WHAT IS CLAIMED IS:

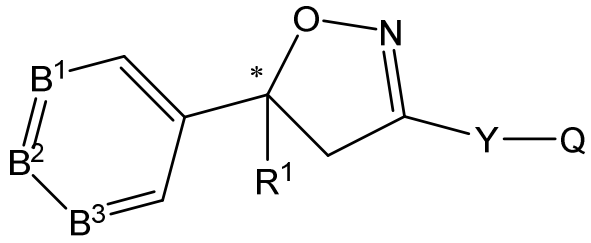
1. An extended release injectable composition comprising an antiparasitic effective amount of at least one isoxazoline active agent, a pharmaceutically acceptable polymer and a solvent or mixture of solvents.

2. An extended release injectable composition comprising an antiparasitic effective amount of at least one isoxazoline active agent, a pharmaceutically acceptable polymer which is a copolymer of a polylactides and polyglycolides, a solvent or mixture of solvents, and optionally a surfactant.

3. The extended release injectable composition according to claim 2 comprising:

a) an antiparasitic effective amount of at least one isoxazoline active agent, which is:

i) an isoxazoline compound of formula (I):



(I)

wherein:

B^1, B^2 and B^3 are each independently C-R or N;

each R is independently H, halogen, cyano, -NO_2, alkyl, haloalkyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl, alkylamino, dialkylamino or alkoxycarbonyl;

R^1 is C_1-C_3alkyl or C_1-C_3haloalkyl;

Y is an optionally substituted phenylene, naphthylene, indanylene, a 5- or 6-membered heteroarylene or an 8-10-membered fused heterobicyclylene, wherein the optional substituents are selected from the group consisting of halogen, alkyl, haloalkyl, cycloalkyl, halocycloalkyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl, alkylamino, dialkylamino, —CN or —NO_2 and NH_2-C(=S)-;

Q is X-NR^2R^3, the group (-CH_2-)(-CH_2-)N-R^3, OH, NH_2, alkoxy, haloalkoxy, alkylamino, haloalkylamino, dialkylamino, halodialkylamino, thiol, alkylthio, haloalkylthio, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl, or an optionally substituted 5- or 6-membered carbocyclyl, heterocyclyl or heteroaryl ring;

X is $(CH_2)_n$, $CH(CH_3)$, CH(CN), C(=O) or C(=S);

R^2 is H, alkyl, alkenyl, alkynyl, cycloalkyl, alkylcycloalkyl, cycloalkylalkyl, alkylcarbonyl or alkoxycarbonyl;

R^3 is H, OR^7, NR^8R^9 or Q^1; or alkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, alkylcycloalkyl, cycloalkylalkyl, alkylcarbonyl, alkoxycarbonyl, aminocarbonyl, alkylaminocarbonyl or dialkylaminocarbonyl, each optionally substituted with one or more substituents independently selected from R^4; or

R^2 and R^3 are taken together with the nitrogen to which they are attached to form a ring containing 2 to 6 atoms of carbon and optionally one additional atom selected from the group consisting of N, S and O, said ring optionally substituted with 1 to 4 substituents independently selected from the group consisting of alkyl, halogen, —CN, —NO_2 and alkoxy;

each R^4 is independently halogen; alkyl, cycloalkyl, alkoxy, alkylthio, haloalkylthio, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl, alkylamino, haloalkylamino, dialkylamino, dihaloalkylamino, cycloalkylamino, alkylcarbonyl, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, haloalkylcarbonyl, haloalkoxycarbonyl, haloalkylaminocarbonyl, dihaloalkylaminocarbonyl, hydroxy, —NH_2, —CN or —NO_2; or Q^2;

each R^5 is independently halogen, alkoxy, haloalkoxy, alkylthio, haloalkylthio, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl, alkylamino, dialkylamino, alkoxycarbonyl, —CN or —NO_2;

each R^6 is independently halogen, alkyl, haloalkyl, cycloalkyl, halocycloalkyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl, alkylamino, dialkylamino, —CN, —NO_2, phenyl or pyridinyl;

R^7 is H; or alkyl, alkenyl, alkynyl, cycloalkyl, alkylcycloalkyl or cycloalkylalkyl, each optionally substituted with one of more halogen;

R^8 is H, alkyl, alkenyl, alkynyl, cycloalkyl, alkylcycloalkyl, cycloalkylalkyl, alkylcarbonyl or alkoxycarbonyl;

R^9 is H; Q^3; or alkyl, alkenyl, alkynyl, cycloalkyl, alkylcycloalkyl or cycloalkylalkyl, each optionally substituted with one or more substituents independently selected from R^4; or

R^8 and R^9 are taken together with the nitrogen to which they are attached to form a ring containing 2 to 6 atoms of carbon and optionally one additional atom selected from the group consisting of N, S and O, said ring optionally substituted with 1 to 4 substituents independently selected from the group consisting of alkyl, halogen, —CN, —NO_2 and alkoxy;

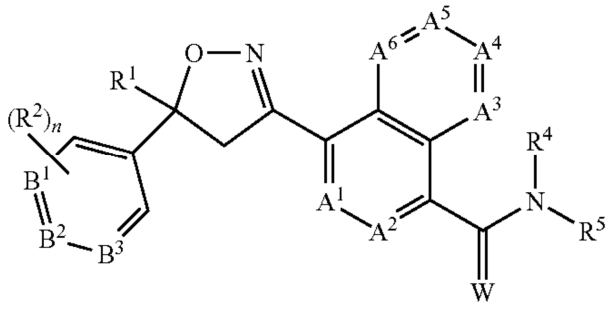
Q^1 is a phenyl ring, a 5- or 6-membered heterocyclic ring, or an 8-, 9- or 10-membered fused bicyclic ring system optionally containing one to three heteroatoms selected from up to 1 O, up to 1 S and up to 3 N, each ring or ring system optionally substituted with one or more substituents independently selected from R^5;

Q^2 is independently a phenyl ring or a 5- or 6-membered heterocyclic ring, each ring optionally substituted with one or more substituents independently selected from R^6;

Q^3 is a phenyl ring or a 5- or 6-membered heterocyclic ring, each ring optionally substituted with one or more substituents independently selected from R^6; and

n is 0, 1 or 2; and/or

ii) an isoxazoline compound of formula (II):



(II)

wherein:

A^1, A^2, A^3, A^4, A^5 and A^6 are independently selected from the group consisting of CR^3 and N, provided that at most 3 of A^1, A^2, A^3, A^4, A^5 and A^6 are N;

B^1, B^2 and B^3 are independently selected from the group consisting of CR^2 and N;

W is O or S;

R^1 is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl or C_4-C_7 cycloalkylalkyl, each optionally substituted with one or more substituents independently selected from R^6;

each R^2 is independently H, halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 haloalkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 haloalkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 haloalkylsulfonyl, C_1-C_6 alkylamino, C_2-C_6 dialkylamino, C_2-C_4 alkoxycarbonyl, —CN or —NO_2;

each R^3 is independently H, halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_3-C_6 cycloalkyl, C_3-C_6 halocycloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 haloalkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 haloalkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 haloalkylsulfonyl, C_1-C_6 alkylamino, C_2-C_6 dialkylamino, —CN or —NO_2;

R^4 is H, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl, C_4-C_7 cycloalkylalkyl, C_2-C_7 alkylcarbonyl or C_2-C_7 alkoxycarbonyl;

R^5 is H, OR^{10}, $NR^{11}R^{12}$ or Q^1; or C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl or C_4-C_7 cycloalkylalkyl, each optionally substituted with one or more substituents independently selected from R^7; or

