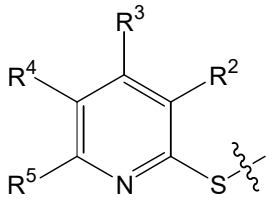
CLAIMS

1. A drug conjugate comprising a targeting moiety, a linker moiety, and a drug moiety, wherein the drug moiety is conjugated to the linker which is conjugated to the targeting moiety, and wherein the linker moiety comprises the structural formula (I):



(I)

wherein:

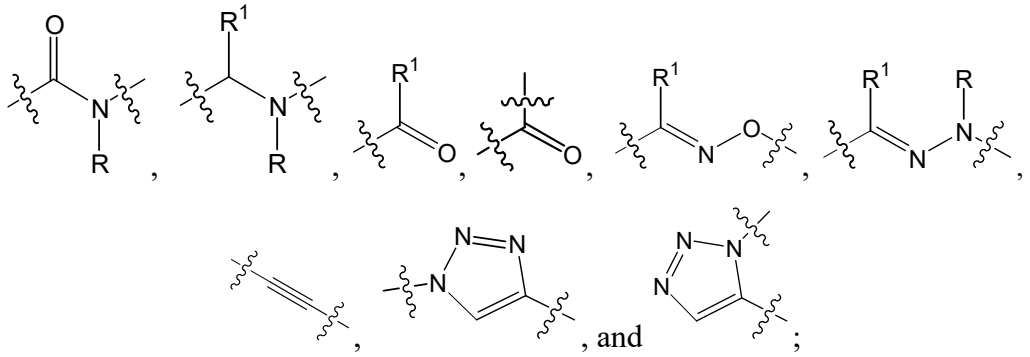
each R^2, R^3, R^4 is independently selected from the group consisting of H, NO_2, CN, CF_3, F, an unsubstituted or substituted C_{1-6} alkyl, C_{2-6} alkyene, C_{2-6} alkyne, C_{6-10} aryl, and W;

R^5 is H, Cl, SOR^6, SO_2R^6, OR^7, NRR^7 or W;

R^6 is an unsubstituted or substituted C_{1-6} alkyl or C_{6-10} aryl;

R^7 is an unsubstituted or substituted C_{2-6} alkyene or C_{2-6} alkyne;

W is selected from the group consisting of:

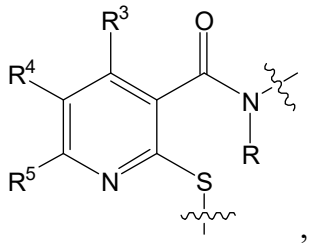


R^1 is H, an unsubstituted or substituted C_{1-6} alkyl, C_{2-6} alkyene, C_{2-6} alkyne or C_{6-10} aryl;

R is H, an unsubstituted or substituted C_{1-6} alkyl, C_{2-6} alkyene, C_{2-6} alkyne or C_{6-10} aryl;

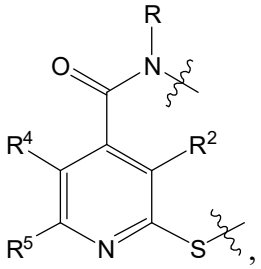
or a pharmaceutically acceptable salt thereof.

2. The drug conjugate of claim 1, comprising a structural formula:



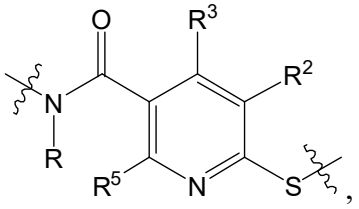
,

(I^1)



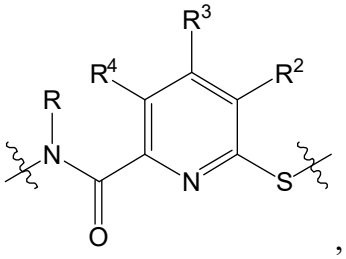
,

(I^2)



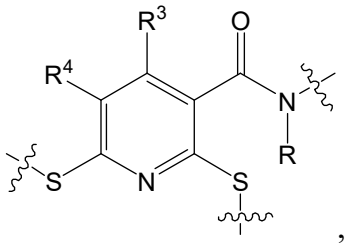
,

(I^3)



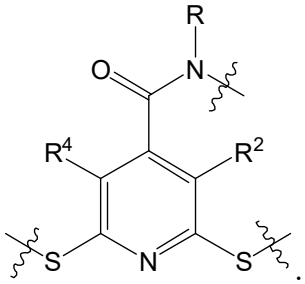
,

(I^4)



, or

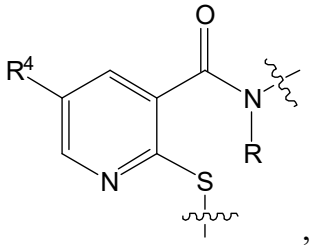
(I^5)



.

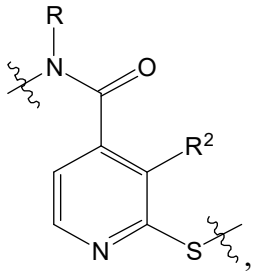
(I^6)

3. The drug conjugate of claim 1 or 2, comprising the structural formula:



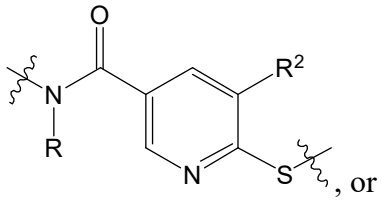
,

(I^7)

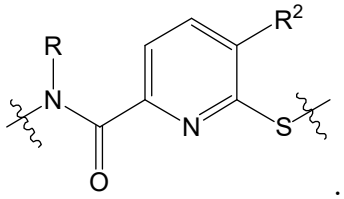


,

(I^8)


, or

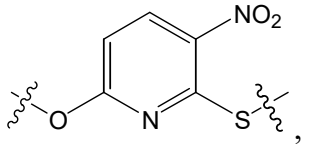
(I^9)

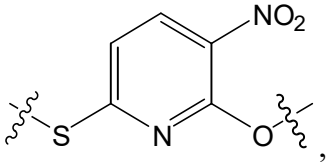

.

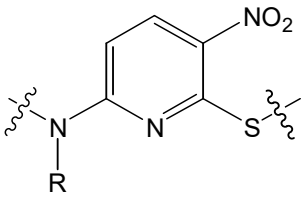
(I^{10})

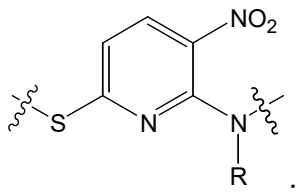
4. The drug conjugate of any one of claims 1-3, wherein one of R^2, R^3 and R^4 is selected from the group consisting of NO_2, CN, CF_3 and F.

5. The drug conjugate of any one of claims 1-4, comprising the structural formula:

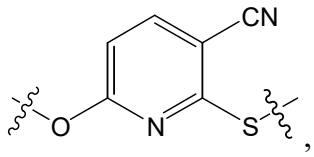

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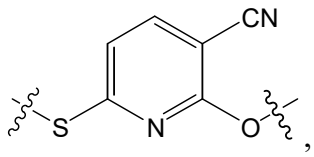

,

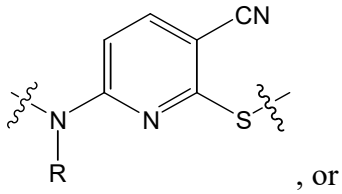

, or

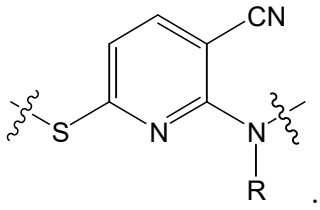


6. The drug conjugate of any one of claims 1-4, comprising the structural formula:





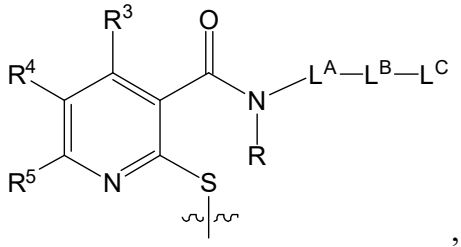




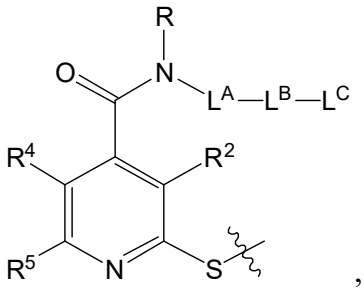
7. The drug conjugate of any one of claims 1-6, wherein the linker moiety further comprises a spacer, a peptide moiety, and/or a self-immolative moiety.

8. The drug conjugate of claim 7, wherein the spacer, the peptide moiety, and/or the self-immolative moiety are conjugated to one of R^2, R^3, R^4 and R^5.

