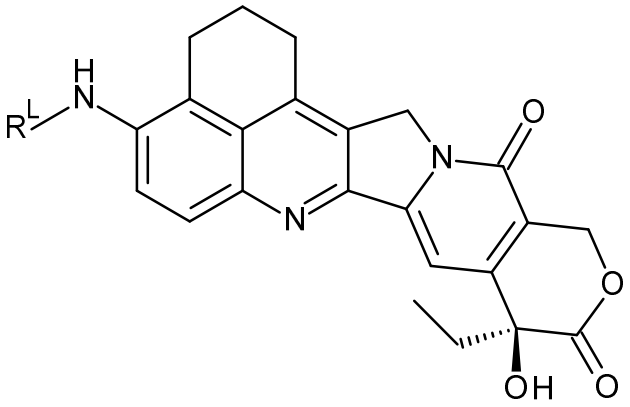
CLAIMS

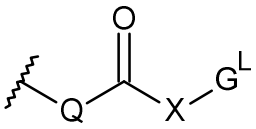
1. A compound with the formula **I**:



I

and salts and solvates thereof, wherein R^L is a linker for connection to an antibody or an antigen-binding fragment of an antibody, which is selected from:

(ia):

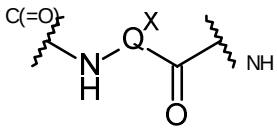


Ia

,

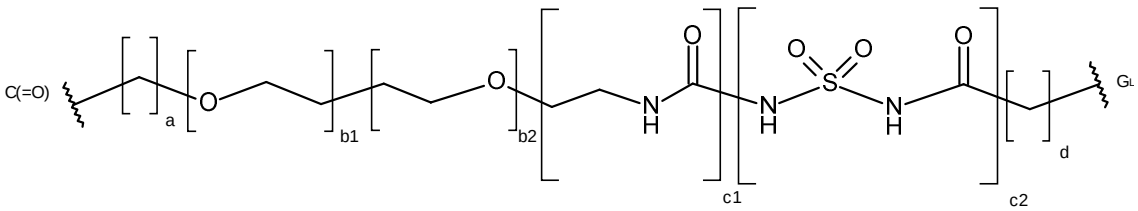
wherein

Q is:



, where Q^X is such that Q is an amino-acid residue, a dipeptide residue, a tripeptide residue or a tetrapeptide residue, and wherein the superscripted labels C(=O) and NH indicate the group to which the atoms are bound;

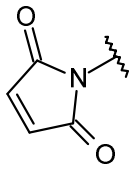
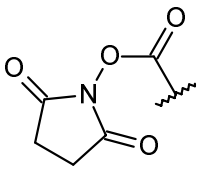
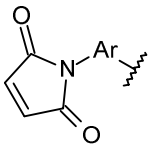
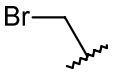
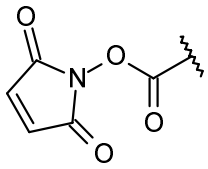
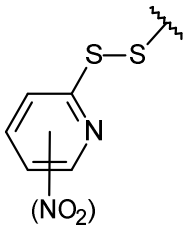
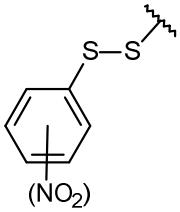
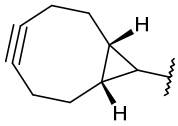
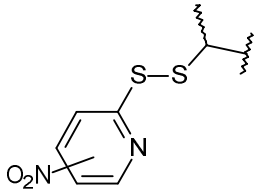
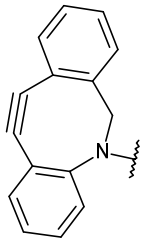
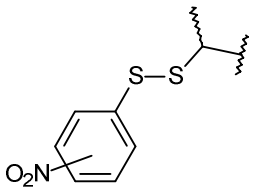
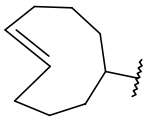
X is:

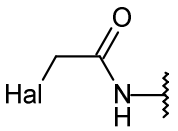
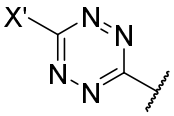
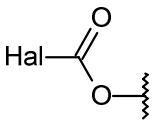
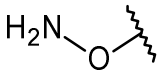


,

where a = 0 to 5, b1 = 0 to 16, b2 = 0 to 16, c1 = 0 or 1, c2 = 0 or 1, d = 0 to 5, wherein at least b1 or b2 = 0 and at least c1 or c2 = 0;