R^4 and R^5 are taken together with the nitrogen to which they are attached to form a ring containing 2 to 6 atoms of carbon and optionally one additional atom selected from the group consisting of N, S and O, said ring optionally substituted with 1 to 4 substituents independently selected from the group consisting of C_1-C_2 alkyl, halogen, —CN, —NO_2 and C_1-C_2 alkoxy;

each R^6 is independently halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 alkylsulfonyl, —CN or —NO_2;

each R^7 is independently halogen; C_1-C_6 alkyl, C_3-C_6 cycloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 alkylamino, C_2-C_8 dialkylamino, C_3-C_6 cycloalkylamino, C_2-C_7 alkylcarbonyl, C_2-C_7 alkoxycarbonyl, C_2-C_7 alkylaminocarbonyl, C_3-C_9 dialkylaminocarbonyl, C_2-C_7 haloalkylcarbonyl, C_2-C_7 haloalkoxycarbonyl, C_2-C_7 haloalkylaminocarbonyl, C_3-C_9 dihaloalkylaminocarbonyl, hydroxy, —NH_2, —CN or —NO_2; or Q^2;

each R^8 is independently halogen, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 haloalkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 haloalkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6

haloalkylsulfonyl, C_1-C_6 alkylamino, C_2-C_6 dialkylamino, C_2-C_4 alkoxycarbonyl, —CN or —NO_2;

each R^9 is independently halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_3-C_6 cycloalkyl, C_3-C_6 halocycloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 haloalkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 haloalkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 haloalkylsulfonyl, C_1-C_6 alkylamino, C_2-C_6 dialkylamino, —CN, —NO_2, phenyl or pyridinyl;

R^{10} is H; or C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl or C_4-C_7 cycloalkylalkyl, each optionally substituted with one of more halogen;

R^{11} is H, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl, C_4-C_7 cycloalkylalkyl, C_2-C_7 alkylcarbonyl or C_2-C_7 alkoxycarbonyl;

R^{12} is H; Q^3; or C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl or C_4-C_7 cycloalkylalkyl, each optionally substituted with one or more substituents independently selected from R^7; or

R^{11} and R^{12} are taken together with the nitrogen to which they are attached to form a ring containing 2 to 6 atoms of carbon and optionally one additional atom selected from the group consisting of N, S and O, said ring optionally substituted with 1 to 4 substituents independently selected from the group consisting of C_1-C_2 alkyl, halogen, —CN, —NO_2 and C_1-C_2 alkoxy;

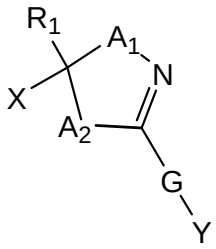
Q^1 is a phenyl ring, a 5- or 6-membered heterocyclic ring, or an 8-, 9- or 10-membered fused bicyclic ring system optionally containing one to three heteroatoms selected from up to 1 O, up to 1 S and up to 3 N, each ring or ring system optionally substituted with one or more substituents independently selected from R^8;

each Q^2 is independently a phenyl ring or a 5- or 6-membered heterocyclic ring, each ring optionally substituted with one or more substituents independently selected from R^9;

Q^3 is a phenyl ring or a 5- or 6-membered heterocyclic ring, each ring optionally substituted with one or more substituents independently selected from R^9; and

n is 0, 1 or 2; or a pharmaceutically acceptable salt thereof; and/or

iii) an isoxazoline compound of formula (III):



(III)

wherein:

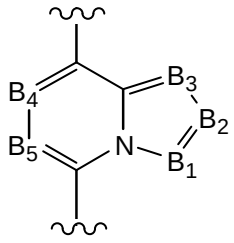
R_1 is alkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, halocycloalkyl, alkylcycloalkyl or cycloalkylalkyl, each which is unsubstituted or substituted with one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-, $R_7OC(O)$-, $R_7C(O)O$-, $R_7C(O)NR_8$-, -CN or -NO_2;

X is aryl or heteroaryl, which may be unsubstituted or substituted by one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-, $R_7OC(O)$-, $R_7C(O)O$-, $R_7C(O)NR_8$-, -CN or -NO_2;

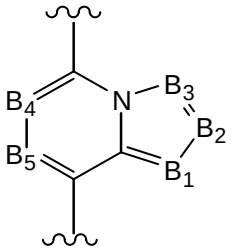
A_1 is oxygen; and

A_2 is oxygen, NR_2 or CR_7R_8;

G is G-1 or G-2;



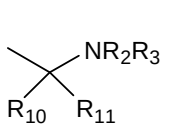
G-1



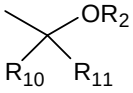
G-2

B_1, B_2, B_3, B_4 and B_5 are independently N or C-R_9;

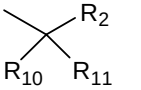
Y is hydrogen, halogen, -CN; or Y is alkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, alkylcycloalkyl, cycloalkylalkyl, aryl, or heterocyclyl or heteroaryl each of which is unsubstituted or substituted with one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-, $R_7OC(O)$-, $R_7C(O)O$-, $R_7C(O)NR_8$-, -CN or -NO_2; or Y is Y-1, Y-2, Y-3, Y-4, Y-5, Y-6, Y-7, Y-8, Y-9, Y-10, Y-11, Y-12 or Y-13;



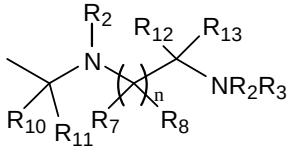
Y-1 ,



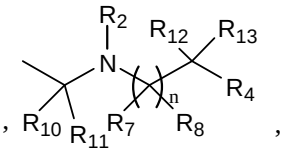
Y-2 ,



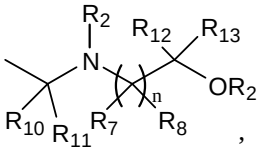
Y-3 ,



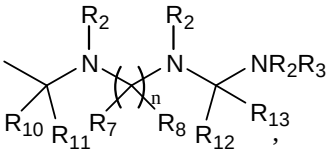
Y-4



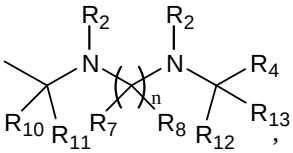
Y-5 ,



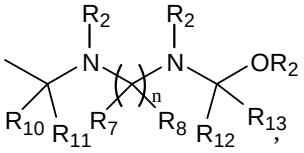
Y-6 ,



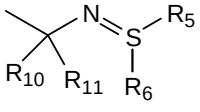
Y-7 ,



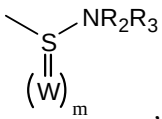
Y-8 ,



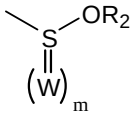
Y-9 ;



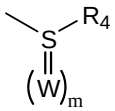
Y-10 ,



Y-11 ,



Y-12 or



Y-13

R_2, R_3 are independently hydrogen, alkyl, haloalkyl, thioalkyl, alkylthioalkyl, hydroxyalkyl, alkoxyalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, $R_{10}S(O)$-, $R_{10}S(O)_2$-, $R_{10}C(O)$-, $R_{10}C(S)$-, $R_{10}R_{11}NC(O)$-, $R_{10}R_{11}NC(S)$- $R_{10}OC(O)$-;

R_4, R_5 and R_6 are independently hydrogen, alkyl, haloalkyl, thioalkyl, alkylthioalkyl, hydroxyalkyl, alkoxyalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, aryl or heteroaryl;

R_7 and R_8 are independently hydrogen, alkyl, haloalkyl, thioalkyl, alkylthioalkyl,

hydroxyalkyl, alkoxyalkyl, alkenyl, haloalkenyl, alkynyl or haloalkynyl;

R_9 is hydrogen, halogen, -CN, or alkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, halocycloalkyl, alkylcycloalkyl or cycloalkylalkyl, each which is unsubstituted or substituted with one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-, $R_7OC(O)$-, $R_7C(O)O$-, $R_7C(O)NR_8$-, -CN or -NO_2;

