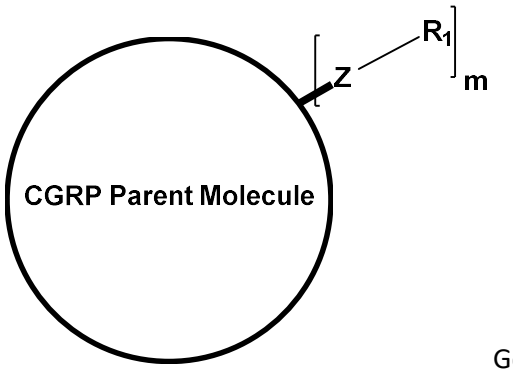
CLAIMS

What is claimed is:

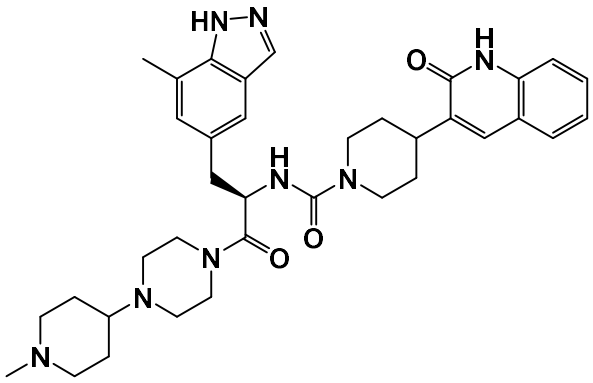
1. A compound having General Formula 1, comprising a CGRP Parent Molecule having at least one functionalizable moiety Z:



General Formula (1)

wherein:

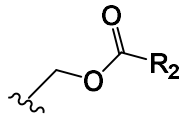
the CGRP Parent Molecule having at least one functionalizable moiety Z is



;

Z is a functionalizable moiety present on the CGRP Parent Molecule;

m is at least 1;

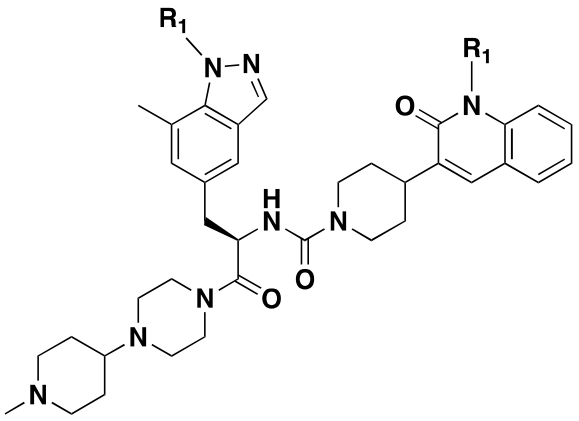
R_1 is  or $-CH_2OP(=O)(OH)_2$;

R_2 is $-[C(R_3)_2]_nR_4$, $-NR_3R_4$, or $-OR_4$, wherein each R_3 is independently hydrogen or C1-C10 alkyl wherein R_3 are optionally connected to form a ring, and R_4 is a substituted or unsubstituted C1-C20 alkyl group, a substituted or unsubstituted C2-C20 alkenyl group, a substituted or unsubstituted C2-C20 alkynyl group, a substituted or unsubstituted C1-C20 heteroalkyl group, a substituted or unsubstituted

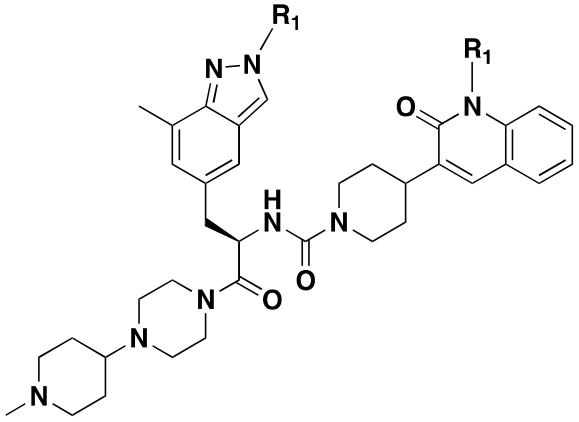
C2-C20 heteroalkenyl group, a substituted or unsubstituted C2-C20 heteroalkynyl group, a substituted or unsubstituted C3-C20 cycloalkyl group, a substituted or unsubstituted C3-C20 heterocycloalkyl group, a substituted or unsubstituted C6-C20 aryl group, or a substituted or unsubstituted C1-C20 heteroaryl group, and n is 0 or 1,

wherein, when m is at least 2, R_2 are optionally connected to form a ring.

