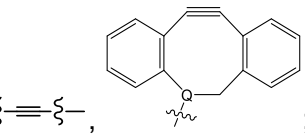
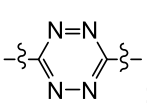
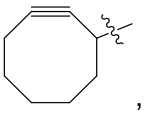
B is a branching unit comprising at least one adduct of group B', where the group B' is selected from -$N_3$, , ; and , where Q is C or N;

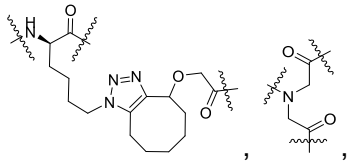
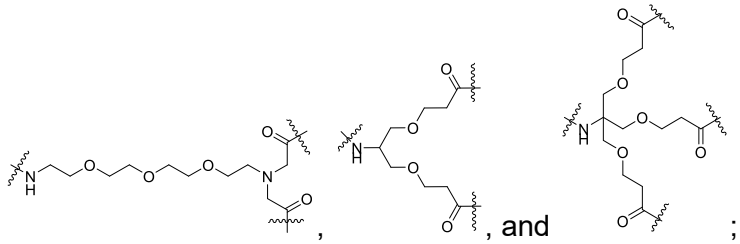
L2 has a structure according to Formula (L2):

$$B''\text{-}SP1\text{-}B2\text{-}(\text{-}SP2\text{-}AA\text{-}SP3)_p \quad (L2),$$

wherein:

B" is a group attached to the group B';

SP1 is absent or a first spacer unit;

B2 is absent or selected from the group consisting of , ;

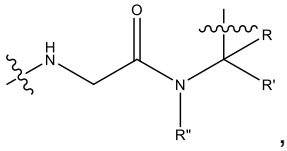
SP2 is absent or a second spacer unit;

AA is absent or a peptide unit comprising from 2 to 4 amino acids selected from glycine, valine, phenylalanine, proline, glutamic acid, lysine, phenylalanine, and citrulline, and combinations thereof;

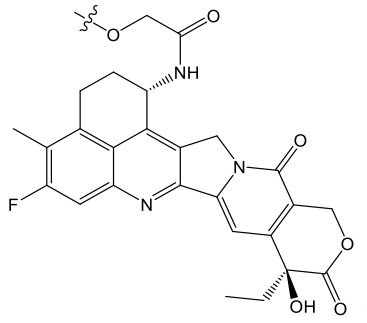
SP3 is absent or a third spacer unit covalently attached to the Dxd,

p is an integer from 1 to 12,

wherein the group B' and the group B" form the at least one adduct;

M is absent or a moiety having the structure , where R, R', and R" are independently at each occurrence hydrogen or a $C_1$-$C_4$ alkyl, or wherein R' and R" together form a 5-membered or a 6-membered ring;

Dxd is an anti-tumor agent having a structure according to Formula (P):



(P);

k is an integer from 1 to 12, and

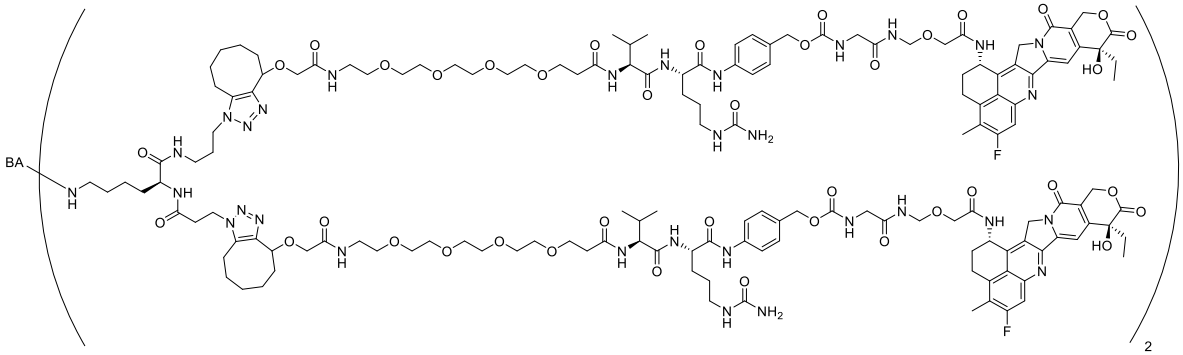
n is an integer from 1 to 30.

**[0013]** In another example, the present disclosure provides a compound having a structure according to Formula (I):

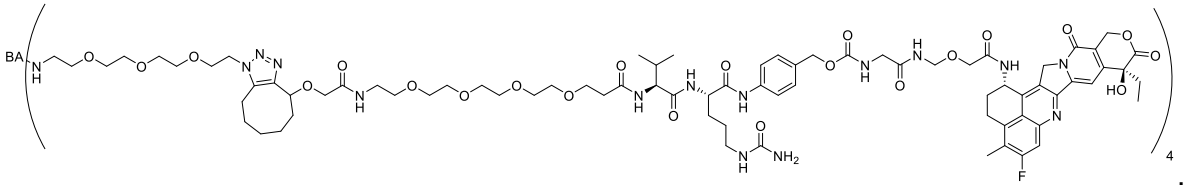
$$BA\text{-}(Gln\text{-}NH\text{-}L1\text{-}B\text{-}(\text{-}L2\text{-}M\text{-}Dxd)_k)_n \quad (I),$$

wherein:

BA is an antibody or an antigen-binding fragment thereof;



**[0060]** In one example, the compound has a structure:



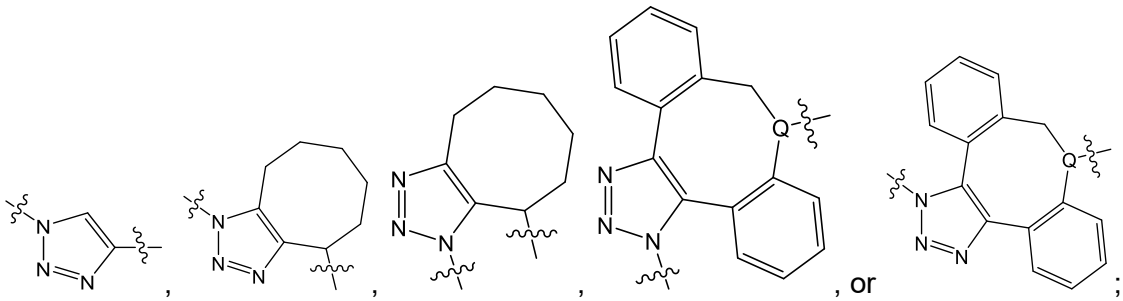
**[0060a]** In another aspect, there is provided a compound having a structure according to Formula (I):

$$BA\text{-}(\ NH\text{-}L1\text{-}B\text{-}(\text{-}L2\text{-}M\text{-}Dxd)_k)_n \quad (I),$$ wherein:

BA is an antibody or an antigen-binding fragment thereof;

L1 is absent or a first linker linked to said BA through side chain of a glutamine residue;

B is a branching unit comprising



;

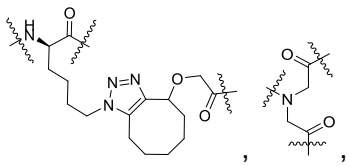
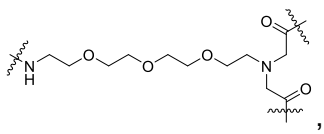
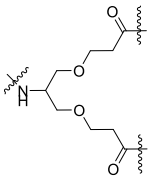
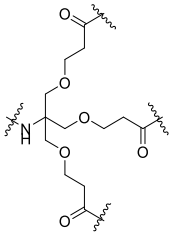
L2 has a structure according to Formula (L2):

$$B''\text{-}SP1\text{-}B2\text{-}(\text{-}SP2\text{-}AA\text{-}SP3)_p \quad (L2),$$

wherein:

B" is a group capable of covalently attaching to the group B' as defined above;

SP1 is absent or a first spacer unit;

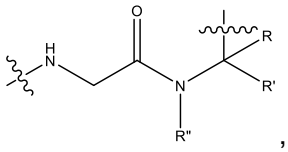
B2 is absent or selected from the group consisting of  ,  ,  ,  , and  ;

SP2 is absent or a second spacer unit;

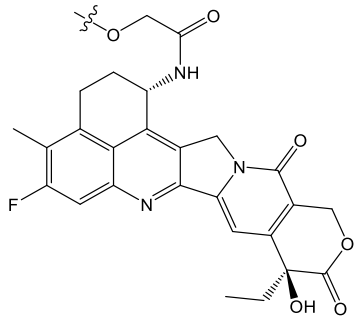
AA is absent or a peptide unit comprising from 2 to 4 amino acids selected from glycine, valine, phenylalanine, proline, glutamic acid, lysine, phenylalanine, and citrulline, and combinations thereof;

SP3 is absent or a third spacer unit covalently attached to the Dxd;

p is an integer from 1 to 12;

M is absent or a moiety having the structure  , where R, R', and R" are independently at each occurrence hydrogen or a $C_1$-$C_4$ alkyl, or wherein R' and R" together form a 5-membered or a 6-membered ring;

Dxd is an anti-tumor agent having a structure according to Formula (P):


(P);

k is an integer from 1 to 12, and

n is an integer from 1 to 30.

**[0061]** In another example, the present disclosure provides a compound having a structure according to Formula (I):

$$BA\text{-}(Gln\text{-}NH\text{-}L1\text{-}B\text{-}(\text{-}L2\text{-}M\text{-}Dxd)_k)_n \quad (I),$$

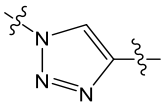
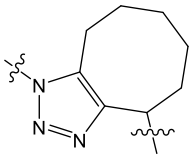
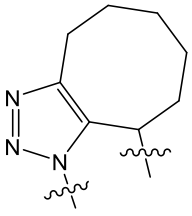
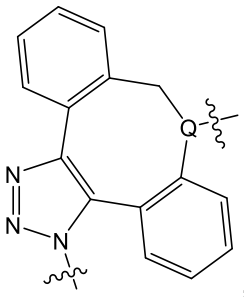
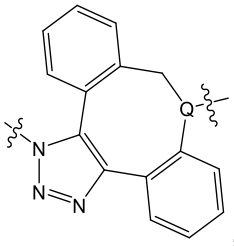
wherein:

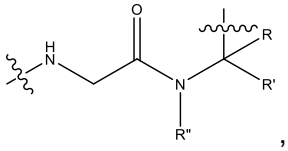
BA is an antibody or an antigen-binding fragment thereof;

Gln is a glutamine residue;

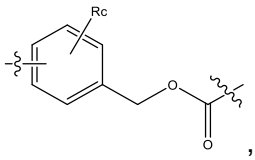
L1 is absent or a first linker;

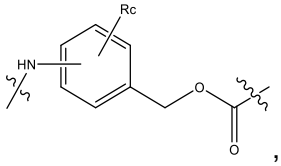
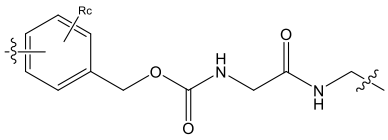
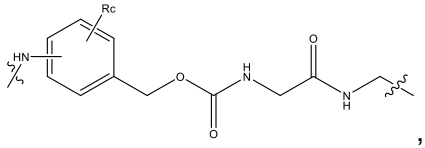
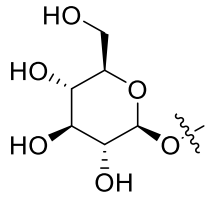
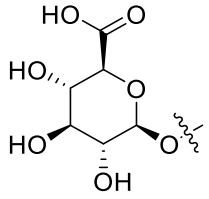
B is a branching unit comprising

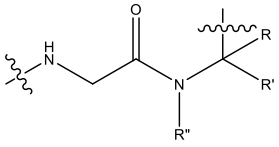

,

,

,

, and

, M is


absent or a moiety having the structure , where R, R', and R" are independently at each occurrence hydrogen or a $C_1$-$C_4$ alkyl, or wherein R' and R" together form a 5-membered or a 6-membered ring;

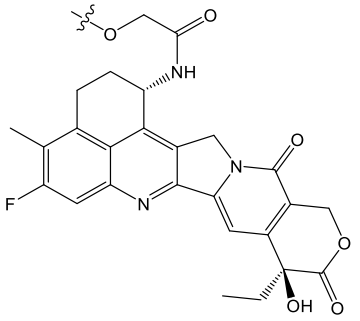
Dxd is an anti-tumor agent having a structure according to Formula (P):

SP3 is absent or a third spacer unit selected from the group consisting of, ,

, , , wherein $R_c$ is independently at each occurrence absent or a group selected from  and ;

M is absent or , where R, R', and R" are independently at each occurrence hydrogen or a $C_1$-$C_4$ alkyl, or wherein R' and R" together form a 5-membered or a 6-membered ring; and

Dxd is an anti-tumor agent having a structure according to Formula (P):

 (P), and

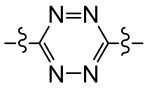
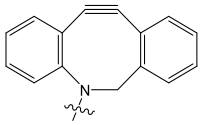
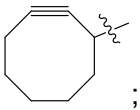
p is an integer from 1 to 12.

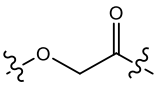
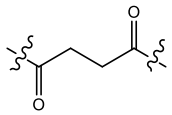
**[0062a]** In another aspect, there is a compound according to Formula (L2-P) or (L2'-P):

B"-SP1-B2-(-SP2-AA-SP3-M-Dxd)p (L2-P),

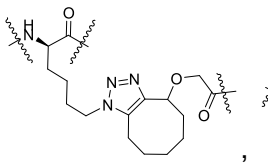
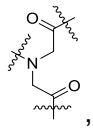
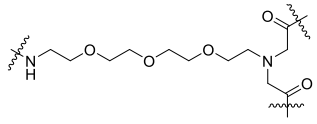
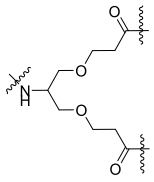
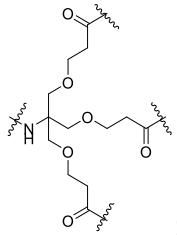
$H_2N$-SP1-B2-(-SP2-AA-SP3-M-Dxd)$_p$ (L2'-P),

wherein:

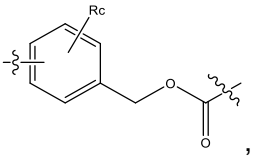
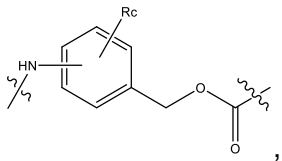
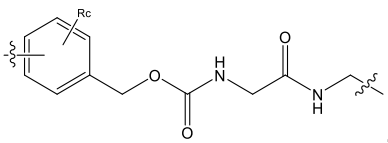
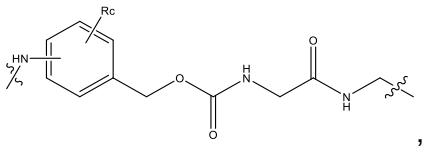
B” is selected from the group consisting of -$N_3$, , , ,  and ;

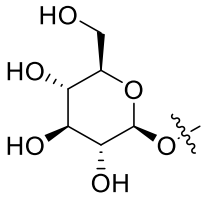
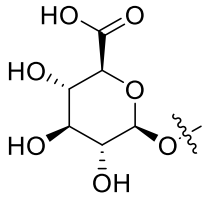
SP1 is absent or a first spacer unit selected from the group consisting of  and ;

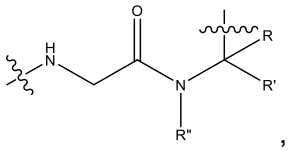
SP2 is absent or a second spacer unit selected from the group consisting of a $C_{1-6}$ alkylene, -$(CH_2$-$CH_2$-$O)_v$-, -NH-, -C(O)-, -NH-C(O)-, -NH-$(CH_2)_u$-, -NH-$(CH_2)_u$-C(O)-, -NH-$(CH_2$-$CH_2$-$O)_v$-, -NH-$(CH_2$-$CH_2$-$O)_v$-C(O)-, -NH-$(CH_2$-$CH_2$-$O)_v$-$(CH_2)_u$-, -NH-$(CH_2$-$CH_2$-$O)_v$-$(CH_2)_u$-C(O)-, -$(CH_2)_u$-NH-C(O)-, -NH-$(CH_2)_u$-NH-C(O)-, -NH-$(CH_2)_u$-C(O)-NH-, or combinations thereof; wherein subscripts u and v are independently an integer from 1 to 8;

B2 is absent or selected from the group consisting of , , , , and ;

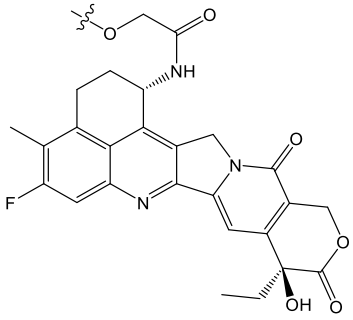
AA is absent or a peptide unit comprising from 2 to 4 amino acids;

SP3 is absent or a third spacer unit selected from the group consisting of, , , , , wherein

$R_c$ is independently at each occurrence absent or a group selected from  and ;

M is absent or , where R, R', and R" are independently at each occurrence hydrogen or a $C_1$-$C_4$ alkyl, or wherein R' and R" together form a 5-membered or a 6-membered ring; and

Dxd is an anti-tumor agent having a structure according to Formula (P):

 (P), and

**[0063]** p is an integer from 1 to 12.In one example, AA is a peptide unit comprising from 2 to 4 amino acids selected from glycine, valine, phenylalanine, proline, glutamic acid, lysine, alanine and citrulline, and combinations thereof.