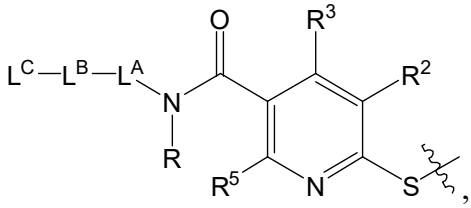
9. The drug conjugate of claim 1 or 2, comprising a structural formula:



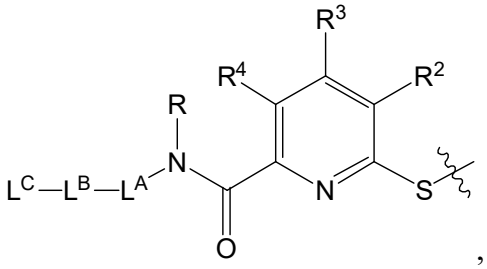
(I^{11})



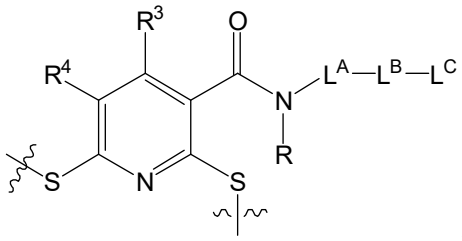
(I^{12})



(I^{13})

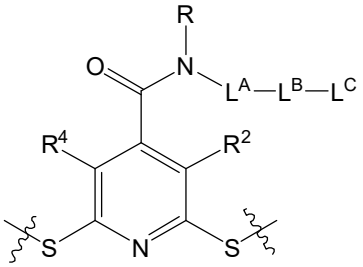


(I^{14})



, or

(I^{15})



(I^{16})

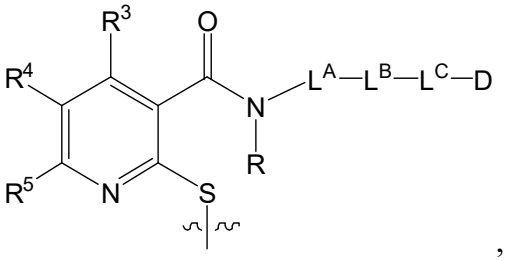
wherein

L^A is a spacer moiety or is absent;

L^B is a peptide moiety or is absent; and

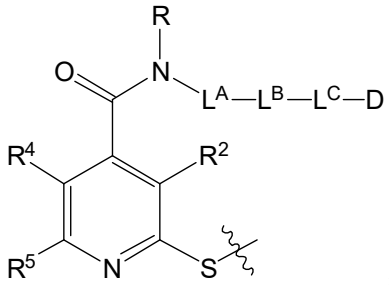
L^C is a self-immolative moiety or is absent.

10. The drug conjugate of claim 9, further comprising a drug moiety D, comprising the structural formula:

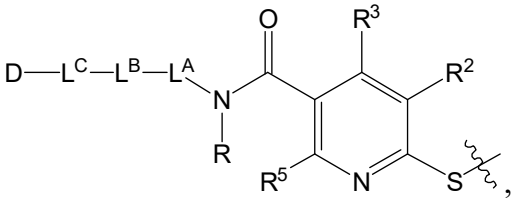


,

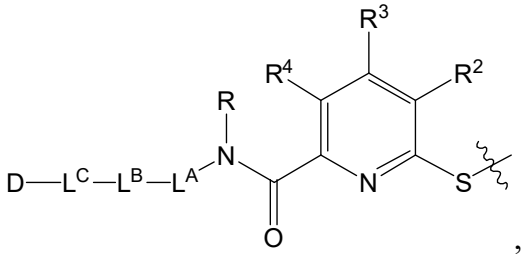
(I^{17})



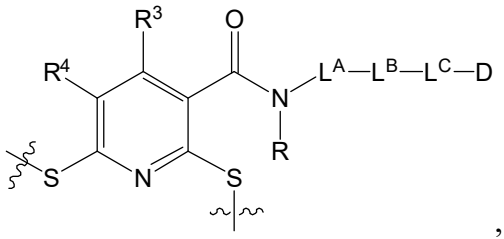
(I^{18})



(I^{19})

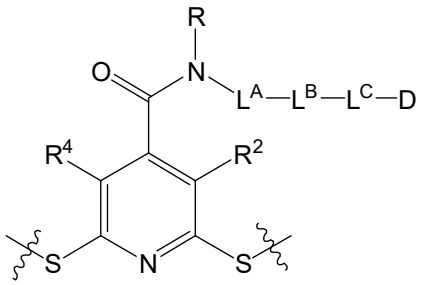


(I^{20})



, or

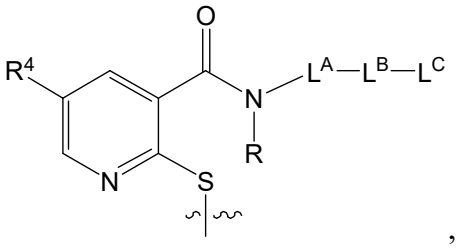
(I^{21})



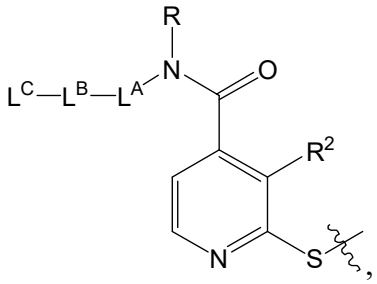
(I^{22})

wherein D is a drug moiety.

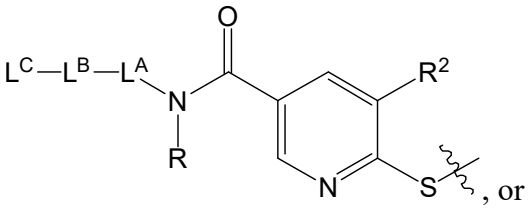
11. The drug conjugate of claim 3, comprising the structural formula:



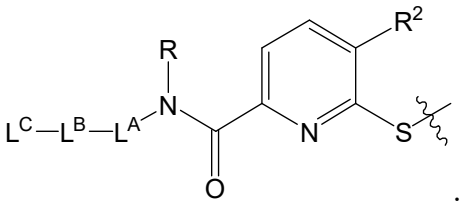
(I^{23})



(I^{24})

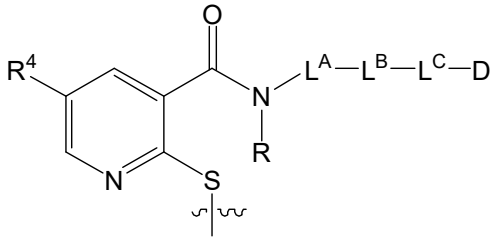


(I^{25})

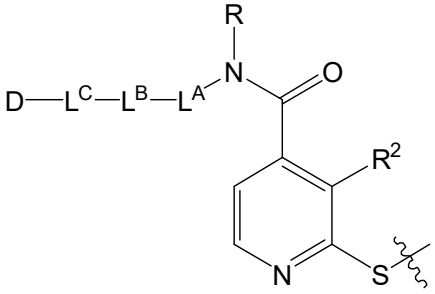


(I^{26})

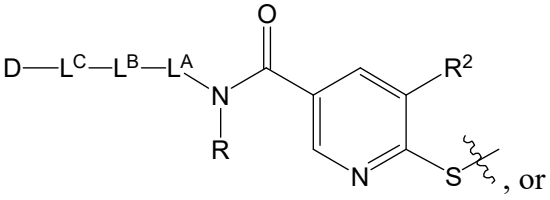
12. The drug conjugate of claim 11, further comprising drug moiety, comprising the structural formula:



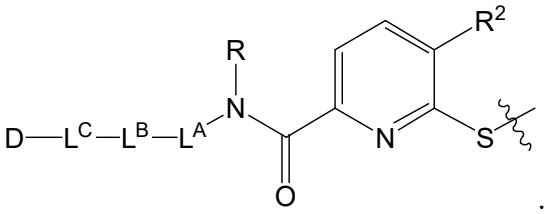
(I^{27})



(I^{28})



(I^{29})



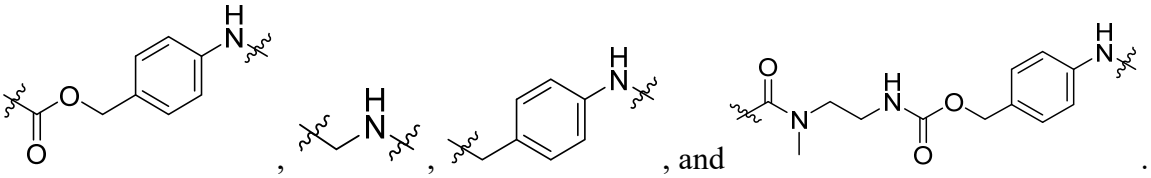
(I^{30})

13. The drug conjugate of any one of claims 9-12, wherein

the spacer moiety is selected from the group consisting of an alkyl, a heteroalkyl, polyethylene glycol (PEG), and a peptide;

the peptide moiety comprises 1 to 6 amino acids; and/or

the self-immolative moiety is selected from the group consisting of:



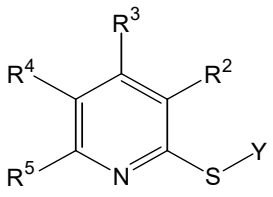
14. The drug conjugate of any one of claims 1-13, wherein

the drug moiety is a chemical agent selected from the group consisting of an antibiotic, an anti-cancer agent, a steroid, a TLR7/TLR9 antagonist, a peptide, a protein, and a nucleic acid;

the targeting moiety is selected from the group consisting of an antibody, small molecule, a peptide and a nucleic acid; and/or

the drug conjugate has a targeting moiety to drug moiety ratio of about 1:1 to about 1:16.

