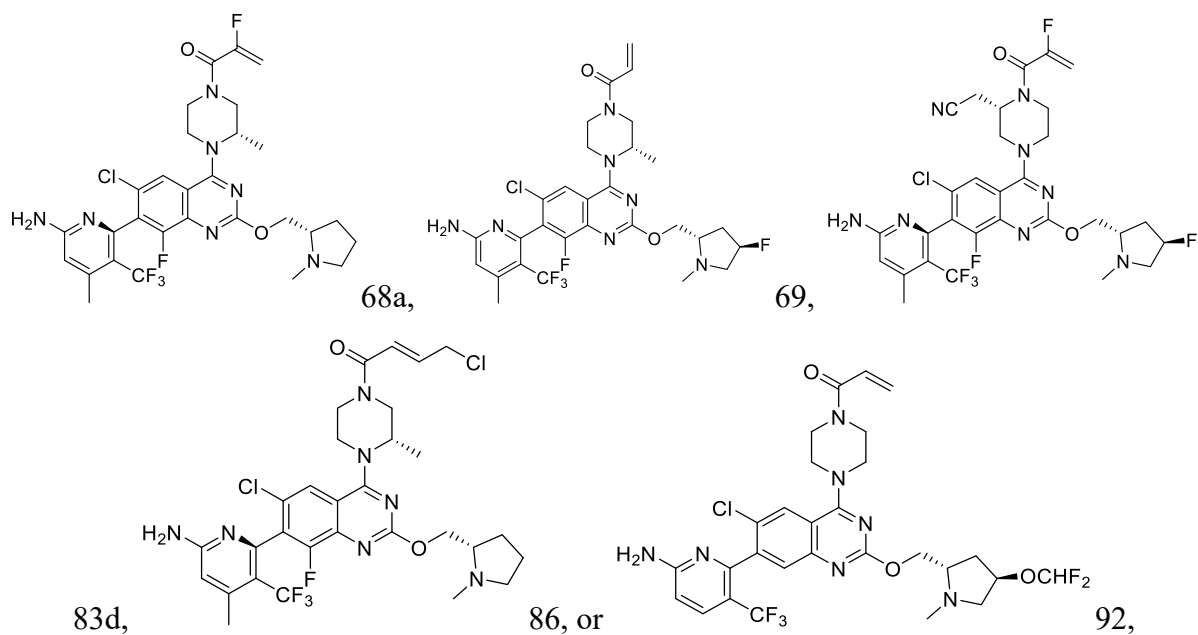


pharmaceutically acceptable salt thereof.

[0005f] In another aspect of the present disclosure, there is provided a compound of formula:

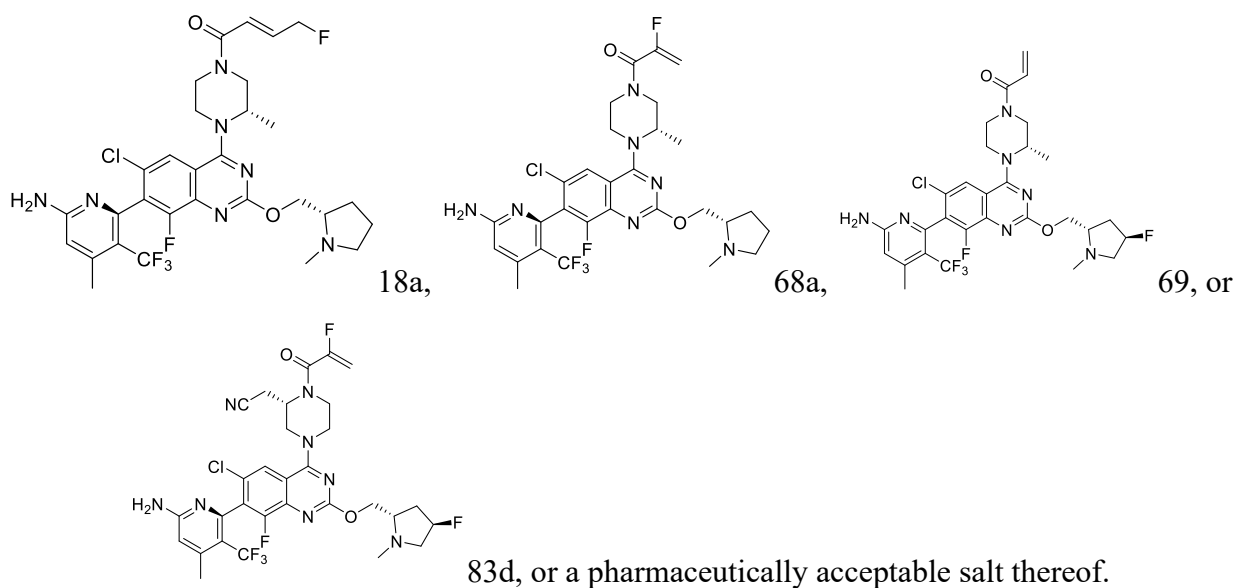


2m

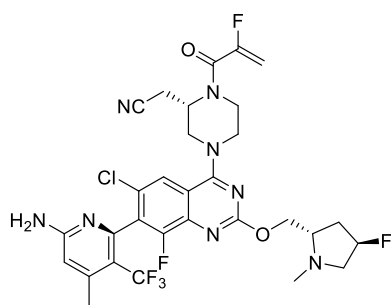


or a pharmaceutically acceptable salt thereof.

[0005g] In a further aspect of the present disclosure, there is provided a compound of formula:

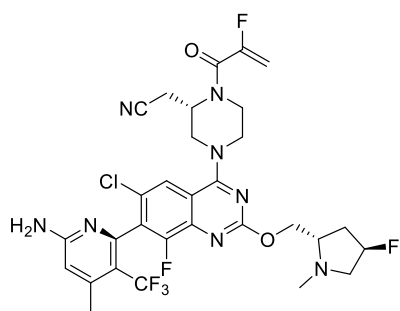


[0005h] In another aspect of the present disclosure, there is provided a compound of formula:

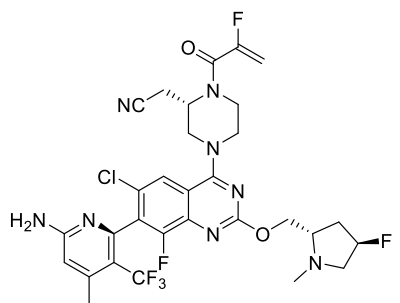


, or a pharmaceutically acceptable salt thereof.

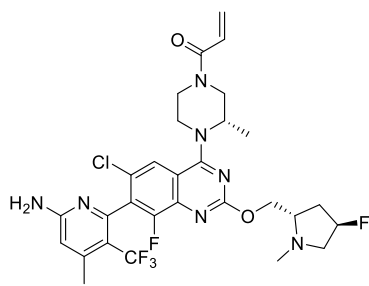
[0005i] In a further aspect of the present disclosure, there is provided a compound of formula:



[0005j] In another aspect of the present disclosure, there is provided a pharmaceutically acceptable salt of the compound of formula:

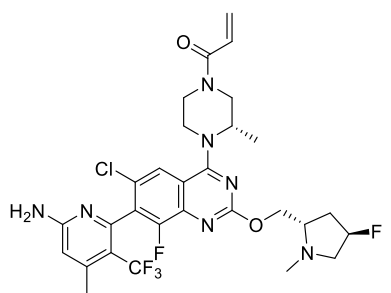


[0005k] In a further aspect of the present disclosure, there is provided a compound of formula:

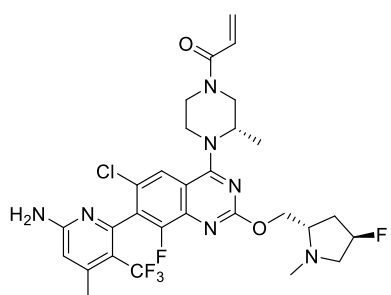


, or a pharmaceutically acceptable salt thereof.

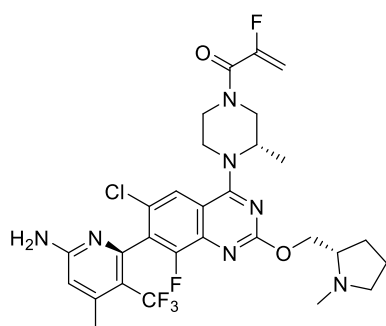
[0005l] In another aspect of the present disclosure, there is provided a compound of formula:



[0005m] In a further aspect of the present disclosure, there is provided a pharmaceutically acceptable salt of the compound of formula:

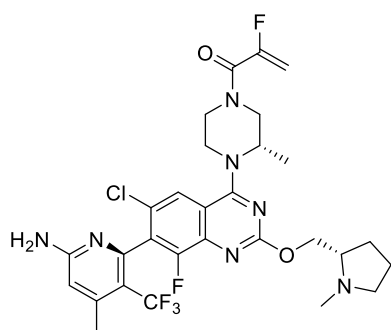


[0005n] In another aspect of the present disclosure, there is provided a compound of formula:

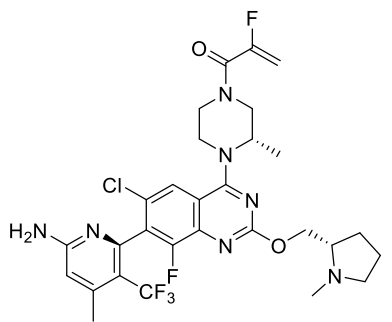


, or a pharmaceutically acceptable salt thereof.

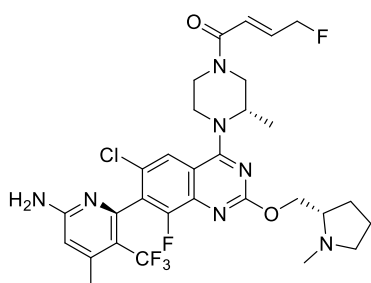
[0005o] In a further aspect of the present disclosure, there is provided a compound of formula:



[0005p] In another aspect of the present disclosure, there is provided a pharmaceutically acceptable salt of the compound of formula:

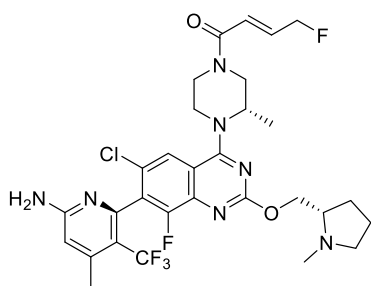


[0005q] In a further aspect of the present disclosure, there is provided a compound of formula:

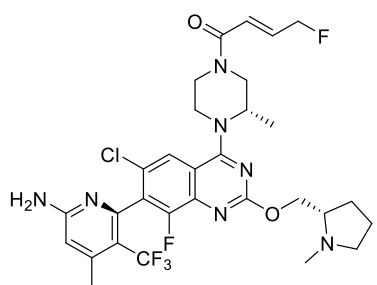


, or a pharmaceutically acceptable salt thereof.

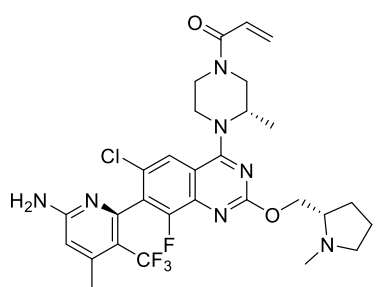
[0005r] In another aspect of the present disclosure, there is provided a compound of formula:



[0005s] In a further aspect of the present disclosure, there is provided a pharmaceutically acceptable salt of the compound of formula

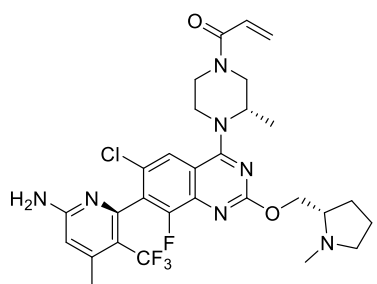


[0005t] In another aspect of the present disclosure, there is provided a compound of formula;

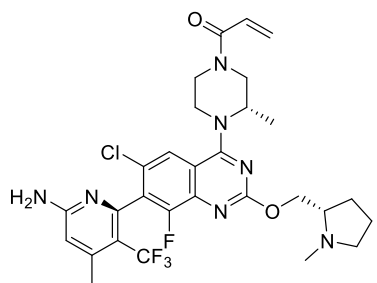


, or a pharmaceutically acceptable salt thereof.

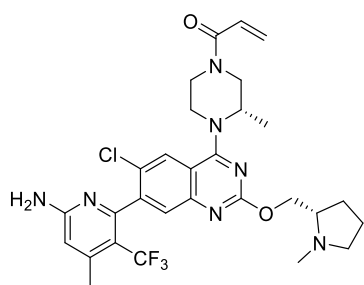
[0005u] In a further aspect of the present disclosure, there is provided a compound of formula:



[0005v] In another aspect of the present disclosure, there is provided a pharmaceutically acceptable salt of the compound of formula:

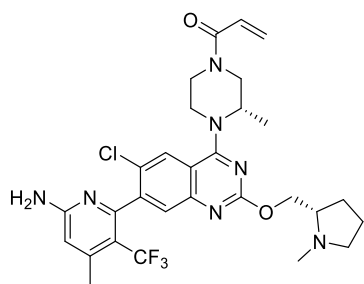


[0005w] In a further aspect of the present disclosure, there is provided a compound of formula:

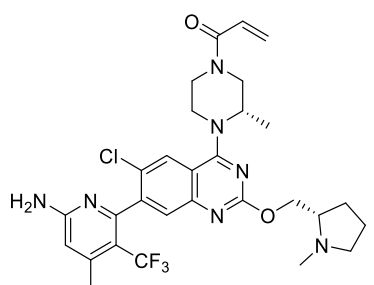


, or a pharmaceutically acceptable salt thereof.

[0005x] In another aspect of the present disclosure, there is provided a compound of formula:



[0005y] In a further aspect of the present disclosure, there is provided a pharmaceutically acceptable salt of the compound of formula:



[0005z] In another aspect of the present disclosure, there is provided a pharmaceutical composition comprising the compound disclosed herein or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient.

[0005aa] In a further aspect of the present disclosure, there is provided an agent for regulating activity of a K-Ras G12C mutant protein, comprising the compound disclosed herein, or a pharmaceutically acceptable salt thereof.

[0005bb] In another aspect of the present disclosure, there is provided a agent for inhibiting proliferation of a cell population, comprising the compound disclosed herein, or a pharmaceutically acceptable salt thereof.

[0005cc] In a further aspect of the present disclosure, there is provided a use of a compound or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition disclosed herein, in the manufacture of a medicament for treating a cancer mediated by a K-Ras G12C mutation in an individual in need thereof and having the mutation.

[0005dd] In another aspect of the present disclosure, there is provided a use of a compound or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition disclosed herein, in the manufacture of a medicament for treating a cancer mediated by a K-Ras G12C mutation in an individual who has been determined to have the mutation.

[0005ee] In a further aspect of the present disclosure, there is provided a use of a compound or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition disclosed herein, in the manufacture of a medicament for treating lung cancer comprising a K-Ras G12C mutation in an individual having such a cancer.

[0005ff] In another aspect of the present disclosure, there is provided a use of a compound or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition disclosed herein, in the manufacture of a medicament for treating tumor agnostic G12C K-Ras mediated cancer, wherein an absence or presence of a K-Ras G12C mutation is to be determined in a sample taken from a patient with a suspected diagnosed cancer.

[0005gg] In a further aspect of the present disclosure, there is provided a method for preparing a labeled K-Ras G12C mutant protein, the method comprising reacting a K-Ras G12C mutant protein with a labeled compound disclosed herein or a pharmaceutically acceptable salt thereof, to result in the labeled K-Ras G12C mutant protein.