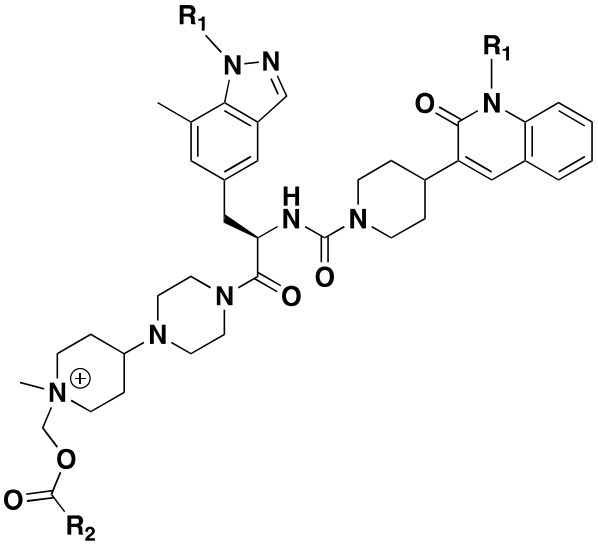
2. The compound according to Claim 1, having one of Formulae (I) to (IV):



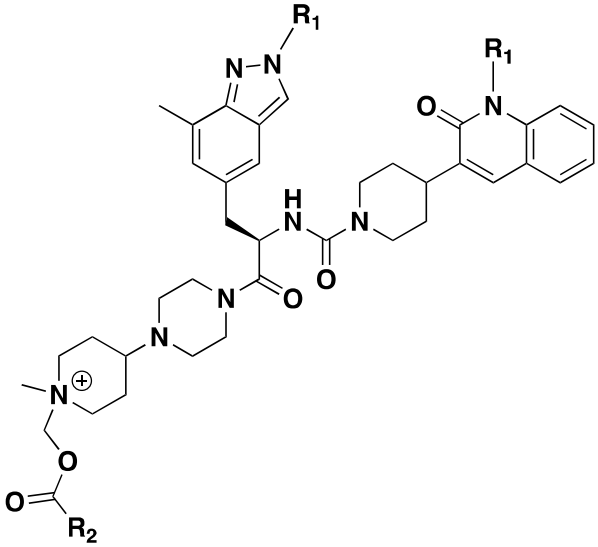
(I)



(II)

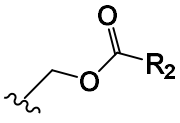
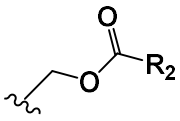


(III)

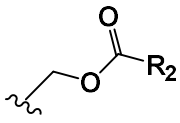


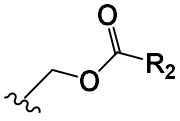
(IV)

wherein, in Formulae (I) to (IV),

each R_1 is independently H, , or $-CH_2OP(=O)(OH)_2$, provided that at least one R_1 is  or $-CH_2OP(=O)(OH)_2$;

R_2 is $-[C(R_3)_2]_nR_4$, $-NR_3R_4$, or $-OR_4$, wherein each R_3 is independently hydrogen or C1-C10 alkyl group, wherein R_3 are optionally connected to form a ring, and R_4 is a substituted or unsubstituted C1-C20 alkyl group, a substituted or unsubstituted C2-C20 alkenyl group, a substituted or unsubstituted C2-C20 alkynyl group, a substituted or unsubstituted C1-C20 heteroalkyl group, a substituted or unsubstituted C2-C20 heteroalkenyl group, a substituted or unsubstituted C2-C20 heteroalkynyl group, a substituted or unsubstituted C3-C20 cycloalkyl group, a substituted or unsubstituted C3-C20 heterocycloalkyl group, or a substituted or unsubstituted C6-C20 aryl group, or a substituted or unsubstituted C1-C20 heteroaryl group, and n is 0 or 1,

wherein, when each R_1 is , R_2 are optionally connected to form a ring.

