CLAIMS

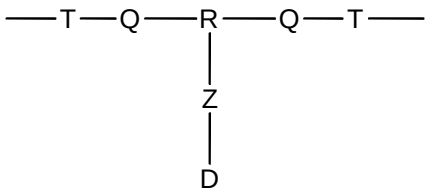
1. A polymer-bioactive agent conjugate comprising:

a polymer backbone comprising a plurality of triazole moieties; and

a plurality of releasable bioactive agents covalently bonded to and pendant from the polymer backbone,

wherein the bioactive agent are selected from the group consisting of prostaglandin analogues, β-blockers, and mixtures thereof.

2. A polymer-bioactive agent conjugate according to claim 1, comprising a moiety of formula (I):



(I)

where:

T at each occurance represents a triazole moiety;

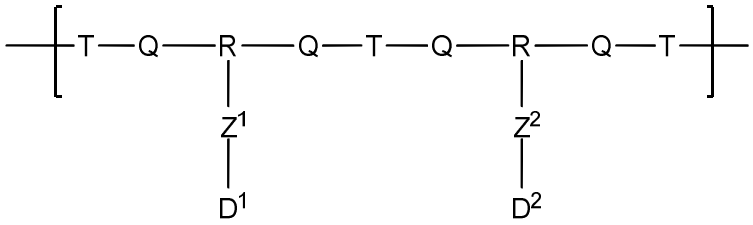
Q is independently selected at each occurrence and may be present or absent and when present represents a linking group;

R is an optionally substituted linear or branched hydrocarbon and may comprise optionally substituted aromatic hydrocarbon or heteroaromatic hydrocarbon;

Z is a cleavable linking group; and

D is one of the plurality of releasable bioactive agents, wherein the bioactive agent is selected from the group consisting of prostaglandin analogues, β-blockers, and mixtures thereof.

3. A polymer-bioactive agent conjugates according to claim 1 or claim 2, comprising a moiety of formula (Ib):



(Ib)

where:

T at each occurrence represents a triazole moiety;

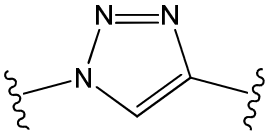
Q is independently selected at each occurrence may be present or absent and when present represents a linking group;

R is an optionally substituted linear or branched hydrocarbon and may include optionally substituted aromatic hydrocarbon and heteroaromatic hydrocarbon;

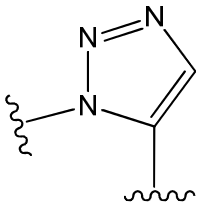
Z^1 and Z^2 are each cleavable linking groups that may be the same or different; and

D^1 and D^2 are each one of the plurality of releasable bioactive agents and may be the same or different.

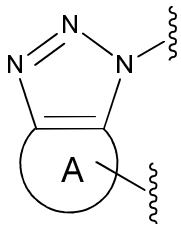
4. A polymer-bioactive agent conjugate according to any one of claims 1 to 3 wherein the polymer backbone comprises at least one triazole moiety selected from the group consisting of formula (II), (III) and (IX):



(II)



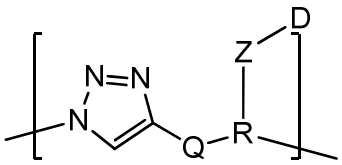
(III)



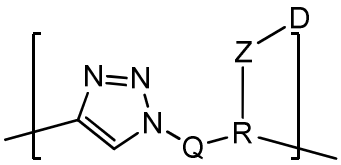
(IX)

wherein in formula (IX), A is an optionally substituted cyclic group.

5. A polymer-bioactive agent conjugate according to any one of claims 1 to 4, wherein the polymer backbone comprises at least one moiety selected from formula (IIa) and (IIb):

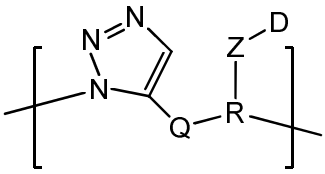


(IIa)

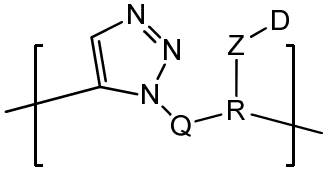


(IIb)

6. A polymer-bioactive agent conjugate according to any one of claims 1 to 5, wherein the polymer backbone comprises comprises at least one moiety selected from formula (IIIa) and (IIIb):