**[0064]** In one example, AA is valine-citrulline, valine-alanine, or phenylalanine-lysine.

**[0065]** In one example, AA is selected from the group consisting of glycine-glycine-glycine (GGG), glycine-glycine-glycine-glycine (GGGG (SEQ ID NO: 2113)), glycine-glycine-phenylalanine (GGF), glycine-glycine-phenylalanine-glycine (GGFG (SEQ ID NO: 2114)) and glutamic acid-valine-citrulline (EVC).

covalently attached to the antibody via the adduct of the group B' and the group B"; k is an integer from 1 to 12, p is an integer from 1 to 30, and n is an integer from 1 to 30.

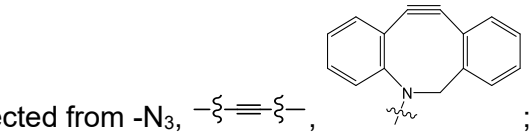
**[0069a]** In another aspect, there is provided an antibody-drug conjugate according to formula (II):

$$BA\text{-}(\ NH\text{-}L1\text{-}B\text{-}(SP1\text{-}B2\text{-}(\text{-}SP2\text{-}AA\text{-}SP3\text{-}M\text{-}Dxd)_k)_p)_n \quad (II),$$

wherein BA is an antibody;

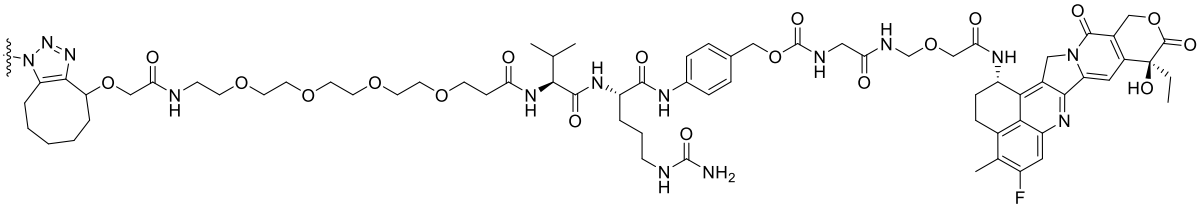
L1 is absent or a first linker linked to said BA through side chain of a glutamine residue;

B is a branching unit comprising at least one adduct of group B' and group B", where

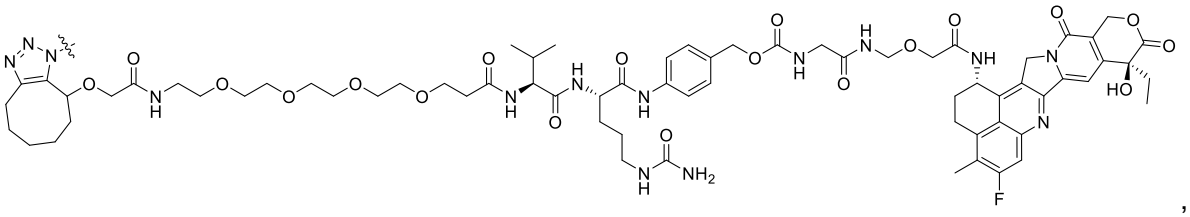
the group B' is selected from $-N_3$, , wherein

B"-SP1-B2-(-SP2-AA-SP3-M-Dxd)p is the compound according to Formula (L2-P) as defined above, and wherein the compound of formula (L2-P) is covalently attached to the antibody via the adduct of the group B' and the group B"; k is an integer from 1 to 12, p is an integer from 1 to 30, and n is an integer from 1 to 30.

**[0070]** In another aspect, the present disclosure provides an antibody-drug conjugate comprising an antibody and a linker-payload, wherein the linker-payload comprises the structure:



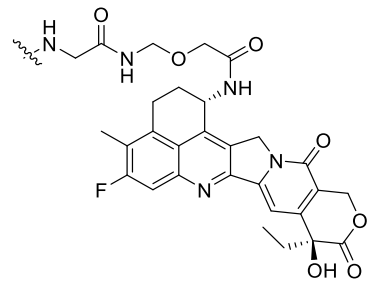
, or



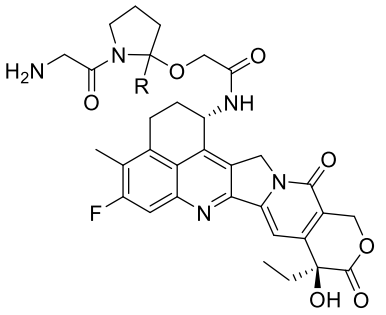
,

where ~~~ represents the point of attachment to the antibody, directly or through a second linker, or a pharmaceutically acceptable salt thereof.

**[0070a]** In another aspect, there is provided a composition comprising a population of compounds as defined above, having a drug-antibody ratio (DAR) of 0.5 to 30.0.

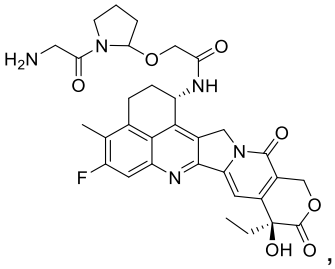
**[0081]** An antibody-drug conjugate comprising an antibody, a linker, and a payload, wherein the payload is , or a pharmaceutically acceptable salt thereof, where ~~~ represents the point of attachment to the linker.

**[0082]** In one example, the compound has a structure according to Formula (P2):

 (P2),

wherein R is a hydrogen or a $C_1$-$C_4$ alkyl, or a pharmaceutically acceptable salt thereof.

**[0083]** In one example, the compound is

, or a pharmaceutically acceptable salt thereof.

**[0084]** In one example, the present disclosure provides a pharmaceutical composition comprising the compound according to any of the preceding examples, and a diluent, a carrier, and/or an excipient.

**[0084a]** In another aspect, there is provided a use of the compound, or the composition as described above, in the manufacture of a medicament for the treatment of cancer in a subject in need thereof, comprising the compound or composition to be administered to the subject.

**[0085]** In one example, the present disclosure provides a method of treating a condition in a subject in need thereof comprising administering to the subject a therapeutically effective amount of the compound according to any of the preceding examples, or the composition of any one of the preceding examples.

**[0086]** In one example, the condition is cancer.

**[0087]** In one example, the cancer is selected from the group consisting of breast cancer, ovarian cancer, prostate cancer, lung cancer, liver cancer, or brain cancer.

**[0088]** In one example, the condition is HER2+ breast cancer.

**[0089]** In another aspect, the present disclosure provides a method of selectively delivering a compound into a cell, wherein the compound is according to any one of the preceding examples.

**[0090]** In another aspect, the present disclosure provides a method of selectively targeting an antigen on a surface of a cell with a compound, wherein the compound is according to any one of the preceding examples.

[0090a] In another aspect, there is provided a compound or a composition as described above for use in therapy.

**[0091]** In one example, the cell is a mammalian cell.

**[0092]** In one example, the cell is a human cell.

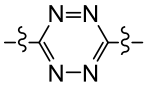
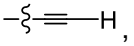
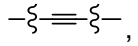
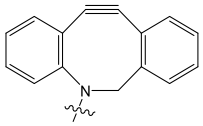
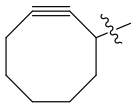
**[0093]** In one example, the cell is a cancer cell.

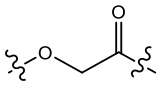
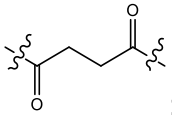
**[0094]** In one example, the cancer cell is selected from the group consisting of a breast cancer cell, an ovarian cancer cell, a prostate cancer cell, a lung cancer cell, a liver cancer cell, or a brain cancer cell.

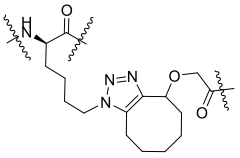
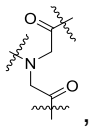
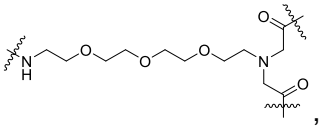
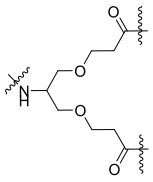
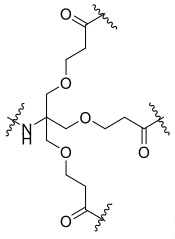
**[0094a]** In another aspect, there is provided a compound according to Formula (L2"-P)

maleimide-N-SP1-B2-(-SP2-AA-SP3-M-Dxd)$_p$ (L2"-P),

wherein:

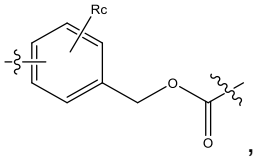
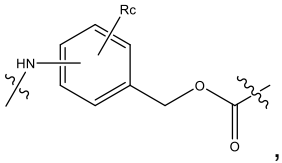
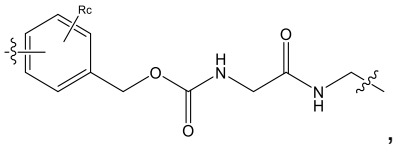
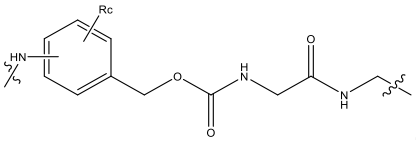
B" is selected from the group consisting of -$N_3$, , , ,  and ;

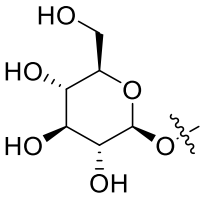
SP1 is absent or a first spacer unit selected from the group consisting of  and ;

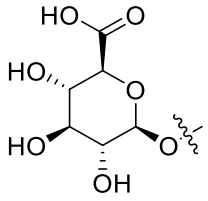
B2 is absent or selected from the group consisting of , , , , and ;

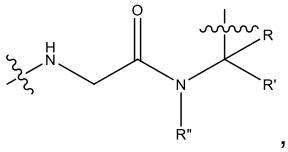
SP2 is absent or a second spacer unit selected from the group consisting of a $C_{1-6}$ alkylene, -$(CH_2$-$CH_2$-$O)_v$-, -NH-, -C(O)-, -NH-C(O)-, -NH-$(CH_2)_u$-, -NH-$(CH_2)_u$-C(O)-, -NH-$(CH_2$-$CH_2$-$O)_v$-, -NH-$(CH_2$-$CH_2$-$O)_v$-C(O)-, -NH-$(CH_2$-$CH_2$-$O)_v$-$(CH_2)_u$-, -NH-$(CH_2$-$CH_2$-$O)_v$-$(CH_2)_u$-C(O)-, -$(CH_2)_u$-NH-C(O)-, -NH-$(CH_2)_u$-NH-C(O)-, -NH-$(CH_2)_u$-C(O)-NH-, or combinations thereof; wherein subscripts u and v are independently an integer from 1 to 8;

AA is absent or a peptide unit comprising from 2 to 4 amino acids;

SP3 is a third spacer unit selected from the group consisting of, , , , , wherein

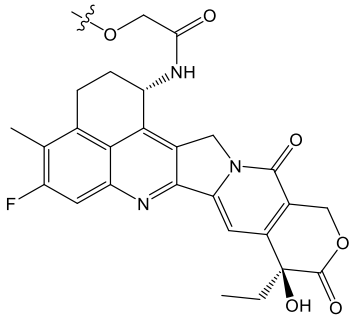


$R_c$ is independently at each occurrence absent or a group selected from  and ;



M is absent or , where R, R', and R" are independently at each occurrence hydrogen or a $C_1$-$C_4$ alkyl, or wherein R' and R" together form a 5-membered or a 6-membered ring; and

Dxd is an anti-tumor agent having a structure according to Formula (P):



(P), and

p is an integer from 1 to 12.

**[0095]** In one example, the present disclosure provides a method of producing a compound having a structure according to Formula (A):

$$BA\text{-}(Gln\text{-}NH\text{-}L1\text{-}B\text{-}(\text{-}L2\text{-}(\text{-}M\text{-}Dxd)_m)_k)_n \quad (A),$$

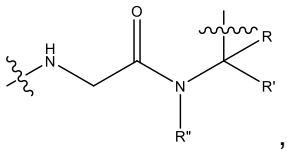
wherein BA is an antibody or an antigen-binding fragment thereof;

Gln is a glutamine residue;

L1 is a first linker;

B is a branching unit comprising at least one adduct of a group B' and a group B";

L2 is a second linker covalently attached to the branching unit B via at least one group B";

M is absent or , where R, R', and R" are independently at each occurrence hydrogen or a $C_1$-$C_4$ alkyl, or wherein R' and R" together form a 5-membered or a 6-membered ring;

Dxd is an anti-tumor agent comprising a structure according to Formula (P):

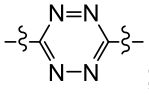
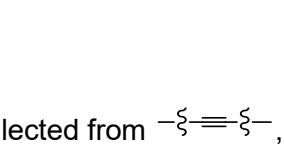
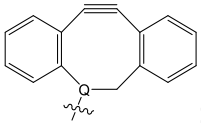
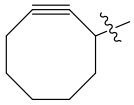
WHAT IS CLAIMED IS:

1. A compound having a structure according to Formula (A):

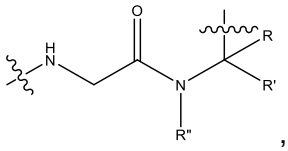
$$BA\text{-}(\ NH\text{-}L1\text{-}B\text{-}(\text{-}L2\text{-}(\text{-}M\text{-}Dxd)_m)_k)_n \quad (A),$$ wherein:

BA is an antibody or an antigen-binding fragment thereof;

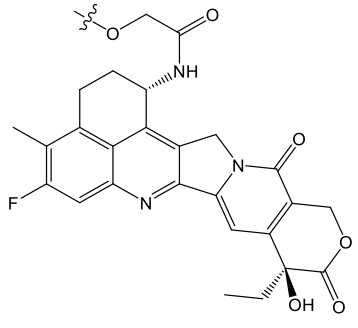
L1 is absent or a first linker linked to said BA through side chain of a glutamine residue;

B is a branching unit comprising at least one adduct of group B' and group B", wherein one of the groups B' and B" is selected from $-N_3$ and ; and the other of the groups B' and B" is selected from , ; and , where Q is C or N;

L2 is a second linker covalently attached to the branching unit B via the at least one group B";

M is absent or a moiety having the structure , where R, R', and R" are independently at each occurrence hydrogen or a $C_1$-$C_4$ alkyl, or wherein R' and R" together form a 5-membered or a 6-membered ring;

Dxd is an anti-tumor agent having a structure according to Formula (P):

 (P);

k is an integer from 1 to 12;

m is an integer from 1 to 30, and

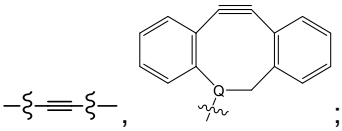
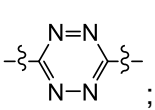
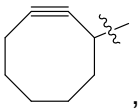
n is an integer from 1 to 30.