3. The compound according to Claim 2, wherein, in Formulae (I) and (II), each R_1 is .

4. The compound according to Claim 2, wherein one of the following conditions is met:

at least one R_3 is not hydrogen;

at least one R_3 is a methyl group;

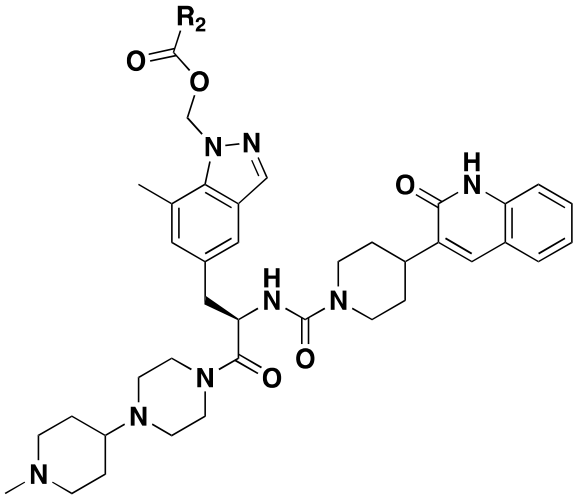
each R_3 is not hydrogen; or

each R_3 is a methyl group.

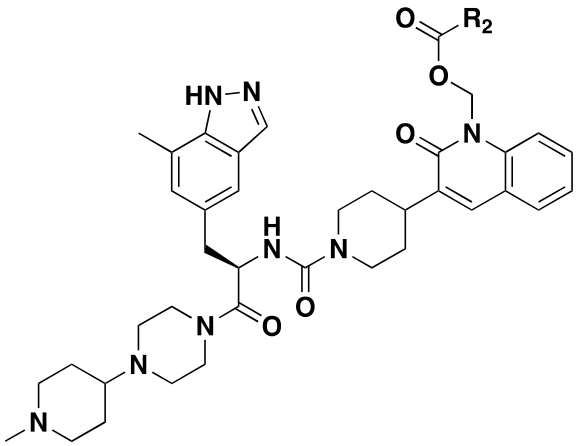
5. The compound according to Claim 2, wherein R_4 is each independently a substituted or unsubstituted C1-C10 alkyl group, a substituted or unsubstituted C2-C10 alkenyl group, a substituted or unsubstituted C2-C10 alkynyl group, a substituted or unsubstituted C1-C10 heteroalkyl group, a

substituted or unsubstituted C2-C10 heteroalkenyl group, a substituted or unsubstituted C2-C10 heteroalkynyl group, a substituted or unsubstituted C3-C10 cycloalkyl group, a substituted or unsubstituted C3-C10 heterocycloalkyl group, a substituted or unsubstituted C6-C10 aryl group, or a substituted or unsubstituted C1-C10 heteroaryl group.

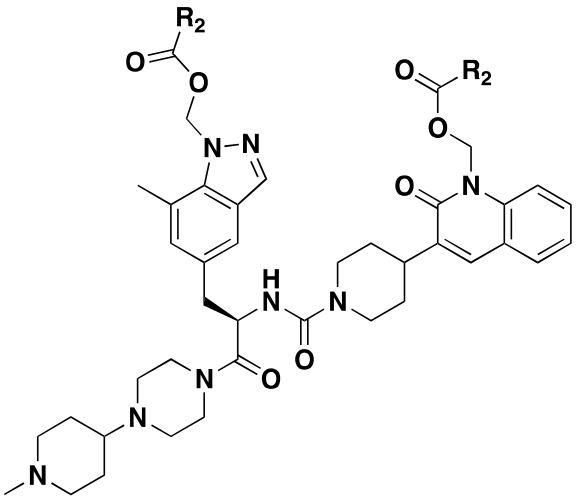
6. The compound according to Claim 2, wherein Formula (I) is represented by one of Formulae (Ia), (Ib), and (Ic), and wherein Formula (II) is represented by one of Formulae (IIa), (IIb), and (IIc):