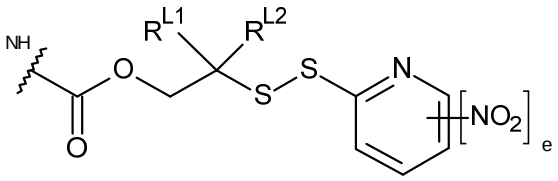
G^L is a linker for connecting to an antibody or an antigen-binding fragment of an antibody, wherein G^L is selected from

(G^{L1-1})		(G^{L6})	
(G^{L1-2})		(G^{L7})	
(G^{L2})		(G^{L8})	
(G^{L3-1})	 where the NO_2 group is optional	(G^{L9})	
(G^{L3-2})	 where the NO_2 group is optional	(G^{L10})	
(G^{L3-3})	 where the NO_2 group is optional	(G^{L11})	
(G^{L3-4})	 where the NO_2 group is optional	(G^{L12})	

(G^{L4})	 Where Hal = I, Br, Cl	(G^{L13})	
(G^{L5})		(G^{L14})	

where Ar represents a C_{5-6} arylene group, and X' represents C_{1-4} alkyl;

(ib):



Ib

,

where R^{L1} and R^{L2} are independently selected from H and methyl, or together with the carbon atom to which they are bound form a cyclopropylene or cyclobutylene group; and

e is 0 or 1.

2. The compound according to claim 1, wherein R^L is of formula Ia.

3. The compound according to claim 2, wherein Q is:

(a) an amino acid residue selected from: Phe, Lys, Val, Ala, Cit, Leu, Ile, Arg, and Trp; or

(b) a dipeptide residue selected from:

^{NH}-Phe-Lys-$^{C=O}$,

^{NH}-Val-Ala-$^{C=O}$,

^{NH}-Val-Lys-$^{C=O}$,

^{NH}Ala-Lys-$^{C=O}$,

^{NH}-Val-Cit-$^{C=O}$,

^{NH}-Phe-Cit-$^{C=O}$,

^{NH}-Leu-Cit-$^{C=O}$,

^{NH}-Ile-Cit-$^{C=O}$,

^{NH}-Phe-Arg-$^{C=O}$,

^{NH}-Trp-Cit-$^{C=O}$, and

^{NH}-Gly-Val-$^{C=O}$; or

(c) a tripeptide residue selected from:

^{NH}-Glu-Val-Ala-$^{C=O}$,

^{NH}-Glu-Val-Cit-$^{C=O}$,

^{NH}-αGlu-Val-Ala-$^{C=O}$, and

^{NH}-αGlu-Val-Cit-$^{C=O}$; or

(d) a tetrapeptide residue selected from:

^{NH} -Gly-Gly-Phe-Gly-$^{C=O}$; and

^{NH} -Gly-Phe-Gly-Gly-$^{C=O}$,

wherein ^{NH}- represents the N-terminus, and -$^{C=O}$ represents the C-terminus of the residue.

4. The compound according to either claim 2 or claim 3, wherein a is:

(a) 0 to 3; or

(b) 0 or 1; or

(c) 0.

5. The compound according to any one of claims 2 to 4, wherein b1 is:

(a) 0 to 8; or

(b) 0; or

(c) 2; or

(d) 3; or

(e) 4; or

(f) 5; or

(g) 8.

6. The compound according to any one of claims 2 to 4, wherein b2 is:

(a) 0 to 8; or

(b) 0; or

(c) 2; or

(d) 3; or

(e) 4; or

(f) 5; or

(g) 8.

7. The compound according to any one of claims 2 to 6, wherein

(i) c1 is:

(a) 0; or

(b) 1; and

(ii) c2 is:

(a) 0; or

(b) 1;

wherein at least one of c1 and c2 is 0.

8. The compound according to any one of claims 2 to 7, wherein d is:

(a) 0 to 3; or

(b) 1 or 2; or

(c) 2; or

(d) 5.

9. The compound according to any one of claims 2 to 8, wherein:

(a) a is 0, b1 is 0, c1 is 1, c2 is 0 and d is 2, and b2 is 0, 2, 3, 4, 5 or 8; or

(b) a is 1, b2 is 0, c1 is 0, c2 is 0 and d is 0, and b1 is 0, 2, 3, 4, 5 or 8; or

(c) a is 0, b1 is 0, c1 is 0, c2 is 0 and d is 1, and b2 is 0, 2, 3, 4, 5 or 8; or

(d) b1 is 0, b2 is 0, c1 is 0, c2 is 0, one of a and d is 0, and the other of a and d is 1 or 5; or

(e) a is 1, b2 is 0, c1 is 0, c2 is 1, d is 2, and b1 is 0, 2, 3, 4, 5 or 8.