2. A compound having a structure according to Formula (I):

$$BA\text{-}(\ NH\text{-}L1\text{-}B\text{-}(\text{-}L2\text{-}M\text{-}Dxd)_k)_n \quad (I),$$ wherein:

BA is an antibody or an antigen-binding fragment thereof;

L1 is absent or a first linker linked to said BA through side chain of a glutamine residue;

B is a branching unit comprising at least one adduct of group B', where the group B' is selected from -$N_3$, , ; and , where Q is C or N;

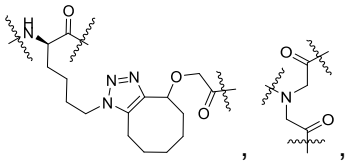
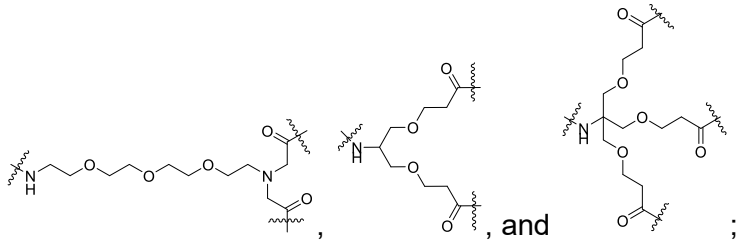
L2 has a structure according to Formula (L2):

$$B''\text{-}SP1\text{-}B2\text{-}(\text{-}SP2\text{-}AA\text{-}SP3)_p \quad (L2),$$

wherein:

B" is a group attached to the group B';

SP1 is absent or a first spacer unit;

B2 is absent or selected from the group consisting of , ;

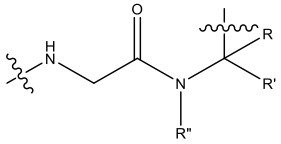
SP2 is absent or a second spacer unit;

AA is absent or a peptide unit comprising from 2 to 4 amino acids selected from glycine, valine, phenylalanine, proline, glutamic acid, lysine, phenylalanine, and citrulline, and combinations thereof;

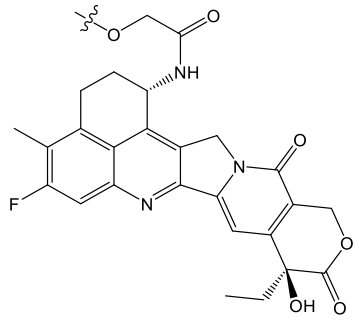
SP3 is absent or a third spacer unit covalently attached to the Dxd,

p is an integer from 1 to 12,

wherein the group B' and the group B" form the at least one adduct;

M is absent or a moiety having the structure , where R, R', and R" are independently at each occurrence hydrogen or a $C_1$-$C_4$ alkyl, or wherein R' and R" together form a 5-membered or a 6-membered ring;

Dxd is an anti-tumor agent having a structure according to Formula (P):



(P);

k is an integer from 1 to 12, and
n is an integer from 1 to 30.

3. The compound of claim 1 or claim 2, wherein the BA is an anti-HER2 antibody, an anti-STEAP2 antibody, an anti-MET antibody, an anti-EGFRVIII antibody, an anti-MUC16 antibody, an anti-PRLR antibody, an anti-PSMA antibody, an anti-FGFR2 antibody, an anti-FOLR1 antibody, an anti-HER2/HER2 bispecific antibody, an anti-MET/MET bispecific antibody, or an antigen-binding fragment thereof.

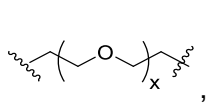
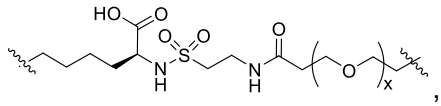
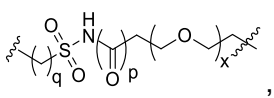
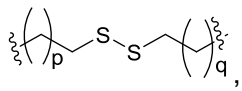
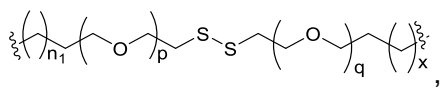
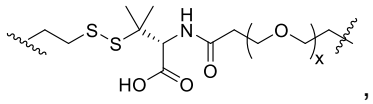
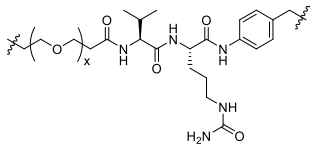
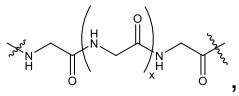
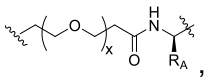
4. The compound of any of claims 1-3, wherein the glutamine residue is naturally present in a CH2 or CH3 domain of the BA, or wherein the glutamine residue is introduced to the BA by modifying one or more amino acids.

5. The compound of claim any of claims 1-3, wherein the glutamine residue is Q295 or N297Q.

6. The compound of any of claims 1-5, wherein the BA targets a cancer selected from the group consisting of breast cancer, ovarian cancer, prostate cancer, lung cancer, liver cancer, or brain cancer.

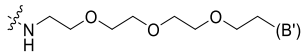
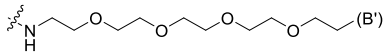
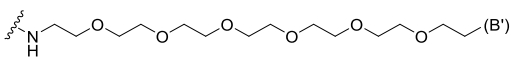
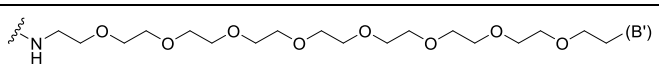
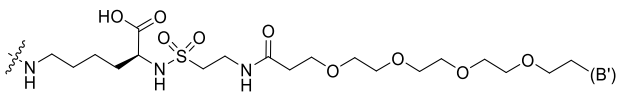
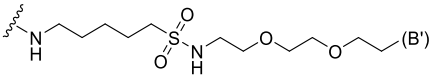
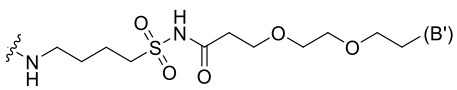
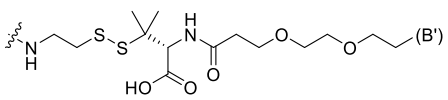
7. The compound of any of claims 1-6, wherein L1 comprises $C_{1-6}$ alkylene, phenylene, -NH-, -C(O)-, $-(CH_2)_u$-NH-C(O)-, $-(CH_2)_u$-C(O)-NH-, $-(CH_2-CH_2-O)_v$-, $-(CH_2)_u-(O-CH_2-CH_2)_v$-C(O)-NH-, a peptide unit comprising from 2 to 4 amino acids, or combinations thereof, each of which may be optionally substituted with one or more of -S-, $-S(O_2)$-, -C(O)-, $-C(O_2)$-; and $CO_2H$, wherein subscripts u and v are independently an integer from 1 to 8.

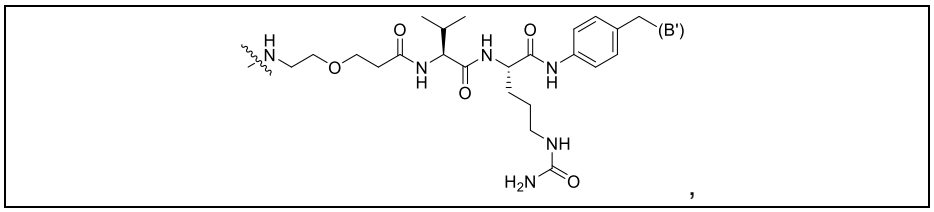
8. The compound of claim 1, wherein L1 is selected from the group consisting of:

, , , , , , , , and , wherein $R_A$ is a group comprising an alkyne, an azide, a tetrazine, a trans-cyclooctene, a maleimide, an amine, a ketone, an aldehyde, a carboxylic acid, an ester, a thiol, a sulfonic acid, a tosylate, a halide, a silane, a cyano group, a carbohydrate group, a biotin group, a lipid residue and wherein subscripts x, $n_1$, p and q are independently an integer from 0 to 12, and combinations thereof.

9. The compound of any of claims 1-8, wherein B comprises one adduct of group B'.

10. The compound of claim 9, wherein -NH-L1-B' is selected from the group consisting of:

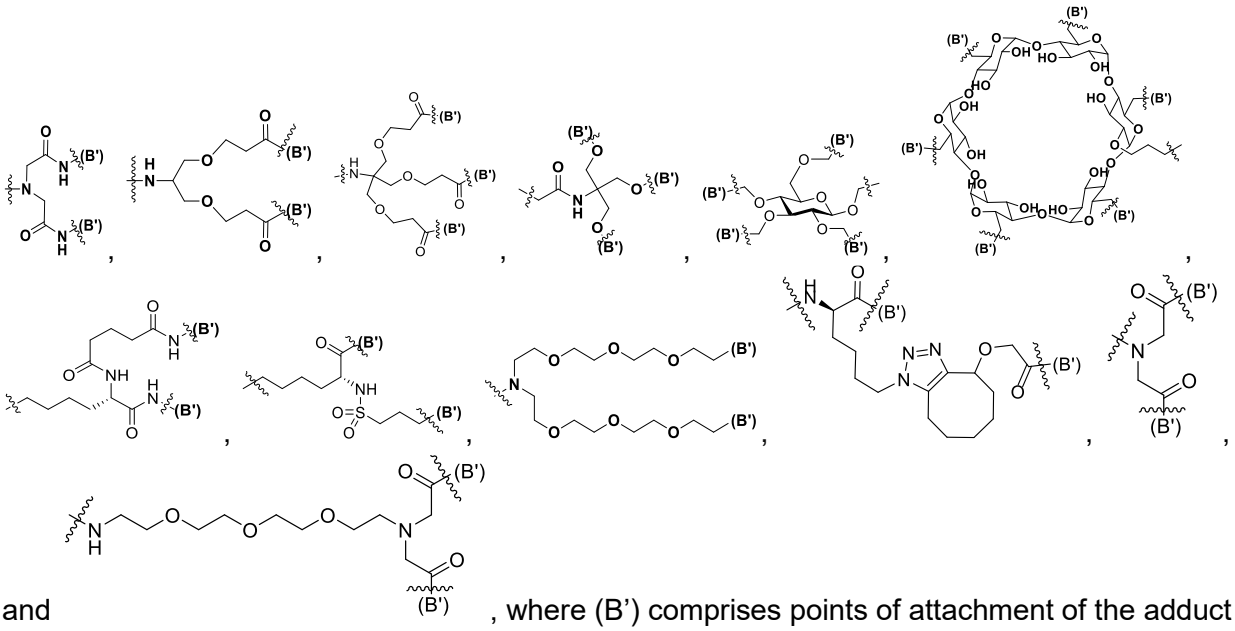
| |
|---|
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |



where the  is the amino point of attachment to the glutamine residue of the BA.

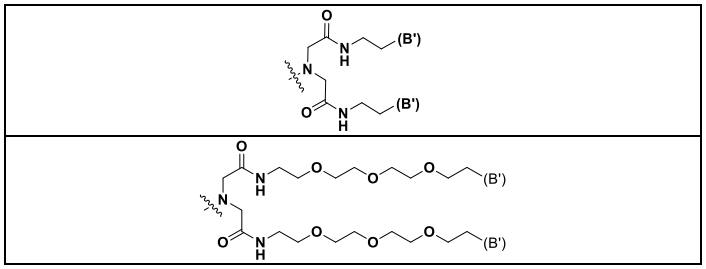
11. The compound of any of claims 1-8, wherein B comprises two adducts of group B', or wherein B comprises three adducts of group B', or wherein B comprises at least four adducts of group B'.

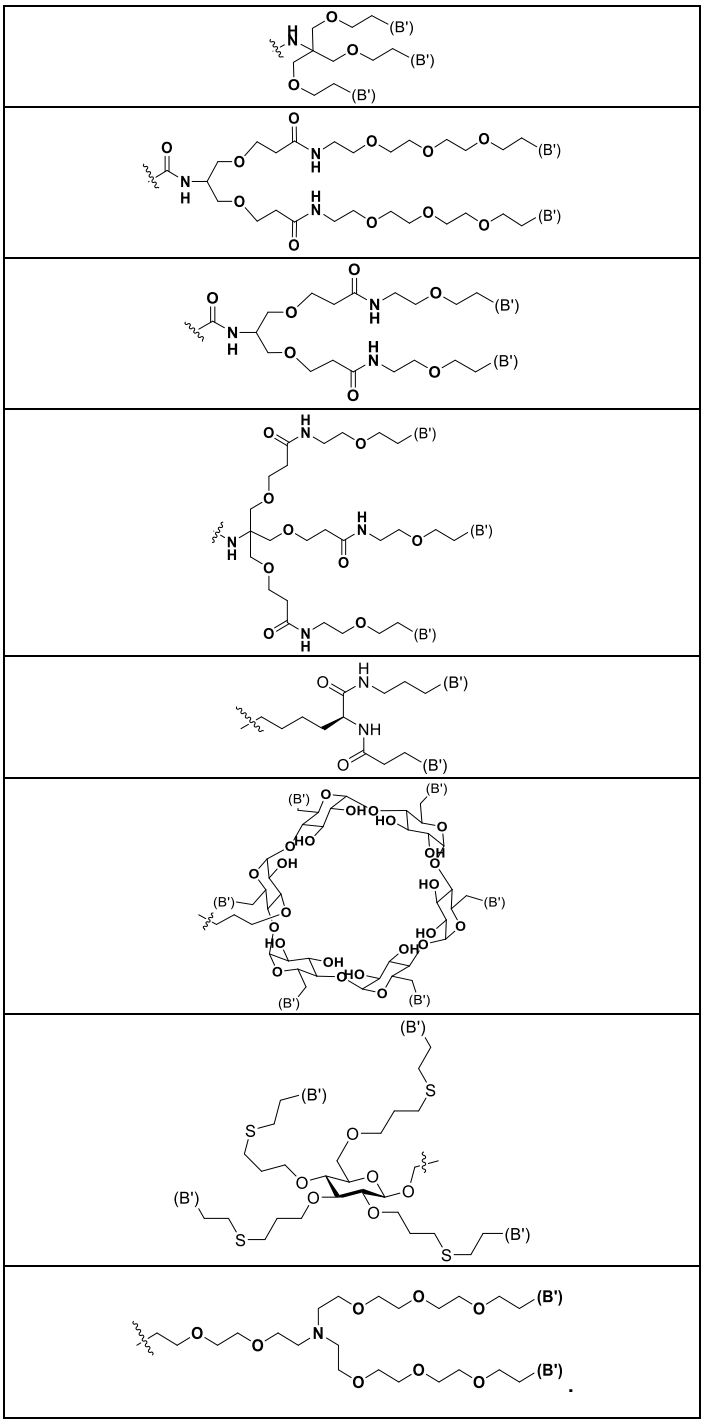
12. The compound of any of claims 1-8, wherein B comprises a group selected from the group consisting of:



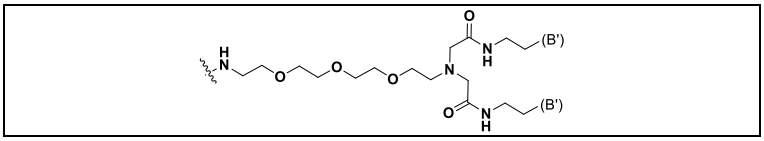
and , where (B') comprises points of attachment of the adduct of the group B' and the group B".