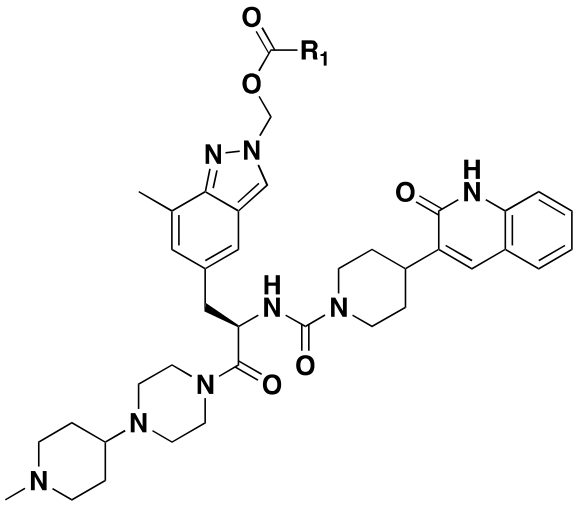
(Ia)



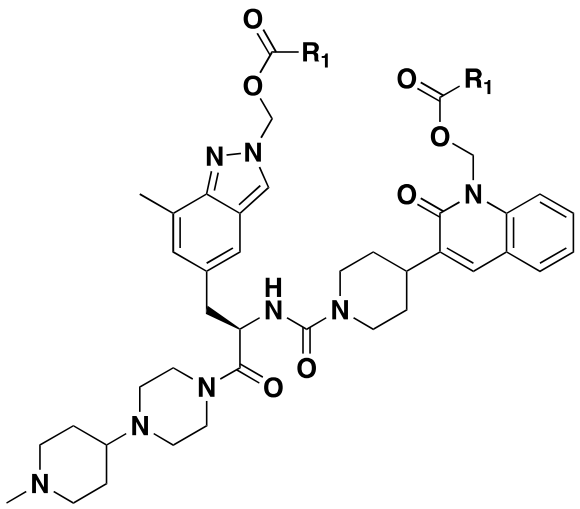
(Ib)



(Ic)



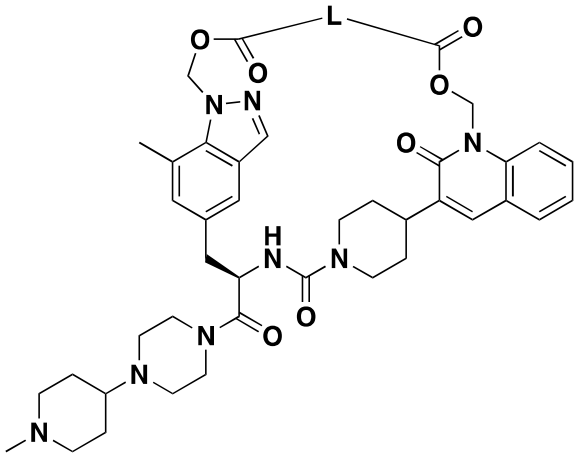
(IIa)



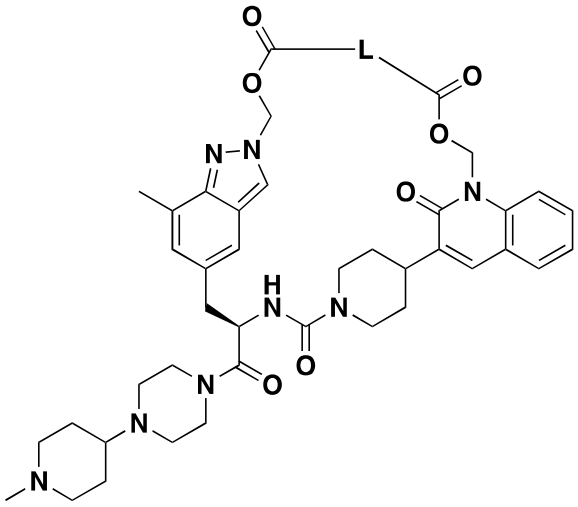
(IIb)

wherein, in Formulae (Ia), (Ib), (Ic), (IIa), and (IIb), R_2 is the same as that in Claim 1.