15. A drug conjugate comprising a targeting moiety, a linker moiety, and a drug moiety, wherein the drug moiety is conjugated to the linker which is conjugated to the targeting moiety, and wherein the linker moiety comprises the structural formula (II):



(II)

wherein:

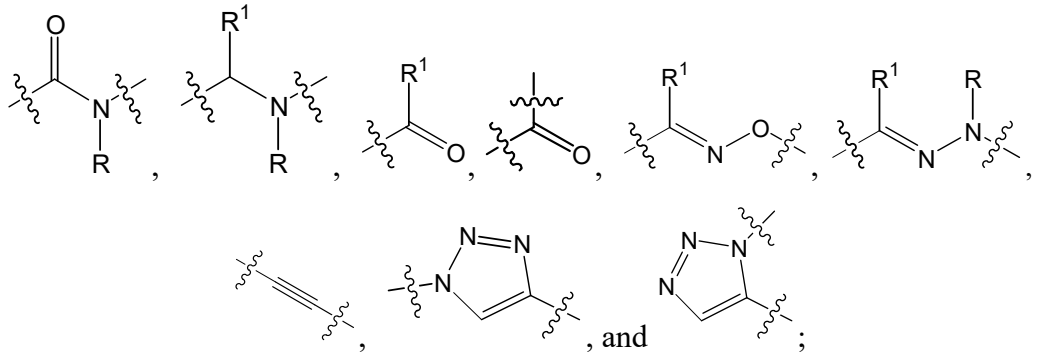
each R^2, R^3, R^4 is independently selected from the group consisting of H, NO_2, CN, CF_3, F, an unsubstituted or substituted C_{1-6} alkyl, C_{2-6} alkyene, C_{2-6} alkyne, C_{6-10} aryl, and W;

R^5 is H, Cl, SOR^6, SO_2R^6, OR^7, NRR^7 or W;

R^6 is an unsubstituted or substituted C_{1-6} alkyl or C_{6-10} aryl;

R^7 is an unsubstituted or substituted C_{2-6} alkyene or C_{2-6} alkyne;

W is selected from the group consisting of:



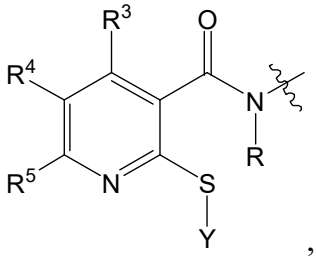
R^1 is H, an unsubstituted or substituted C_{1-6} alkyl, C_{2-6} alkyene, C_{2-6} alkyne or C_{6-10} aryl;

R is H, an unsubstituted or substituted C_{1-6} alkyl, C_{2-6} alkyene, C_{2-6} alkyne or C_{6-10} aryl; and

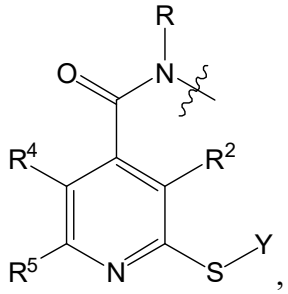
each Y is independently a peptide or an antigen-binding moiety that comprises a cysteine moiety,

or a pharmaceutically acceptable salt thereof.

16. The drug conjugate of claim 15, comprising the structural formula:

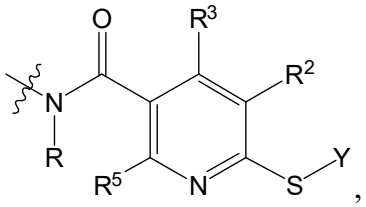


(II^1)



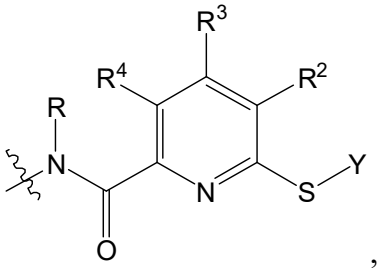
,

(II^2)



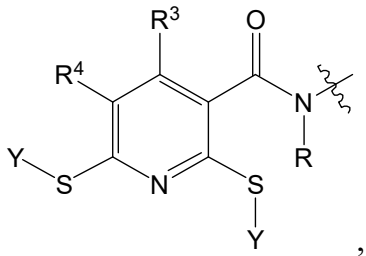
,

(II^3)



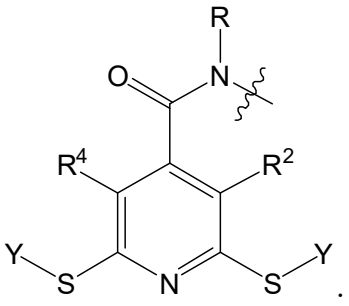
,

(II^4)



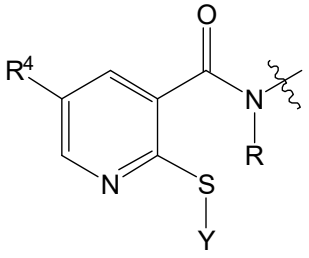
, or

(II^5)

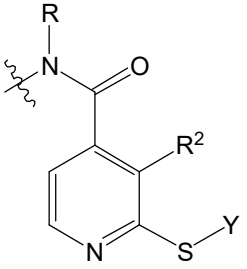


(II^6)

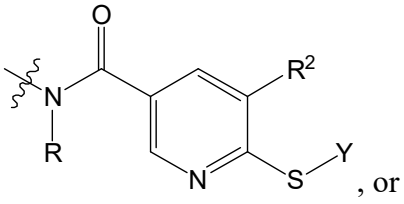
17. The drug conjugate of claim 16, comprising the structural formula:



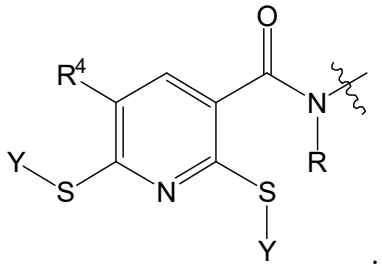
(II^7)



(II^8)



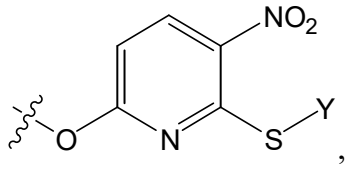
(II^9)



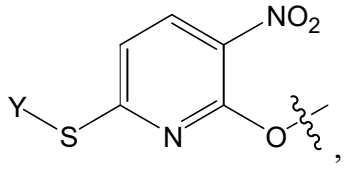
(II[10])

18. The drug conjugate of any one of claims 15-17, wherein one of R^2, R^3 and R^4 is selected from the group consisting of NO_2, CN, CF_3 and F.

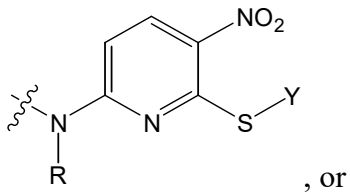
19. The drug conjugate of any one of claims 15-18, comprising the structural formula:



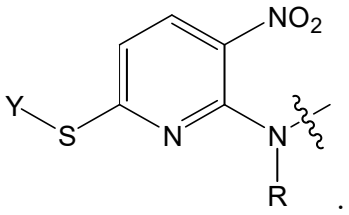
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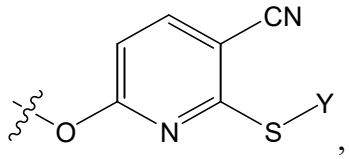


, or

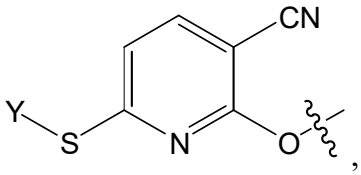


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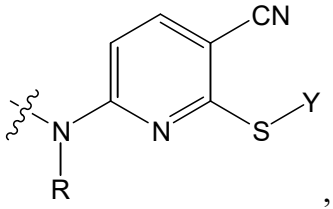
20. The drug conjugate of any one of claims 15-18, comprising the structural formula:



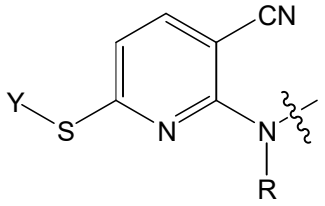
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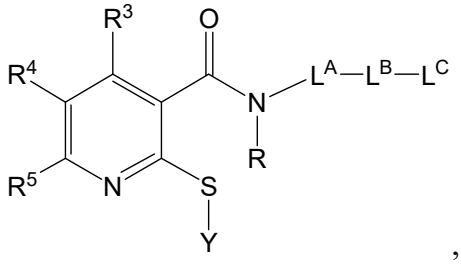
, or



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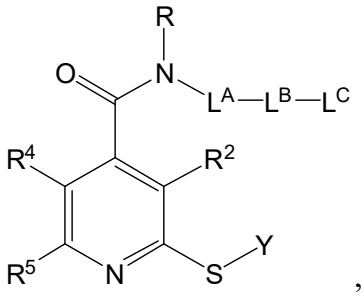
21. The drug conjugate of any one of claims 15-20, wherein the linker moiety further comprises a spacer, a peptide moiety, and/or a self-immolative moiety.

22. The drug conjugate of claim 15 or 16, comprising a structural formula:

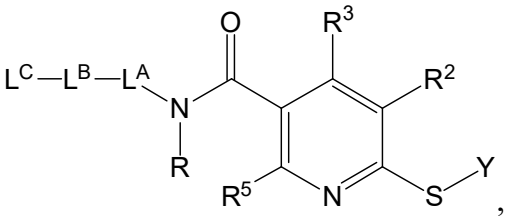


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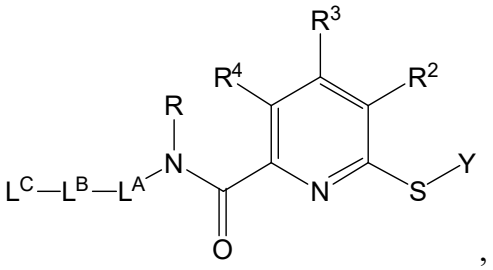
(II^{11})



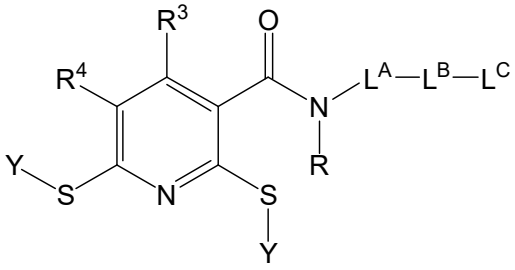
(II[12])



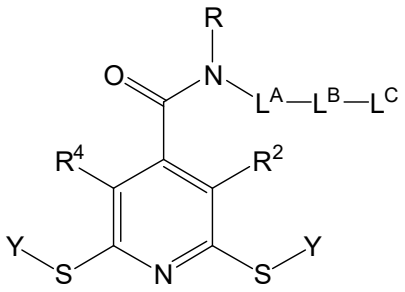
(II[13])



(II[14])



(II[15])



(II[16])

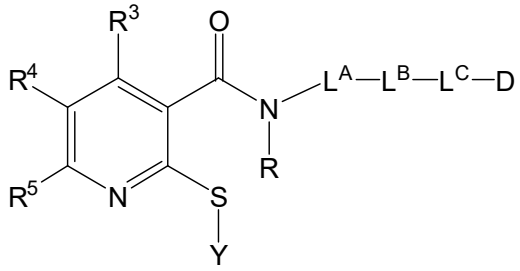
wherein

L^A is a spacer moiety or is absent;

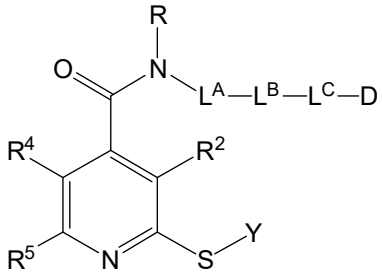
L^B is a peptide moiety or is absent; and

L^C is a self-immolative moiety or is absent.