R_{10}, R_{11}, R_{12} and R_{13} are each independently hydrogen, alkyl, haloalkyl, thioalkyl, alkylthioalkyl, hydroxyalkyl, alkoxyalkyl, alkenyl, haloalkenyl, alkynyl or haloalkynyl; or

R_{10} together with R_{11} form =O, =S or =NR_2; or

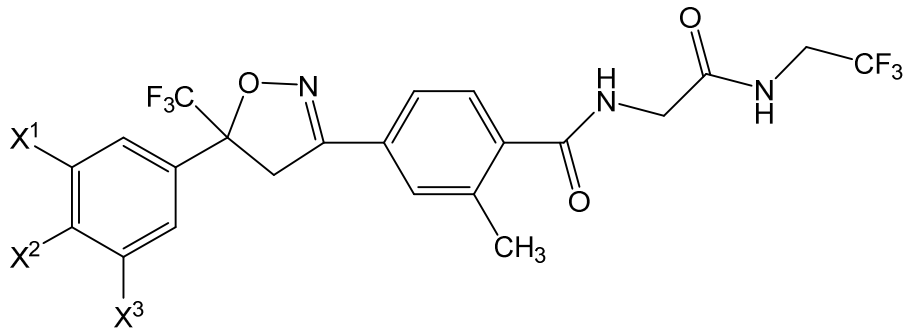
R_{12} together with R_{13} form =O, =S or =NR_2;

W is O, S or NR_2;

n is 1-4; and

m is 0, 1 or 2; or a pharmaceutically acceptable salt thereof; and/or

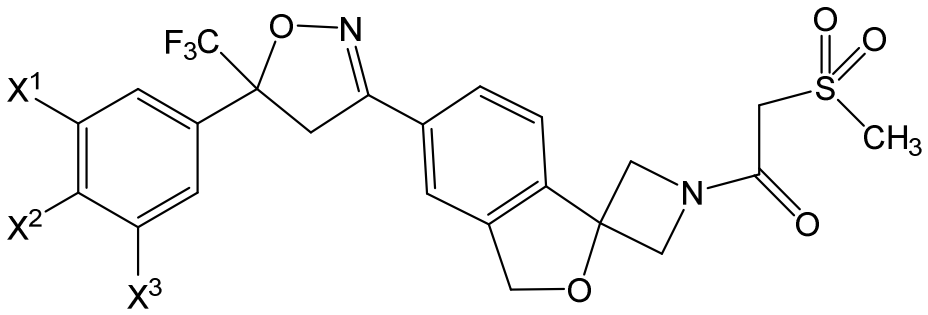
iv) an isoxazoline compound of formula (IV)



(IV)

wherein X^1, X^2 and X^3 are independently H, halogen, C_1-C_3alkyl or C_1-C_3haloalkyl, or a pharmaceutically acceptable salt thereof; and/or

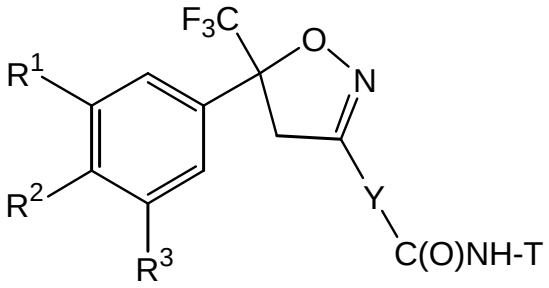
iv) an isoxazoline compound of formula (V)



(V)

wherein X^1, X^2 and X^3 are independently H, halogen, C_1-C_3alkyl or C_1-C_3haloalkyl, or a pharmaceutically acceptable salt thereof; and/or

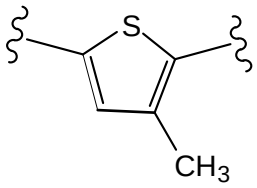
v) an isoxazoline compound of formula (VI):



(VI)

wherein R^1, R^2 and R^3 are independently H, Cl, F or CF_3;

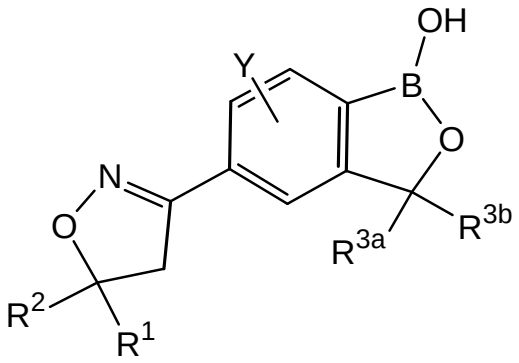
Y is the diradical group



; and

T is a C_1-C_6-alkyl group which is unsubstituted or substituted by halogen, cyano, nitro, amino, hydroxyl, C_1-C_6-alkoxy, C_1-C_6-haloalkoxy, C_1-C_6-alkylthio, C_1-C_6-alkylthio, carboxy, carbamoyl or C_2-C_6-alkanoyl group which may be unsubstituted or substituted in the alkyl portion by halogen or a pharmaceutical acceptable salt thereof; and/or

vi) an isoxazoline compound of formula (VII):



(VII)

wherein Y is hydrogen, fluoro, chloro or bromo;

R^1 is phenyl substituted with 2-4 substituents selected from halogen, methyl, difluoromethyl, trifluoromethyl, methoxy, trifluoromethoxy or trifluoroethoxy;

R^2 is methyl, fluoromethyl, trifluoromethyl or perfluoroethyl;

R^{3a} and R^{3b} are independently selected from hydrogen, methyl, ethyl or fluoromethyl; or R^{3a} and R^{3b} together combine with the carbon to which they are attached to form a cyclopentyl ring or a cyclohexyl ring; or a pharmaceutically acceptable salt thereof;

b) at least one pharmaceutically acceptable polymer;

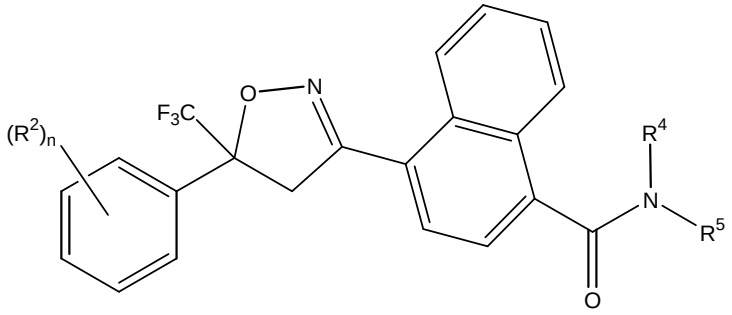
c) at least one solvent or a mixture of solvents;

d) optionally, an antioxidant; and

e) optionally at least one pharmaceutically acceptable additive, excipient or mixtures thereof.

4. The extended release injectable composition according to claim 3, wherein the isoxazoline active agent is a compound of formula (II).

