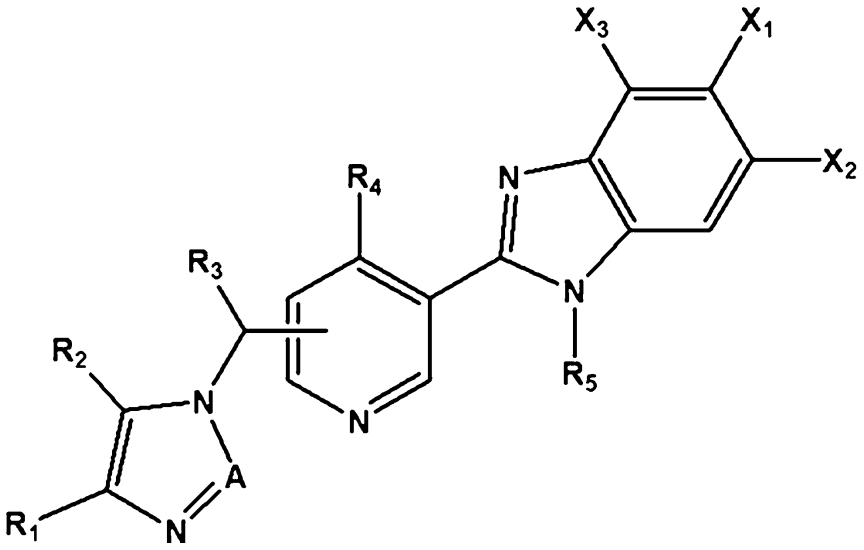
Claims

1. Use of a radioactively labeled compound capable of binding to an aldosterone synthase or a salt thereof as an active ingredient in the manufacture of a non-invasive diagnostic imaging agent for diagnosing a heart disease.

2. The use according to claim 1, wherein the radioactively labeled compound is labeled with carbon-11, fluorine-18, chlorine-34m, bromine-76, iodine-123 or iodine-124.

3. The use according to claim 1, wherein the radioactively labeled compound is represented by the following general formula (1):

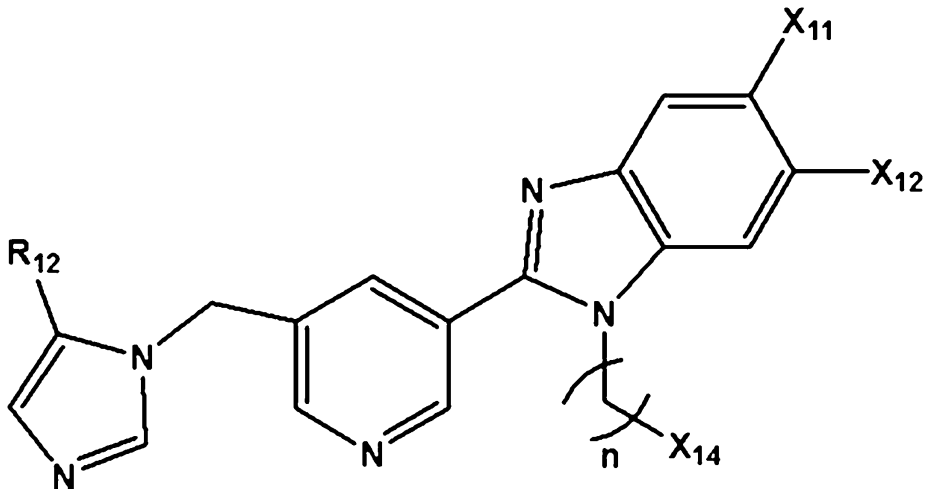


(1)

wherein R_1 represents a hydrogen atom or CO_2R_a; R_2 represents a hydrogen atom, a halogen atom or CO_2R_a; R_3

represents a hydrogen atom or a hydroxyalkyl group having 1 to 10 carbon atoms; R_4 represents a hydrogen atom, a hydroxy group or an alkoxy group having 1 to 10 carbon atoms; R_5 represents a chain alkyl group having 1 to 5 carbon atoms in which a hydrogen atom is optionally replaced with a halogen atom, a cyclic alkyl group having 3 to 5 carbon atoms in which a hydrogen atom is optionally replaced with a halogen atom, a hydroxyalkyl group having 1 to 5 carbon atoms, or an o-, p- or m-halobenzyl group; A represents CH or a nitrogen atom; X_1 and X_3 each independently represent a hydrogen atom or a halogen atom, and X_2 represents a hydrogen atom, a halogen atom or a nitrile group, provided that at least one of X_1, X_2 and X_3 is a halogen atom; each R_a independently represents an alkyl group having 1 to 10 carbon atoms; and any one of R_2, R_5, and X_2 contains a radioactive halogen atom.

4. The use according to claim 3, wherein the radioactively labeled compound is represented by the following general formula (2):



(2)

wherein R_{12} represents a hydrogen atom, a halogen atom or CO_2R_a; X_{11} represents a hydrogen atom or a halogen atom; X_{12} represents a halogen atom; X_{14} represents a hydrogen atom, a halogen atom or a hydroxy group; n represents an integer of 1 to 5; R_a represents an alkyl group having 1 to 10 carbon atoms; and R_{12}, X_{12}, or X_{14} is a radioactive halogen atom.

5. The use according to claim 4, wherein in the general formula (2), R_{12} is a hydrogen atom, and X_{12} or X_{14} is a radioactive halogen atom.

6. The use according to claim 4 or 5, wherein in the general formula (2), n represents an integer of 1 to 3.

7. The use according to any one of claims 3 to 6, wherein the radioactive halogen atom is fluorine-18, chlorine-34m, bromine-76, iodine-123 or iodine-124.

8. The use according to any one of claims 1 to 7 for use in positron emission tomography or single-photon emission computed tomography.

9. The use according to any one of claims 1 to 8, wherein the heart disease is an ischemic heart disease.

10. The use according to claim 9, wherein the ischemic heart disease is a coronary heart disease angina pectoris, myocardial infarction, acute coronary syndrome or ischemic heart failure.

11. The use according to any one of claims 1 to 8, wherein the heart disease is a non-ischemic heart disease.

12. The use according to claim 11, wherein the non-ischemic heart disease is myocarditis, hypertensive heart disease, dilated cardiomyopathy, hypertrophic cardiomyopathy or non-ischemic heart failure.