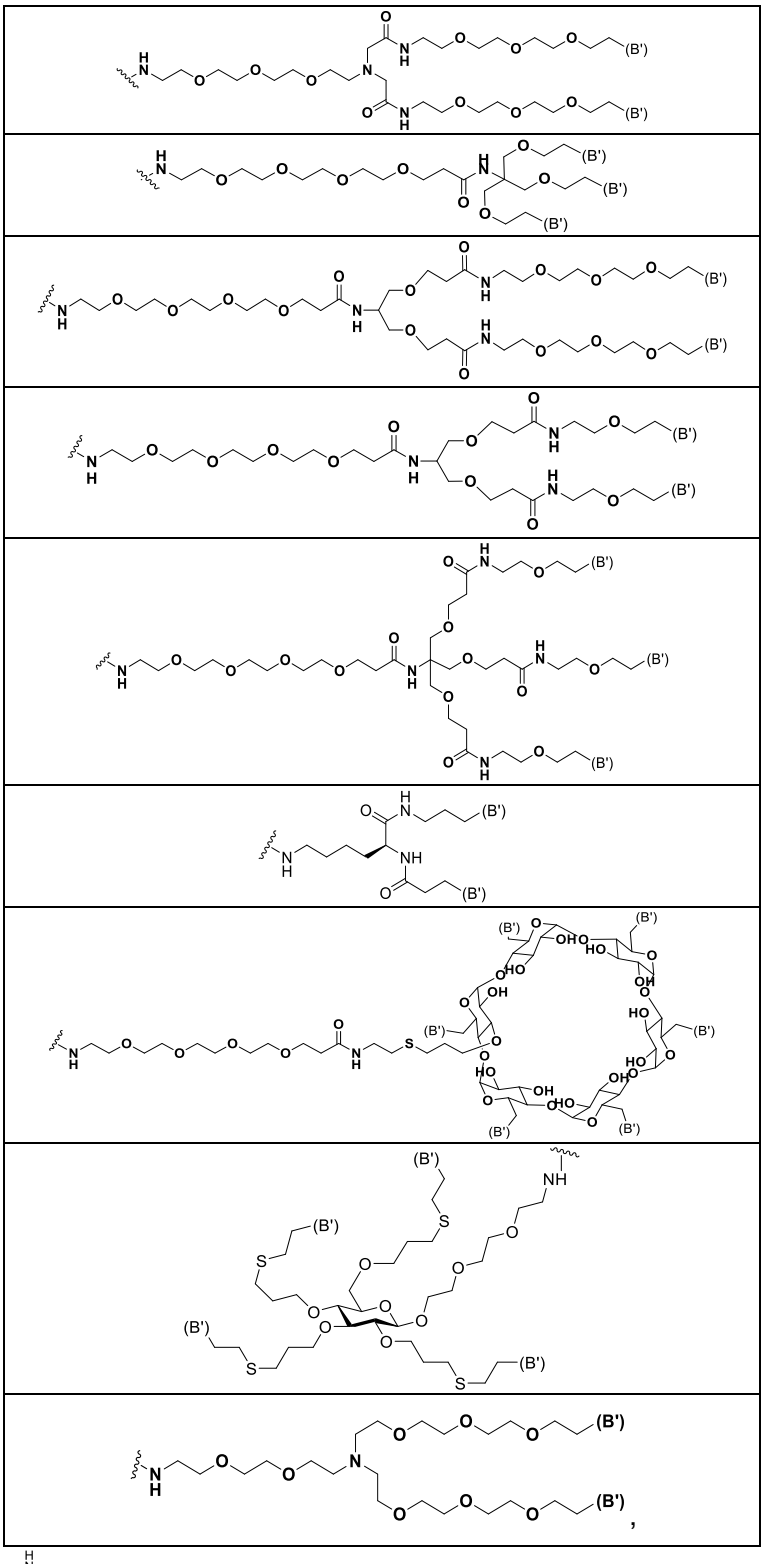
13. The compound of claim 12, wherein B is selected from the group consisting of:





14. The compound of claim 1, wherein -NH-L1-B is selected from the group consisting of:

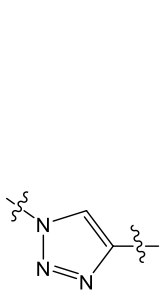
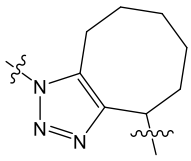
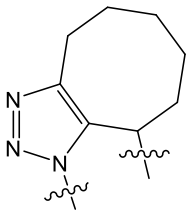
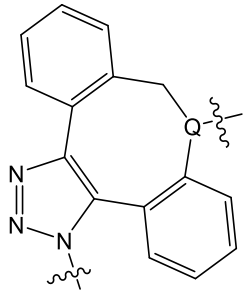
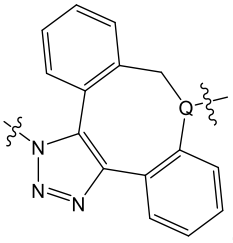




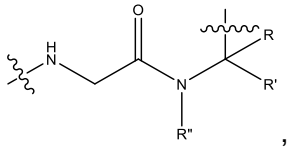
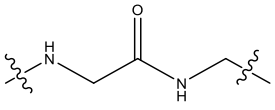
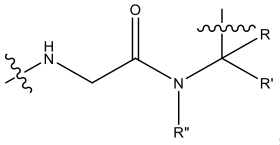
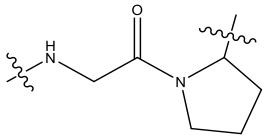
where the  is the amino point of attachment to the glutamine residue of the BA.

15. The compound of claim 10 or claim 14, wherein the group B’ is an azide ($-N_3$), and the adduct of the group B’ and the group B” comprises a triazole.

16. The compound of any of claims 1-15, wherein the adduct of the group B’ and the group B” has a structure selected from the group consisting of:


, 
, 
, 
, and 
,
wherein Q is C or N.

17. The compound of any of claims 1-16, wherein M is absent.

18. The compound of any of claims 1-16, wherein M is 
, where R, R’, and R” are hydrogens at each occurrence, i.e. M is 
, or wherein M is 
, where R is hydrogen and R’ and R” together form a 5-membered ring, i.e. M is 
.

19. The compound of any of claims 1-18, wherein n is 2, or n is 4, or n is 8, or n is 12, or n is 16, or n is 24.

20. The compound of any of claims 1-19, wherein L2 has a structure according to Formula (L2):

$$B”\text{-}SP1\text{-}B2\text{-}(\text{-}SP2\text{-}AA\text{-}SP3)_p \quad (L2),$$

wherein:

B” is a group capable of covalently attaching to the group B’;

SP1 is absent or a first spacer unit;

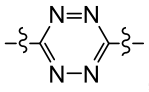
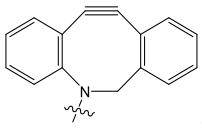
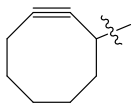
B2 is absent or a branching unit;

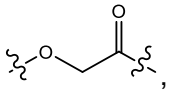
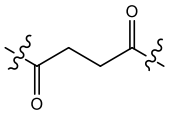
SP2 is absent or a second spacer unit;

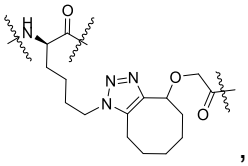
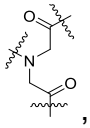
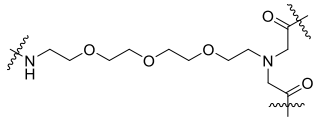
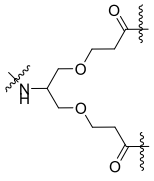
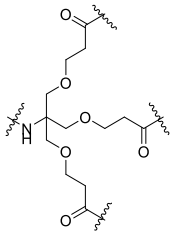
AA is absent or a peptide unit comprising from 2 to 4 amino acids;

SP3 is absent or a third spacer unit covalently attached to the Dxd, and

p is an integer from 1 to 12.

21. The compound of claim 20, wherein the at least one group B” is selected from the group consisting of -$N_3$, , , , , , and combinations thereof.

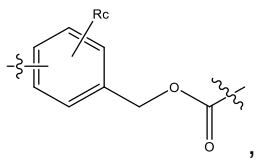
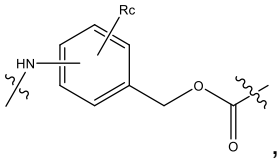
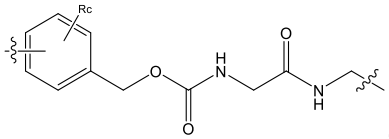
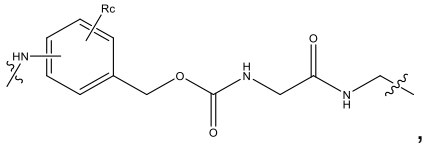
22. The compound of any of claims 20 or 21, wherein SP1 is absent or selected from the group consisting of , , $C_{1\text{-}6}$ alkylene, -$(CH_2$-$CH_2$-$O)_v$-, -NH-, -C(O)-, -NH-C(O)-, -NH-$(CH_2)_u$-, -NH-$(CH_2)_u$-C(O)-, -NH-$(CH_2$-$CH_2$-$O)_v$-, -NH-$(CH_2$-$CH_2$-$O)_v$-C(O)-, -NH-$(CH_2$-$CH_2$-$O)_v$-$(CH_2)_u$-, -NH-$(CH_2$-$CH_2$-$O)_v$-$(CH_2)_u$-C(O)-, -$(CH_2)_u$-NH-C(O)-, -NH-$(CH_2)_u$-NH-C(O)-, -NH-$(CH_2)_u$-C(O)-NH-, or combinations thereof; wherein subscripts u and v are independently an integer from 1 to 8.

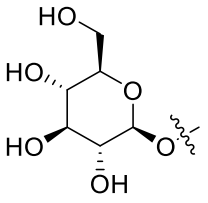
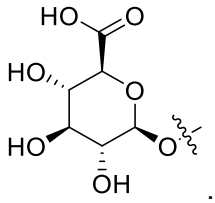
23. The compound of any of claims 20-22, wherein B2 is absent or selected from the group consisting of , , , , and .

24. The compound of any of claims 20-22, wherein SP2 is absent or selected from the group consisting of a $C_{1-6}$ alkylene, -$(CH_2$-$CH_2$-$O)_v$-, -NH-, -C(O)-, -NH-C(O)-, -NH-$(CH_2)_u$-, -NH-$(CH_2)_u$-C(O)-, -NH-$(CH_2$-$CH_2$-$O)_v$-, -NH-$(CH_2$-$CH_2$-$O)_v$-C(O)-, -NH-$(CH_2$-$CH_2$-$O)_v$-$(CH_2)_u$-, -NH-$(CH_2$-$CH_2$-$O)_v$-$(CH_2)_u$-C(O)-, -$(CH_2)_u$-NH-C(O)-, -NH-$(CH_2)_u$-NH-C(O)-, -NH-$(CH_2)_u$-C(O)-NH-, or combinations thereof; wherein subscripts u and v are independently an integer from 1 to 8.

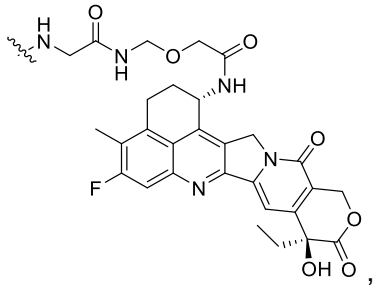
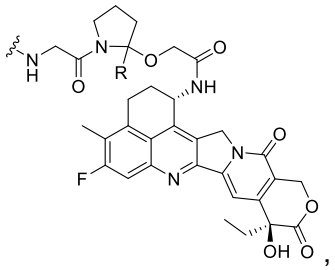
25. The compound of any of claims 20-23, wherein AA is a peptide unit comprising from 2 to 4 amino acids selected from glycine, valine, phenylalanine, proline, glutamic acid, lysine, phenylalanine, and citrulline, and combinations thereof.

26. The compound of claim 25, wherein AA is selected from the group consisting of valine-citrulline, valine-alanine, phenylalanine-lysine, glycine-glycine-glycine (GGG), glycine-glycine-glycine-glycine (GGGG (SEQ ID NO: 2113)), glycine-glycine-phenylalanine (GGF), glycine-glycine-phenylalanine-glycine (GGFG (SEQ ID NO: 2114)), L-glutamic acid-valine-citrulline ($^L$EVC), and D-glutamic acid-valine-citrulline ($^D$EVC).

27. The compound of any of claims 20-26, wherein SP3 is absent or selected from the group consisting of , , , , and combinations thereof, wherein $R_c$ is independently

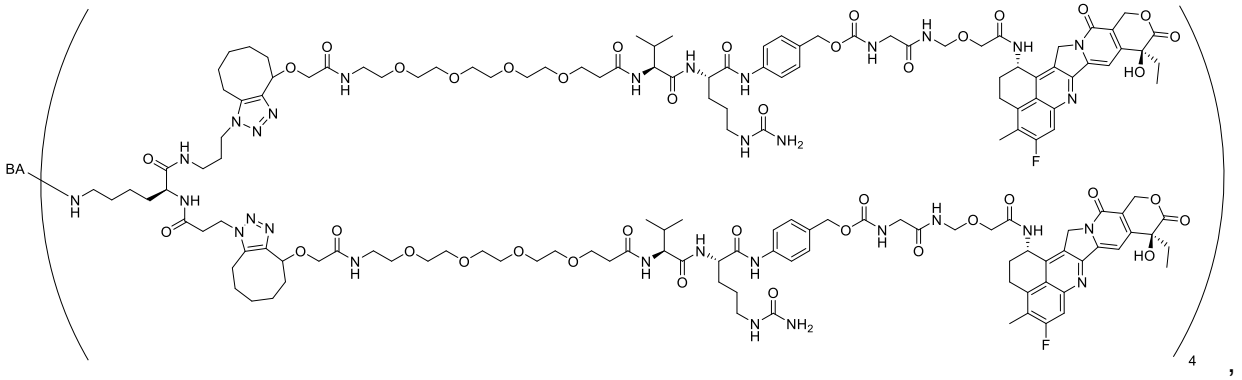
at each occurrence absent or a group selected from  and .

28. The compound of any of claims 1-27, wherein the M-Dxd has a structure selected from the group consisting of

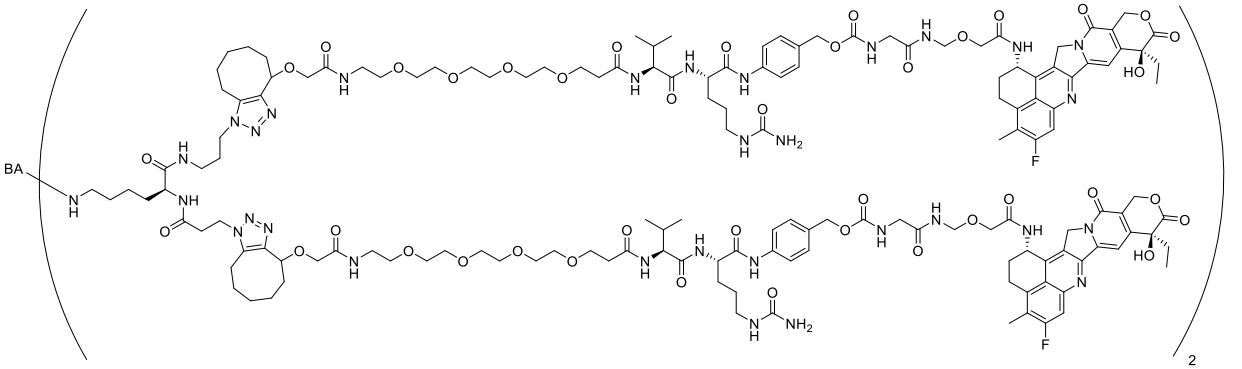
 and ,

wherein R is a hydrogen or a $C_1$-$C_4$ alkyl, and where ~~~ represents the point of attachment to L2.