7. The compound according to Claim 6, wherein, in Formulae (Ic) and (IIb), R_2 are connected with a single bond to form a linking group L, as in Formulae (Id) and (IIc), respectively:



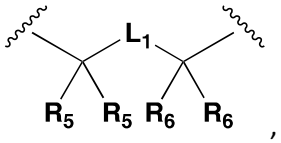
(Id)



(IIc)

wherein, L is a substituted or unsubstituted C1-C10 alkylene group, a substituted or unsubstituted C2-C10 alkenylene group, a substituted or unsubstituted C2-C10 alkynylene group, a substituted or unsubstituted C1-C10 heteroalkylene group, a substituted or unsubstituted C2-C10 heteroalkenylene group, a substituted or unsubstituted C2-C10 heteroalkynylene group, a substituted or unsubstituted C3-C10 cycloalkylene group, a substituted or unsubstituted C3-C10 heterocycloalkylene group, a substituted or unsubstituted C6-C10 arylene group, or a substituted or unsubstituted C1-C10 heteroarylene group, or any combination thereof.

8. The compound according to Claim 7, wherein the linking group L is:



,

wherein

L_1 is a substituted or unsubstituted C1-C10 alkylene group, a substituted or unsubstituted C2-C10 alkenylene group, a substituted or unsubstituted C2-C10 alkynylene group, a substituted or unsubstituted C1-C10 heteroalkylene group, a substituted or unsubstituted C2-C10 heteroalkenylene group, a substituted or unsubstituted C2-C10 heteroalkynylene group, a substituted or unsubstituted C3-C10 cycloalkylene group, a substituted or unsubstituted C3-C10 heterocycloalkylene group, a substituted or unsubstituted C6-C10 arylene group, or a substituted or unsubstituted C1-C10 heteroarylene group, and

R_5 and R_6 are each independently hydrogen or C1-C10 alkyl, wherein two R_5 and two R_6 are optionally connected to form a ring.

9. The compound according to Claim 8, wherein one of the following conditions is met:

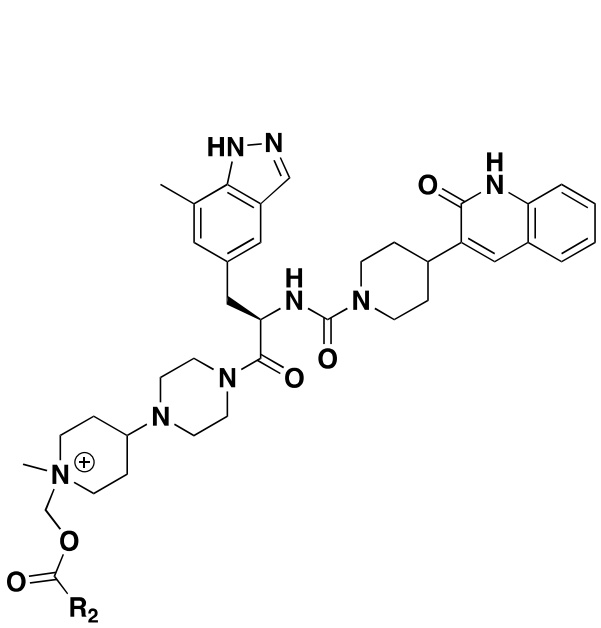
at least one R_5 is not hydrogen and at least one R_6 is not hydrogen;

at least one R_5 is a methyl group and at least one R_6 is a methyl group;