5. The extended release injectable composition according to claim 4, wherein the isoxazoline active agent is a compound of the formula (IIa):



(IIa)

or a pharmaceutically acceptable salt thereof,

wherein:

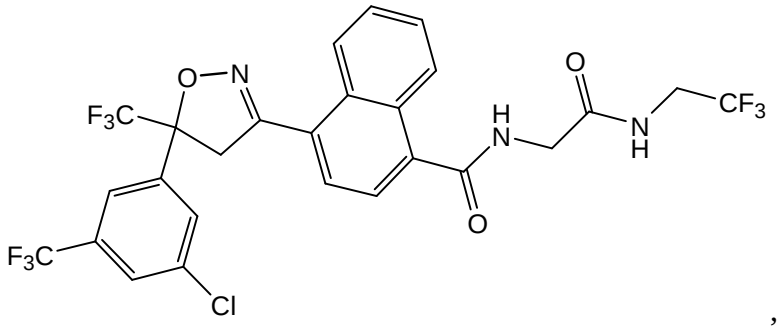
R^2 independently is halogen, C_1-C_6 alkyl or C_1-C_6 haloalkyl

R^4 is H or C_1-C_6 alkyl;

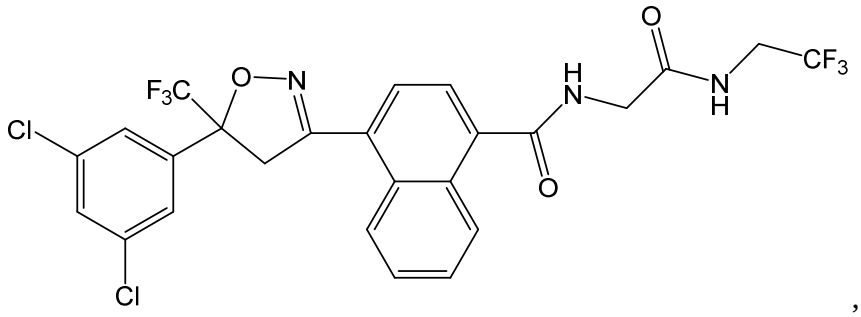
R^5 is C_1-C_4 alkyl optionally substituted with one or more R^7; and R^7 is C_2-C_7 alkylcarbonyl, C_2-C_7 alkoxycarbonyl, C_2-C_7 alkylaminocarbonyl, C_3-C_9 dialkylaminocarbonyl, C_2-C_7 haloalkylcarbonyl, C_2-C_7 haloalkoxycarbonyl, C_2-C_7 haloalkylaminocarbonyl, C_3-C_9 dihaloalkylaminocarbonyl; and

n is 0, 1 or 2.

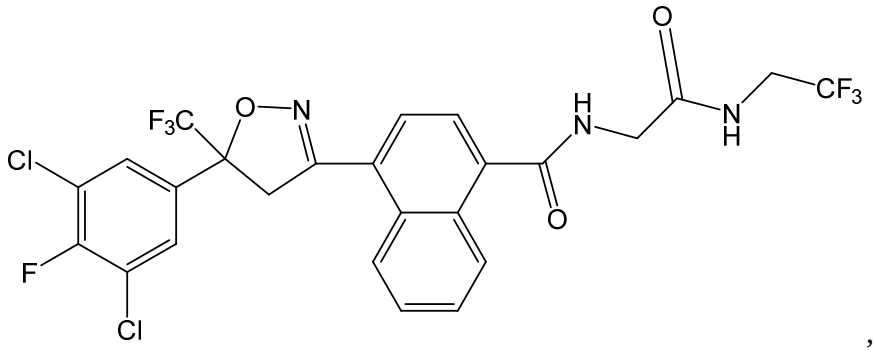
6. The extended release injectable composition according to claim 5, wherein the isoxazoline active agent is a compound of formula (IIc), (IId), (IIe) or (IIf):



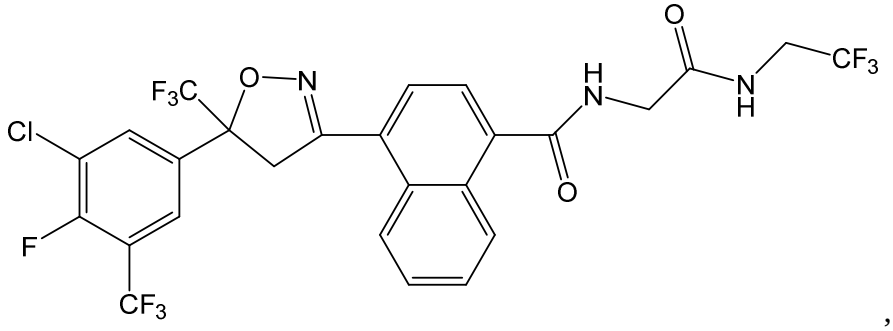
(IIc)



(IId)



(IIe)

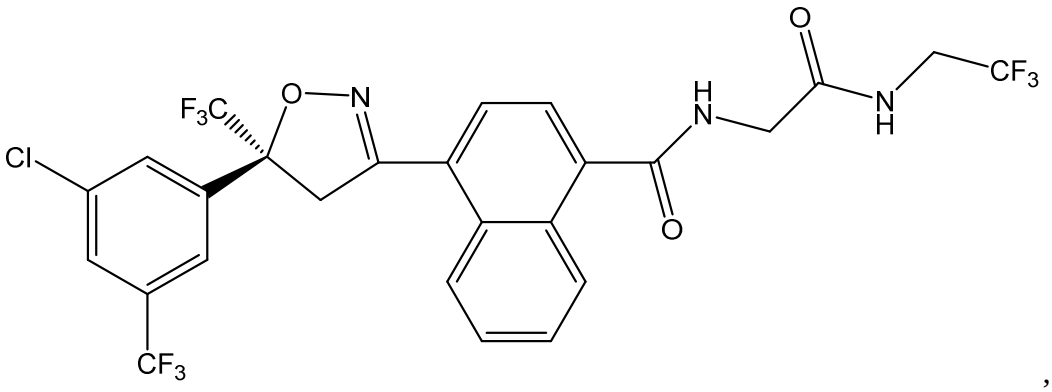


(IIf)

or a pharmaceutically acceptable salt thereof.

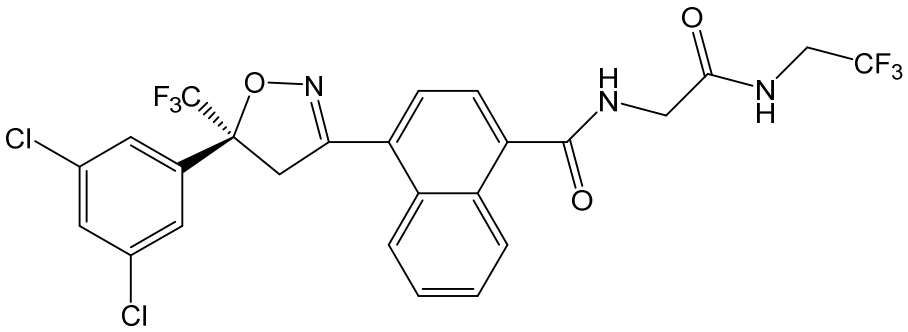
7. The extended release injectable composition according to claim 3, wherein the isoxazoline active agent is enriched in an enantiomer.

8. The extended release injectable composition according to claim 7, wherein the isoxazoline active agent is a compound of formula (*S*)-IIc, (*S*)-IId, (*S*)-IIe or (*S*)-IIf:

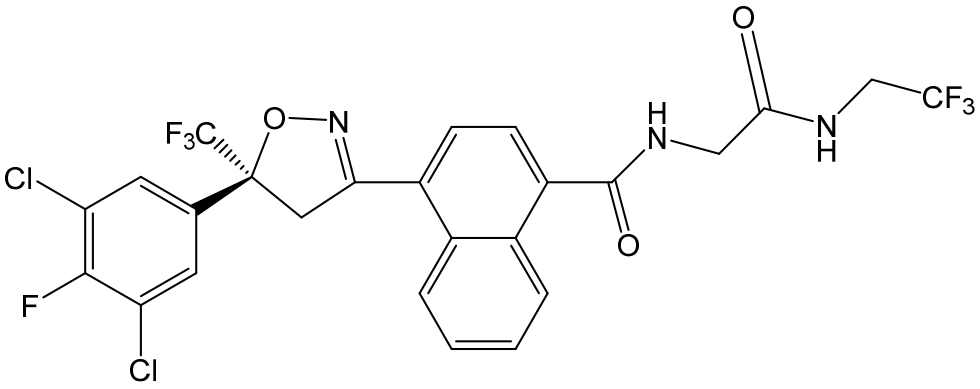


,

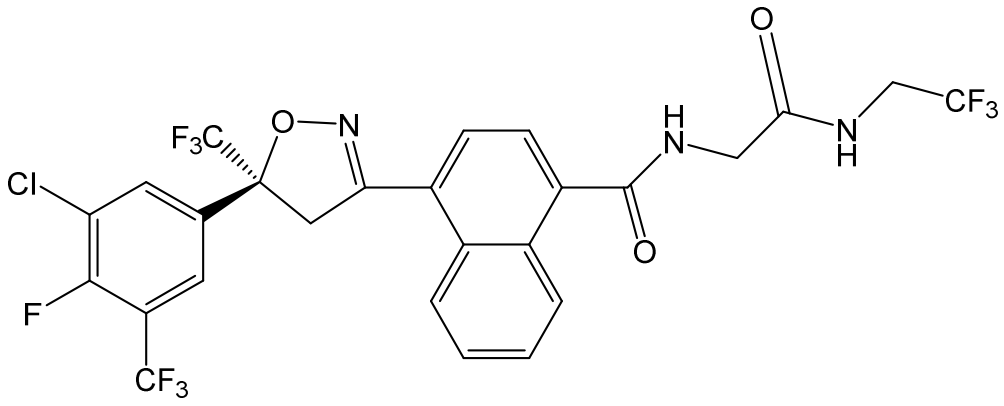
(*S*)-IIc



(*S*)-IId



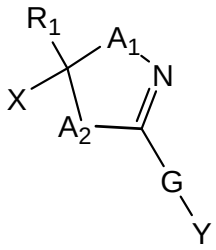
(*S*)-IIe



(*S*)-IIf

or a pharmaceutically acceptable salt thereof.

9. The extended release injectable composition according to claim 3, wherein the isoxazoline active agent is a compound of formula (III):



(III)

wherein:

R_1 is alkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, halocycloalkyl, alkylcycloalkyl or cycloalkylalkyl, each which is unsubstituted or substituted with one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-, $R_7OC(O)$-, $R_7C(O)O$-, $R_7C(O)NR_8$-, -CN or -NO_2;

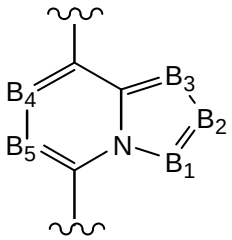
X is aryl or heteroaryl, which may be unsubstituted or substituted by one or more of

halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-, $R_7OC(O)$-, $R_7C(O)O$-, $R_7C(O)NR_8$-, -CN or $-NO_2$;

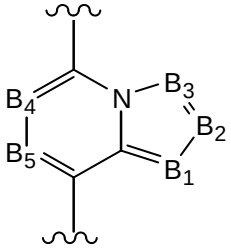
A_1 is oxygen; and

A_2 is oxygen, NR_2 or CR_7R_8;

G is G-1 or G-2;



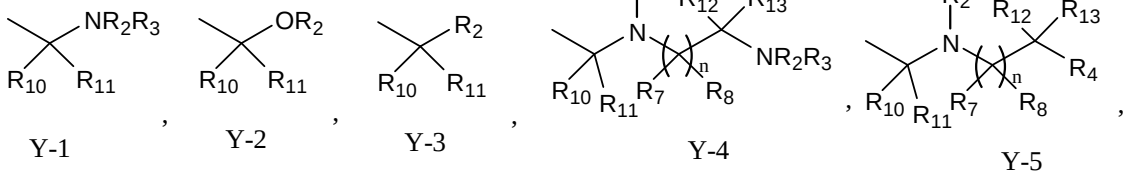
G-1



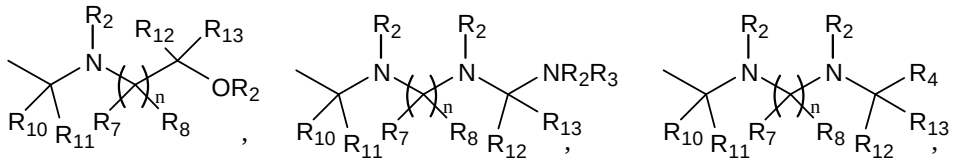
G-2

B_1, B_2, B_3, B_4 and B_5 are independently N or C-R_9;

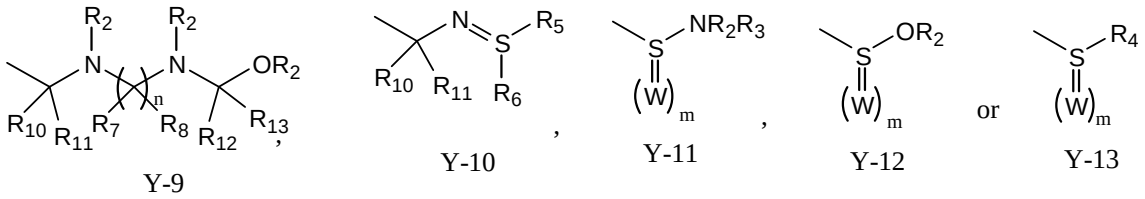
Y is hydrogen, halogen, -CN; or Y is alkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, alkylcycloalkyl, cycloalkylalkyl, aryl, or heterocyclyl or heteroaryl each of which is unsubstituted or substituted with one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-, $R_7OC(O)$-, $R_7C(O)O$-, $R_7C(O)NR_8$-, -CN or $-NO_2$; or Y is Y-1, Y-2, Y-3, Y-4, Y-5, Y-6, Y-7, Y-8, Y-9, Y-10, Y-11, Y-12 or Y-13;



Y-1 Y-2 Y-3 Y-4 Y-5



Y-6 Y-7 Y-8



Y-9 Y-10 Y-11 Y-12 or Y-13

R_2, R_3 are independently hydrogen, alkyl, haloalkyl, thioalkyl, alkylthioalkyl, hydroxyalkyl, alkoxyalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, $R_{10}S(O)$-, $R_{10}S(O)_2$-, $R_{10}C(O)$-, $R_{10}C(S)$-, $R_{10}R_{11}NC(O)$-, $R_{10}R_{11}NC(S)$- $R_{10}OC(O)$-;

R_4, R_5 and R_6 are independently hydrogen, alkyl, haloalkyl, thioalkyl, alkylthioalkyl, hydroxyalkyl, alkoxyalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, aryl or heteroaryl;

R_7 and R_8 are independently hydrogen, alkyl, haloalkyl, thioalkyl, alkylthioalkyl, hydroxyalkyl, alkoxyalkyl, alkenyl, haloalkenyl, alkynyl or haloalkynyl;

R_9 is hydrogen, halogen, -CN, or alkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, halocycloalkyl, alkylcycloalkyl or cycloalkylalkyl, each which is unsubstituted or substituted with one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-, $R_7OC(O)$-, $R_7C(O)O$-, $R_7C(O)NR_8$-, -CN or $-NO_2$;

R_{10}, R_{11}, R_{12} and R_{13} are each independently hydrogen, alkyl, haloalkyl, thioalkyl,

alkylthioalkyl, hydroxyalkyl, alkoxyalkyl, alkenyl, haloalkenyl, alkynyl or haloalkynyl; or

R_{10} together with R_{11} form =O, =S or $=NR_2$; or

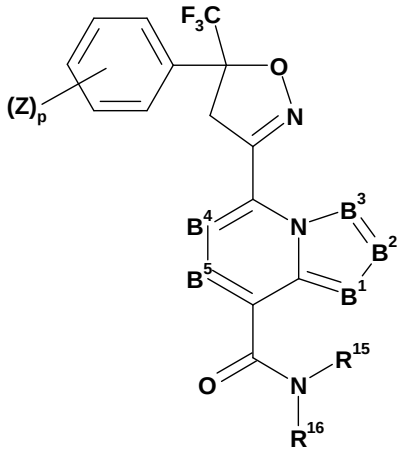
R_{12} together with R_{13} form =O, =S or $=NR_2$;

W is O, S or NR_2;

n is 1-4; and

m is 0, 1 or 2; or a pharmaceutically acceptable salt thereof.