(IIIa)

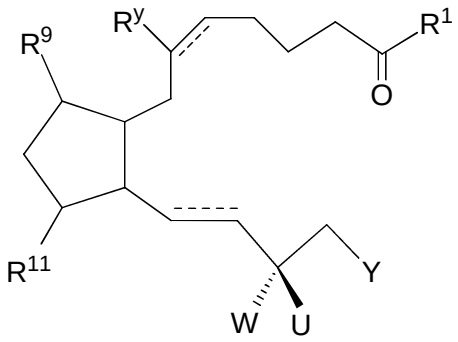


(IIIb)

7. A polymer-bioactive agent conjugate according to any one of claims 1 to 6, wherein the conjugate comprises a bioactive agent which is a prostaglandin analogue, wherein the prostaglandin analogue is conjugated to the polymer backbone at a position selected from the 1, 9, 11 and 15 position of the prostaglandin analogue.

8. A polymer-bioactive agent conjugate according to claim 7, wherein the prostaglandin analogue is conjugated to the polymer backbone via an ester, anhydride or carbonate linking group.

9. A polymer-bioactive agent conjugate according to any one of claims 1 to 8, wherein the prostaglandin analogue is of formula (X):



(X)

where:

------ represents a double or single bond;

W and U are selected from the group consisting of where W and U together form oxo (=O), where W and U are each halo, and where W is R^{15} and U is hydrogen;

R^y is an optional substituent selected from the group consisting of oxo and hydroxy;

Y is optionally substituted C_4 to C_{10} hydrocarbyl or optionally substituted C_4 to C_{10} hydrocarbyloxy; and

one of R^1, R^9, R^{11} and R^{15} is linked to the polymer backbone and wherein:

R^9, R^{11} and R^{15} when linked to the polymer backbone are the alcohol residue of an ester or carbonate linking group and R^1 when linked to the polymer backbone forms the acid residue of an ester or anhydride linking group; and

R^1 when not linked to the backbone is selected from the group consisting of -OH, -O(C_{1-6} alkyl), and -NR^aR^b where R^a and R^b are each independently selected from the group consisting of H and C_{1-6} alkyl;

R^9 and R^{11} when not linked to the polymer backbone are each hydroxy or where one of R^9 and R^{11} is linked to the backbone, the other is hydroxy; and

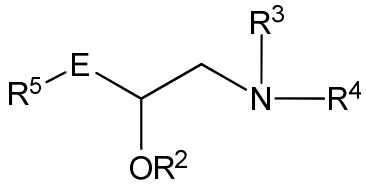
when R^{15} is not linked to the backbone then W is hydroxy and U is hydrogen, or W and U are each fluoro, or W and U together form oxo.

10. A polymer-bioactive agent conjugate according to any one of claims 1 to 9, wherein the conjugate comprises a bioactive agent which is a β-blocker.

11. A polymer-bioactive agent conjugate according to claim 10, wherein the β-blocker comprises a beta-amino alcohol group and is conjugated to the polymer

backbone *via* an ester or carbonate linking group formed with the alcohol moiety of the beta-amino alcohol group.

12. A polymer-bioactive agent conjugate according to claim 10 or claim 11, wherein the bioactive agent is a β-blocker of formula (XX):



(XX)

wherein:

E is a bond or -OCH_2- (preferably –OCH_2-);

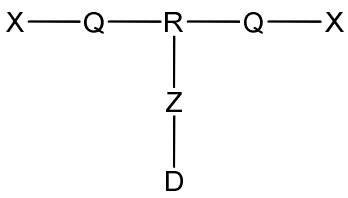
R^2 is linked to the polymer backbone and is the alcohol residue of an ester or carbonate linking group;

R^3 and R^4 are each independenly selected from the group consisting of H, and linear or branched C_1-C_4 alkyl optionally substituted by one or more substituents selected from the group consisting of hydroxy, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted amido, optionally substituted cycloalkyl, and optionally substituted aryl; and

R^5 is an optionally substituted cycloalkyl or aryl moiety.

13. A polymer –bioactive agent conjugate according to any one of claims 1 to 12, wherein the triazole moieties constitute at least 10 mol% of the polymer backbone.