10. A compound according to claim 1, wherein G^L is selected from G^{L1-1} and G^{L1-2}.

11. The compound according to claim 1, wherein R^L is of formula Ib, and:

(a) both R^{L1} and R^{L2} are H; or

(b) R^{L1} is H and R^{L2} is methyl; or

(c) both R^{L1} and R^{L2} are methyl; or

(d) wherein R^{L1} and R^{L2} together with the carbon atom to which they are bound form a cyclopropylene group; or

(e) wherein R^{L1} and R^{L2} together with the carbon atom to which they are bound form a cyclobutylene group.

12. The compound according to claim 1 that is 1-(3-(2,5-dioxo-2,5-dihydro-1H-pyrrol-1-yl)propanamido)-N-((S)-1-(((S)-1-(((S)-9-ethyl-9-hydroxy-10,13-dioxo-2,3,9,10,13,15-hexahydro-1H,12H-benzo[de]pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl)amino)-1-oxopropan-2-yl)amino)-3-methyl-1-oxobutan-2-yl)-3,6,9,12,15,18,21,24-octaoxaheptacosan-27-amide.

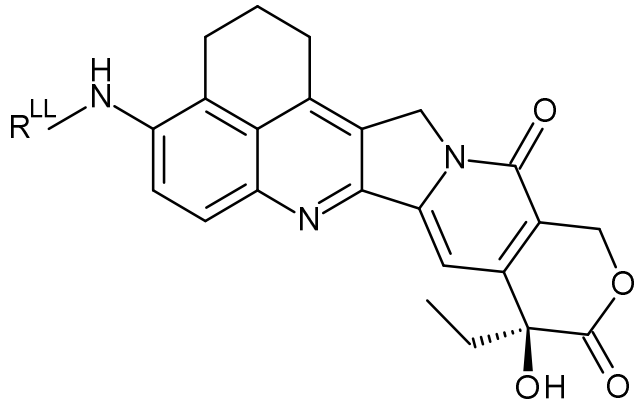
13. The compound according to claim 1 that is (S)-2-(2-(2-(2-(2-azidoethoxy)ethoxy)ethoxy)acetamido)-N-((S)-1-(((S)-9-ethyl-9-hydroxy-10,13-dioxo-2,3,9,10,13,15-hexahydro-1H,12H-benzo[de]pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl)amino)-1-oxopropan-2-yl)-3-methylbutanamide.

14. The compound according to claim 1 that is N-((S)-1-(((S)-1-(((S)-9-ethyl-9-hydroxy-10,13-dioxo-2,3,9,10,13,15-hexahydro-1H,12H-benzo[de]pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl)amino)-1-oxopropan-2-yl)amino)-3-methyl-1-oxobutan-2-yl)-4,7,10,13,16-pentaoxanonadec-18-ynamide.

15. A conjugate of formula IV:

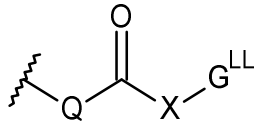
$$L - (D^L)_p \qquad (IV)$$

or a pharmaceutically acceptable salt or solvate thereof, wherein L is a Ligand unit, D^L is a Drug Linker unit that is of formula III:



III

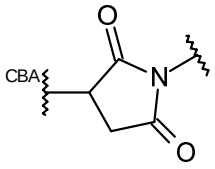
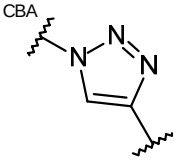
R^{LL} is a linker connected to the Ligand unit selected from (ia'):