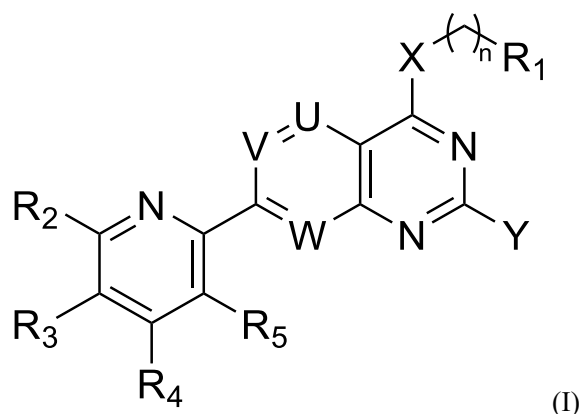
[0005hh] In another aspect of the present disclosure, there is provided a use of a compound or a pharmaceutically acceptable salt thereof disclosed herein, in the manufacture of a medicament for treating a cancer mediated by a K-Ras G12C mutation.

[0005ii] In a further aspect of the present disclosure, there is provided a use of a compound or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for inhibiting tumor metastasis

[0005jj] In another aspect of the present disclosure, there is provided a compound or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition disclosed herein, for use in treating a cancer mediated by a K-Ras G12C mutation in an individual in need thereof

and having the mutation, or for use in treating a cancer mediated by a K-Ras G12C mutation in an individual who has been determined to have the mutation, or for use treating lung cancer comprising a K-Ras G12C mutation in an individual having such a cancer, or for use in treating tumor agnostic G12C K-Ras mediated cancer, wherein an absence or presence of a K-Ras G12C mutation is to be determined in a sample taken from a patient with a suspected diagnosed cancer, or for use in treating a cancer mediated by a K-Ras G12C mutation, or for use in inhibiting tumor metastasis.

[0006] In one example, the present disclosure is directed to a compound of Formula (I):

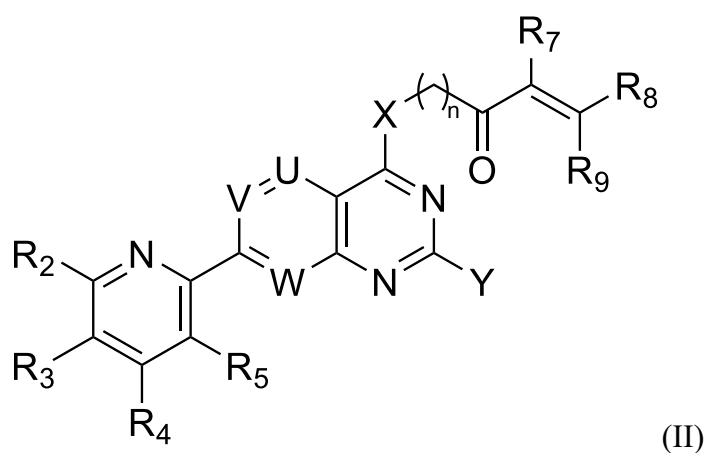


or a pharmaceutically acceptable salt thereof;

wherein,

R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, X, Y, U, V, W, and n are as defined herein.

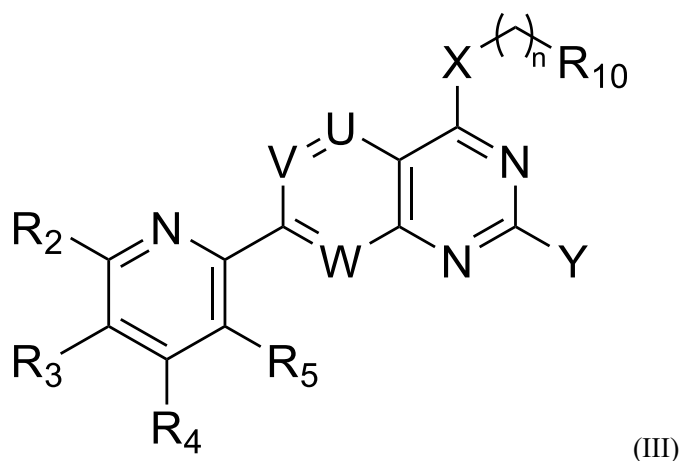
[0007] Another example of the present disclosure includes a compound of Formula (II):



or a pharmaceutically acceptable salt thereof;

wherein, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, X, Y, U, V, W, and n are as defined herein.

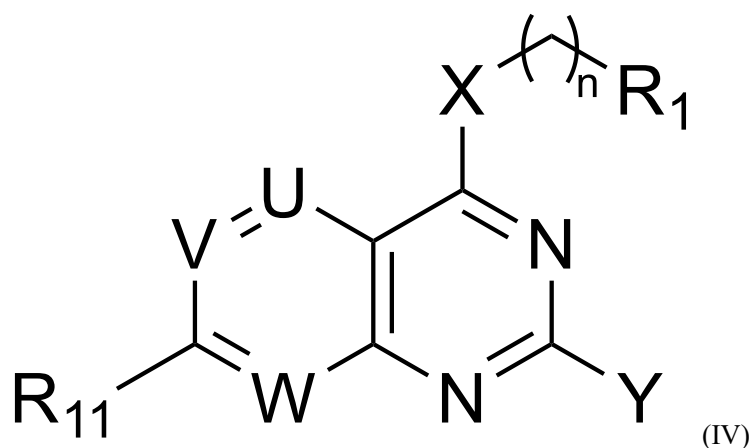
[0008] Also disclosed, is a compound of Formula (III):



or a pharmaceutically acceptable salt thereof;

wherein, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>10</sub>, X, Y, U, V, W, and n are as defined herein.

[0009] In another example, the present disclosure is directed to a compound of Formula (IV):



or a pharmaceutically acceptable salt thereof;

wherein, R<sub>1</sub>, R<sub>11</sub>, X, Y, U, V, W, and n are as defined herein.

[0010] Also provided is a pharmaceutical composition comprising a compound of the present disclosure, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient.

[0011] Another example includes a method of treating cancer comprising administering to an individual in need thereof a therapeutically effective amount of a compound of the present disclosure, or a pharmaceutically acceptable salt thereof.

[0012] Another example includes a method of regulating activity of a mutant K-Ras G12C protein, the method comprising reacting the mutant protein with the compound of the present disclosure, or a pharmaceutically acceptable salt thereof.

[0013] Another example includes a method of treating a disorder mediated by a K-Ras G12C mutation in an individual in need thereof, the method comprising: determining if the individual has the mutation; and if the individual is determined to have the mutation, then administering to the individual a therapeutically effective amount of the pharmaceutical composition of the present disclosure.

[0014] Another example includes a method of inhibiting tumor metastasis, the method comprising administering a therapeutically effective amount of the pharmaceutical composition of the present disclosure to an individual in need thereof.

## DETAILED DESCRIPTION OF THE DISCLOSURE

### DEFINITIONS

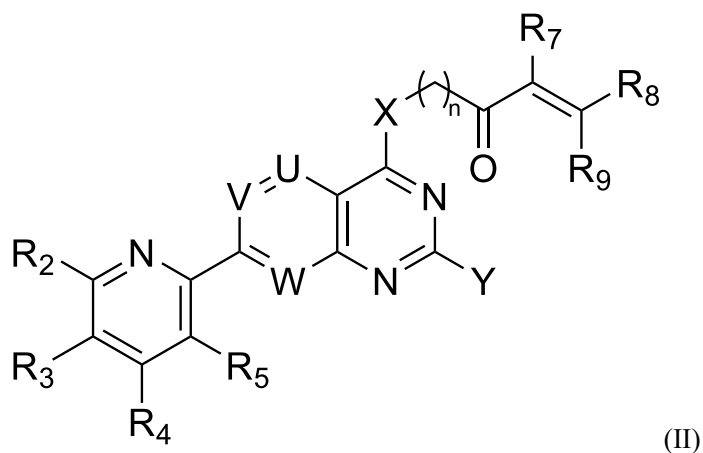
[0015] The term “halogen” or “halo” refers to F, Cl, Br or I. Additionally, terms such as "haloalkyl," are meant to include monohaloalkyl and polyhaloalkyl.

[0016] The term "alkyl" refers to a saturated linear or branched-chain monovalent hydrocarbon radical. In one example, the alkyl radical is one to eighteen carbon atoms (C<sub>1-18</sub>). In other examples, the alkyl radical is C<sub>1-12</sub>, C<sub>1-10</sub>, C<sub>1-8</sub>, C<sub>1-6</sub>, C<sub>1-5</sub>, C<sub>1-4</sub>, or C<sub>1-3</sub>. Examples of alkyl groups include methyl (Me, –CH<sub>3</sub>), ethyl (Et, –CH<sub>2</sub>CH<sub>3</sub>), 1-propyl (n-Pr, n-propyl, –CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>), 2-propyl (i-Pr, i-propyl, –CH(CH<sub>3</sub>)<sub>2</sub>), 1-butyl (n-Bu, n-butyl, –CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>), 2-methyl-1-propyl (i-Bu, i-butyl, –CH<sub>2</sub>CH(CH<sub>3</sub>)<sub>2</sub>), 2-butyl (s-Bu, s-butyl, –CH(CH<sub>3</sub>)CH<sub>2</sub>CH<sub>3</sub>), 2-methyl-2-propyl (t-Bu, t-butyl, –C(CH<sub>3</sub>)<sub>3</sub>), 1-pentyl (n-pentyl, –CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>), 2-pentyl (–CH(CH<sub>3</sub>)CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>), 3-pentyl (–CH(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>), 2-methyl-2-butyl (–C(CH<sub>3</sub>)<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>), 3-methyl-2-butyl (–CH(CH<sub>3</sub>)CH(CH<sub>3</sub>)<sub>2</sub>), 3-methyl-1-butyl (–CH<sub>2</sub>CH<sub>2</sub>CH(CH<sub>3</sub>)<sub>2</sub>), 2-methyl-1-butyl (–CH<sub>2</sub>CH(CH<sub>3</sub>)CH<sub>2</sub>CH<sub>3</sub>), 1-hexyl (–CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>), 2-hexyl (–CH(CH<sub>3</sub>)CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>), 3-hexyl (–CH(CH<sub>2</sub>CH<sub>3</sub>)(CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>)), 2-methyl-2-pentyl (–C(CH<sub>3</sub>)<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>), 3-methyl-2-pentyl (–CH(CH<sub>3</sub>)CH(CH<sub>3</sub>)CH<sub>2</sub>CH<sub>3</sub>), 4-methyl-2-pentyl (–CH(CH<sub>3</sub>)CH<sub>2</sub>CH(CH<sub>3</sub>)<sub>2</sub>), 3-methyl-3-pentyl (–C(CH<sub>3</sub>)(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>), 2-methyl-3-pentyl (–CH(CH<sub>2</sub>CH<sub>3</sub>)CH(CH<sub>3</sub>)<sub>2</sub>), 2,3-dimethyl-2-butyl (–C(CH<sub>3</sub>)<sub>2</sub>CH(CH<sub>3</sub>)<sub>2</sub>), 3,3-dimethyl-2-butyl (–CH(CH<sub>3</sub>)C(CH<sub>3</sub>)<sub>3</sub>), 1-heptyl and 1-octyl.

## CLAIMS

## What is claimed is:

1. A compound of Formula (II):



(II)

or a pharmaceutically acceptable salt thereof;

wherein,

R<sub>2</sub> is NH<sub>2</sub>;

R<sub>3</sub> is H;

R<sub>4</sub> is H or C<sub>1-6</sub> alkyl;

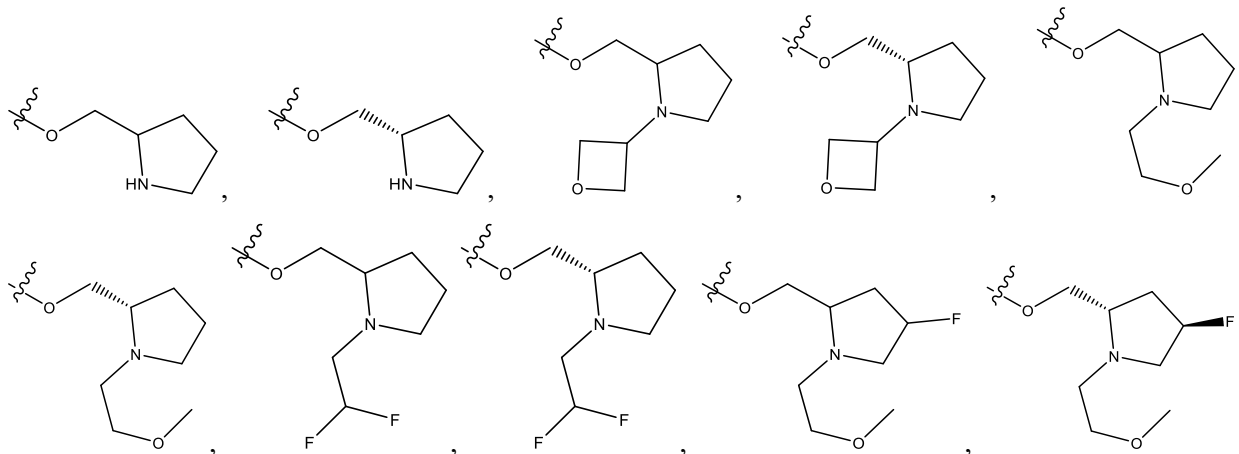
R<sub>5</sub> is CF<sub>3</sub>;

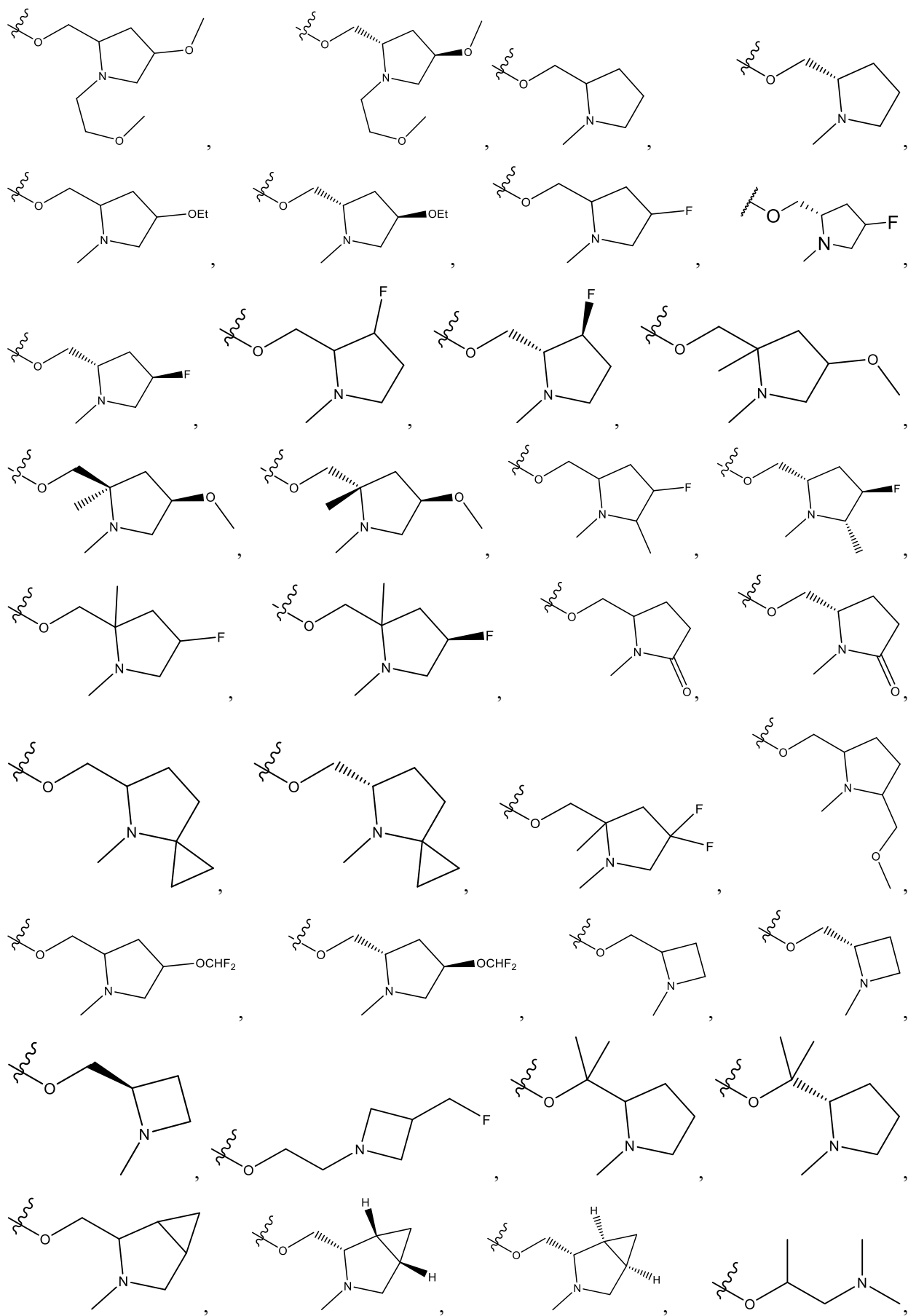
R<sub>7</sub> is selected from the group consisting of H, cyano, and halo;