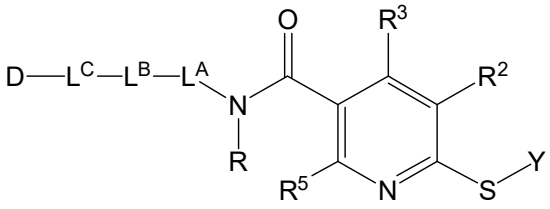
23. The drug conjugate of claim 22, further comprising a drug moiety, comprising the structural formula:



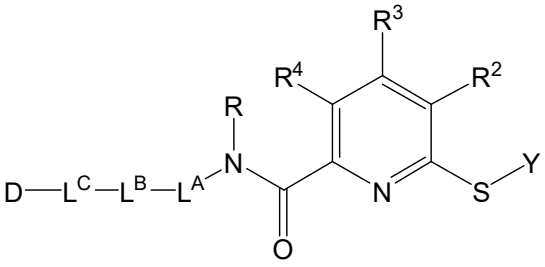
(II[17])



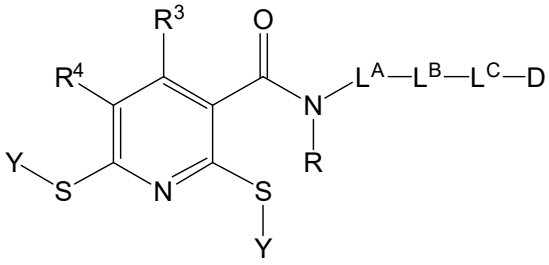
(II[18])



(II[19])

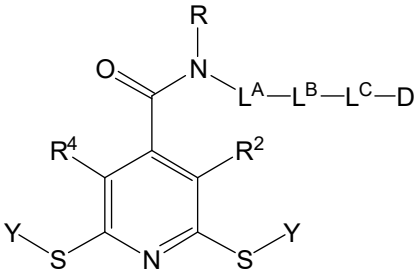


(II[20])



, or

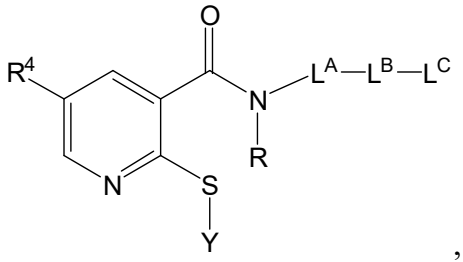
(II[21])



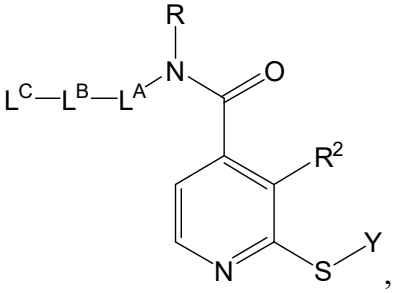
(II[22])

wherein D is a drug moiety.

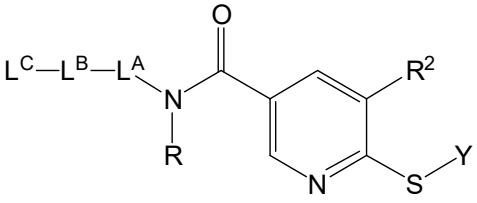
24. The drug conjugate of claim 22, comprising the structural formula:



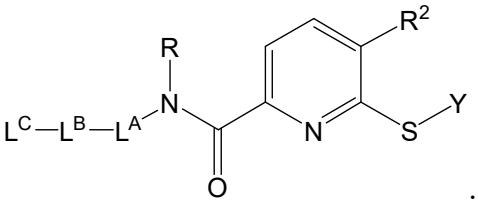
(II[23])



(II[24])

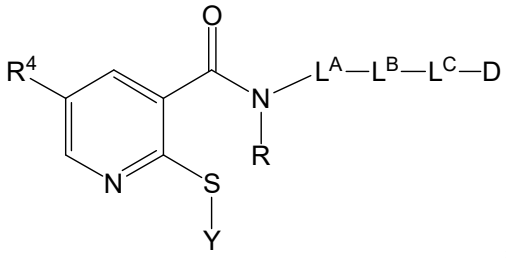


(II[25])



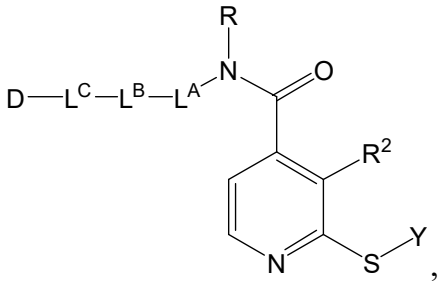
(II[26])

25. The drug conjugate of claim 24, further comprising a drug moiety, comprising the structural formula:



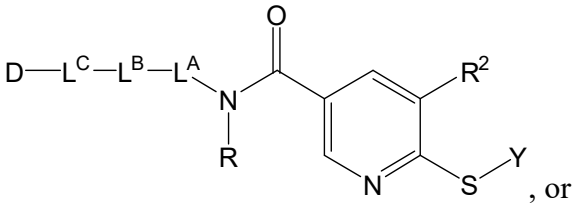
,

(II[27])



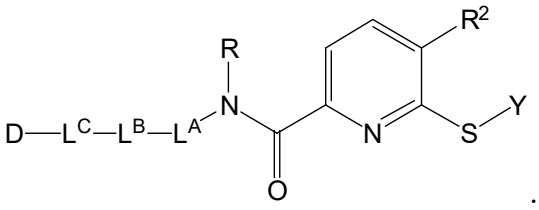
,

(II[28])



, or

(II[29])



.

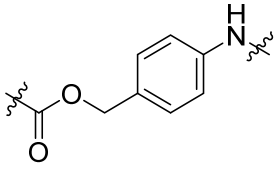
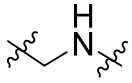
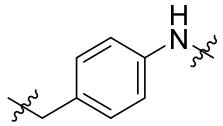
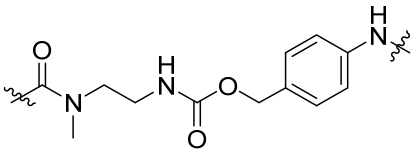
(II[30])

26. The drug conjugate of any one of claims 22-25, wherein

the spacer moiety is selected from the group consisting of an alkyl, a heteroalkyl, polyethylene glycol (PEG), and a peptide;

the peptide moiety comprises 1 to 6 amino acids; and/or

the self-immolative moiety is selected from the group consisting of:


, , , and .

27. The drug conjugate of any one of claims 22-27, wherein

the drug moiety is a chemical agent selected from the group consisting of an anti-cancer agent;

the targeting moiety is selected from the group consisting of an antibody, small molecule, a peptide and a nucleic acid; and/or

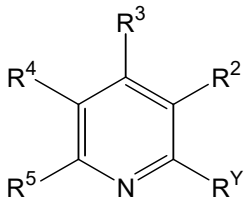
the drug conjugate has a targeting moiety to drug moiety ratio of about 1:1 to about 1:16.

28. A composition comprising a drug conjugate of any one of claims 1-27.

29. A pharmaceutical composition comprising a drug conjugate of any one of claims 1-27, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient, carrier or diluent.

30. A unit dosage form comprising a pharmaceutical composition of claim 29.

31. A compound useful for forming a linker moiety-drug moiety conjugate, a targeting moiety-linker moiety conjugate, or a targeting moiety-linker moiety-drug moiety conjugate, the compound having a structure comprising structural formula (III):



(III)

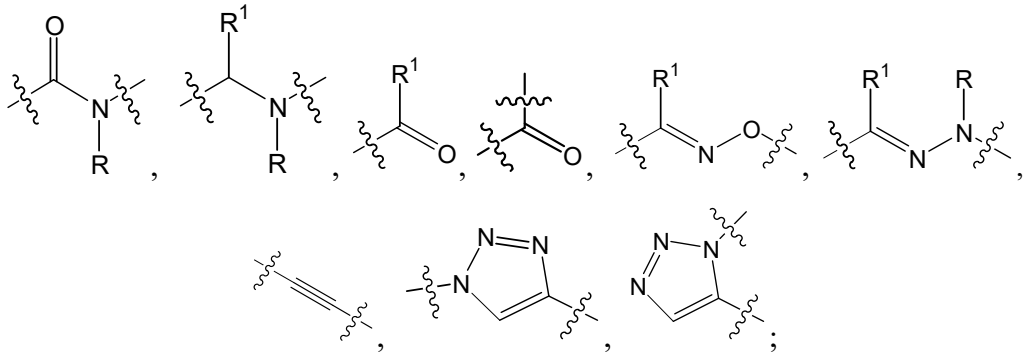
each R^2, R^3, R^4 is independently selected from the group consisting of H, NO_2, CN, CF_3, F, an unsubstituted or substituted C_{1-6} alkyl, C_{2-6} alkyene, C_{2-6} alkyne, C_{6-10} aryl, and W;

each R^5 and R^Y is independently H, Cl, SOR^6, SO_2R^6, OR^7, NRR^7 or W;

R^6 is an unsubstituted or substituted C_{1-6} alkyl or C_{6-10} aryl;

R^7 is an unsubstituted or substituted C_{2-6} alkyene or C_{2-6} alkyne;

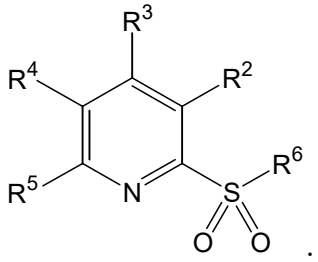
W is selected from:



R^1 is H, an unsubstituted or substituted C_{1-6} alkyl, C_{2-6} alkyene, C_{2-6} alkyne or C_{6-10} aryl; and

R is H, an unsubstituted or substituted C_{1-6} alkyl, C_{2-6} alkyene, C_{2-6} alkyne or C_{6-10} aryl.