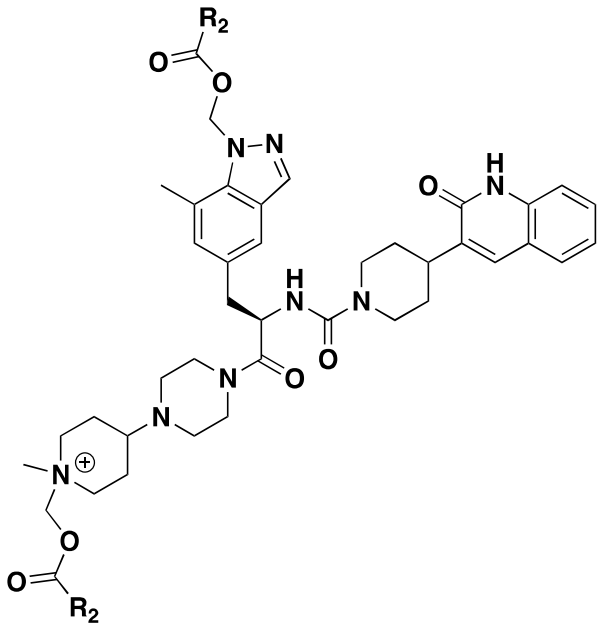
each R_5 is not hydrogen and each R_6 is not hydrogen; or

each R_5 is a methyl group and each R_6 is a methyl group.

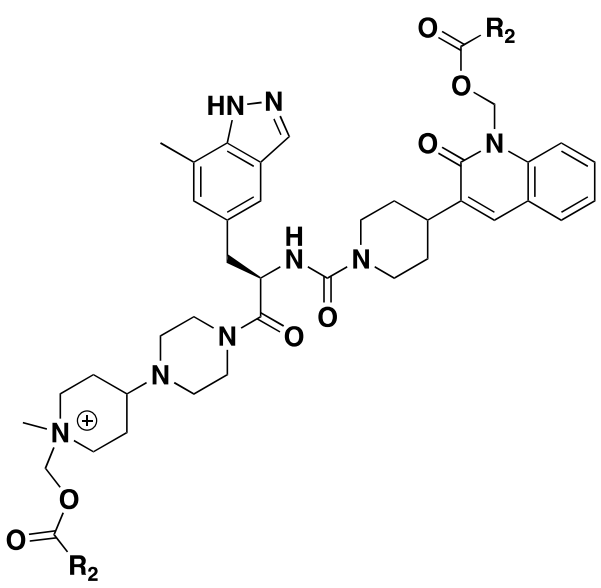
10. The compound according to Claim 1, wherein Formula (III) is represented by one of Formulae (IIa), (IIIb), (IIIc), and (IIId), and wherein Formula (IV) is represented by one of Formulae (IVa) and (IVb):



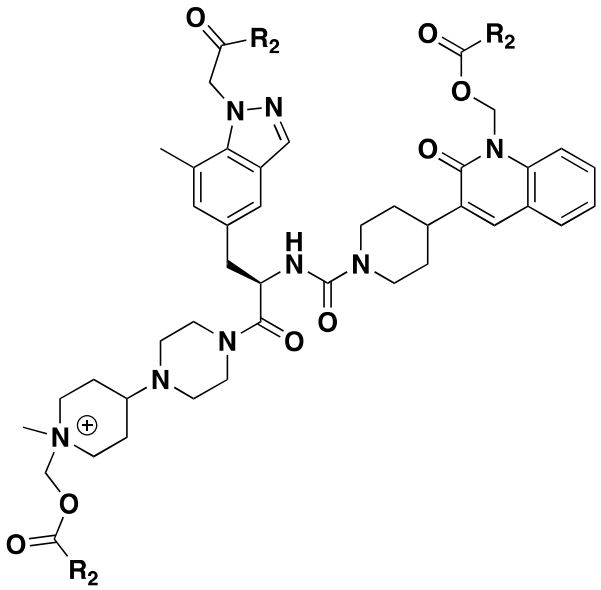
(IIIa)