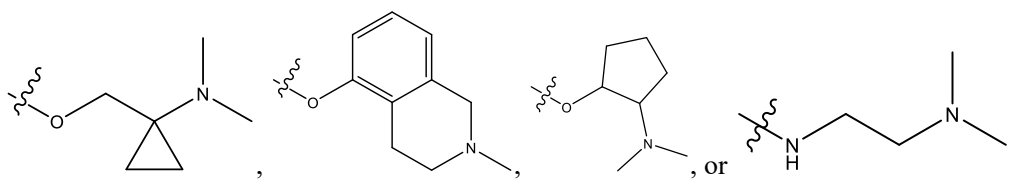
R<sub>8</sub> and R<sub>9</sub> are each independently selected from the group consisting of H, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> hydroxyalkyl, cyano, and halo; wherein C<sub>1-6</sub> alkyl is optionally substituted with one substituent selected from the group consisting of: methanesulfonyl (mesyl), p-toluenesulfonyl (tosyl), an alkyl or aryl sulfonate leaving group, C<sub>1-6</sub> alkanoylamino, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkylamino, C<sub>1-6</sub> alkylsulfonylamino, C<sub>6-12</sub> dialkylamino, and C<sub>1-6</sub> haloalkoxy;

X is piperazinyl optionally substituted with 1 to 4 substituents, wherein each substituent is independently selected from the group consisting of cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> cyanoalkyl, and C<sub>1-6</sub> haloalkyl;

Y is







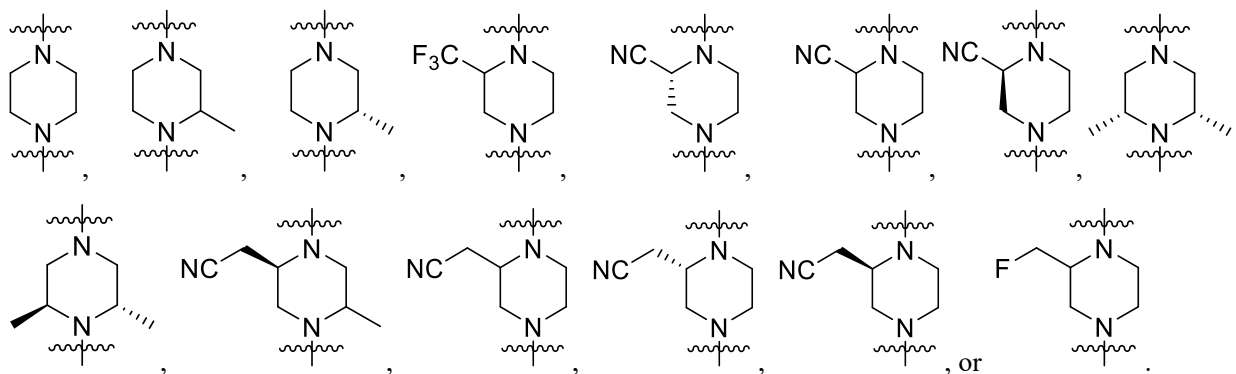
U is C(R<sub>6a</sub>), wherein R<sub>6a</sub> is H;

V is C(R<sub>6b</sub>); wherein R<sub>6b</sub> is H or halo;

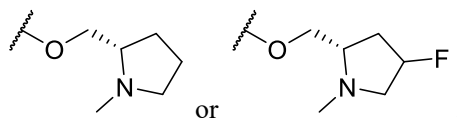
W is C(R<sub>6c</sub>), wherein R<sub>6c</sub> is H or halo; and

n is 0.

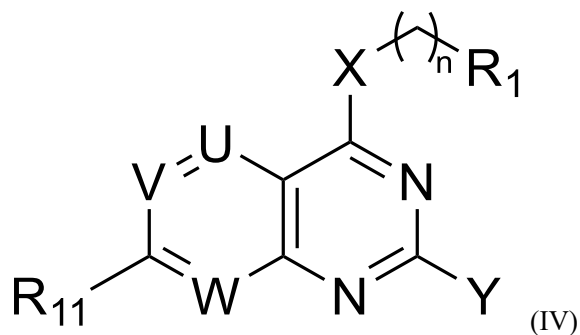
2. The compound or pharmaceutically acceptable salt thereof of claim 1, wherein X is:



3. The compound of claim 1 or 2, or pharmaceutically acceptable salt thereof, wherein Y is



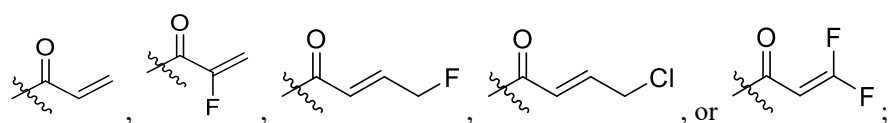
4. A compound of Formula (IV):



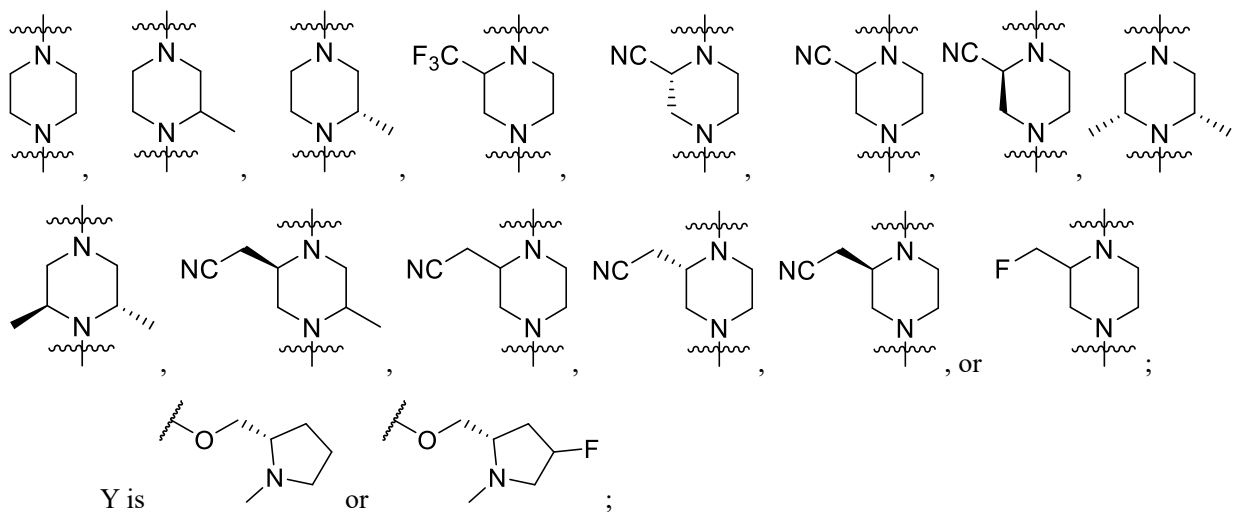
or a pharmaceutically acceptable salt thereof;

wherein,

R<sub>1</sub> is:



X is:



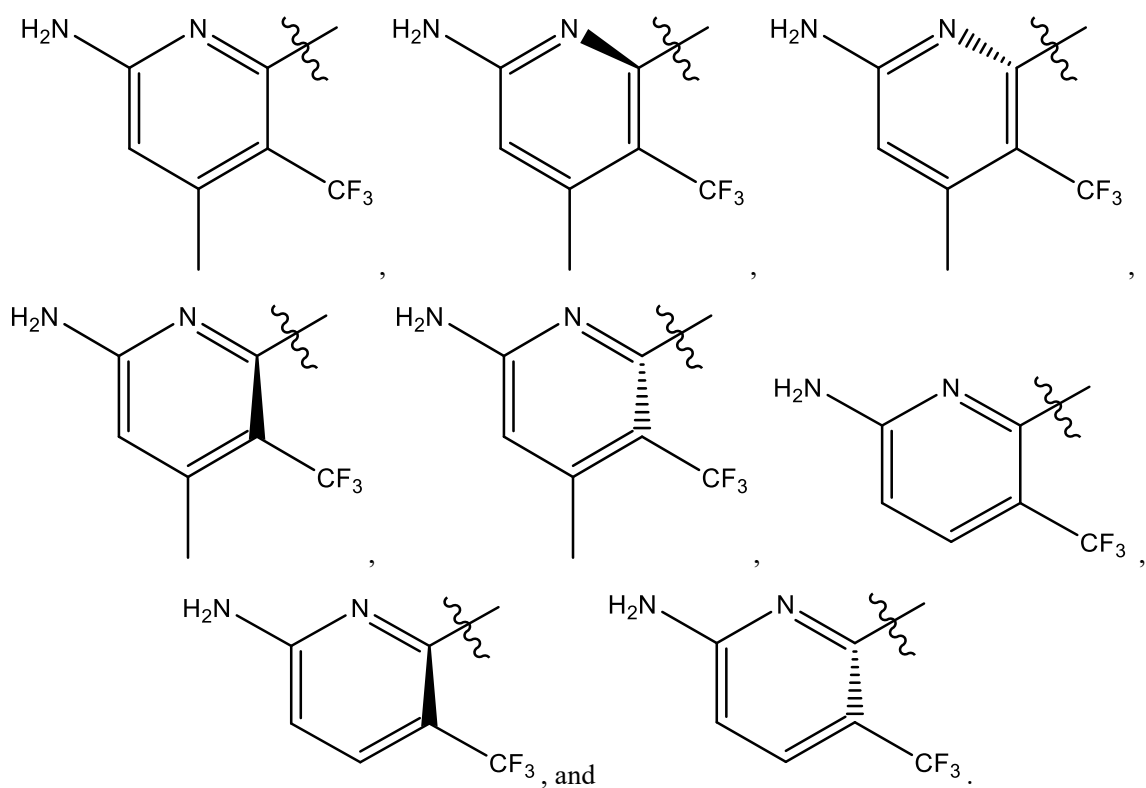
U is C(R<sub>6a</sub>), wherein R<sub>6a</sub> is H;

V is C(R<sub>6b</sub>), wherein R<sub>6b</sub> is H or halo;

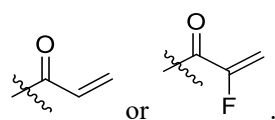
W is C(R<sub>6c</sub>), wherein R<sub>6c</sub> is H or halo;

n is 0; and

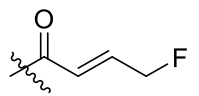
R<sub>11</sub> is selected from the group consisting of:



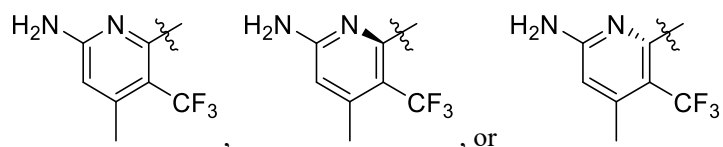
5. The compound of claim 4, or a pharmaceutically acceptable salt thereof, wherein R<sub>1</sub> is



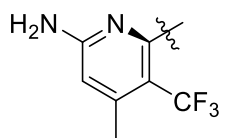
6. The compound of claim 4, or a pharmaceutically acceptable salt thereof, wherein R<sub>1</sub> is



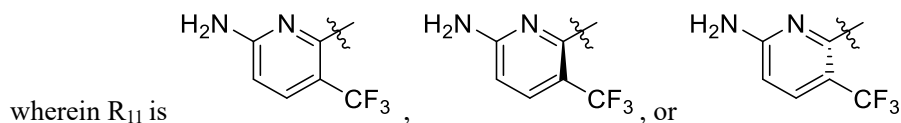
7. The compound of any one of claims 4-6, or a pharmaceutically acceptable salt thereof, wherein R<sub>11</sub> is:



8. The compound of any one of claims 4-7, or a pharmaceutically acceptable salt thereof, wherein R<sub>11</sub> is



9. The compound of any one of claims 4-6, or a pharmaceutically acceptable salt thereof,

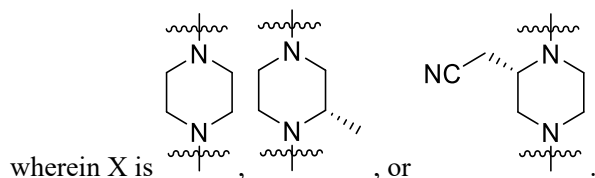


10. The compound of any one of claims 1-9, or a pharmaceutically acceptable salt thereof, wherein R<sub>6c</sub> is halo.