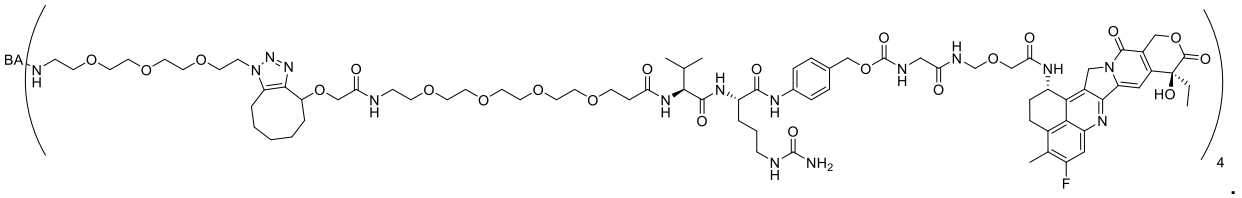
29. The compound of claim 1 or 2 having a structure:




,



or



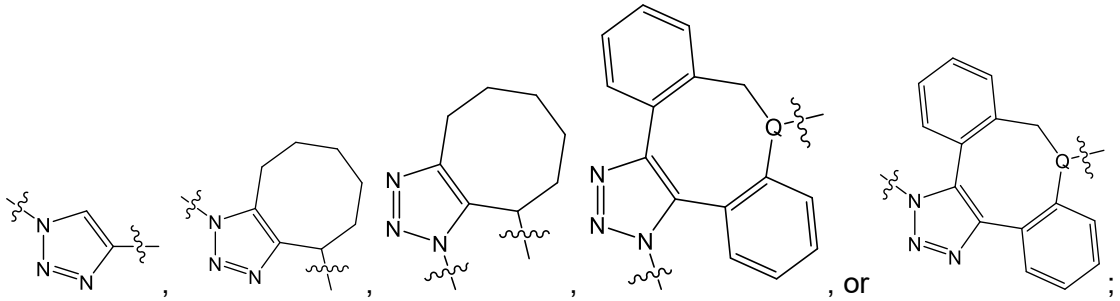
30. A compound having a structure according to Formula (I):

$$BA\text{-}(\ NH\text{-}L1\text{-}B\text{-}(\text{-}L2\text{-}M\text{-}Dxd)_k)_n \quad (I),$$ wherein:

BA is an antibody or an antigen-binding fragment thereof;

L1 is absent or a first linker linked to said BA through side chain of a glutamine residue;

B is a branching unit comprising



;

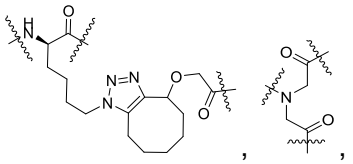
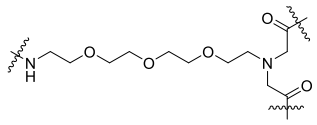
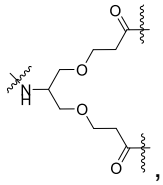
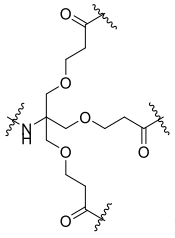
L2 has a structure according to Formula (L2):

$$B''\text{-}SP1\text{-}B2\text{-}(\text{-}SP2\text{-}AA\text{-}SP3)_p \quad (L2),$$

wherein:

B" is a group capable of covalently attaching to the group B' as defined above;

SP1 is absent or a first spacer unit;

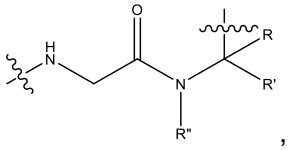
B2 is absent or selected from the group consisting of  ,  ,  ,  , and  ;

SP2 is absent or a second spacer unit;

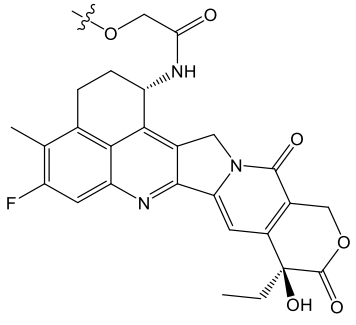
AA is absent or a peptide unit comprising from 2 to 4 amino acids selected from glycine, valine, phenylalanine, proline, glutamic acid, lysine, phenylalanine, and citrulline, and combinations thereof;

SP3 is absent or a third spacer unit covalently attached to the Dxd;

p is an integer from 1 to 12;

M is absent or a moiety having the structure  , where R, R', and R" are independently at each occurrence hydrogen or a $C_1$-$C_4$ alkyl, or wherein R' and R" together form a 5-membered or a 6-membered ring;

Dxd is an anti-tumor agent having a structure according to Formula (P):

 (P);

k is an integer from 1 to 12, and

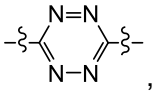
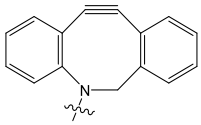
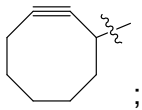
n is an integer from 1 to 30.

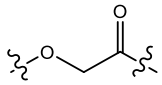
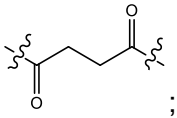
31. A compound according to Formula (L2-P) or (L2'-P):

B"-SP1-B2-(-SP2-AA-SP3-M-Dxd)p (L2-P),

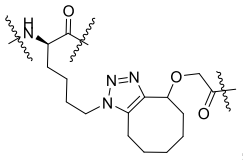
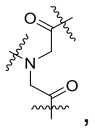
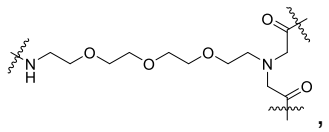
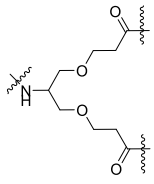
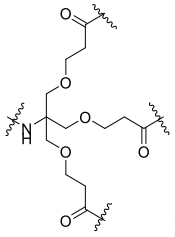
$H_2N$-SP1-B2-(-SP2-AA-SP3-M-Dxd)$_p$ (L2'-P),

wherein:

B" is selected from the group consisting of -$N_3$, , , ,  and ;

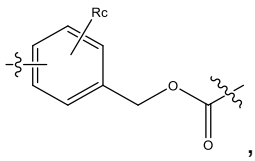
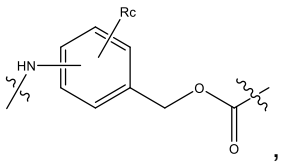
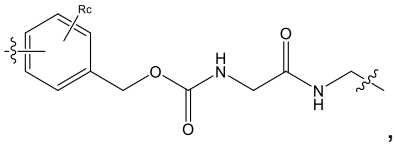
SP1 is absent or a first spacer unit selected from the group consisting of  and ;

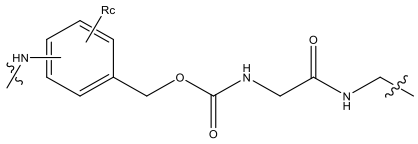
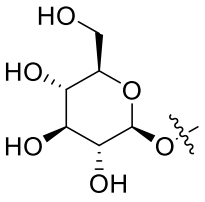
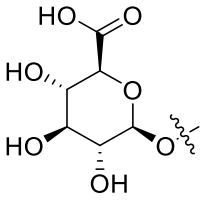
SP2 is absent or a second spacer unit selected from the group consisting of a $C_{1-6}$ alkylene, -$(CH_2$-$CH_2$-$O)_v$-, -NH-, -C(O)-, -NH-C(O)-, -NH-$(CH_2)_u$-, -NH-$(CH_2)_u$-C(O)-, -NH-$(CH_2$-$CH_2$-$O)_v$-, -NH-$(CH_2$-$CH_2$-$O)_v$-C(O)-, -NH-$(CH_2$-$CH_2$-$O)_v$-$(CH_2)_u$-, -NH-$(CH_2$-$CH_2$-$O)_v$-$(CH_2)_u$-C(O)-, -$(CH_2)_u$-NH-C(O)-, -NH-$(CH_2)_u$-NH-C(O)-, -NH-$(CH_2)_u$-C(O)-NH-, or combinations thereof; wherein subscripts u and v are independently an integer from 1 to 8;

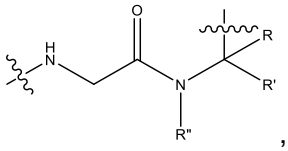
B2 is absent or selected from the group consisting of , , , , and ;

AA is absent or a peptide unit comprising from 2 to 4 amino acids;

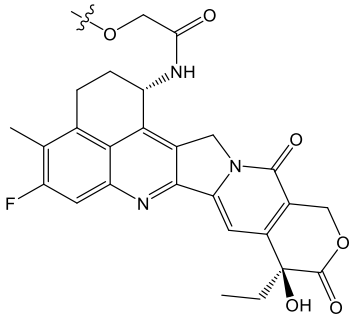
SP3 is absent or a third spacer unit selected from the group consisting of,

, , ,


, wherein $R_c$ is independently at each occurrence absent or a group selected from  and ;

M is absent or , where R, R', and R" are independently at each occurrence hydrogen or a $C_1$-$C_4$ alkyl, or wherein R' and R" together form a 5-membered or a 6-membered ring; and

Dxd is an anti-tumor agent having a structure according to Formula (P):

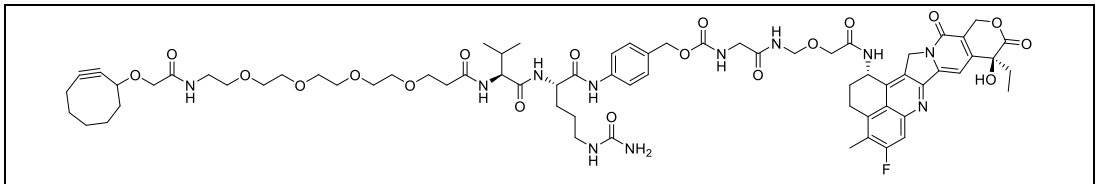

(P), and

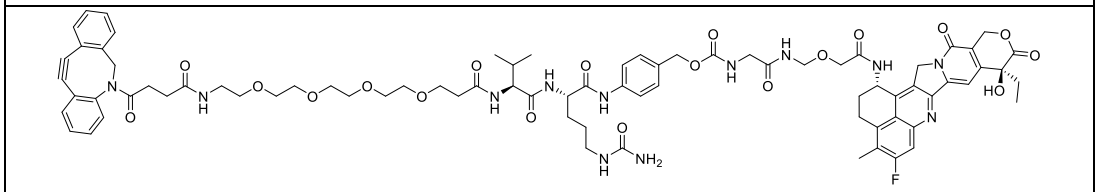
p is an integer from 1 to 12.

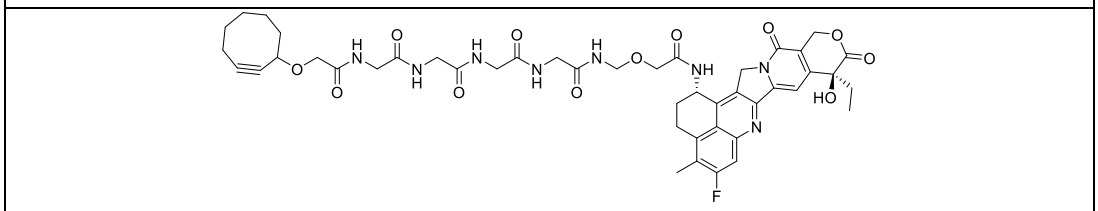
32. The compound of claim 31, wherein AA is a peptide unit comprising from 2 to 4 amino acids selected from glycine, valine, phenylalanine, proline, glutamic acid, lysine, alanine and citrulline, and combinations thereof.

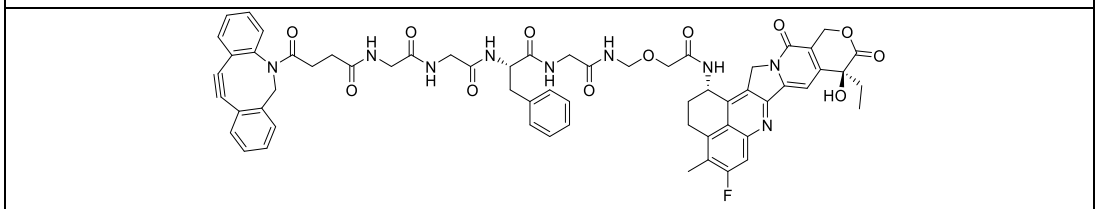
33. The compound of claim 32, wherein AA is selected from the group consisting of valine-citrulline, valine-alanine, phenylalanine-lysine, glycine-glycine-glycine (GGG), glycine-glycine-glycine-glycine (GGGG (SEQ ID NO: 2113)), glycine-glycine-phenylalanine (GGF),glycine-glycine-phenylalanine-glycine (GGFG (SEQ ID NO: 2114)) and glutamic acid-valine-citrulline (EVC).

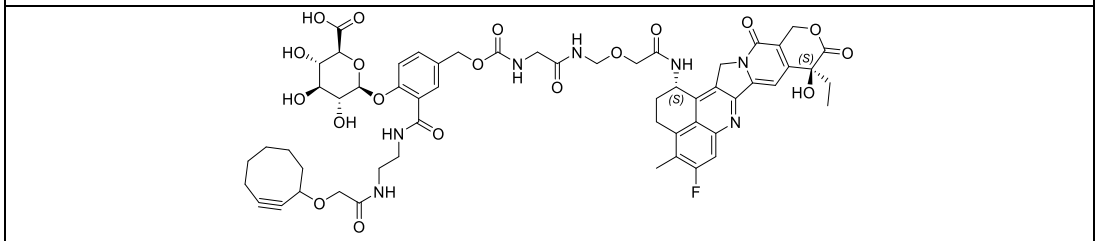
34. The compound of claim 31, wherein the compound has a structure according to Formula (L2-P) selected from the group consisting of:

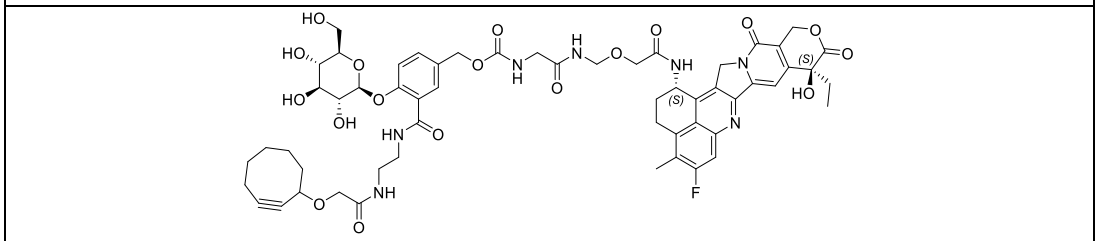


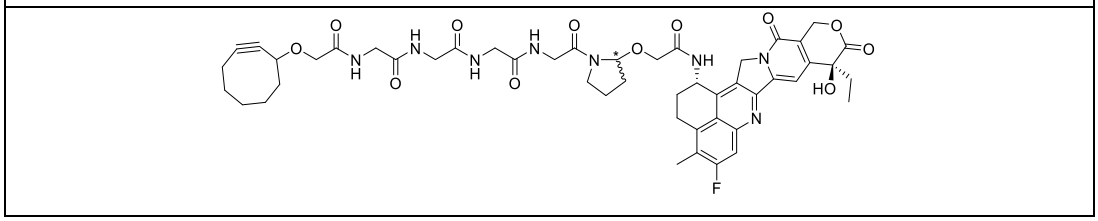


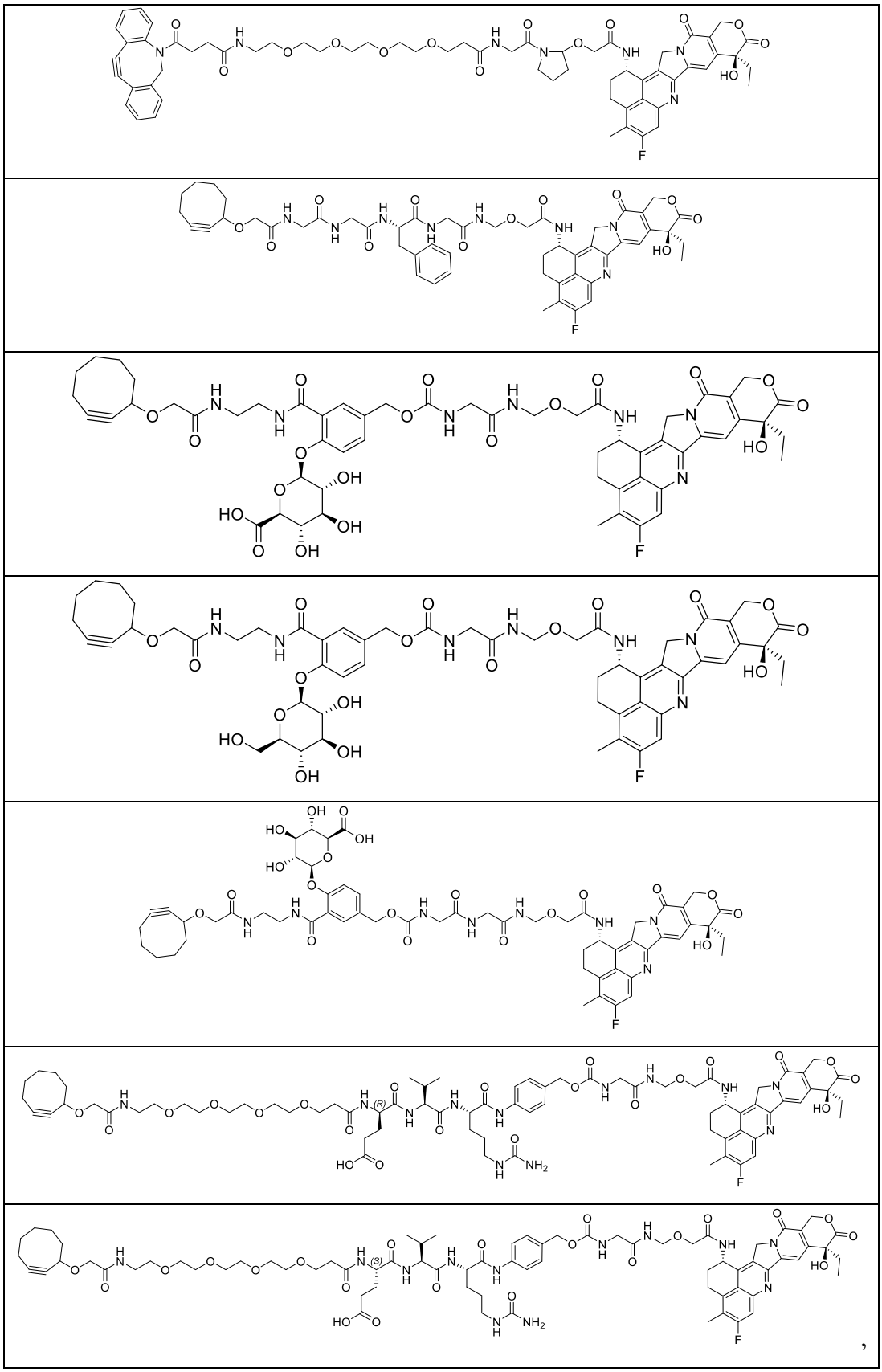






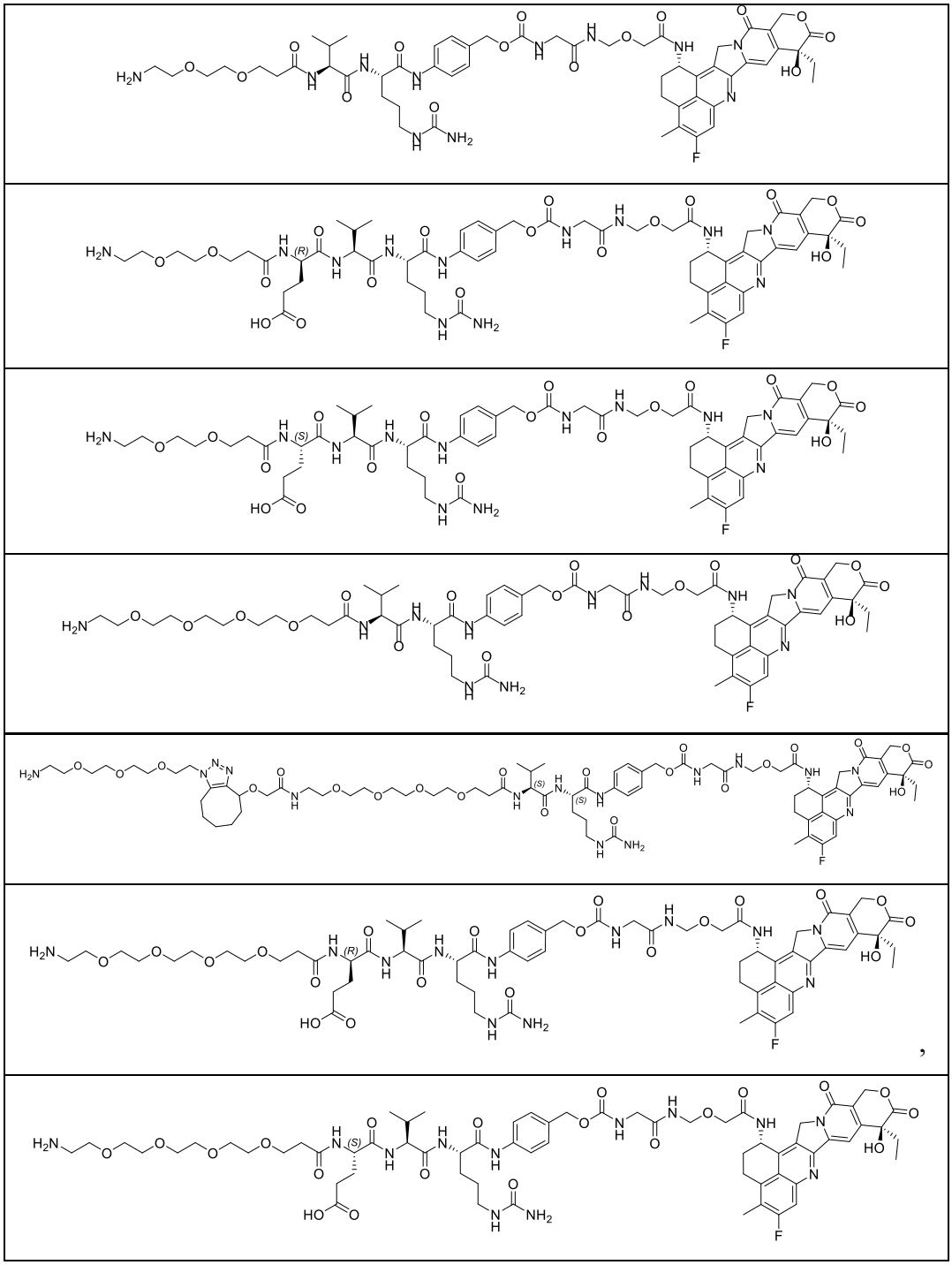






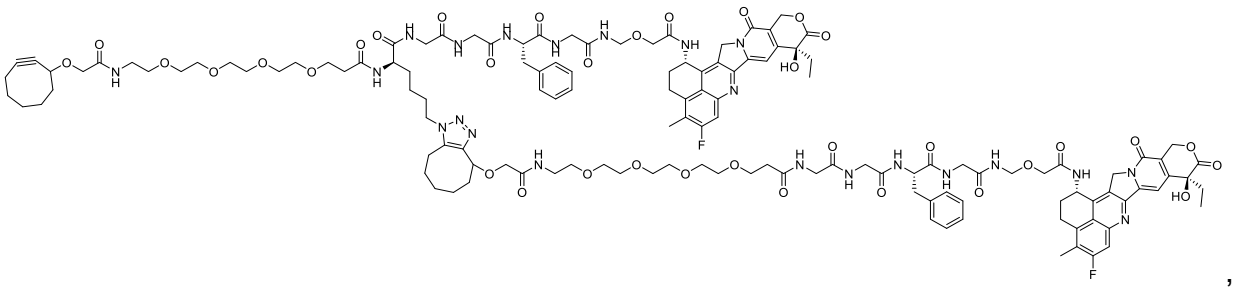
or a pharmaceutically acceptable salt thereof.

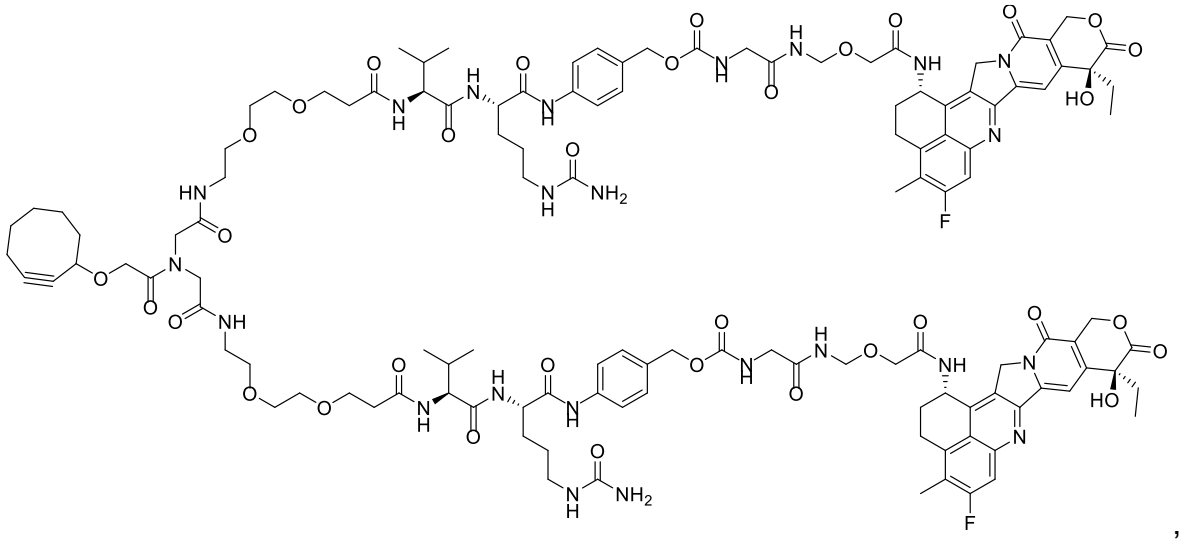
35. The compound of claim 31, wherein the compound has a structure according to Formula (L2'-P) selected from the group consisting of:

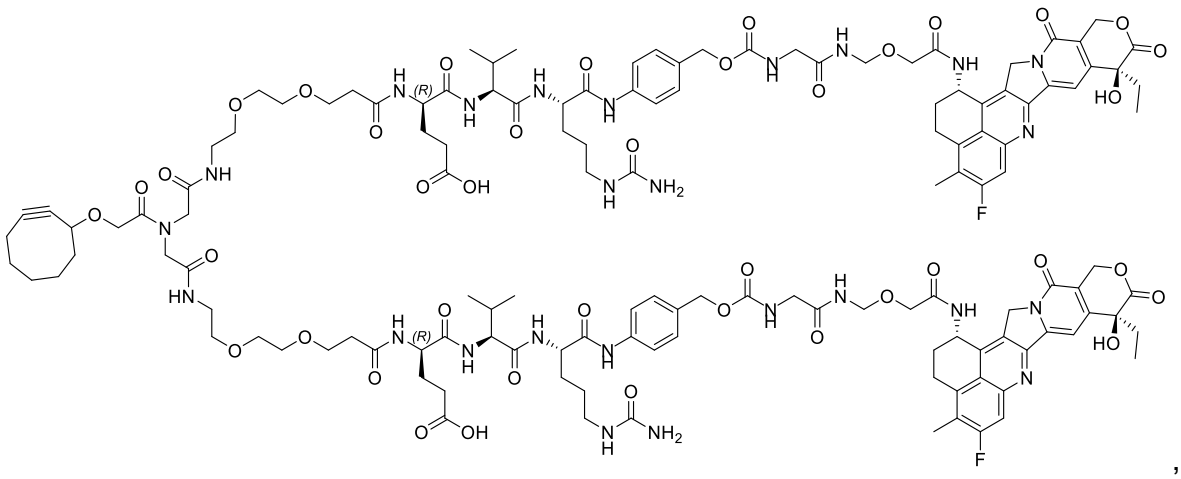


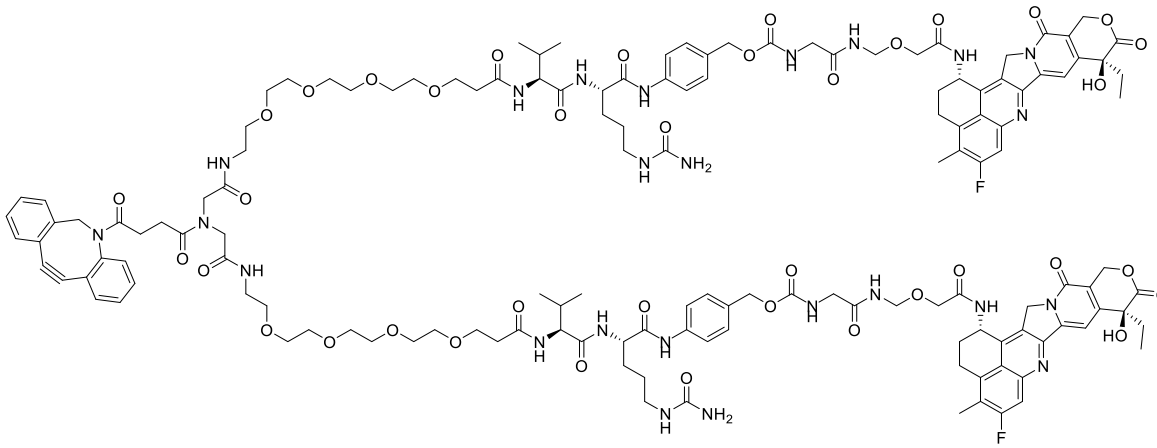
or a pharmaceutically acceptable salt thereof.

36. The compound of any of claims 31, wherein the compound has a structure according to Formula (L2-P), (L2'-P) or (L2"-P) selected from the group consisting of:

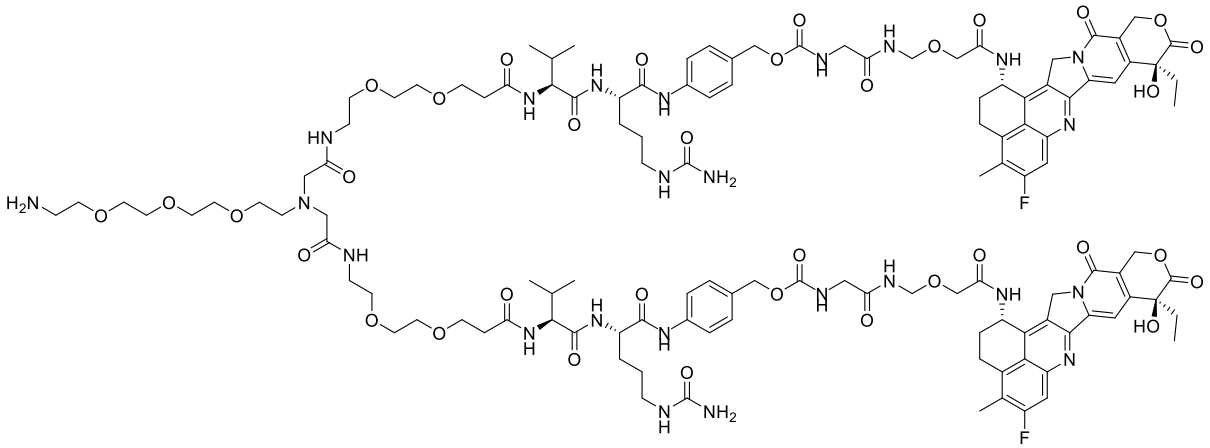

,


,

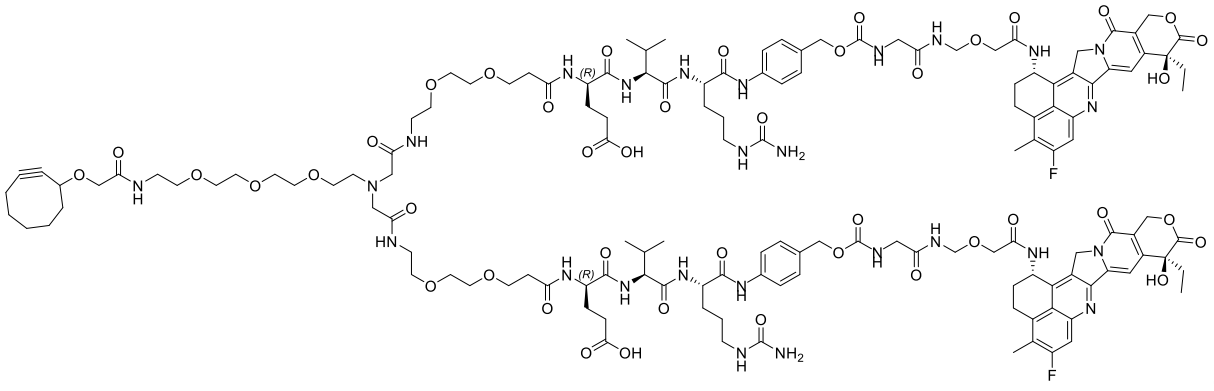

,



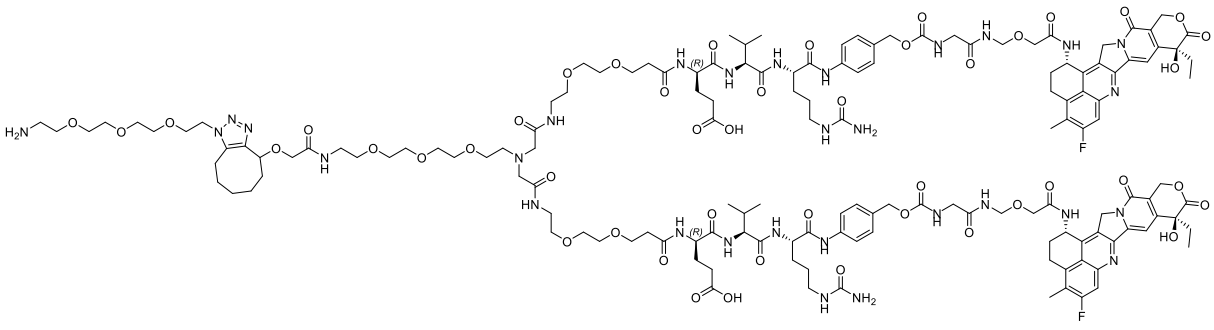
,



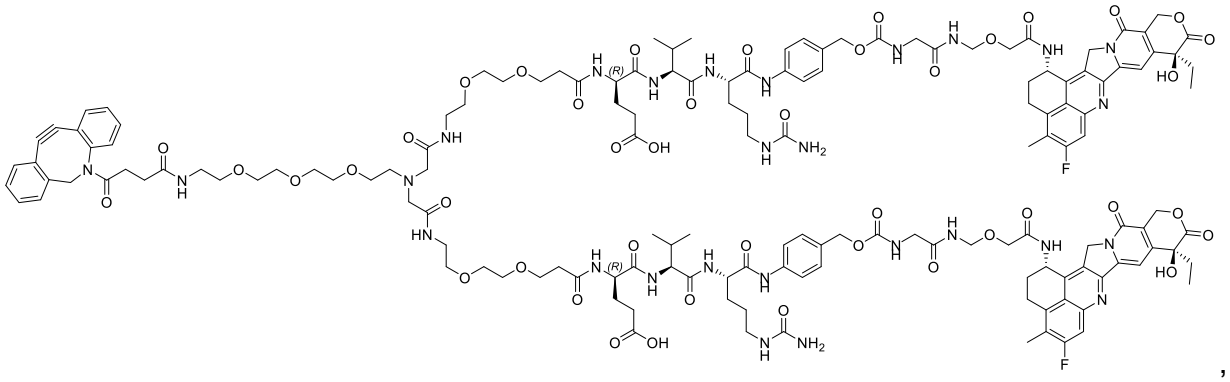
,



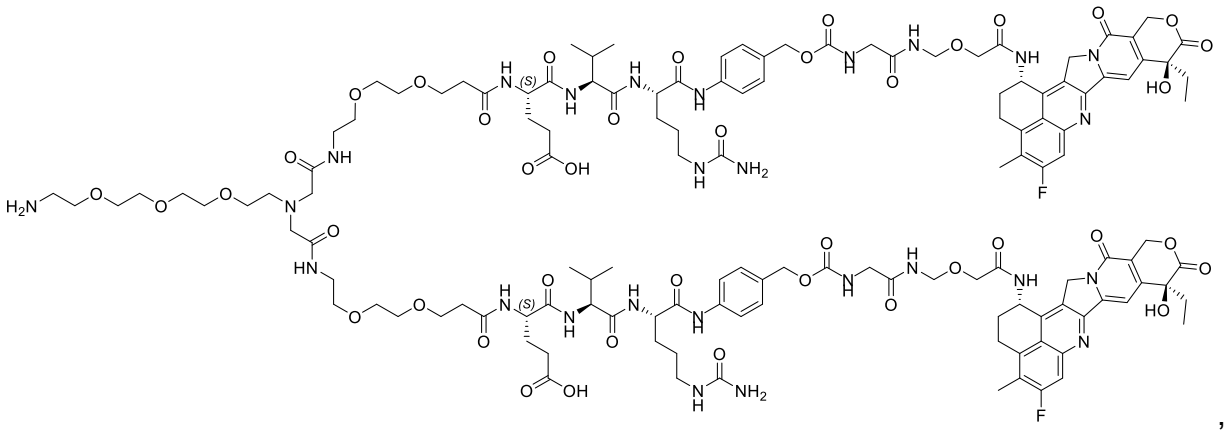
,



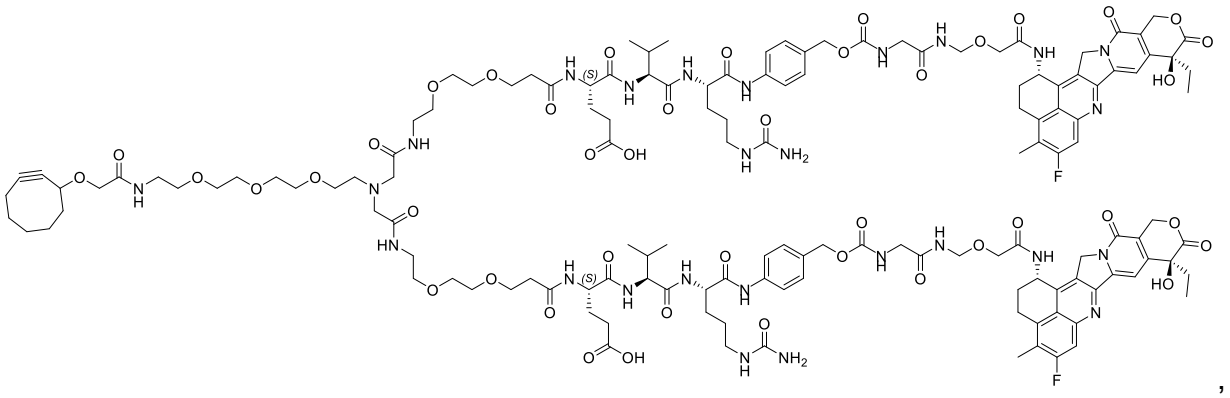
,



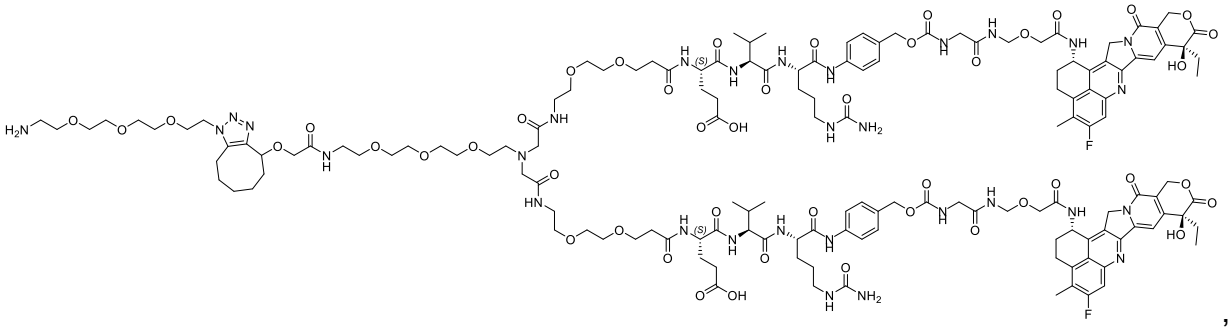
,



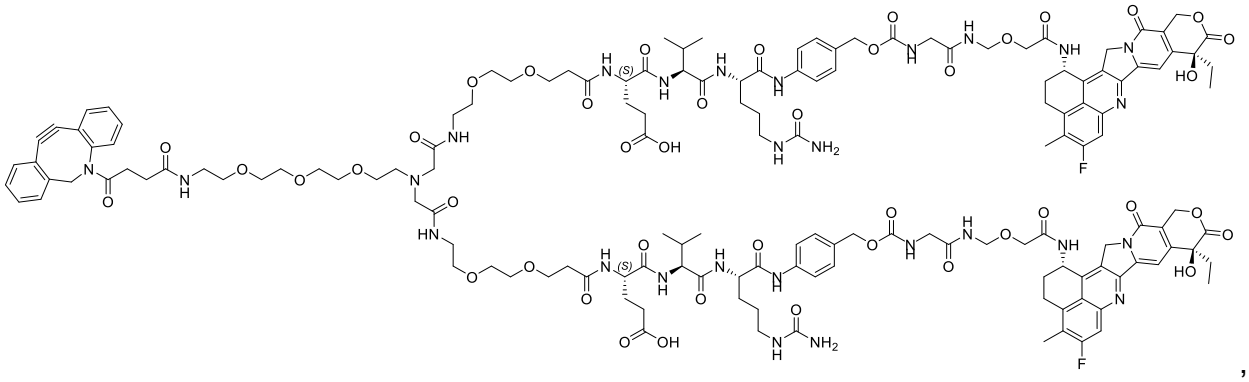
,



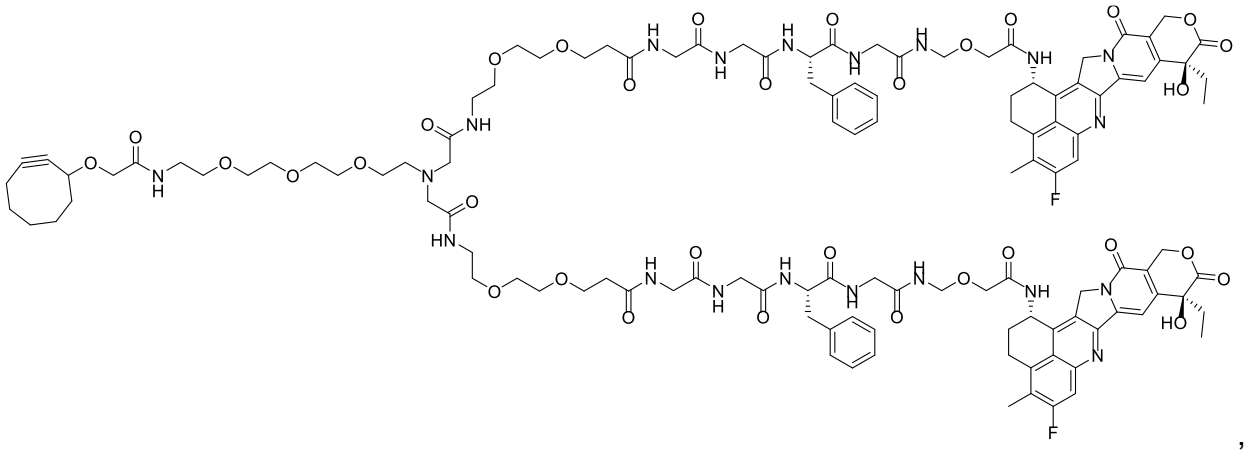
,



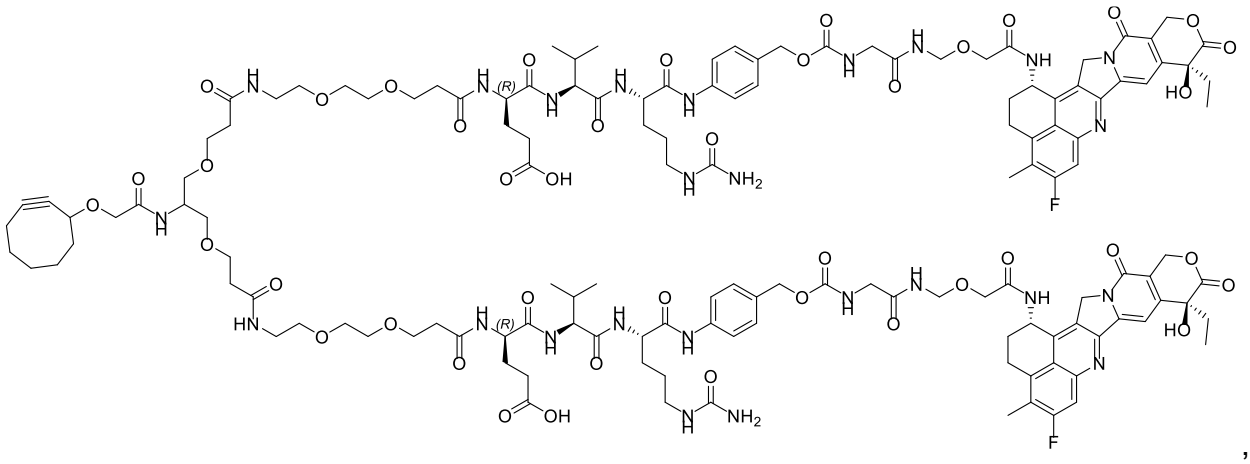
,



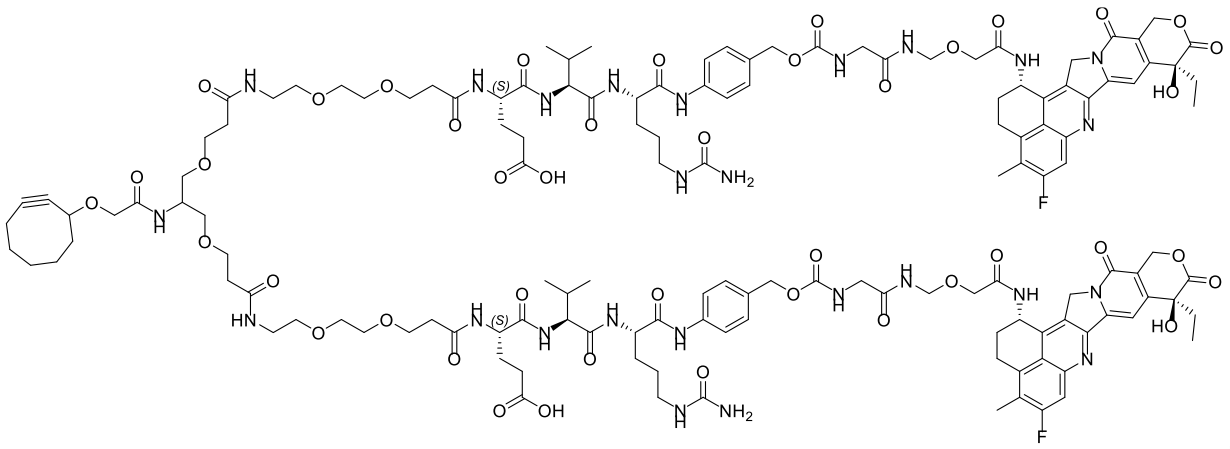
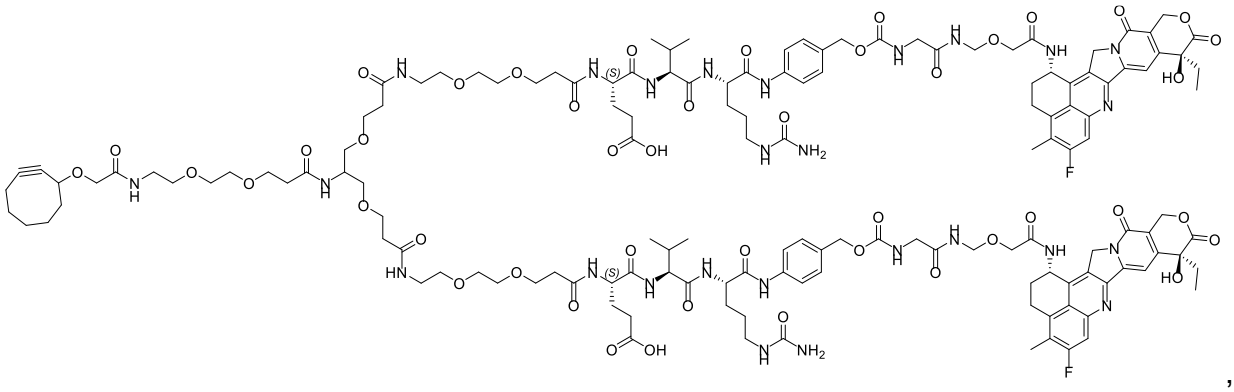
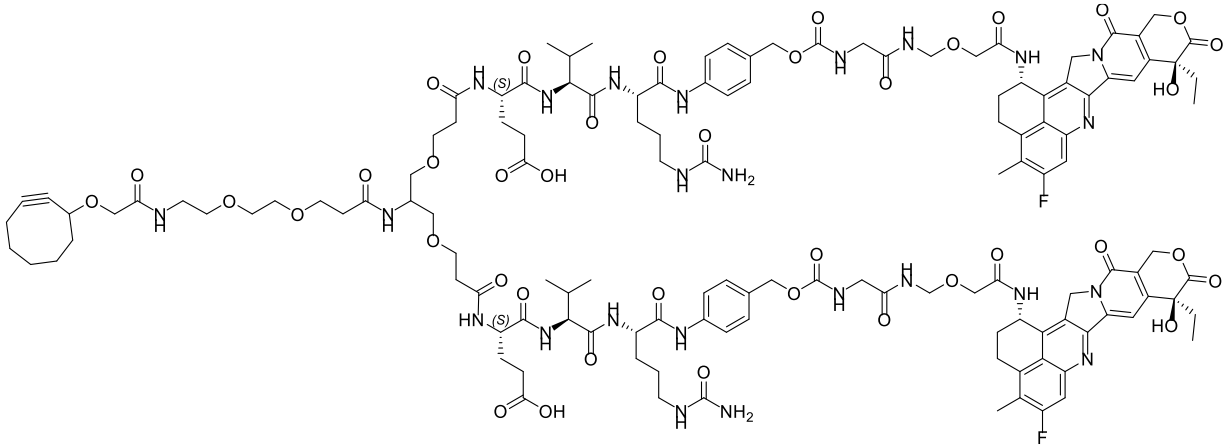
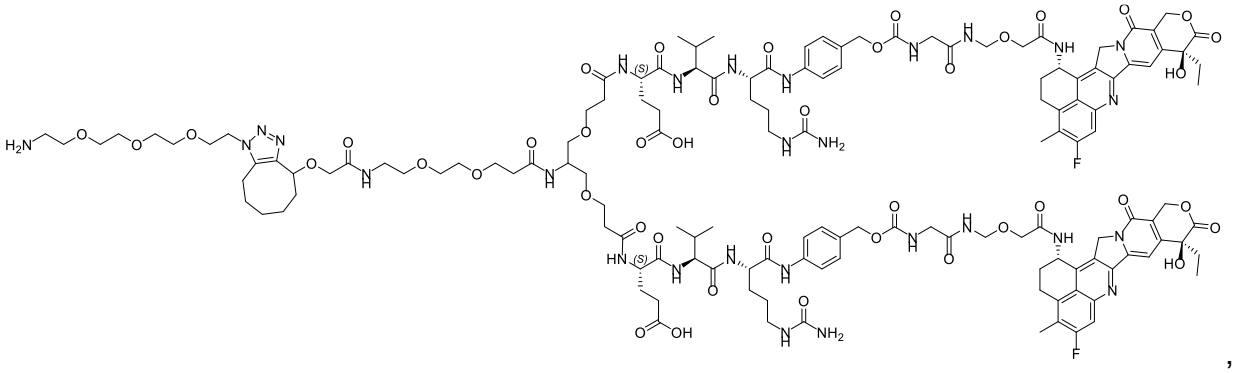
,