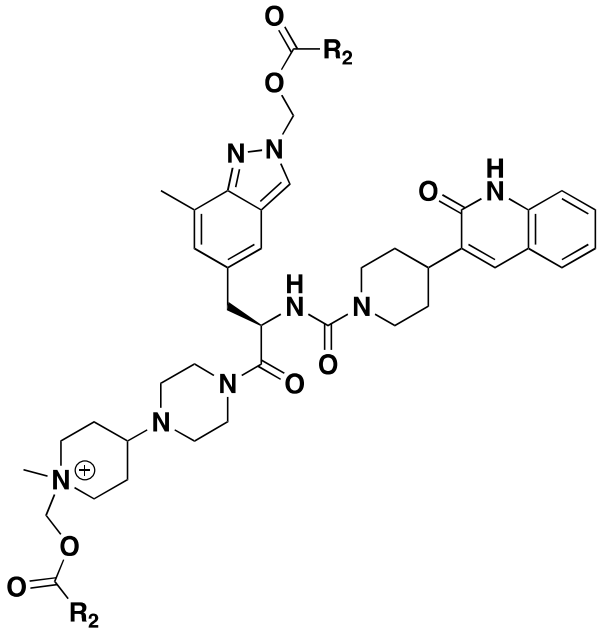
(IIIb)



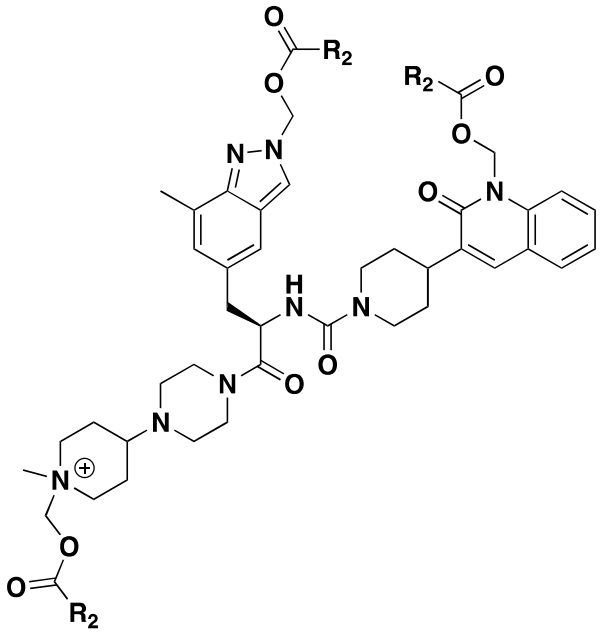
(IIIc)



(IIId)



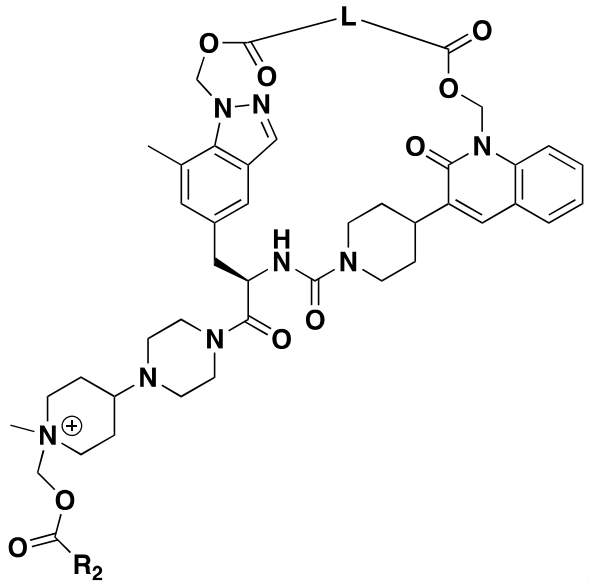
(IVa)