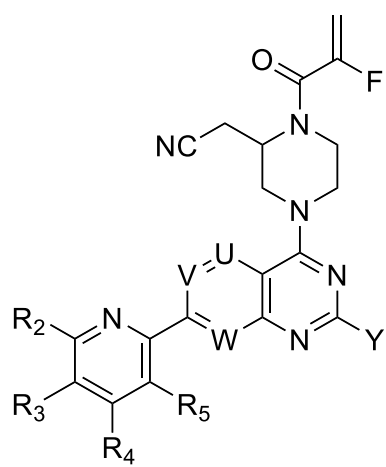
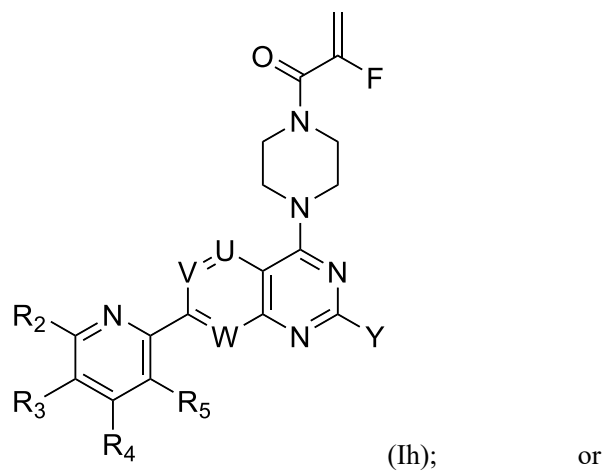
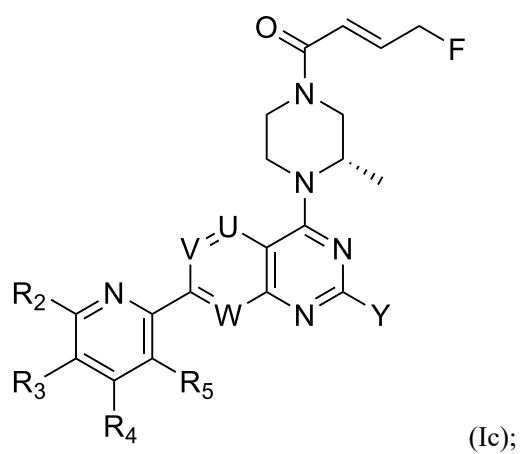
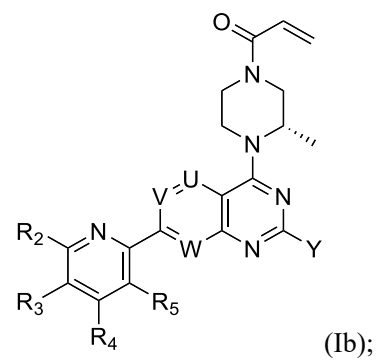
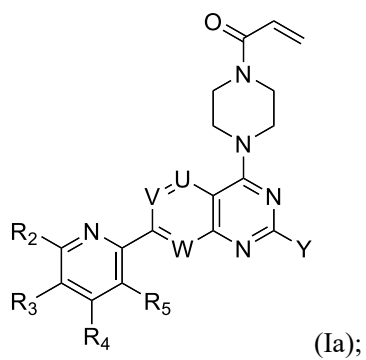
11. The compound of any one of claims 1-9, or a pharmaceutically acceptable salt thereof, wherein R<sub>6c</sub> is hydrogen.

12. The compound of any one of claims 1-11, or a pharmaceutically acceptable salt thereof, wherein R<sub>6b</sub> is halo.

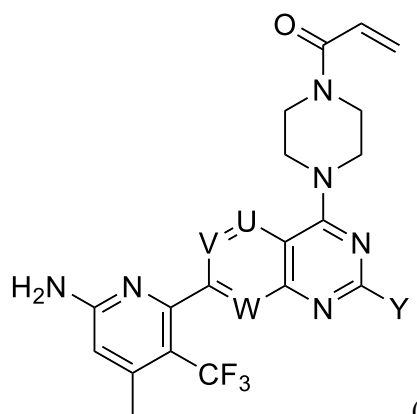
13. The compound of any one of claims 1-12, or a pharmaceutically acceptable salt thereof,



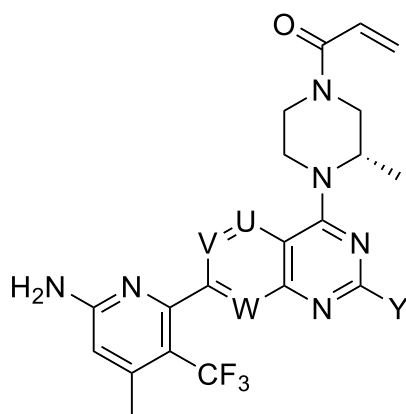
14. The compound of claim 1 having a Formula:



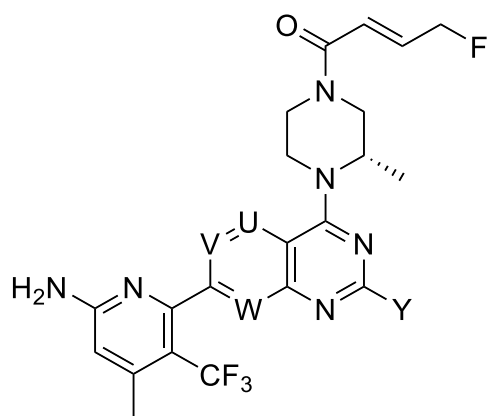
15. The compound of claim 1 or 4 having formula:



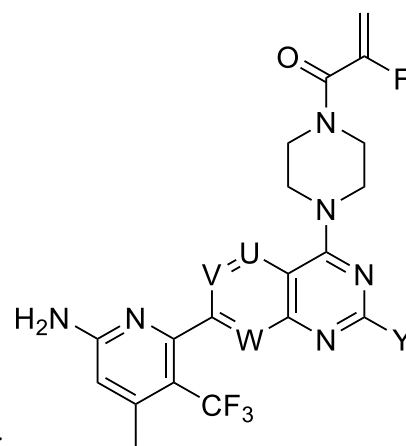
(IVa);



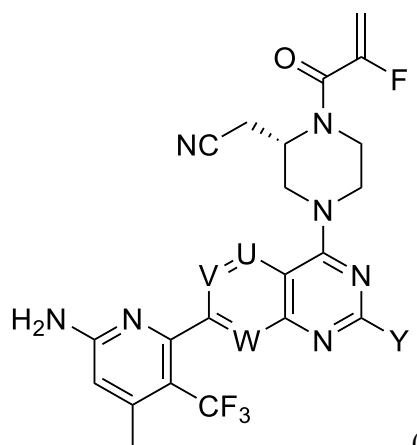
(IVb);



(IVc);

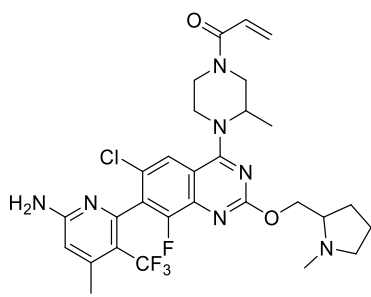


(IVd); or

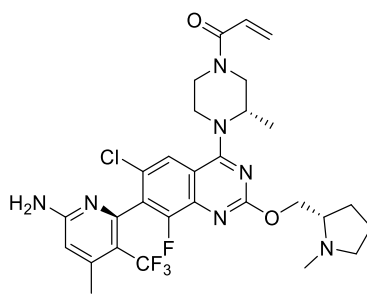


(IVg), or a pharmaceutically acceptable salt thereof.

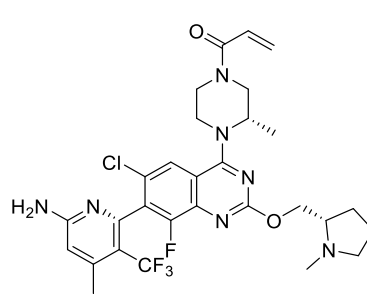
16. A compound having formula:



,

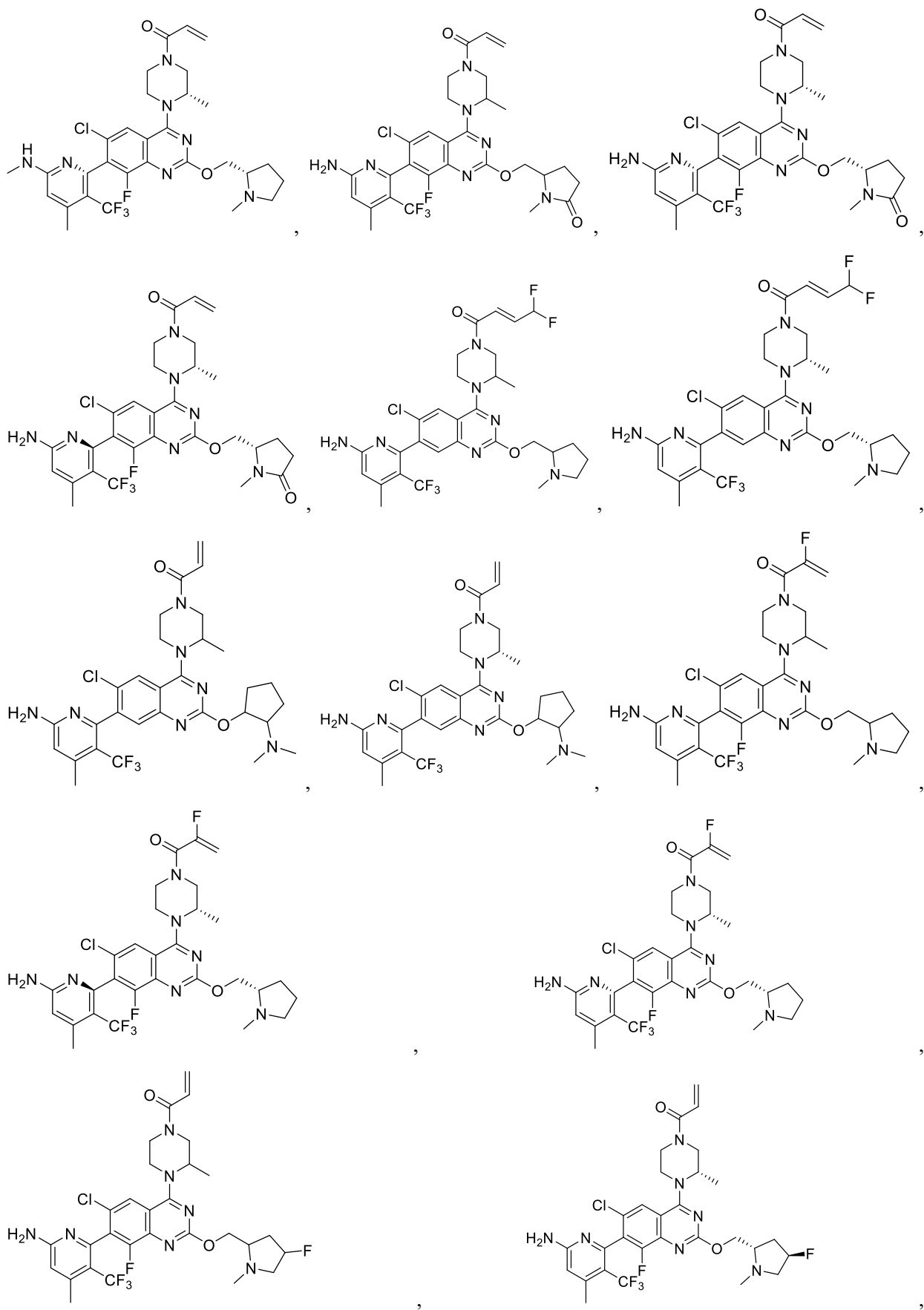


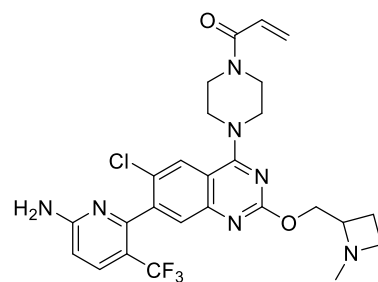
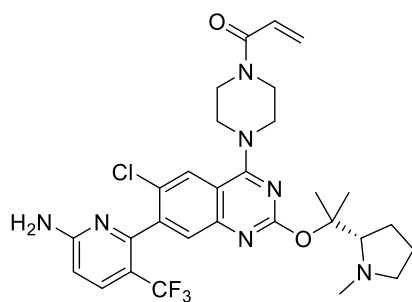
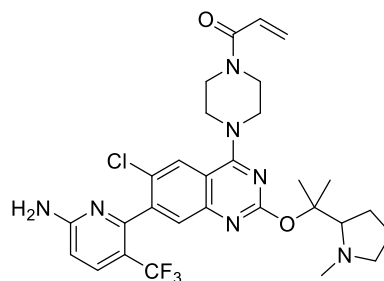
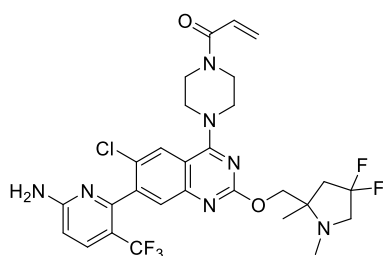
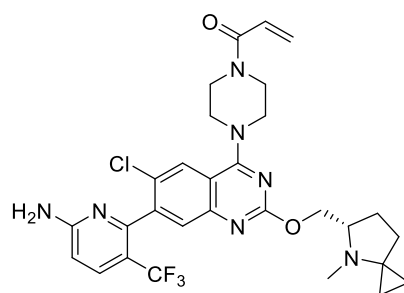
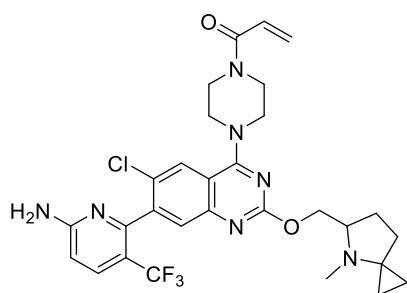
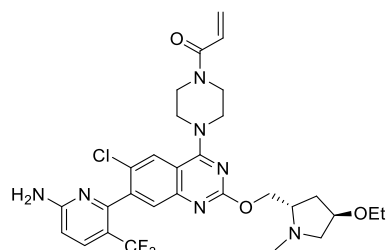
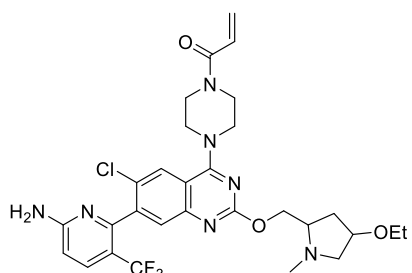
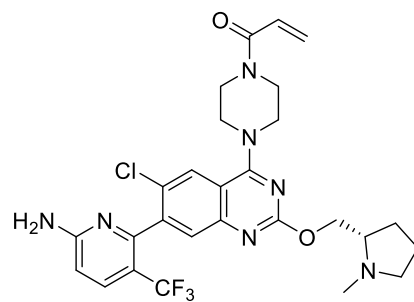
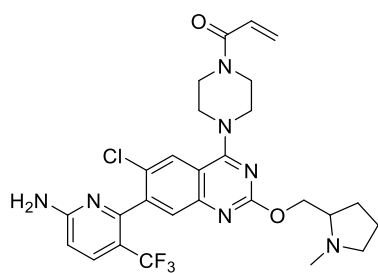
,