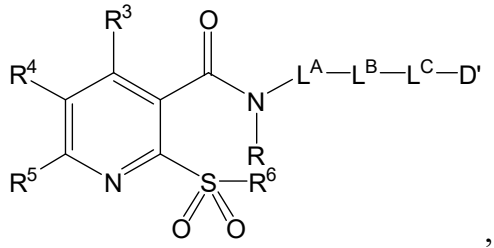
32. The compound of claim 31, wherein R^Y is SO_2R^6, having the structural formula:



(III^1)

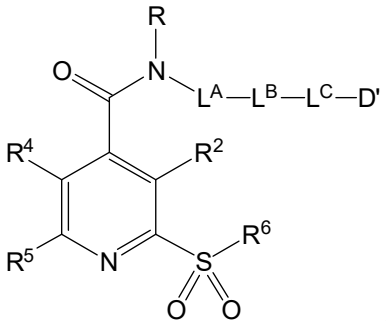
33. The compound of claim 31 or 32, wherein one of R^2, R^3 and R^4 is selected from the group consisting of NO_2, CN, CF_3 and F.

34. The compound of claim 33, having the structural formula:



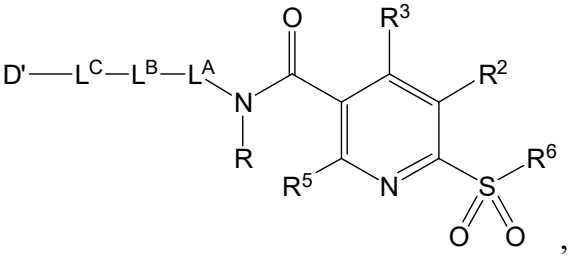
,

(III^2)



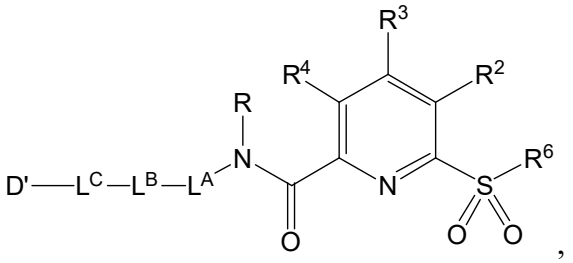
,

(III^3)



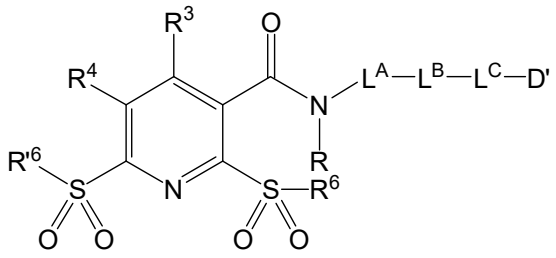
,

(III^4)



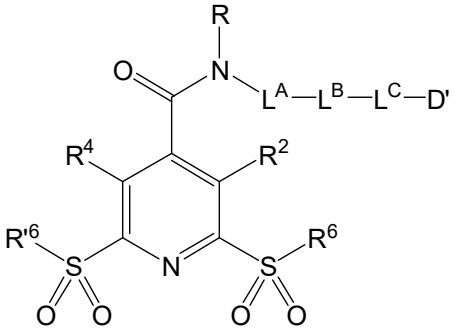
,

(III^5)



, or

(III^6)



(III^7)

wherein

L^A is a spacer moiety or is absent;

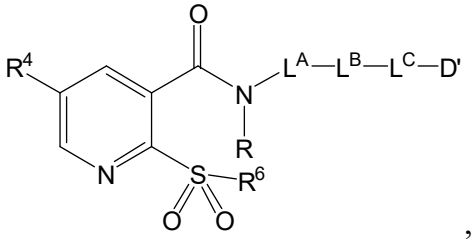
L^B is a peptide moiety or is absent;

L^C is a self-immolative moiety or is absent;

R^6 and R'^{6} may be the same or different and is an unsubstituted or substituted C_{1-6} alkyl or C_{6-10} aryl; and

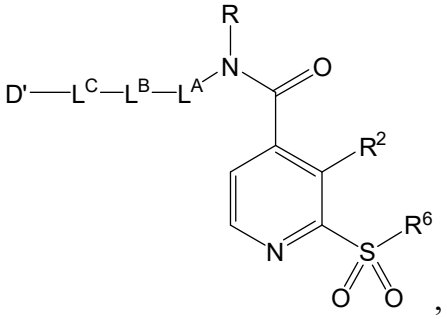
D' is a drug moiety D or is absent.

35. The compound of claim 34, having the structural formula:

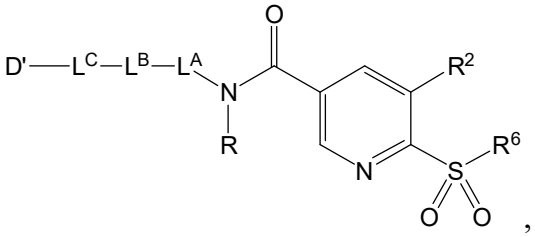


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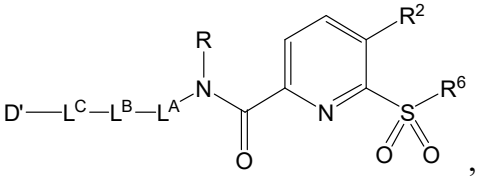
(III^8)



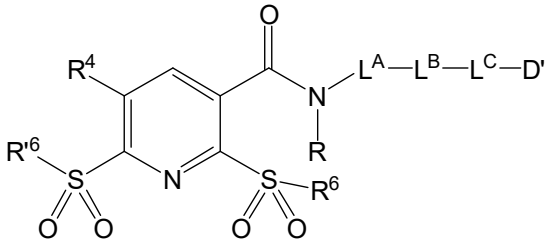
(III[9])



(III[10])

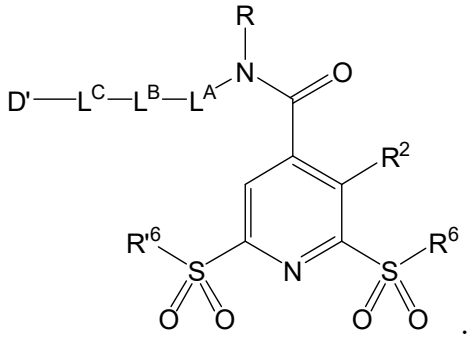


(III[11])



, or

(III[12])



(III[13])

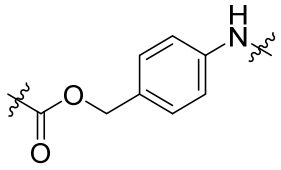
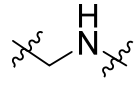
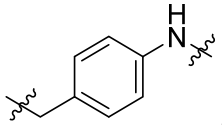
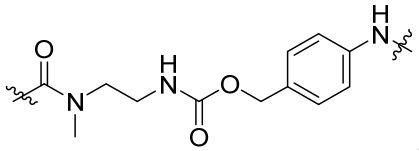
36. The compound of claim 34 or 35, wherein each of R^6 and R'^6 is methyl.

37. The compound of any one of claims 34-36, wherein

the spacer moiety is selected from the group consisting of an alkyl, a heteroalkyl, polyethylene glycol (PEG), and a peptide; and

the peptide moiety comprises 1 to 6 amino acids; and/or

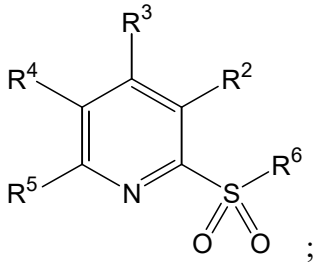
the self-immolative moiety is selected from the group consisting of:

, , , and .

38. The compound of claim 37, wherein the drug moiety is a chemical agent selected from the group consisting of an antibiotic, an anti-cancer agent, a steroid, a TLR7/TLR9 antagonist, a peptide, a protein, and a nucleic acid.