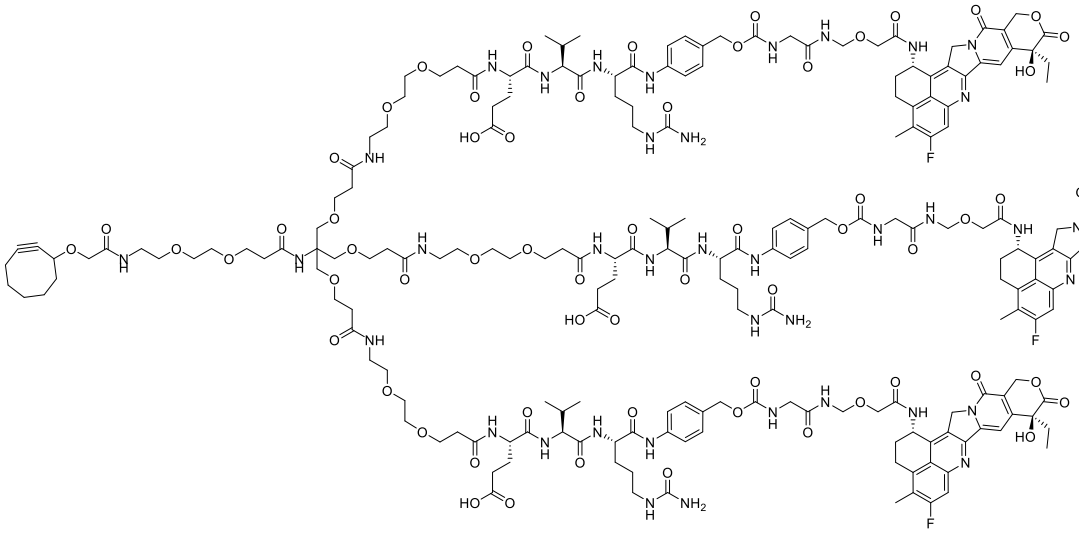


,

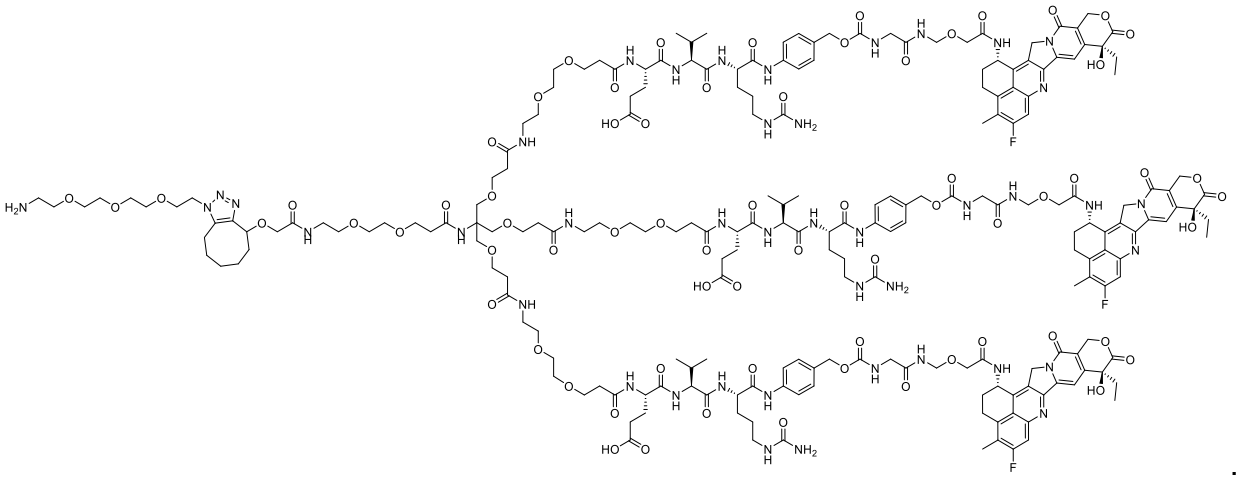


,


,

,

,

,



, and



.

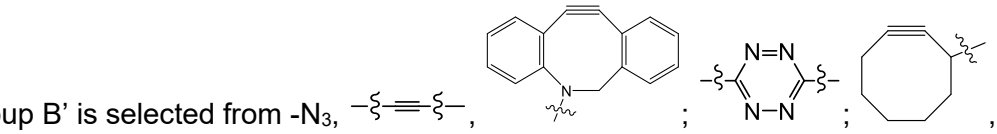
37. An antibody-drug conjugate according to formula (II):

$$BA\text{-}(\ NH\text{-}L1\text{-}B\text{-}(SP1\text{-}B2\text{-}(\text{-}SP2\text{-}AA\text{-}SP3\text{-}M\text{-}Dxd)_k)_p)_n \quad (II),$$

wherein BA is an antibody;

L1 is absent or a first linker linked to said BA through side chain of a glutamine residue;

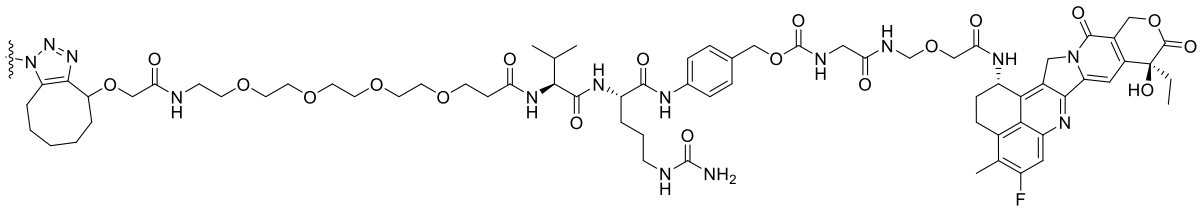
B is a branching unit comprising at least one adduct of group B' and group B", where

the group B' is selected from -$N_3$, , wherein

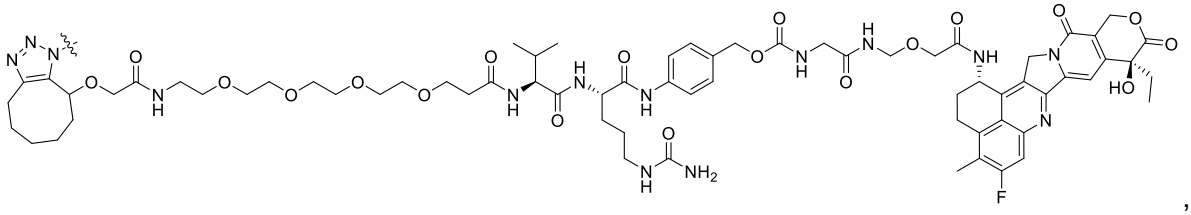
B"-SP1-B2-(-SP2-AA-SP3-M-Dxd)p is the compound according to Formula (L2-P) according to any of claims 31-36, and wherein the compound of formula (L2-P) is

covalently attached to the antibody via the adduct of the group B' and the group B"; k is an integer from 1 to 12, p is an integer from 1 to 30, and n is an integer from 1 to 30.

38. An antibody-drug conjugate comprising an antibody and a linker-payload, wherein the linker-payload comprises the structure:



, or



,

where ~~~ represents the point of attachment to the antibody, directly or through a second linker, or a pharmaceutically acceptable salt thereof.

39. A composition comprising a population of compounds according to any one of claims 1-30, having a drug-antibody ratio (DAR) of 0.5 to 30.0.

40. The composition of claim 39 having a DAR of 1.0 to 2.5, or a DAR of 3.0 to 4.5, or a DAR of 6.5 to 8.5, or a DAR of 10 to 14, or a DAR of 14 to 18, or a DAR of 22 to 24.5.

41. The composition of claim 40 having a DAR of 2, or 4, or 8, or 12, or 16, or 24.

42. Use of the compound according to any one of claims 1-35, or the composition of any one of claims 39-41, in the manufacture of a medicament for the treatment of cancer in a subject in need thereof.

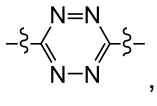
43. The use of the compound or composition of claim 42, wherein the cancer is selected from the group consisting of breast cancer, ovarian cancer, prostate cancer, lung cancer, liver cancer, or brain cancer.

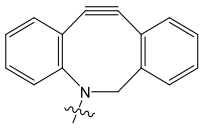
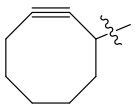
44. A compound according to claims 1-35 or a composition of any one of claims 39-41 for use in therapy.

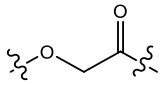
45. A compound according to Formula (L2”-P)

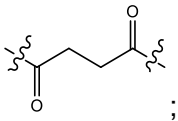
maleimide-N-SP1-B2-(-SP2-AA-SP3-M-Dxd)$_p$ (L2”-P),

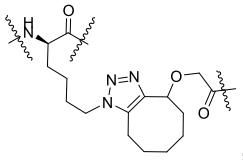
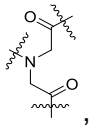
wherein:

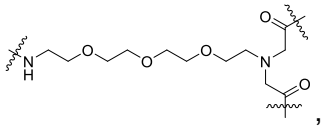
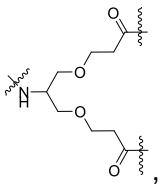
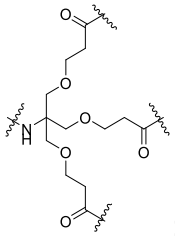
B” is selected from the group consisting of -$N_3$, , , ,

 and ;

SP1 is absent or a first spacer unit selected from the group consisting of 

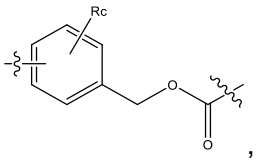
and ;

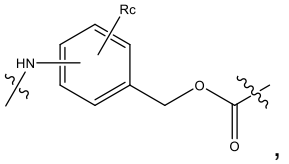
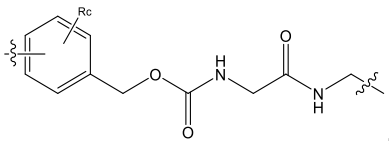
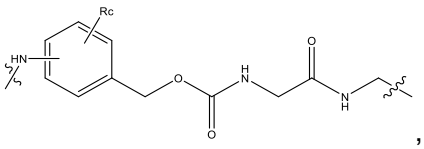
B2 is absent or selected from the group consisting of , ,

, , and ;

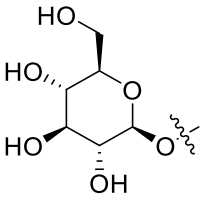
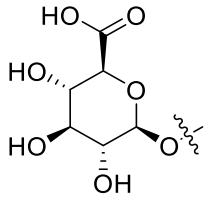
SP2 is absent or a second spacer unit selected from the group consisting of a $C_{1-6}$ alkylene, -$(CH_2$-$CH_2$-$O)_v$-, -NH-, -C(O)-, -NH-C(O)-, -NH-$(CH_2)_u$-, -NH-$(CH_2)_u$-C(O)-, -NH-$(CH_2$-$CH_2$-$O)_v$-, -NH-$(CH_2$-$CH_2$-$O)_v$-C(O)-, -NH-$(CH_2$-$CH_2$-$O)_v$-$(CH_2)_u$-, -NH-$(CH_2$-$CH_2$-$O)_v$-$(CH_2)_u$-C(O)-, -$(CH_2)_u$-NH-C(O)-, -NH-$(CH_2)_u$-NH-C(O)-, -NH-$(CH_2)_u$-C(O)-NH-, or combinations thereof; wherein subscripts u and v are independently an integer from 1 to 8;

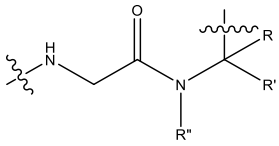
AA is absent or a peptide unit comprising from 2 to 4 amino acids;

SP3 is a third spacer unit selected from the group consisting of, ,

, , ,

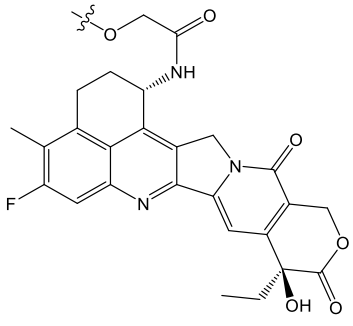
wherein $R_c$ is independently at each occurrence absent or a group selected from

 and ;



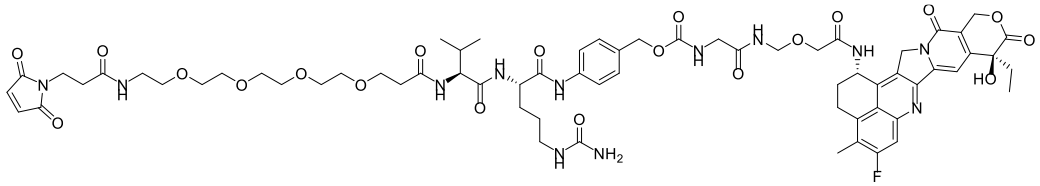
M is absent or , where R, R', and R" are independently at each occurrence hydrogen or a $C_1$-$C_4$ alkyl, or wherein R' and R" together form a 5-membered or a 6-membered ring; and

Dxd is an anti-tumor agent having a structure according to Formula (P):

 (P), and

p is an integer from 1 to 12.

46. The compound of claim 45, wherein the compound has a structure

.