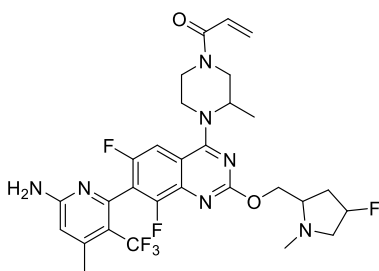
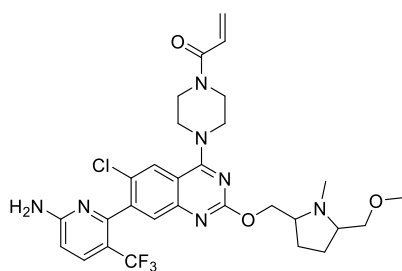
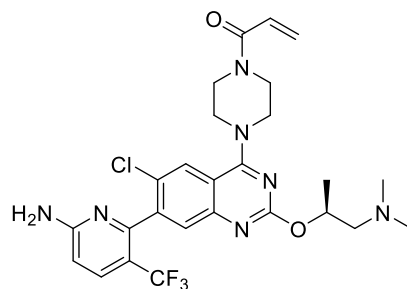
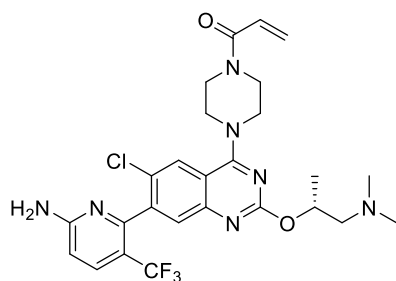
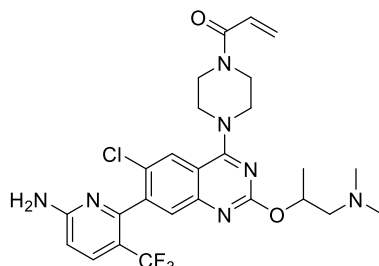
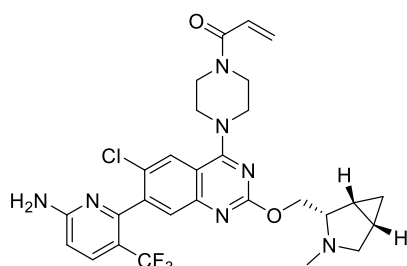
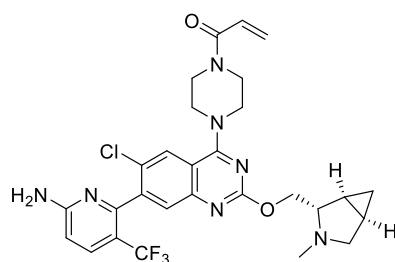
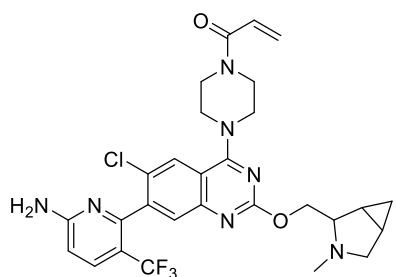
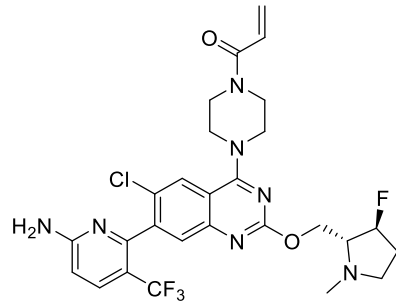
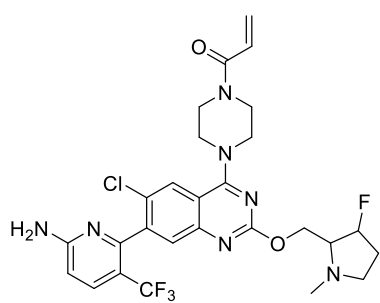
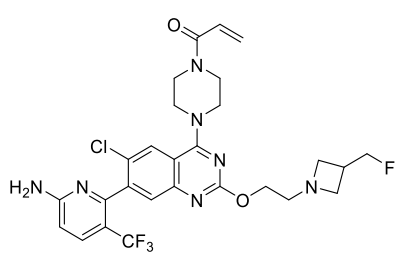
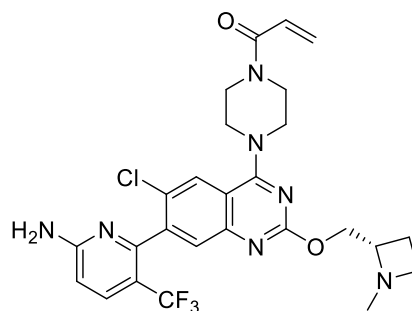
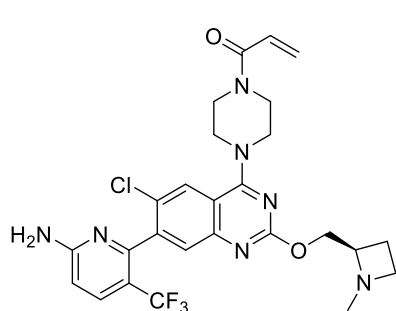


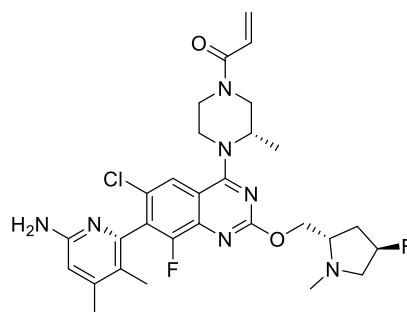
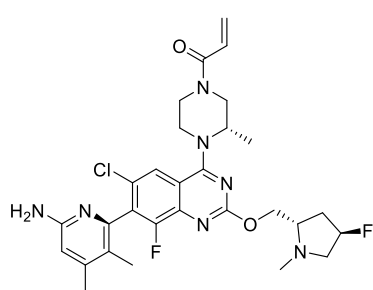
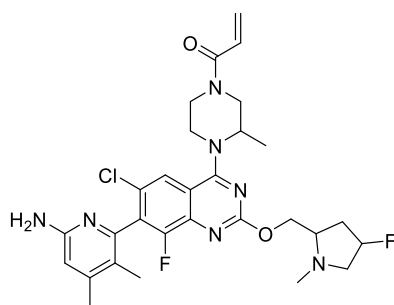
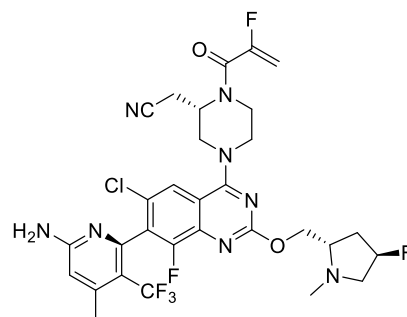
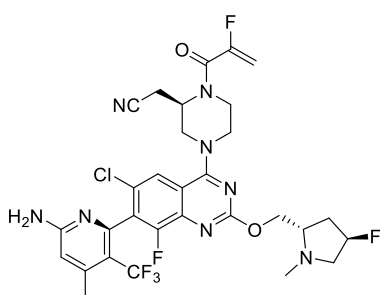
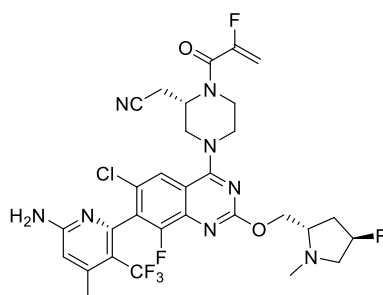
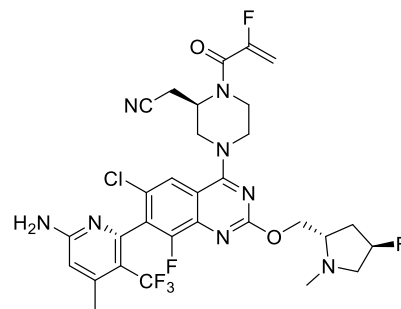
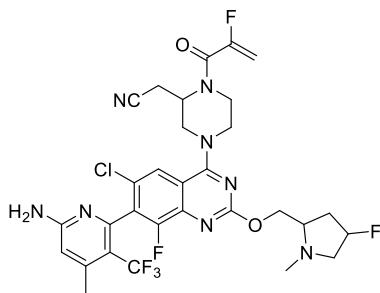
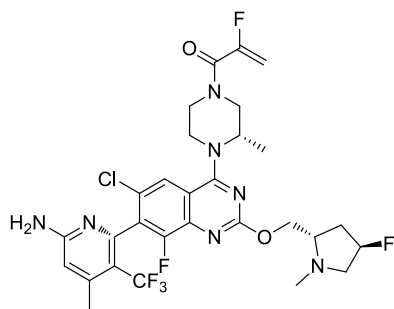
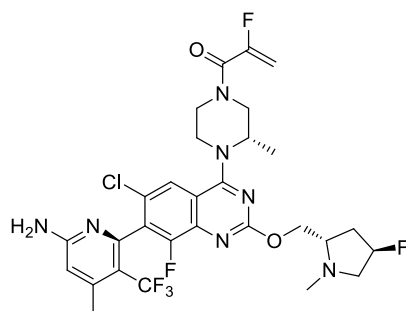
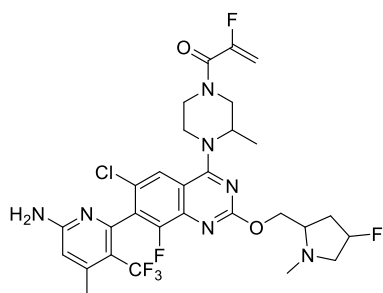
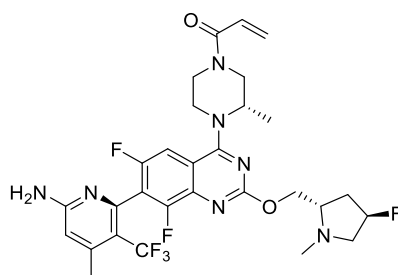
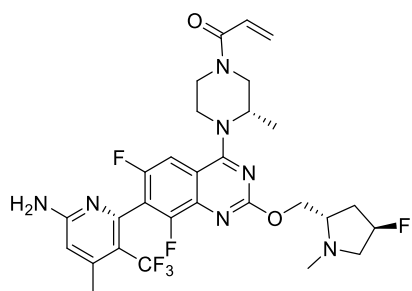
,