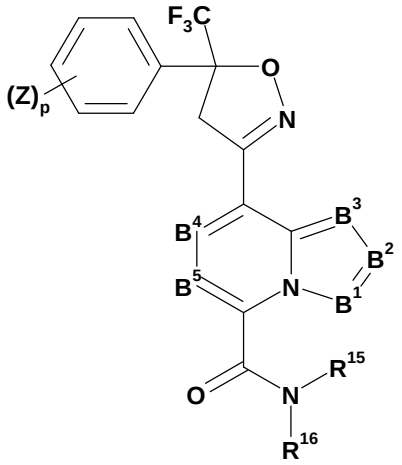
10. The extended release injectable parasiticidal composition according to claim 9, wherein the isoxazoline agent is a compound of formulae III-1.001 to III-1.025 or III-2.00-III-2.018:



Compounds III-1.001 to III-1.025

Compound No.	$(Z)_p$	B^5	B^4	B^3	B^2	B^1	R^{15}	R^{16}
1.001	3,5-Cl_2	C-H	C-H	C-H	C-H	N	H	$CH_2C(O)NHCH_2CF_3$
1.002	3,5-Cl_2	C-H	C-H	C-H	C-H	N	H	CH_2CF_3
1.003	3,5- $(CF_3)_2$	C-H	C-H	C-H	C-H	N	CH_3	$CH_2CO_2CH_3$
1.004	3,5-$(CF_3)_2$	C-H	C-H	C-H	C-H	N	CH_3	CH_2CO_2H
1.005	3,5-$(CF_3)_2$	C-H	C-H	C-H	C-H	N	CH_3	$CH_2C(O)NHCH_2CF_3$
1.006	3,5-$(CF_3)_2$	C-H	C-H	C-H	C-H	N	H	$CH_2C(O)NHCH_2CF_3$
1.007	3,5-$(CF_3)_2$	C-H	C-H	C-H	C-H	N	H	$CH_2CH_2SCH_3$
1.008	3,5-$(CF_3)_2$	C-H	C-H	C-H	C-H	C-H	H	$CH_2C(O)NHCH_2CF_3$
1.009	3,5-$(CF_3)_2$	C-H	C-H	C-H	C-H	C-H	H	$CH_2CH_2SCH_3$
1.010	3,5-$(CF_3)_2$	C-H	C-H	C-H	C-H	C-H	H	CH_2CF_3
1.011	3,5-Cl_2	C-H	C-H	C-H	C-H	C-H	H	$CH_2C(O)NHCH_2CF_3$

1.012	3,5-Cl_2	C-H	C-H	C-H	C-H	C-H	H	CH_2CF_3
1.013	3,5-Cl_2	C-H	C-H	C-H	C-H	C-H	H	$CH_2CH_2SCH_3$
1.014	3-Cl,5-CF_3	C-H	C-H	C-H	C-H	C-H	H	$CH_2C(O)NHCH_2CF_3$
1.015	3-Cl,5-CF_3	C-H	C-H	C-H	C-H	C-H	H	CH_2CF_3
1.016	3-Cl,5-CF_3	C-H	C-H	C-H	C-H	C-H	H	$CH_2CH_2SCH_3$
1.017	3,5-Cl_2	C-H	C-H	C-Me	C-H	C-Me	H	$CH_2C(O)NHCH_2CF_3$
1.018	3,5-Cl_2	C-H	C-H	C-Me	C-H	C-Me	H	CH_2CF_3
1.019	3,5-Cl_2	C-H	C-H	C-Me	C-H	C-Me	H	$CH_2CH_2SCH_3$
1.020	3,5-$(CF_3)_2$	C-H	C-H	C-Me	C-H	C-Me	H	$CH_2C(O)NHCH_2CF_3$
1.021	3,5-$(CF_3)_2$	C-H	C-H	C-Me	C-H	C-Me	H	CH_2CF_3
1.022	3,5-$(CF_3)_2$	C-H	C-H	C-Me	C-H	C-Me	H	$CH_2CH_2SCH_3$
1.023	3-Cl,5-CF_3	C-H	C-H	C-Me	C-H	C-Me	H	$CH_2C(O)NHCH_2CF_3$
1.024	3-Cl,5-CF_3	C-H	C-H	C-Me	C-H	C-Me	H	CH_2CF_3
1.025	3-Cl,5-CF_3	C-H	C-H	C-Me	C-H	C-Me	H	$CH_2CH_2SCH_3$



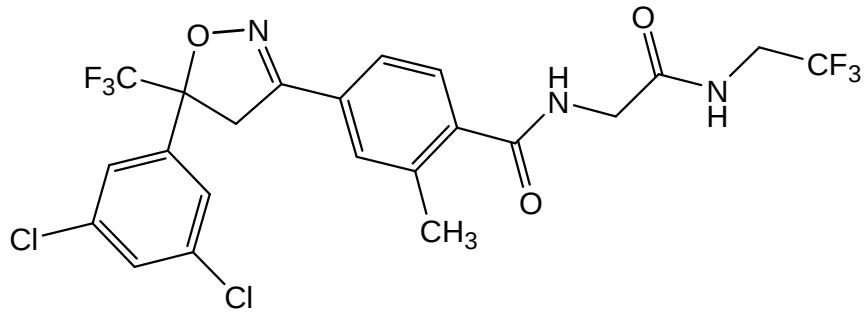
Compounds III-2.001 to III-2.018

Compound No.	$(Z)_p$	B^5	B^4	B^3	B^2	B^1	R^{15}	R^{16}
2.001	3,5-Cl_2	C-H	C-H	N	C-H	C-H	H	$CH_2C(O)NHCH_2CF_3$
2.002	3,5-Cl_2	C-H	C-H	N	C-H	C-H	H	CH_2CF_3
2.003	3,5-Cl_2	C-H	C-H	N	C-H	C-H	H	$CH_2CH_2SCH_3$
2.004	3,5-$(CF_3)_2$	C-H	C-H	N	C-H	C-H	H	$CH_2C(O)NHCH_2CF_3$
2.005	3,5-$(CF_3)_2$	C-H	C-H	N	C-H	C-H	H	CH_2CF_3
2.006	3,5-$(CF_3)_2$	C-H	C-H	N	C-H	C-H	H	$CH_2CH_2SCH_3$
2.007	3-Cl,5-CF_3	C-H	C-H	N	C-H	C-H	H	$CH_2C(O)NHCH_2CF_3$
2.008	3-Cl,5-CF_3	C-H	C-H	N	C-H	C-H	H	CH_2CF_3
2.009	3-Cl,5-CF_3	C-H	C-H	N	C-H	C-H	H	$CH_2CH_2SCH_3$
2.010	3,5-Cl_2	C-H	C-H	C-H	C-H	C-H	H	$CH_2C(O)NHCH_2CF_3$
2.011	3,5-Cl_2	C-H	C-H	C-H	C-H	C-H	H	CH_2CF_3
2.012	3,5-Cl_2	C-H	C-H	C-H	C-H	C-H	H	$CH_2CH_2SCH_3$
2.013	3,5-$(CF_3)_2$	C-H	C-H	C-H	C-H	C-H	H	$CH_2C(O)NHCH_2CF_3$
2.014	3,5-$(CF_3)_2$	C-H	C-H	C-H	C-H	C-H	H	CH_2CF_3
2.015	3,5-$(CF_3)_2$	C-H	C-H	C-H	C-H	C-H	H	$CH_2CH_2SCH_3$

2.016	3-Cl,5-CF_3	C-H	C-H	C-H	C-H	C-H	H	$CH_2C(O)NHCH_2CF_3$
2.017	3-Cl,5-CF_3	C-H	C-H	C-H	C-H	C-H	H	CH_2CF_3
2.018	3-Cl,5-CF_3	C-H	C-H	C-H	C-H	C-H	H	$CH_2CH_2SCH_3$

or a pharmaceutically acceptable salt thereof.