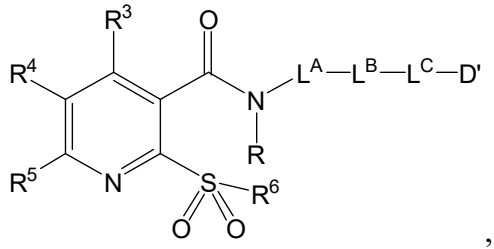
39. A method of preparing a linker-drug conjugate comprising:

(a) providing a compound having the structural formula:

;

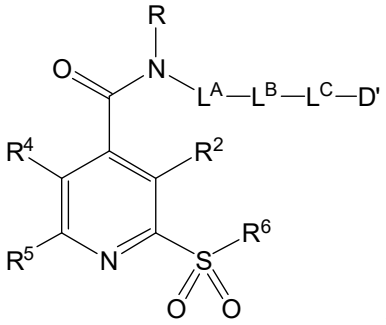
(III[1])

(b) reacting the compound with a precursor to a spacer, a precursor to a peptide, and/or a precursor to a self-immolative moiety, to form a conjugate having the structural formula:



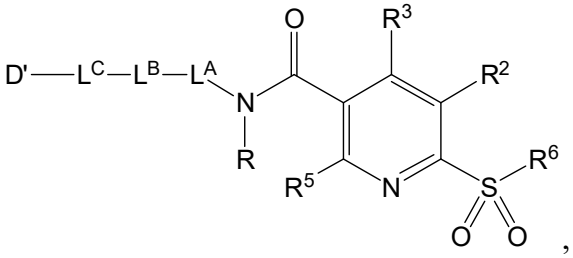
,

(III[2])



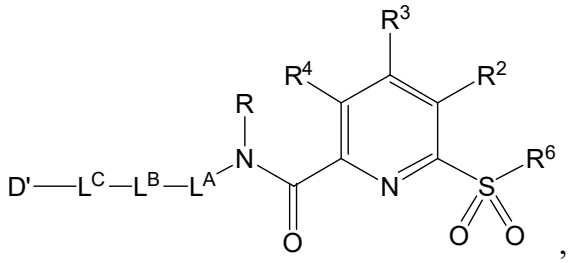
,

(III[3])



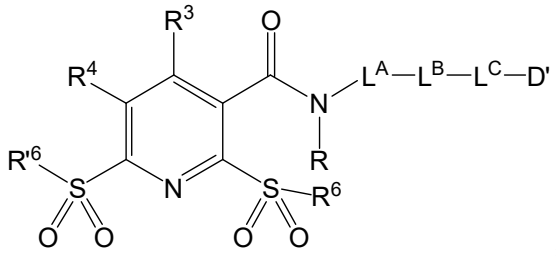
,

(III[4])



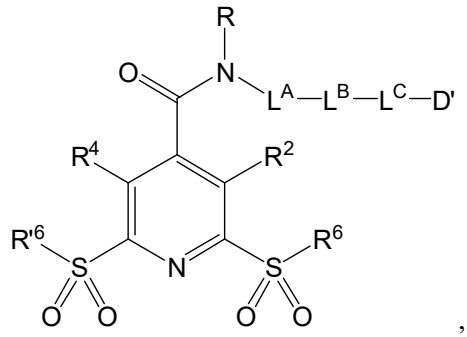
,

(III^5)



, or

(III^6)



,

(III^7)

wherein

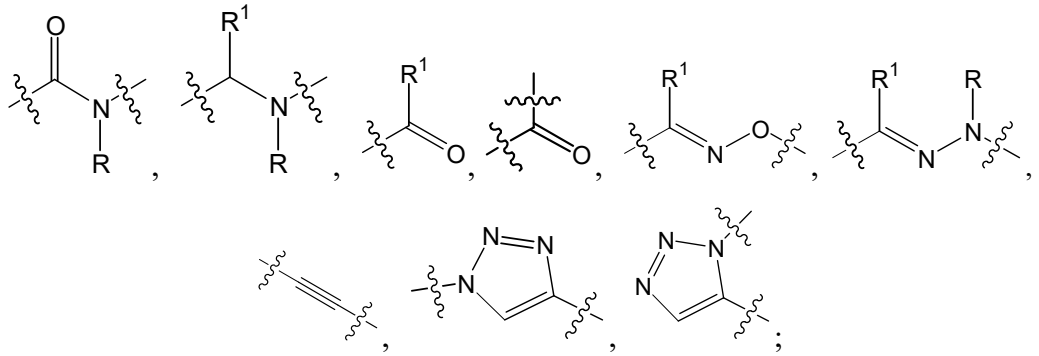
each R^2, R^3, R^4 is independently selected from the group consisting of H, NO_2, CN, CF_3, F, an unsubstituted or substituted C_{1-6} alkyl, C_{2-6} alkyene, C_{2-6} alkyne, C_{6-10} aryl, and W;

R^5 is H, Cl, SOR^6, SO_2R^6, OR^7, NRR^7 or W;

R^6 is an unsubstituted or substituted C_{1-6} alkyl or C_{6-10} aryl;

R^7 is an unsubstituted or substituted C_{2-6} alkyene or C_{2-6} alkyne;

W is selected from:



;

R^1 is H, an unsubstituted or substituted C_{1-6} alkyl, C_{2-6} alkyene, C_{2-6} alkyne or C_{6-10} aryl;

R is H, an unsubstituted or substituted C_{1-6} alkyl, C_{2-6} alkyene, C_{2-6} alkyne or C_{6-10} aryl;

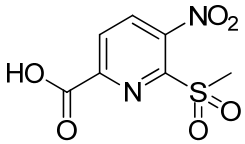
L^A is a spacer moiety or is absent;

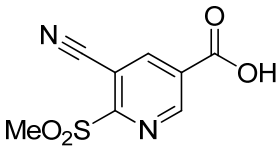
L^B is a peptide moiety or is absent;

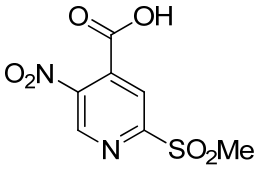
L^C is a self-immolative moiety or is absent; and

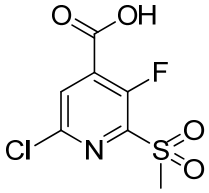
D' is a drug moiety D or is absent.

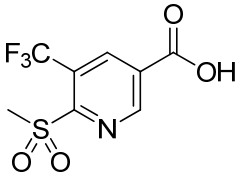
40. A compound selected from the group consisting of:

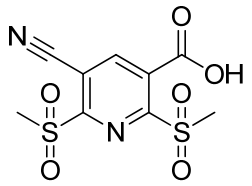


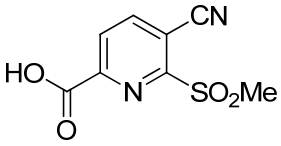


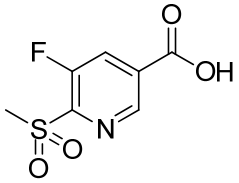


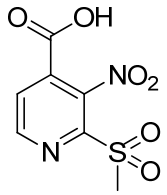


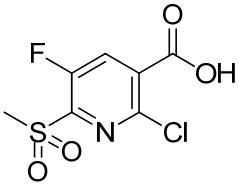


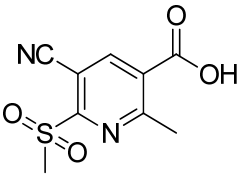


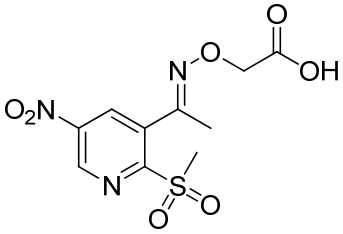


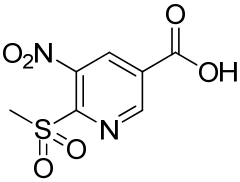


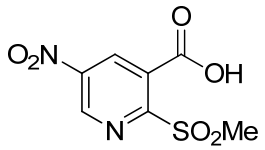


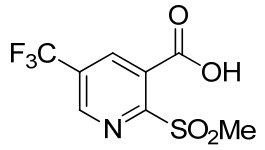


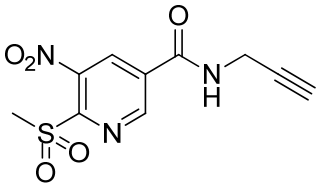


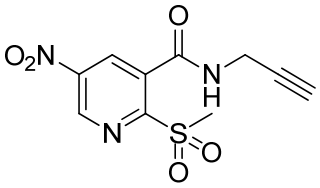


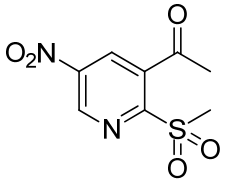


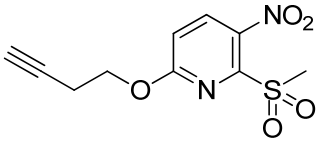


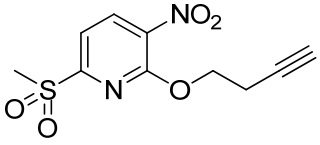


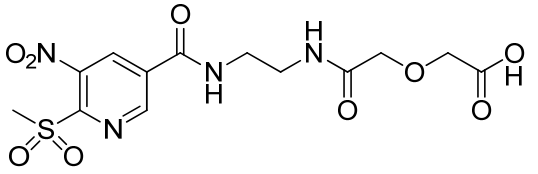


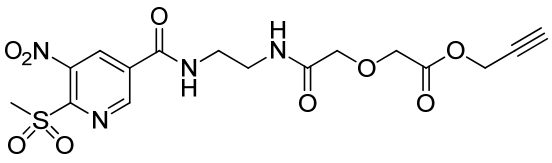


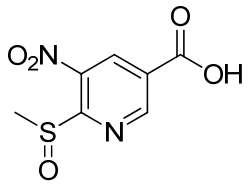


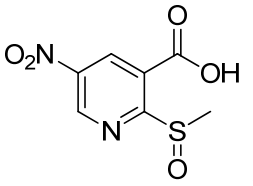




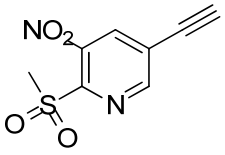






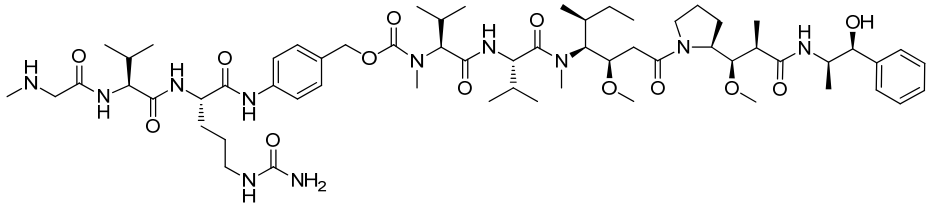


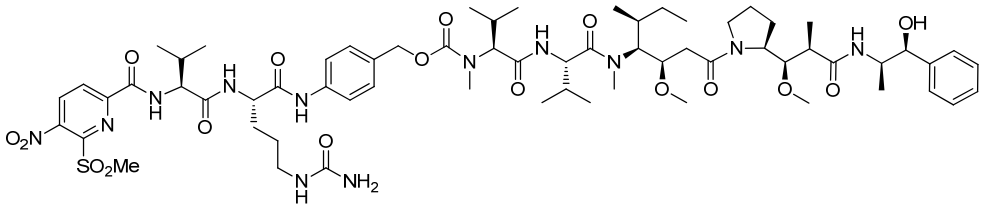
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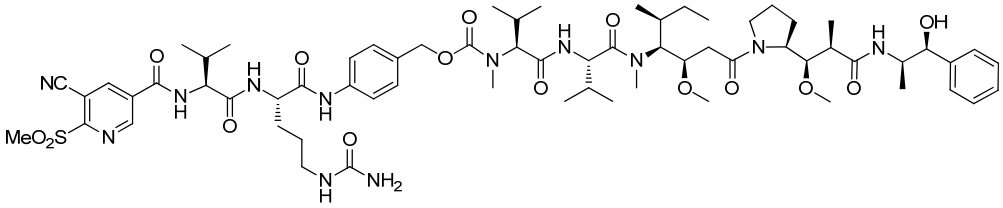


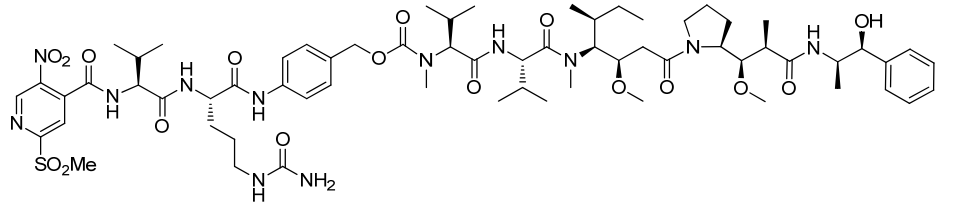
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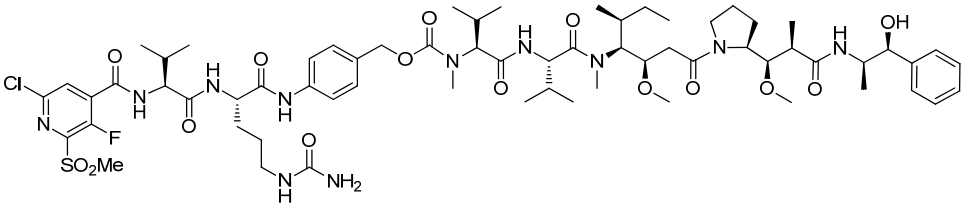
41. A compound selected from the group consisting of:

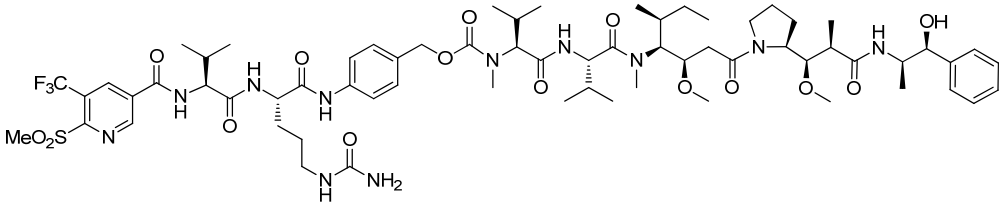


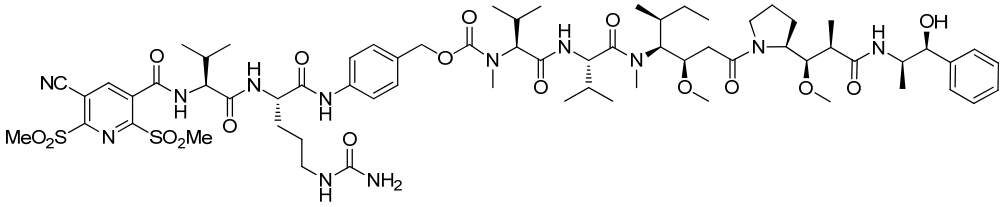


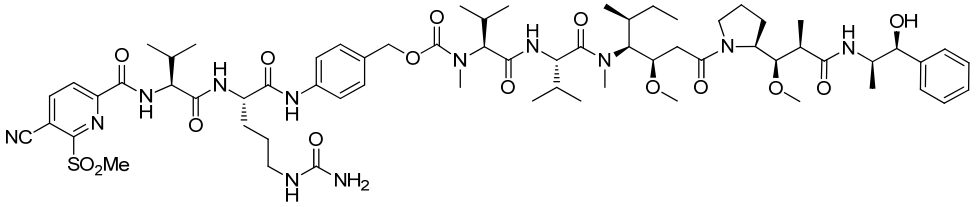


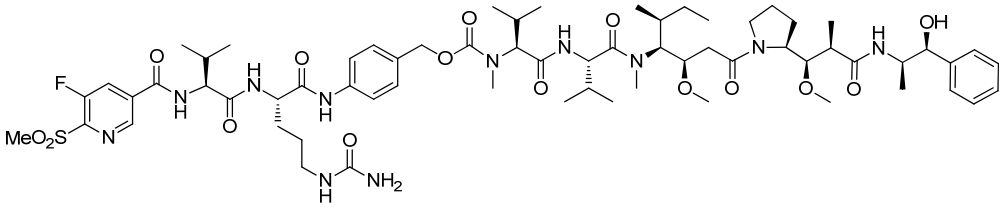


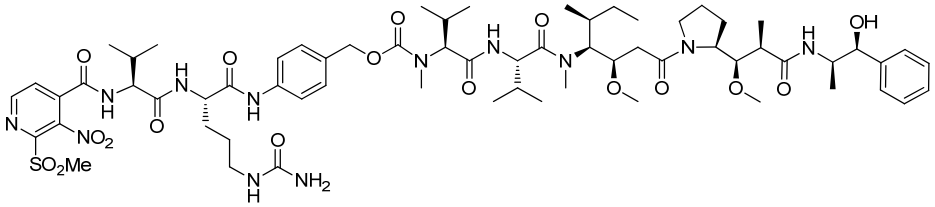


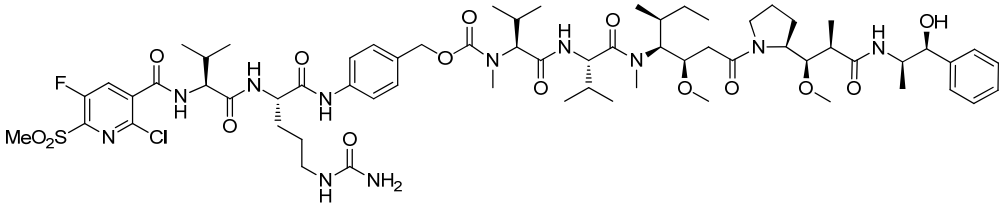


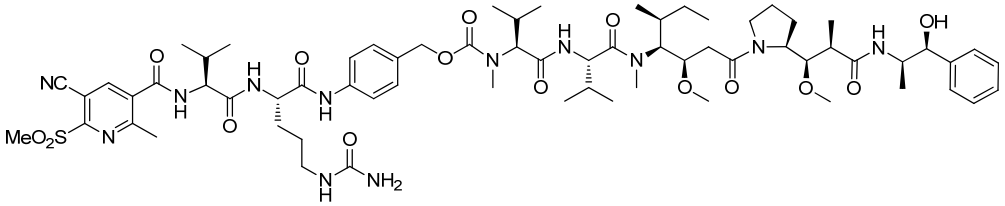


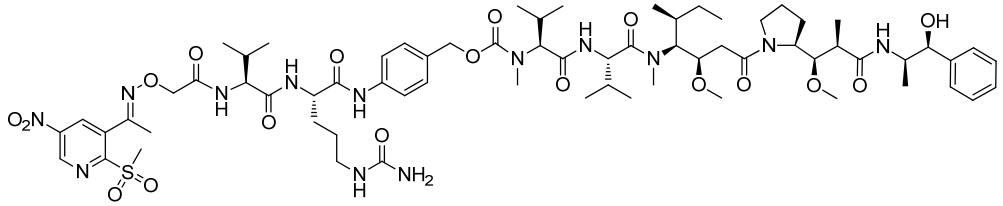


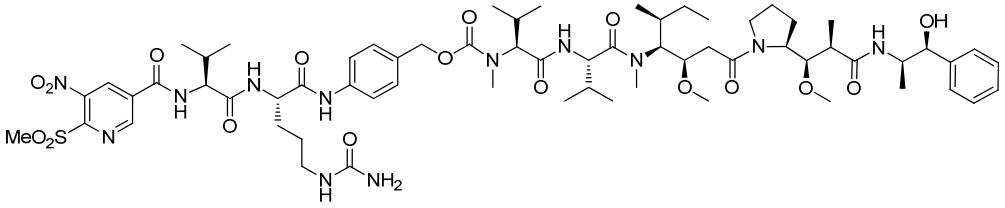


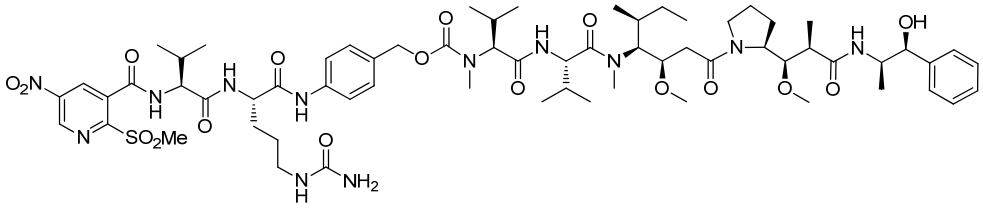


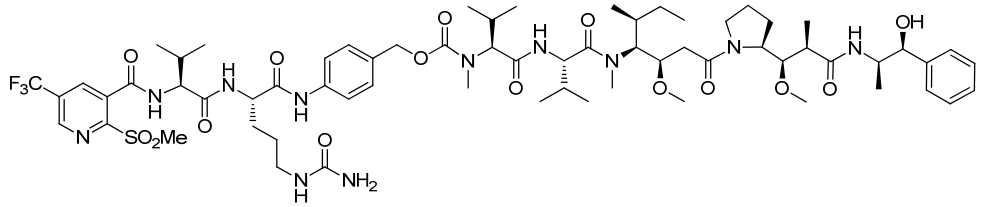


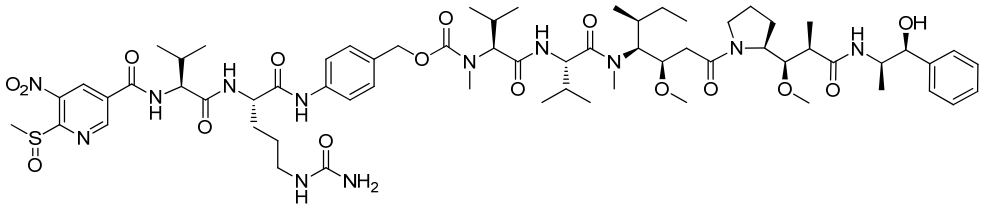


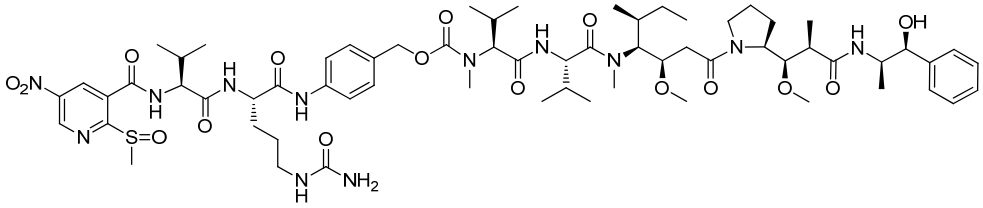


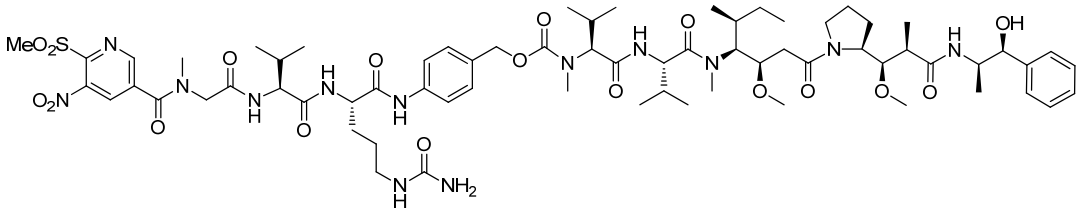


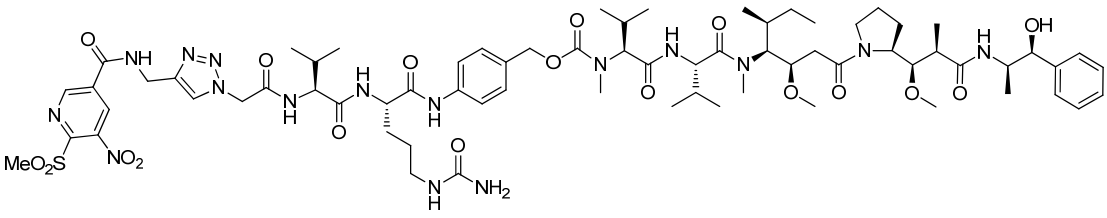


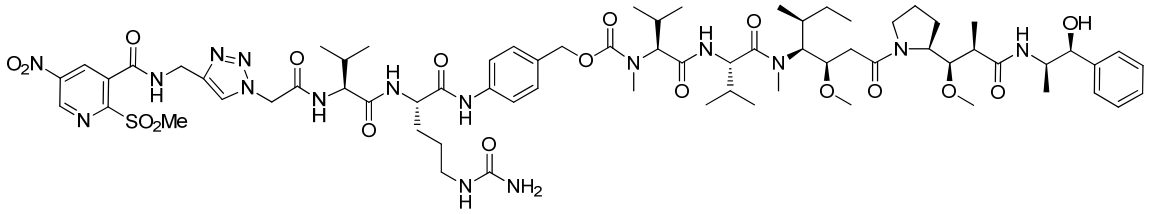


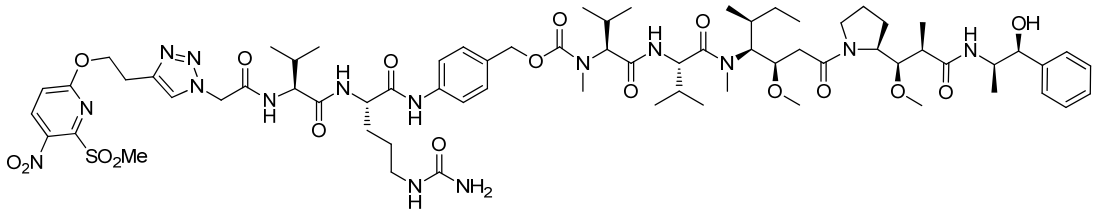


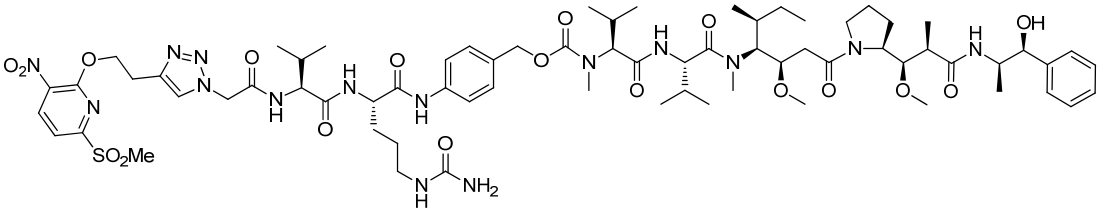


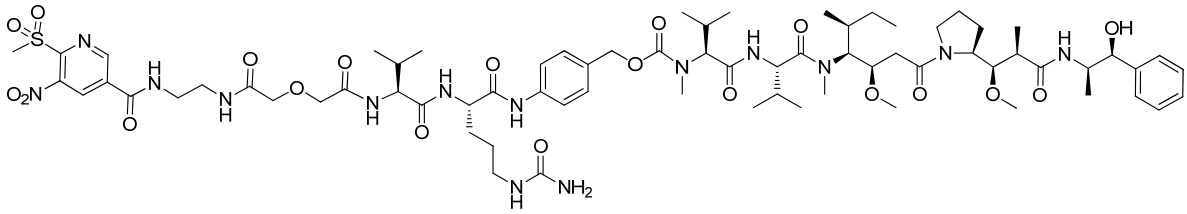


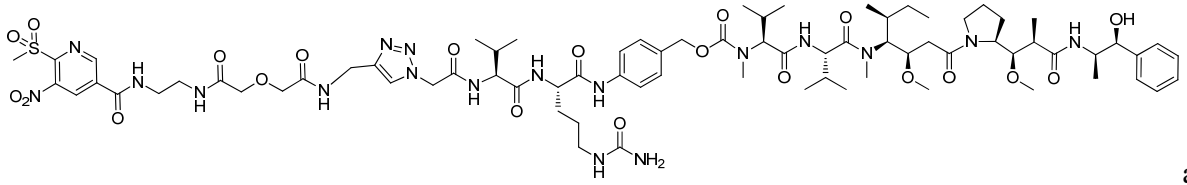




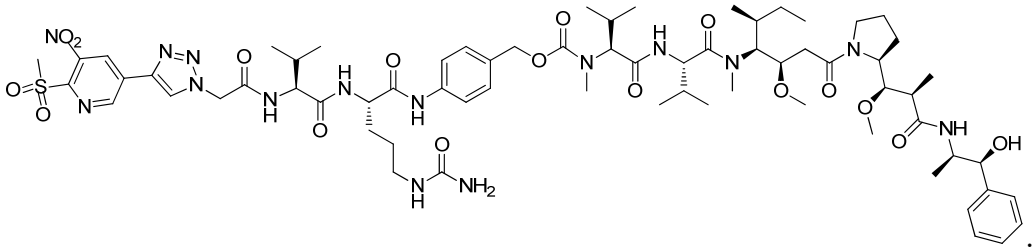








and



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42. The drug conjugate of any one of claims 1-27 for use as a medicament.

43. Use of a drug conjugate of any one of claims 1-27 for the manufacture of a medicament.

44. Use of a drug conjugate of any one of claims 1-27 in the manufacture of a medicament for medicament for treating cancer.

45. Use of a drug conjugate of any one of claims 1-27 in the manufacture of a medicament for treating an autoimmune disorder.

46. Use of a drug conjugate of any one of claims 1-27 in the manufacture of a medicament for treating an infectious disease.