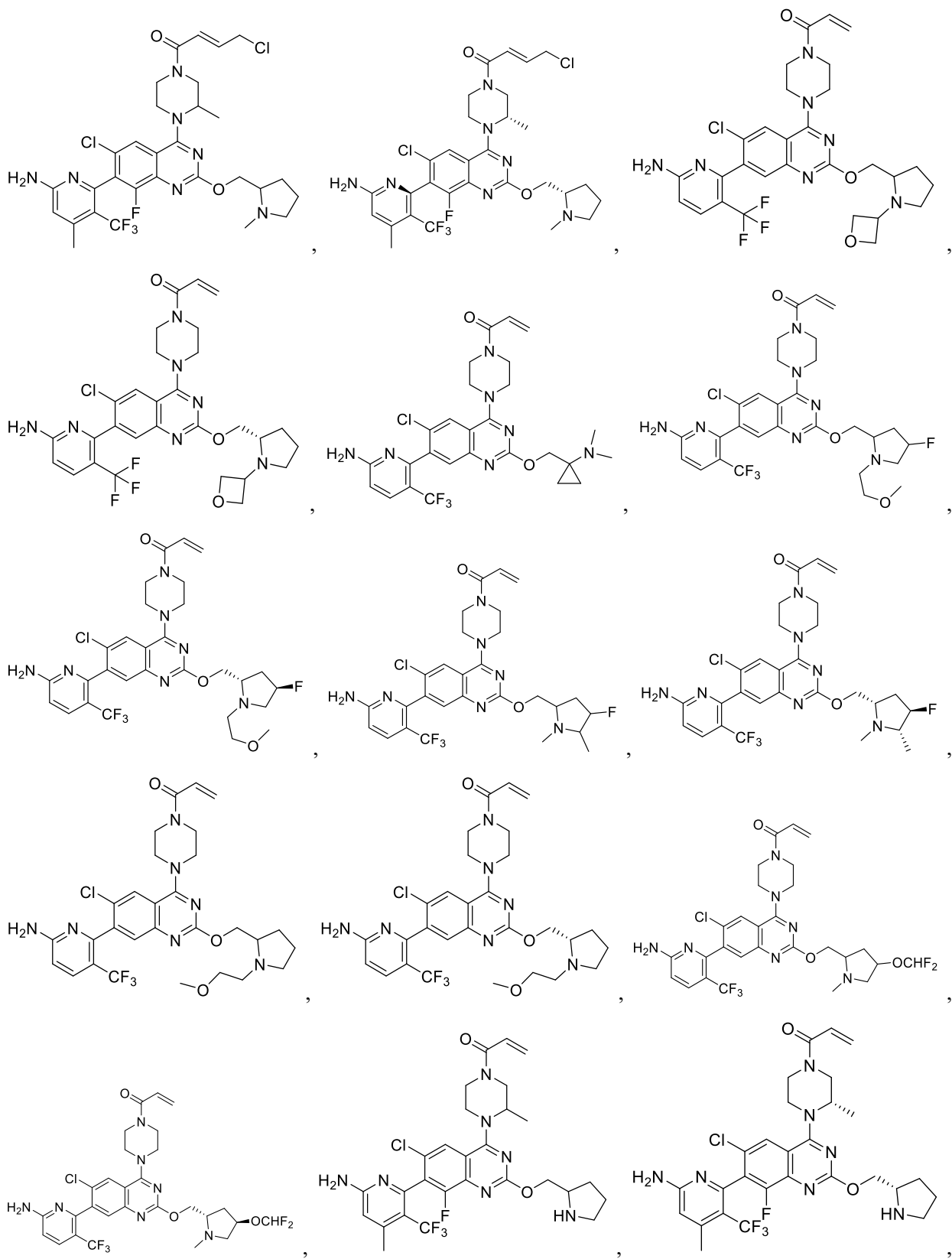


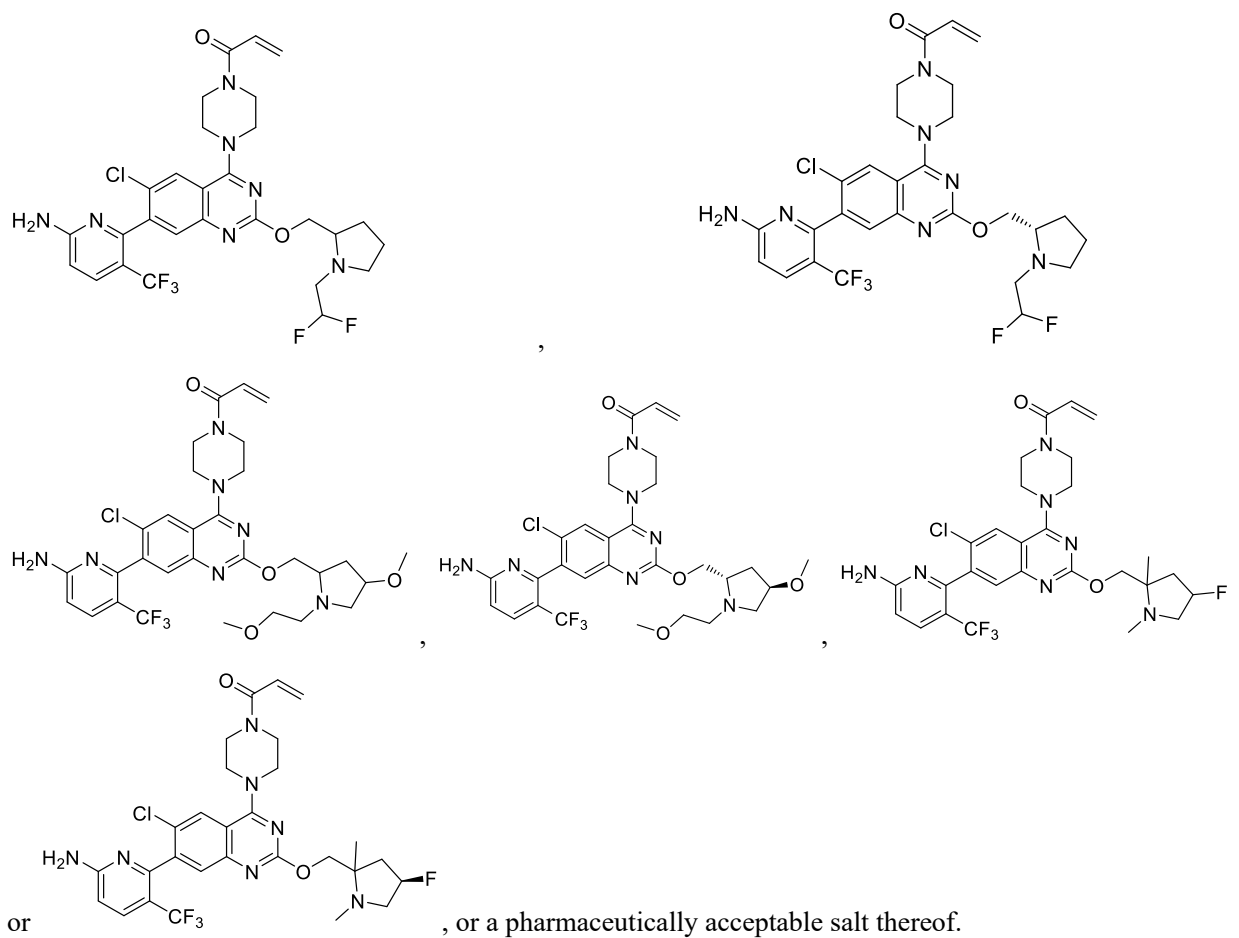




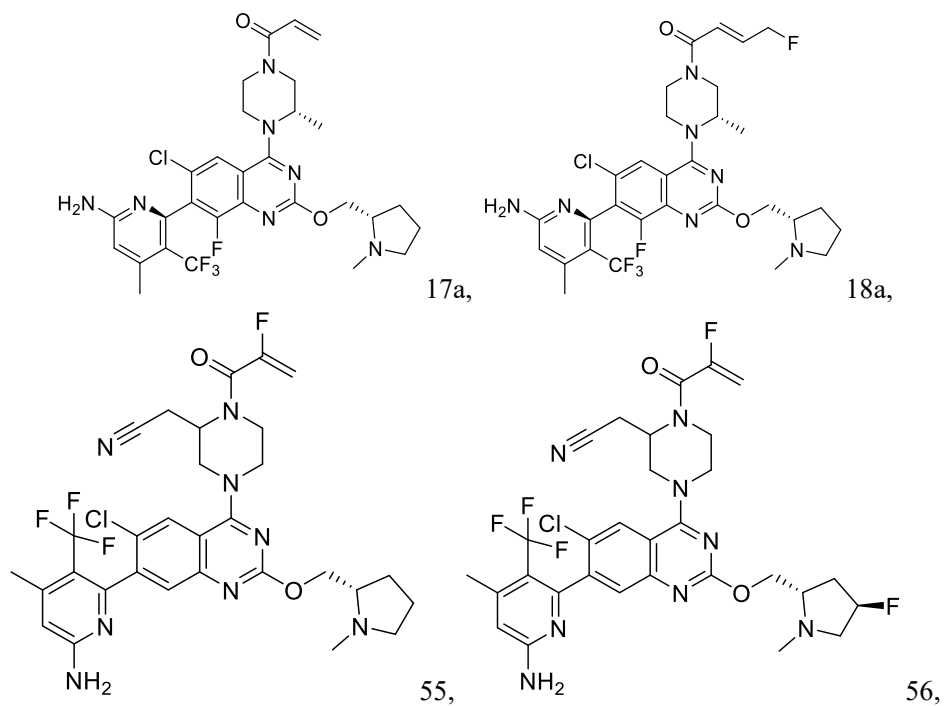


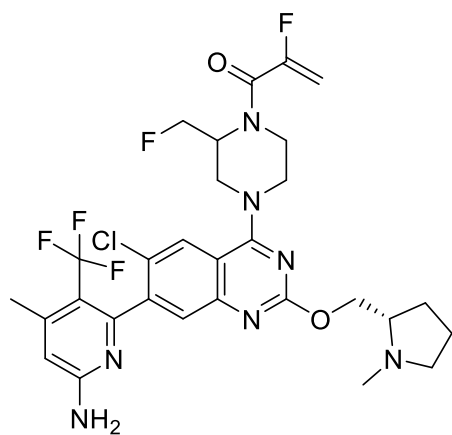




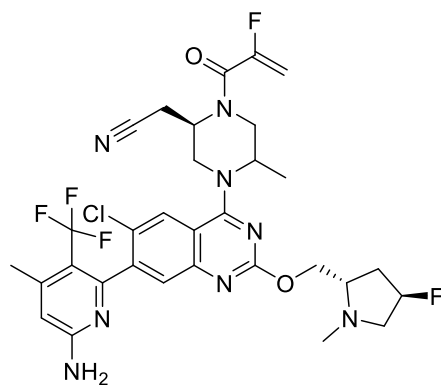


17. A compound of formula:

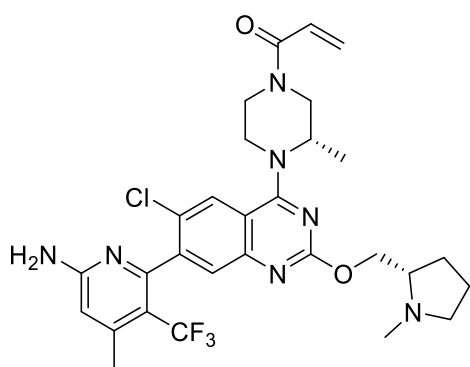




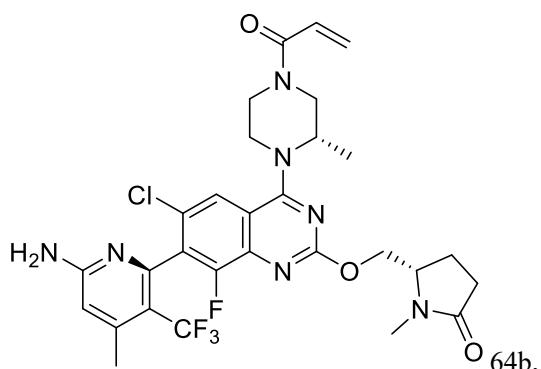
57,



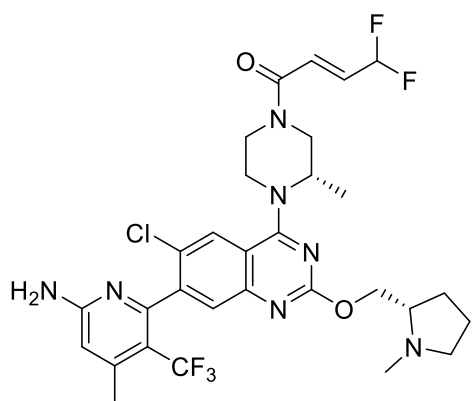
58,



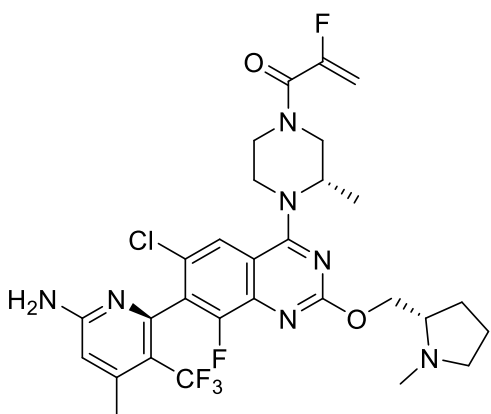
61,



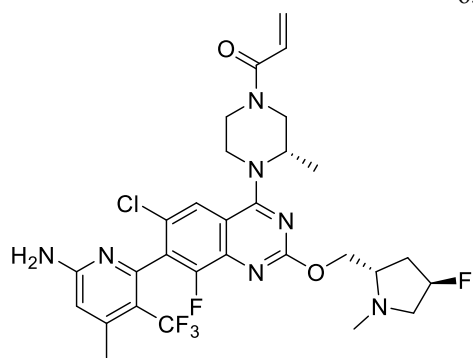
64b,



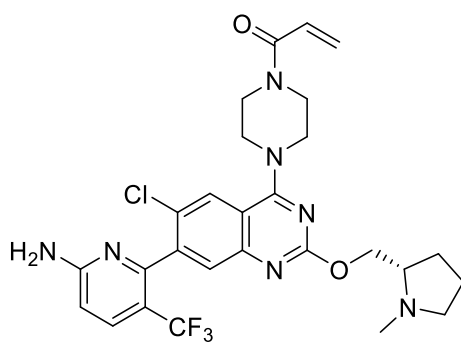
65,



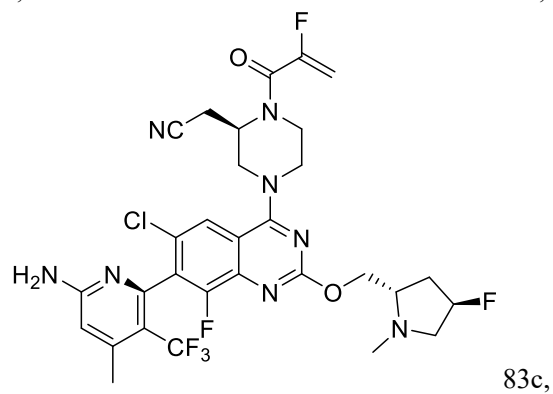
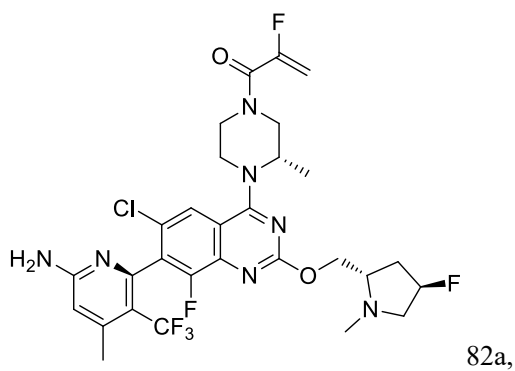
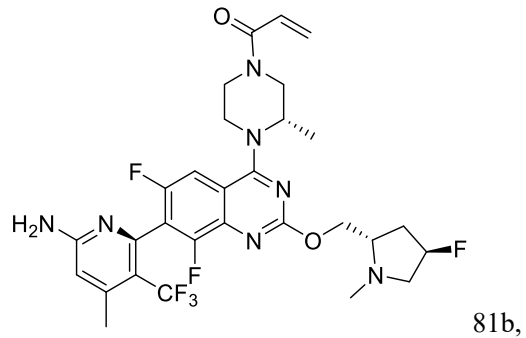
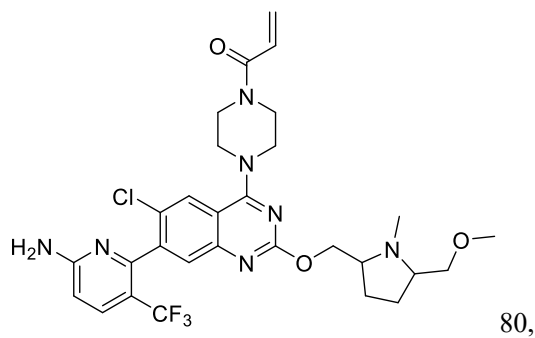
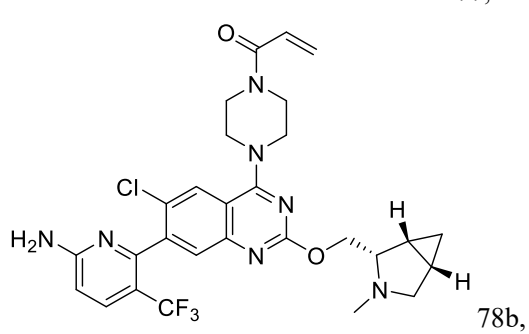
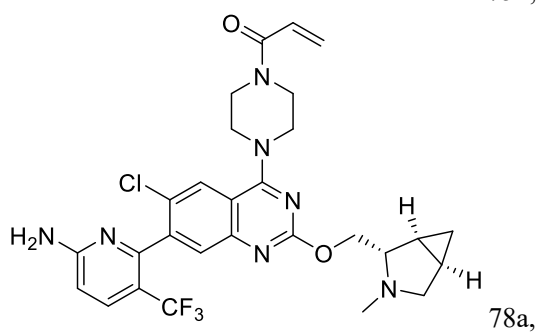
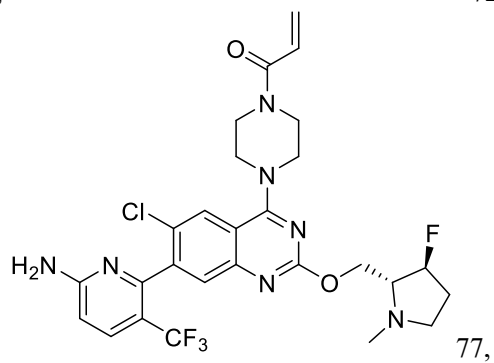
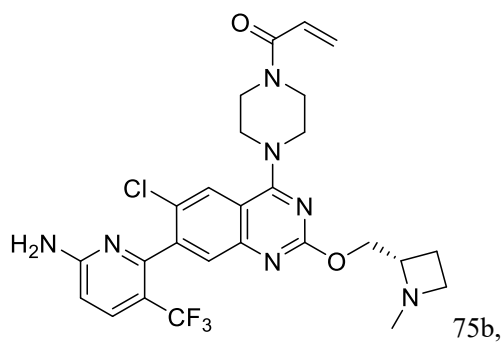
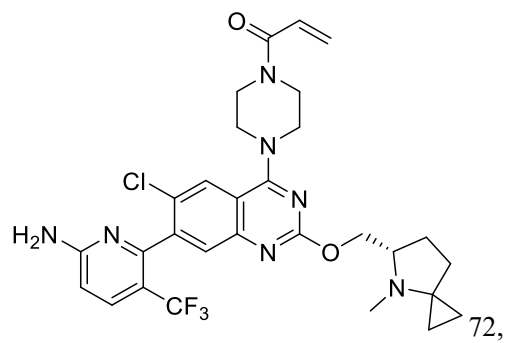
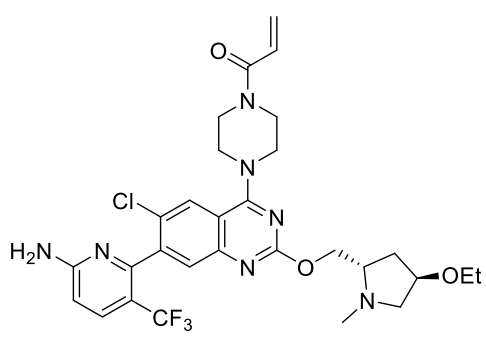
68a,