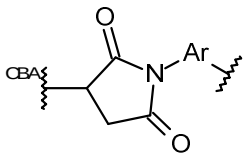
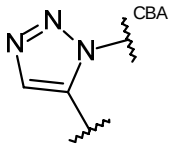
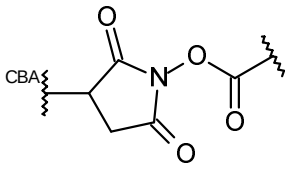
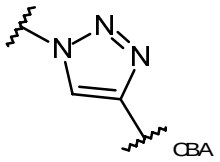
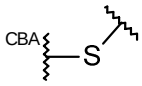
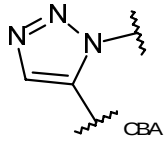
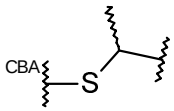
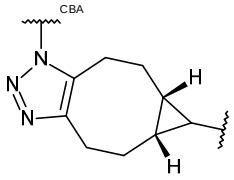
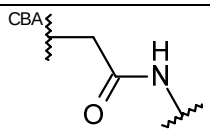
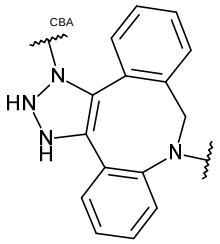
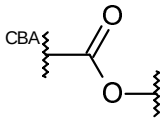
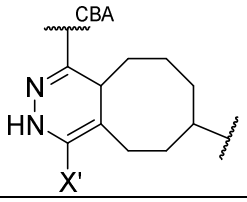
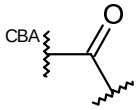
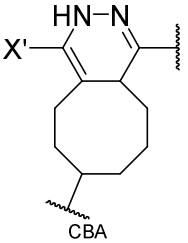
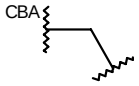
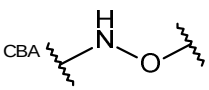


Ia'

,

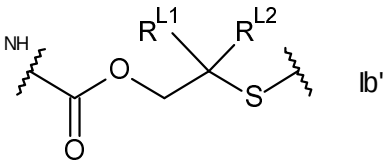
where Q and X are as defined in any one of claims 1 to 9 and G^{LL} is a linker connected to a Ligand Unit, wherein G^{LL} is selected from:

(G^{LL1-1})		(G^{LL8-1})	

(G^{LL1-2})		(G^{LL8-2})	
(G^{LL2})		(G^{LL9-1})	
(G^{LL3-1})		(G^{LL9-2})	
(G^{LL3-2})		(G^{LL10})	
(G^{LL-4})		(G^{LL11})	
(G^{LL5})		(G^{LL12})	
(G^{LL6})		(G^{LL13})	
(G^{LL7})		(G^{LL14})	

where Ar represents a C_{5-6} arylene group and X' represents C_{1-4} alkyl; and

(ib'):



Ib'

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where R^{L1} and R^{L2} are as defined in either claim 1 or claim 11; and

p is an integer of from 1 to 20,

and wherein the Ligand Unit is an antibody or an active fragment thereof.

16. The conjugate according to claim 15, wherein G^{LL} is selected from G^{LL1-1} and G^{LL1-2}.

17. The conjugate according to claim 15, wherein Q is a dipeptide residue that is ^{NH}-Val-Ala-$^{C=O}$, a is 0, b1 is 0, c1 is 1, c2 is 0 and d is 2, b2 is 8 and G^{LL} is G^{LL1-1}, wherein ^{NH}- represents the N-terminus, and -$^{C=O}$ represents the C-terminus of the residue.

18. The conjugate according to claim 15 or 16, wherein the drug loading (p) of drugs (D) to antibody (Ab) is an integer from 1 to 10.

19. A mixture of conjugates according to any one of claims 15 to 18, wherein the average drug loading per antibody in the mixture of antibody-drug conjugates is 1 to 10.

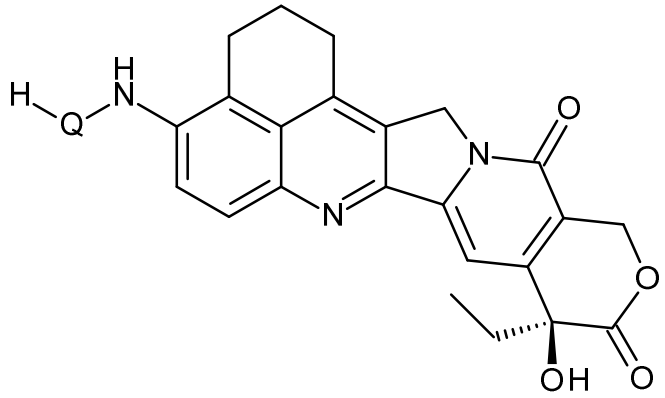
20. A pharmaceutical composition comprising the conjugate or mixture of any one of claims 15 to 19 and a pharmaceutically acceptable diluent, carrier or excipient.

21. The conjugate or mixture according to any one of claims 15 to 19, or the pharmaceutical composition according to claim 20, for use in therapy.

22. The conjugate or mixture according to any one of claims 15 to 19, or the pharmaceutical composition according to claim 20, for use in the treatment of cancer in a subject.

23. Use of the conjugate or mixture according to any one of claims 15 to 19 or the pharmaceutical composition of claim 20 in the manufacture of a medicament for the treatment of cancer in a subject.

24. A compound with the formula VI:



VI

where Q is as in either claims 1 or 3.