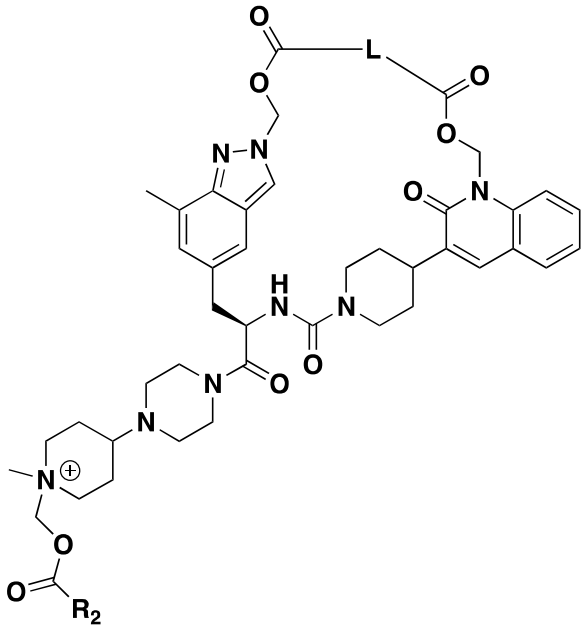
(IVb)

wherein, in Formulae (IIIa), (IIIb), (IIIc), (IIId), (IVa), and (IVb), R_2 is the same as that in Claim 1.

11. The compound according to Claim 10, wherein, in Formulae (IIId) and (IVb), R_2 are connected with a single bond to form a linking group L, as in Formulae (IIIe) and (IVc), respectively:



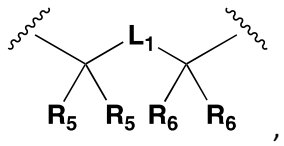
(IIIe)



(IVc)

wherein, in Formulae (IIIe) and (IVc), R_2 is the same as that in Claim 1.

12. The compound according to Claim 7, wherein the linking group is:



wherein

L_1 is a substituted or unsubstituted C1-C10 alkylene group, a substituted or unsubstituted C2-C10 alkenylene group, a substituted or unsubstituted C2-C10 alkynylene group, a substituted or unsubstituted C1-C10 heteroalkylene group, a substituted or unsubstituted C2-C10 heteroalkenylene group, a substituted or unsubstituted C2-C10 heteroalkynylene group, a substituted or unsubstituted C3-C10 cycloalkylene group, a substituted or unsubstituted C3-C10 heterocycloalkylene group, a substituted or unsubstituted C6-C10 arylene group, or a substituted or unsubstituted C1-C10 heteroarylene group, and

R_5 and R_6 are each independently hydrogen or C1-C10 alkyl wherein R_3 are optionally connected to form a ring.

13. The compound according to Claim 8, wherein one of the following conditions is met:

at least one R_5 is not hydrogen and at least one R_6 is not hydrogen;

at least one R_5 is a methyl group and at least one R_6 is a methyl group;

each R_5 is not hydrogen and each R_6 is not hydrogen; or

each R_5 is a methyl group and each R_6 is a methyl group.

14. A pharmaceutical composition comprising a therapeutically effective amount of a compound in accordance with any one of Claims 1-13.

15. The pharmaceutical composition of claim 14 in the form of a tablet.

16. Use of a compound in accordance with any one of Claims 1-13 in the manufacture of a pharmaceutical composition for the treatment of migraine.

17. Use of a compound in accordance with any one of Claims 1-13in the manufacture of a pharmaceutical composition for the treatment of a condition associated with aberrant levels of CGRP.

18. The use of Claim 17, wherein the condition is a disorder selected from: migraine and cluster headache; chronic tension type headache; chronic pain; neurogenic inflammation and inflammatory pain; eye pain; tooth pain; non-insulin dependent diabetes mellitus; vascular disorders; inflammation; arthritis; bronchial hyperreactivity; asthma; shock; sepsis; opiate withdrawal syndrome; morphine tolerance; hot flashes in men and women; allergic dermatitis;

psoriasis; encephalitis, brain trauma, ischaemia, stroke, epilepsy, and neurodegenerative diseases; skin diseases; neurogenic cutaneous redness, skin rosaceousness and erythema; tinnitus; obesity; inflammatory bowel disease; irritable bowel syndrome; and cystitis.

19. A kit for treating a condition associated with aberrant levels of CGRP in a patient, the kit comprising:

(a) a pharmaceutical composition comprising a therapeutically effective amount of a compound in accordance with any one of Claims 1-13; and

(b) instructions for administering the pharmaceutical composition.