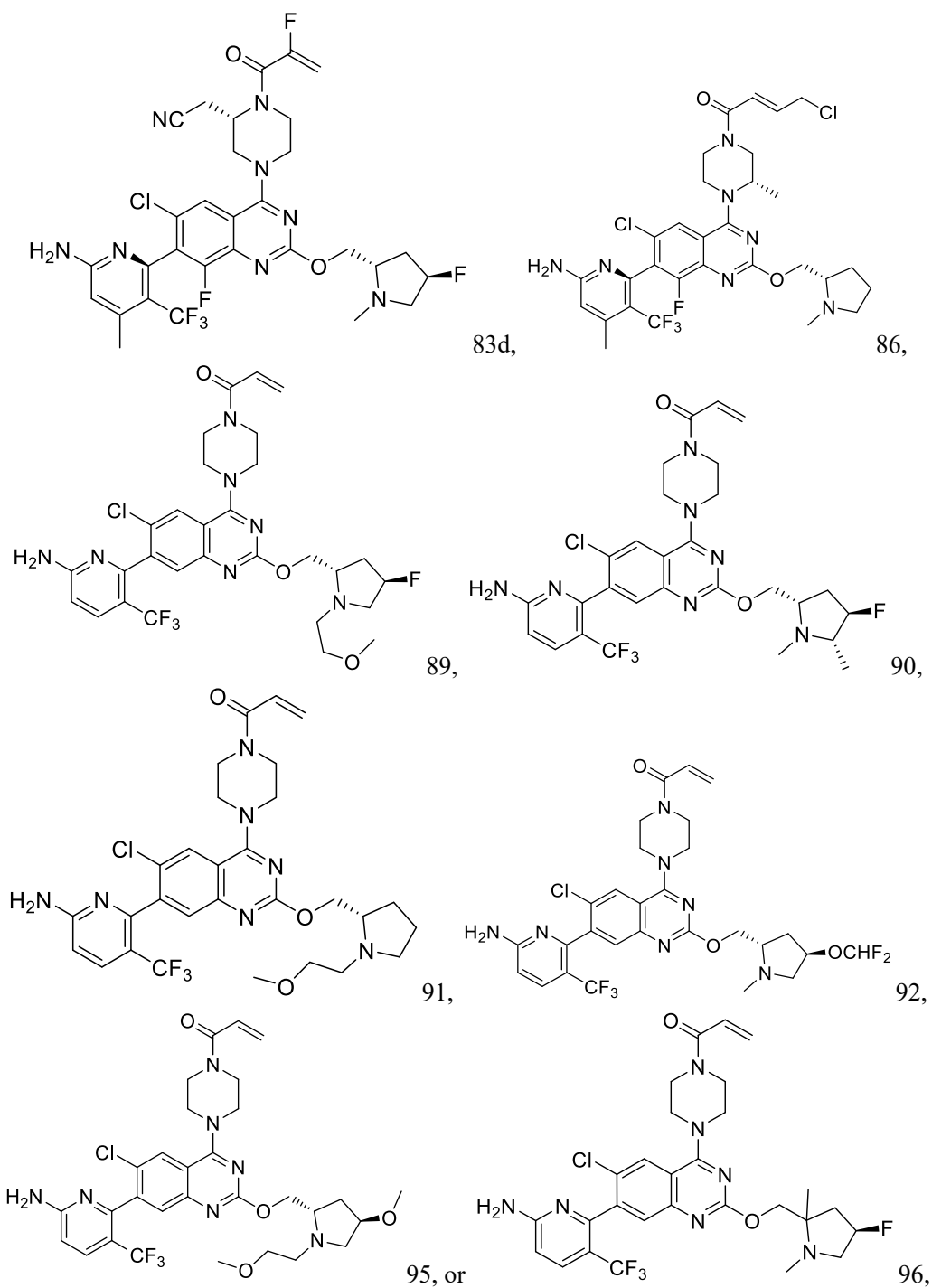


69,



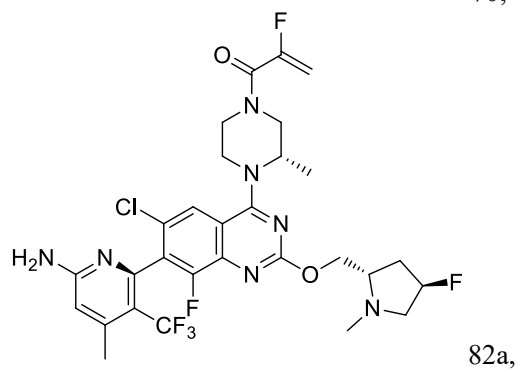
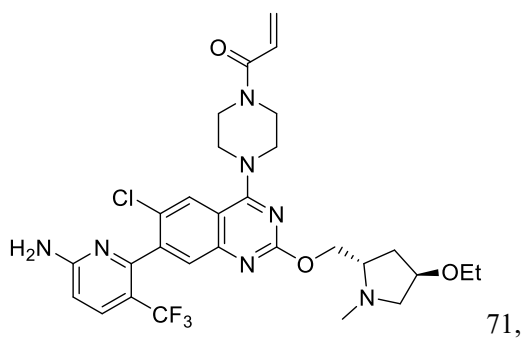
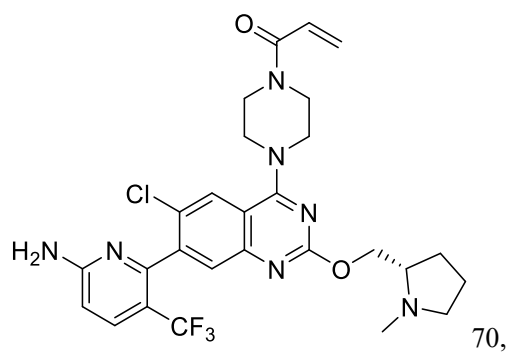
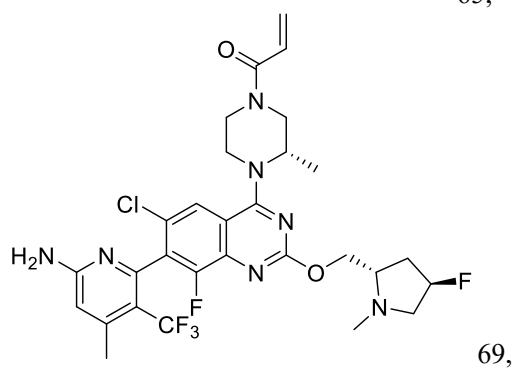
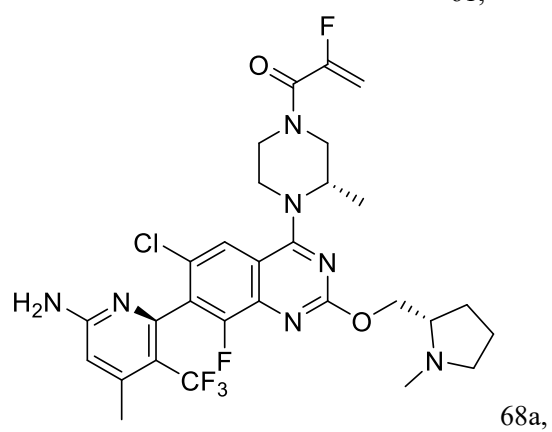
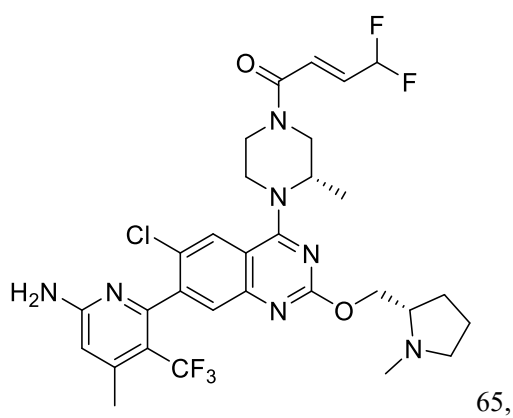
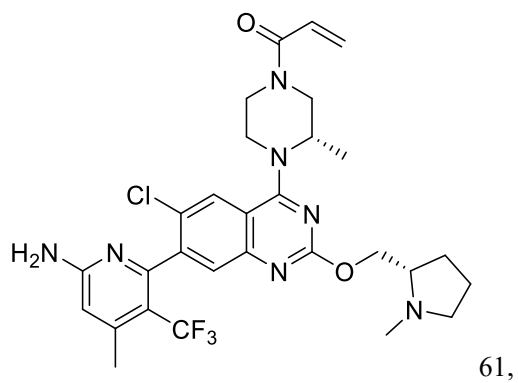
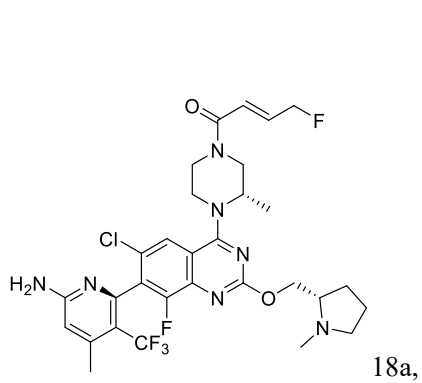
70,

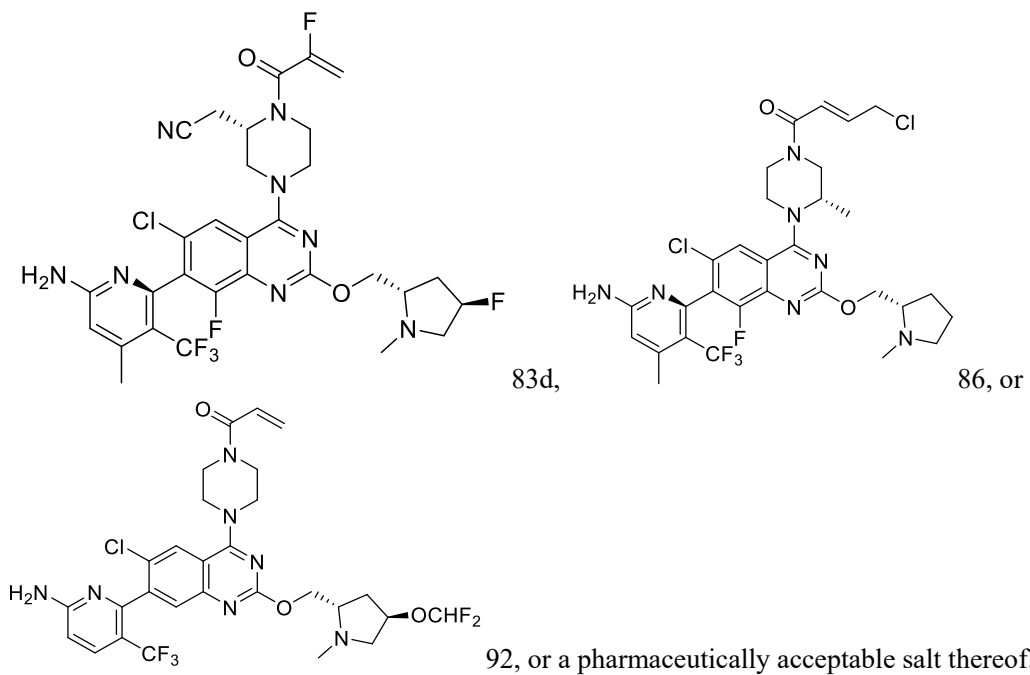




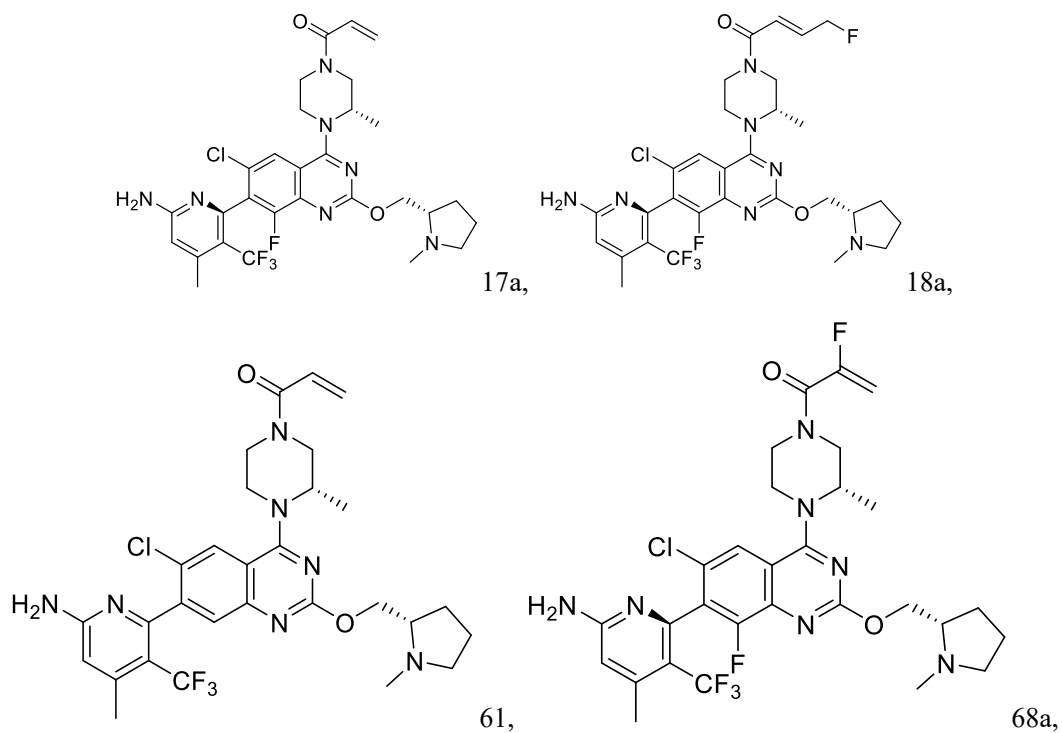
or a pharmaceutically acceptable salt thereof.

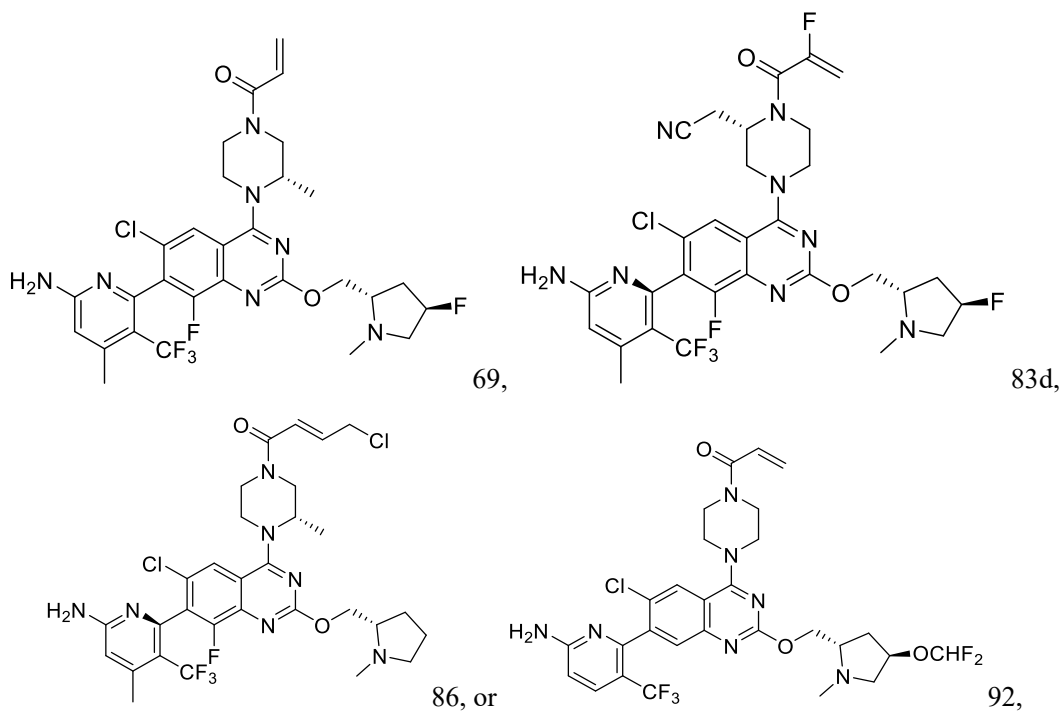
18. A compound of formula:





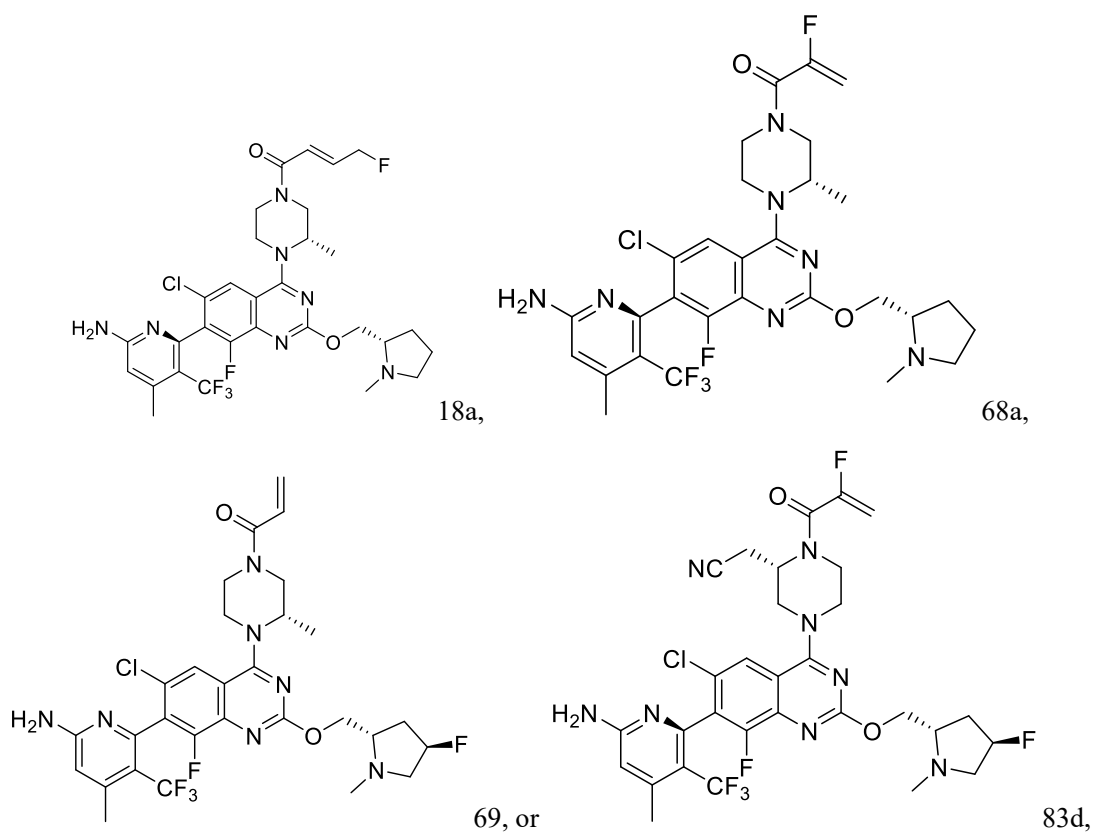
19. A compound of formula:





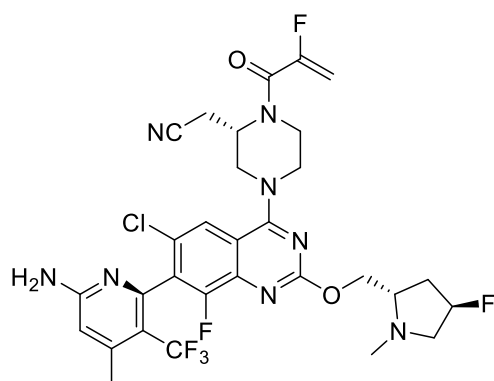
or a pharmaceutically acceptable salt thereof.

20. A compound of formula:



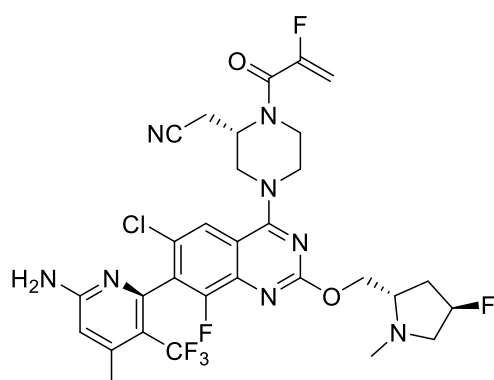
or a pharmaceutically acceptable salt thereof.

21. A compound of formula:

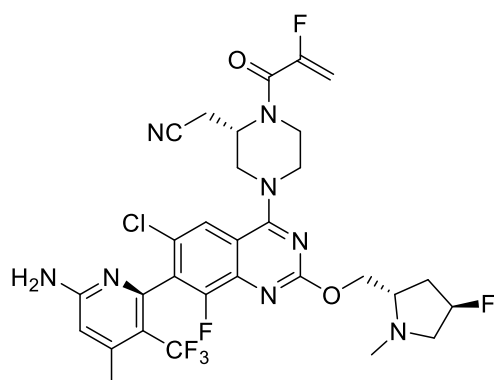


, or a pharmaceutically acceptable salt thereof.

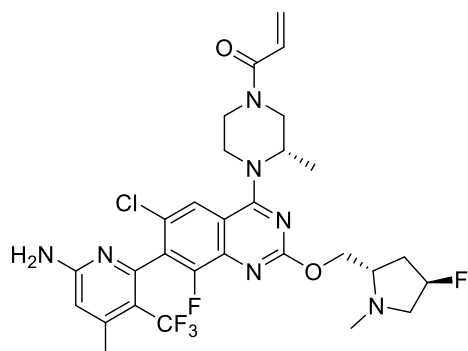
22. A compound of formula:



23. A pharmaceutically acceptable salt of the compound of formula:

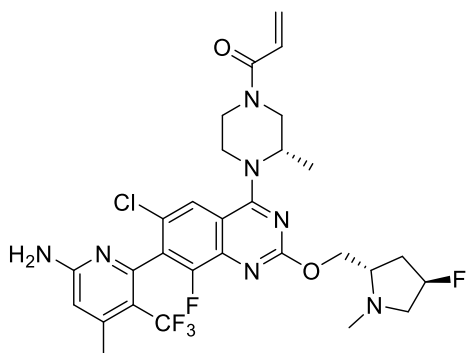


24. A compound of formula:

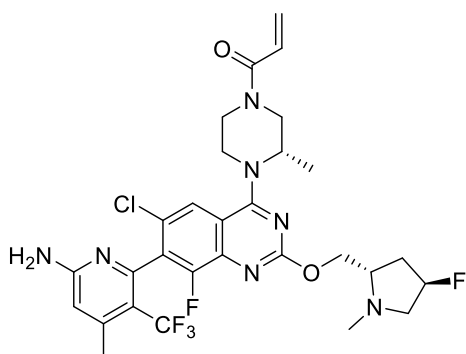


, or a pharmaceutically acceptable salt thereof.

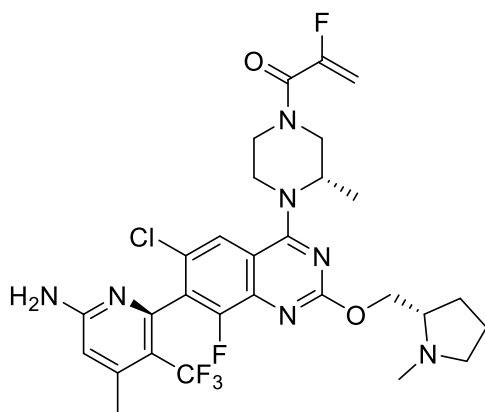
25. A compound of formula:



26. A pharmaceutically acceptable salt of the compound of formula:

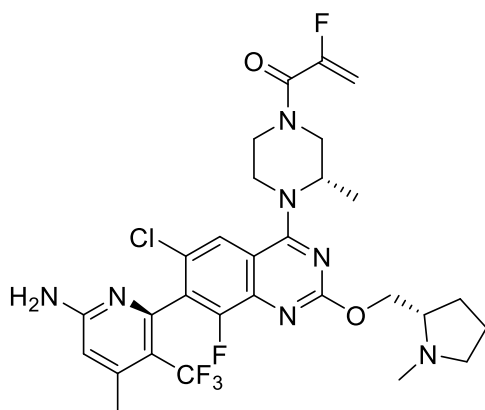


27. A compound of formula:

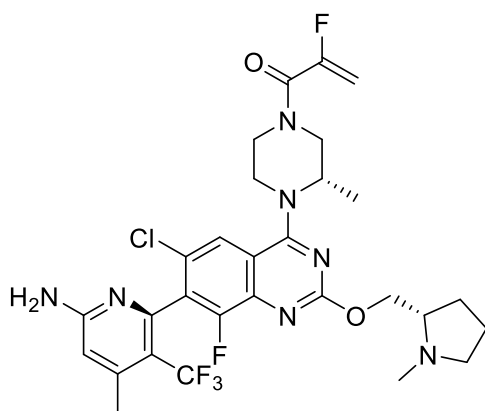


, or a pharmaceutically acceptable salt thereof.

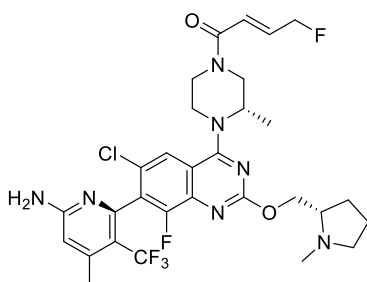
28. A compound of formula:



29. A pharmaceutically acceptable salt of the compound of formula:

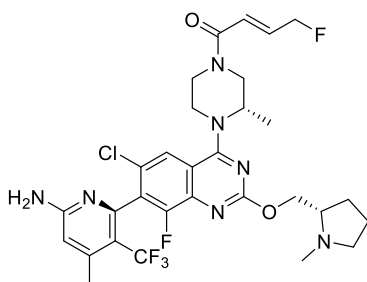


30. A compound of formula:

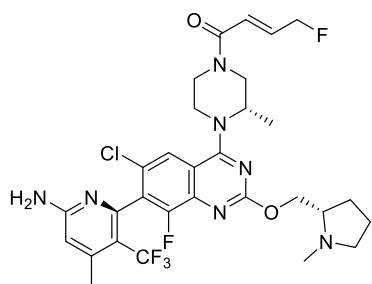


, or a pharmaceutically acceptable salt thereof.

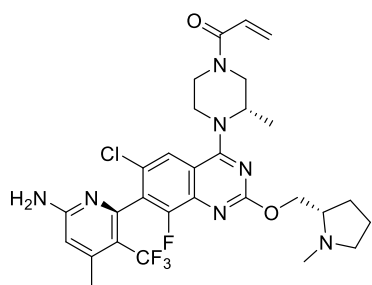
31. A compound of formula:



32. A pharmaceutically acceptable salt of the compound of formula

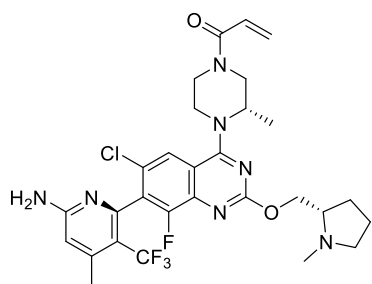


33. A compound of formula;

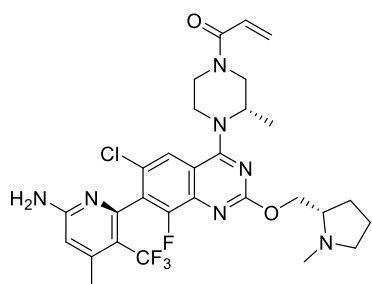


, or a pharmaceutically acceptable salt thereof.

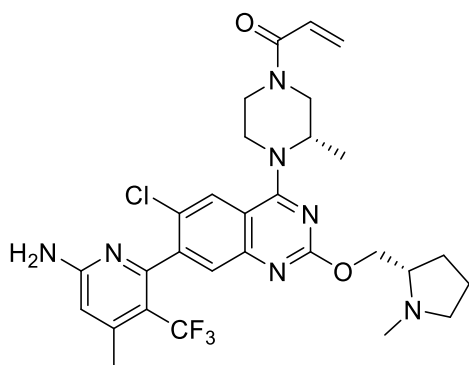
34. A compound of formula:



35. A pharmaceutically acceptable salt of the compound of formula:

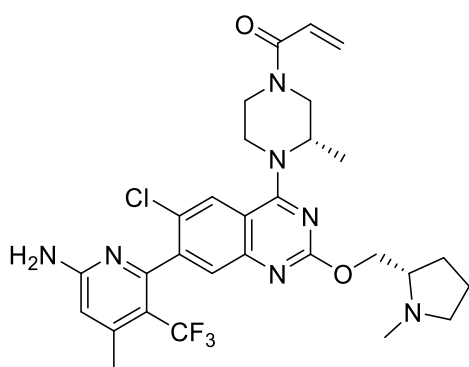


36. A compound of formula:

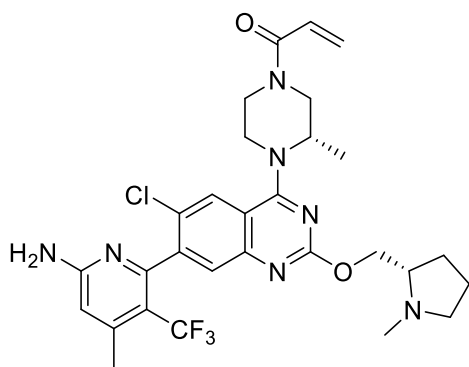


, or a pharmaceutically acceptable salt thereof.

37. A compound of formula:



38. A pharmaceutically acceptable salt of the compound of formula:



39. A pharmaceutical composition comprising the compound of any one of claims 1-38, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient.

40. An agent for regulating activity of a K-Ras G12C mutant protein, comprising the compound of any one of claims 1-38, or a pharmaceutically acceptable salt thereof.

41. An agent for inhibiting proliferation of a cell population, comprising the compound of any one of claims 1-38, or a pharmaceutically acceptable salt thereof.

42. Use of a compound of any one of claims 1-38 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of claim 39, in the manufacture of a medicament for treating a cancer mediated by a K-Ras G12C mutation in an individual in need thereof and having the mutation.

43. Use of a compound of any one of claims 1-38 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of claim 39, in the manufacture of a medicament for treating a cancer mediated by a K-Ras G12C mutation in an individual who has been determined to have the mutation.

44. The use of claim 42 or 43, wherein the cancer is a lung cancer, colorectal cancer, appendicial cancer, or pancreatic cancer.

45. Use of a compound of any one of claims 1-38 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of claim 39, in the manufacture of a medicament for treating lung cancer comprising a K-Ras G12C mutation in an individual having such a cancer.

46. The use of claim 45, wherein the cancer is NSCLC.

47. Use of a compound of any one of claims 1-38 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of claim 39, in the manufacture of a medicament for treating tumor agnostic G12C K-Ras mediated cancer, wherein an absence or presence of a K-Ras G12C mutation is to be determined in a sample taken from a patient with a suspected diagnosed cancer.

48. A method for preparing a labeled K-Ras G12C mutant protein, the method comprising reacting a K-Ras G12C mutant protein with a labeled compound of any one of claims 1-38, or a pharmaceutically acceptable salt thereof, to result in the labeled K-Ras G12C mutant protein.

49. Use of a compound of any one of claims 1-38 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of claim 39, in the manufacture of a medicament for treating a cancer mediated by a K-Ras G12C mutation.

50. The use of claim 49, wherein the cancer is a hematological cancer, pancreatic cancer, MYH associated polyposis, colorectal cancer or lung cancer.

51. The use of claim 49, wherein the cancer is lung adenocarcinoma.

52. Use of a compound of any one of claims 1-38 or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for inhibiting tumor metastasis.

53. A compound of any one of claims 1-38 or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of claim 39, for use in treating a cancer mediated by a K-Ras G12C mutation in an individual in need thereof and having the mutation, or for use in treating a cancer mediated by a K-Ras G12C mutation in an individual who has been determined to have the mutation, or for use treating lung cancer comprising a K-Ras G12C mutation in an individual having such a cancer, or for use in treating tumor agnostic G12C K-Ras mediated cancer, wherein an absence or presence of a K-Ras G12C mutation is to be determined in a sample taken from a patient with a suspected diagnosed cancer, or for use in treating a cancer mediated by a K-Ras G12C mutation, or for use in inhibiting tumor metastasis.