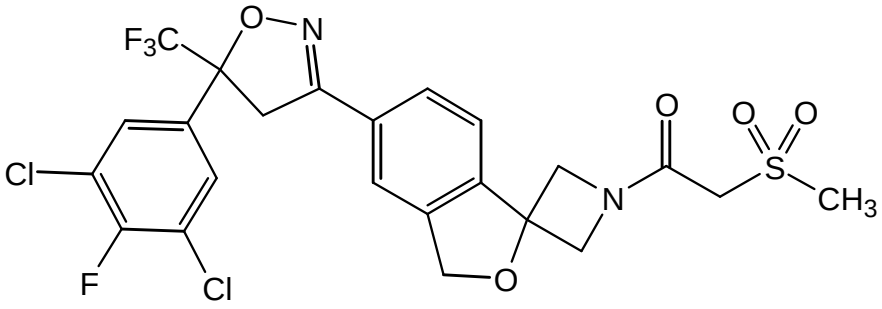
11. The extended release injectable composition according to claim 3, wherein the isoxazoline active agent is a compound of formula (IVa):



(IVa)

or a pharmaceutically acceptable salt thereof.

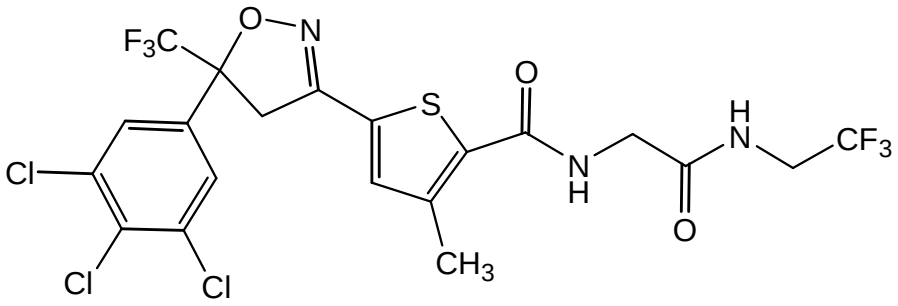
12. The extended release injectable composition according to claim 3, wherein the isoxazoline compound is a compound of formula (Va):



(Va),

or a pharmaceutically acceptable salt thereof.

13. The extended release injectable composition according to claim 3, wherein the isoxazoline compound is a compound of formula (VIa):



(VIa)

or a pharmaceutically acceptable salt thereof.

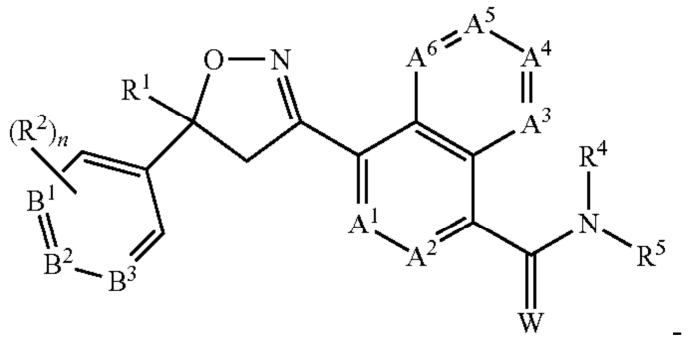
14. The extended release composition according to claim 1, wherein the pharmaceutically acceptable polymer is selected from the group consisting of polylactides, polyglycolides, polycaprolactones, polyanhydrides, polyamides, polyurethanes, polyesteramides, polyorthoesters, polydioxanones, polyacetals, polyketals, polycarbonates, polyorthocarbonates, polyphosphazenes, polyhydroxybutyrates, polyhydroxyvalerates, polyalkylene oxalates, polyalkylene succinates, poly(malic acid), poly(amino acids), poly(methyl vinyl ether), poly(maleic anhydride), chitin, chitosan, copolymers thereof or terpolymers thereof, or combinations or mixtures thereof.

15. The extended release injectable composition according to claim 2 , wherein the solvent is an alcohol, a liquid polyethylene glycol, propylene glycol, glycerol, a glycerol ester, a cyclic carbonate, 2-pyrrolidone, N-methylpyrrolidone, dimethyl isosorbide, dimethylacetamide, glycerol formal, a triglyceride, a propylene glycol diester, a poloxamer, or a mixture of at least two of these solvents.

16. The extended release injectable composition according to claim 2, wherein the solvent is a mixture of a water-miscible solvent and a water-immiscible solvent.

17. The extended release injectable composition according to claim 2 comprising:

a) about 5 to 20% (w/w) of an isoxazoline compound of Formula (II):



(II)

wherein:

A^1, A^2, A^3, A^4, A^5 and A^6 are independently selected from the group consisting of CR^3 and N, provided that at most 3 of A^1, A^2, A^3, A^4, A^5 and A^6 are N;

B^1, B^2 and B^3 are independently selected from the group consisting of CR^2 and N;

W is O or S;

R^1 is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl or C_4-C_7 cycloalkylalkyl, each optionally substituted with one or more substituents independently selected from R^6;

each R^2 is independently H, halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 haloalkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 haloalkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 haloalkylsulfonyl, C_1-C_6 alkylamino, C_2-C_6 dialkylamino, C_2-C_4 alkoxycarbonyl, —CN or —NO_2;

each R^3 is independently H, halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_3-C_6 cycloalkyl, C_3-C_6 halocycloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 haloalkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 haloalkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 haloalkylsulfonyl, C_1-C_6 alkylamino, C_2-C_6 dialkylamino, —CN or —NO_2;

R^4 is H, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl, C_4-C_7 cycloalkylalkyl, C_2-C_7 alkylcarbonyl or C_2-C_7 alkoxycarbonyl;

R^5 is H, OR^{10}, $NR^{11}R^{12}$ or Q^1; or C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl or C_4-C_7 cycloalkylalkyl, each optionally substituted with one or more substituents independently selected from R^7; or

R^4 and R^5 are taken together with the nitrogen to which they are attached to form a ring containing 2 to 6 atoms of carbon and optionally one additional atom selected from the group

consisting of N, S and O, said ring optionally substituted with 1 to 4 substituents independently selected from the group consisting of C_1-C_2 alkyl, halogen, —CN, —NO_2 and C_1-C_2 alkoxy;

each R^6 is independently halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 alkylsulfonyl, —CN or —NO_2;

each R^7 is independently halogen; C_1-C_6 alkyl, C_3-C_6 cycloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 alkylamino, C_2-C_8 dialkylamino, C_3-C_6 cycloalkylamino, C_2-C_7 alkylcarbonyl, C_2-C_7 alkoxycarbonyl, C_2-C_7 alkylaminocarbonyl, C_3-C_9 dialkylaminocarbonyl, C_2-C_7 haloalkylcarbonyl, C_2-C_7 haloalkoxycarbonyl, C_2-C_7 haloalkylaminocarbonyl, C_3-C_9 dihaloalkylaminocarbonyl, hydroxy, —NH_2, —CN or —NO_2; or Q^2;

each R^8 is independently halogen, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 haloalkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 haloalkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 haloalkylsulfonyl, C_1-C_6 alkylamino, C_2-C_6 dialkylamino, C_2-C_4 alkoxycarbonyl, —CN or —NO_2;

each R^9 is independently halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_3-C_6 cycloalkyl, C_3-C_6 halocycloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 haloalkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 haloalkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 haloalkylsulfonyl, C_1-C_6 alkylamino, C_2-C_6 dialkylamino, —CN, —NO_2, phenyl or pyridinyl;