14. A polymer-bioactive agent conjugate which is a copolymer of at least one monomer of formula (IV):



(IV)

where:

X may be the same or different at each occurrence and represents a terminal functional group comprising an alkyne or an azide;

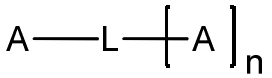
Q is independently selected at each occurrence and may be present or absent and when present, represents a linking group;

R is an optionally substituted linear or branched hydrocarbon and may comprise optionally substituted aromatic hydrocarbon or heteroaromatic hydrocarbon;

Z is a cleavable linking group; and

D is one of the plurality of releasable bioactive agents and is selected from the group consisting of prostaglandin analogues and β-blockers;

and a monomer of formula (V):



(V)

where:

A may be the same or different at each occurrence and represents a group comprising a terminal functional group comprising an alkyne or an azide functionality, wherein said terminal functional group is complementary to X;

L is an optionally substituted linker group; and

n is an integer and is at least 1.

15. A polymer-bioactive agent conjugate according to claim 14, wherein in the monomer of formula (V), L comprises a linker moiety selected from the group consisting of optionally substituted linear or branched aliphatic hydrocarbon, optionally substituted carbocyclyl, optionally substituted heterocyclyl, optionally substituted aryl, optionally substituted heteroaryl, and an optionally substituted polymeric segment.

16. A polymer-bioactive agent conjugate according to claim 15, wherein L comprises a linking moiety comprising a biodegradable polymer.

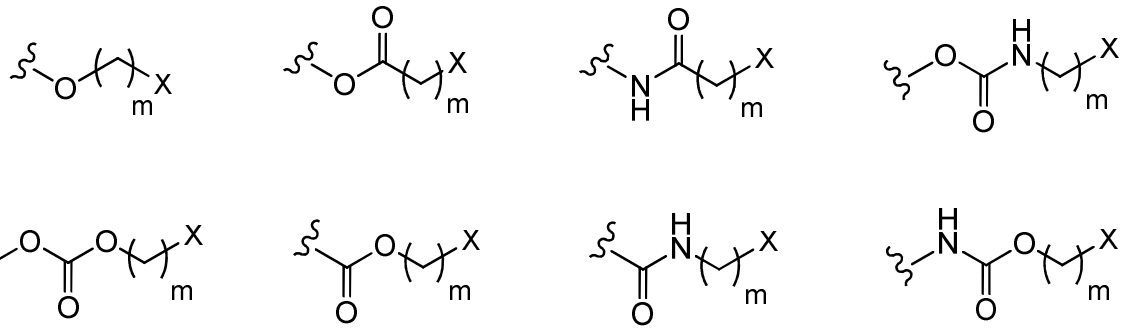
17. A polymer-bioactive agent conjugate according to claim 16 wherein the biodegradable polymer comprises at least one biodegradable moiety selected from the group consisting of an ester, an amide, a urethane, a urea and a disulfide moiety.

18. A polymer-bioactive agent conjugate according to any one of claim 16 or 17, wherein in the monomer of formula (V), L comprises a polymer selected from the group consisting of a polyether, a polyester, a polyurethane, and copolymers thereof.

19. A polymer-bioactive agent conjugate according to any one of claims 14 to 18, wherein in the monomer of formula (V), n is 1, 2, or 3.

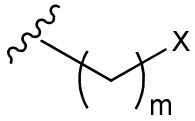
20. A polymer-bioactive agent conjugate according to any one of claims 14 to 19, wherein the monomer of formula (V), L comprises a functional group selected from the group consisting of an amide, ether, ester, urethane, urea and carbonate ester.

21. A polymer-bioactive agent conjugate according to any one of claims 14 to 20, wherein in the monomer of formula (IV), Q is present and each Q-X is independently selected from the following group:



wherein m is an integer in the range of from 0 to 10.

22. A polymer-bioactive agent conjugate according to any one of claims 14 to 21, wherein in the monomer of formula (IV), each Q-X is a group of formula (VII):



(VII)

where:

X is a terminal functional group comprising an alkyne or an azide functionality; and

m is an integer in the range of from 0 to 10.

23. A polymer-bioactive agent conjugate according to any one of claims 14 to 22, wherein in the monomer of formula (IV), R is an optionally substituted linear or branched hydrocarbon having from 1 to 12 carbon atoms.

24. An ocular implant for the treatment of glaucoma comprising the polymer-bioactive agent conjugate of any one of claims 1 to 23.