R^{10} is H; or C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl or C_4-C_7 cycloalkylalkyl, each optionally substituted with one of more halogen;

R^{11} is H, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl, C_4-C_7 cycloalkylalkyl, C_2-C_7 alkylcarbonyl or C_2-C_7 alkoxycarbonyl;

R^{12} is H; Q^3; or C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl or C_4-C_7 cycloalkylalkyl, each optionally substituted with one or more substituents independently selected from R^7; or

R^{11} and R^{12} are taken together with the nitrogen to which they are attached to form a ring containing 2 to 6 atoms of carbon and optionally one additional atom selected from the group consisting of N, S and O, said ring optionally substituted with 1 to 4 substituents independently selected from the group consisting of C_1-C_2 alkyl, halogen, —CN, —NO_2 and C_1-C_2 alkoxy;

Q^1 is a phenyl ring, a 5- or 6-membered heterocyclic ring, or an 8-, 9- or 10-membered fused bicyclic ring system optionally containing one to three heteroatoms selected from up to 1

O, up to 1 S and up to 3 N, each ring or ring system optionally substituted with one or more substituents independently selected from R^8;

each Q^2 is independently a phenyl ring or a 5- or 6-membered heterocyclic ring, each ring optionally substituted with one or more substituents independently selected from R^9;

Q^3 is a phenyl ring or a 5- or 6-membered heterocyclic ring, each ring optionally substituted with one or more substituents independently selected from R^9; and

n is 0, 1 or 2 or a pharmaceutically acceptable salt thereof;

b) about 1 to about 30% (w/w) of a pharmaceutically acceptable polymer which is a copolymer of polylactides and polyglycolides that has a lactide to glycolide ratio of 40:60 to 85:15(weight:weight);

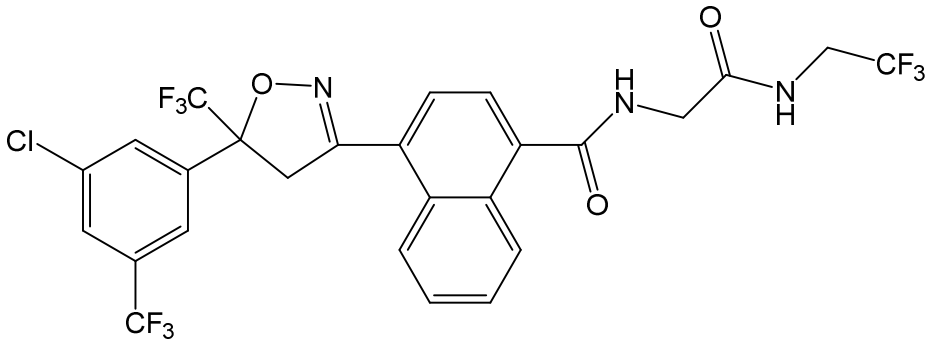
c) about 40 to about 85% (w/w) of solvent selected from a cyclic carbonate, dimethylisosorbide, a poloxamer, a glycerol ester, a triglyceride, a liquid polyethylene glycol and an alcohol, or a mixture thereof;

d) optionally, about 0.01% to about 2.0% (w/w) of an antioxidant;

e) optionally, about 0.1 % to about 10% (w/w) of a surfactant and

f) optionally about 0.01% to about 5.0% (w/w) of a pharmaceutically acceptable additive, excipient or mixtures thereof.

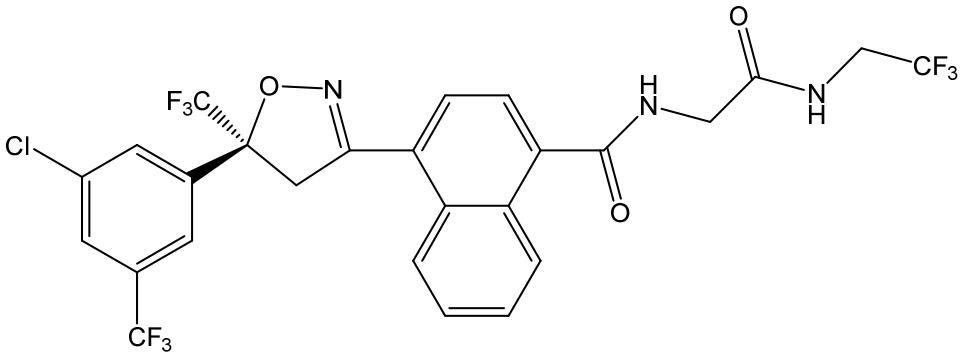
18. The extended release injectable formulation according to claim 17, wherein the compound is a compound of formula (IIc):



(IIc)

or a pharmaceutically acceptable salt thereof.

19. The extended release injectable formulation according to claim17, wherein the isoxazoline compound is:



(*S*)-IIc

or a pharmaceutically acceptable salt thereof.

20. The extended release formulation according to claim 17, wherein the solvent is a cyclic carbonate.

21. The extended release formulation according to claim 17, wherein the solvent is a solvent mixture comprising a cyclic carbonate and a glycerol ester.

22. The extended release formulation according to claim 18, wherein the ratio of cyclic carbonate to glycerol ester is about 1.5:1 to about 15:1 (w/w).

23. The extended release formulation according to claim 17 or 18, wherein the cyclic carbonate is propylene carbonate.

24. The extended release formulation of claim 17 or 18, wherein the glycerol ester is triacetin.

25. The extended release formulation of claim 17 or claim 18, wherein the solvent is a mixture comprising propylene carbonate and triacetin.

26. The extended release formulation according to claim 21 wherein the solvent mixture further comprises a poloxamer.

27. The extended release formulation according to claim 26, which comprises about 0.5 to about 20 % (w/w) of the poloxamer.

28. The extended release injectable parasiticidal formulation according to claim 17, wherein the ratio of the copolymer of polylactides and polyglycolides to the isoxazoline compound of Formula (II) is about 1.5:1 to about 1:1.5 (weight:weight).

29. The extended release formulation according to claim 28, wherein the weight average molecular weight of the copolymer of polylactides and polyglycolides is from about 5 to about 20 kDa.

30. The extended release formulation according to claim 2, which further comprise an effective amount at least one additional pharmaceutically active agent.

31. The extended release formulation according to claim 30, wherein the additional pharmaceutically active agent is a macrocyclic lactone.

32. The extended release formulation according to claim 31, wherein the macrocyclic lactone is abamectin, dimadectin, doramectin, emamectin, eprinomectin, ivermectin, latidectin, lepimectin, selamectin, milbemectin, milbemycin D, milbemycin oxime, moxidectin or nemadectin.

33. Use of the long acting injectable formulation according to claim 2 in the manufacture of a medicament for treating or preventing parasites in an animal in need thereof for a period of 3 to 12 months.

34. The use according to claim 33 wherein the animal is a dog, cat, sheep or cattle.

35. The use according to claim 33 wherein the parasites are treated or prevented for about 5 to 6 months.

36. The use according to claim 33 wherein the parasites are treated or prevented for about 6 months or longer.

37. The use according to claim 33 wherein the parasites are fleas and/or ticks.

38. Use of an isoxazoline in the manufacture of an extended release injectable formulation for treating or preventing a parasite infestation or infection on or in an animal.