for other hydrophobic PET agents also. It combines good local tolerability with easy applicability within the manufacturing process for the radiolabeled PET tracer.

Sterile filtration step is necessary for providing a sterile parenteral formulation and the like for obtaining a suitable pharmaceutical solution for pharmaceutical use. Unfortunately, a critical loss of fluoro labelled ingredient is in many cases observed. Thus, there is a need for improving the purification steps leading to an increase of the radio-labelling yield.

It has been surprisingly found that the suitable formulation of the present invention is successfully used with a sterile filter reducing adsorption onto a sterile filter of the radiopharmaceutical.

Summary

The present disclosure~~invention~~ is directed to formulations of lipophilic Amyloid βeta ligand stilbene based derivatives and more particularly to formulations which are administrable parentally e.g. intravenously wherein the lipophilic Amyloid βeta ligand stilbene based derivative is a ^{18}F-labeled radiopharmaceutical thereof. Further, the present disclosure~~invention~~ is directed to a method for sterile filtration of said suitable formulation.

In one aspect, there is provided a formulation comprising Lipophilic Amyloid βeta ligand stilbene based derivative, Alcohol, and Polyether.

In another aspect, there is provided a method for preparing the formulation as defined herein.

In yet another aspect, there is provided a method for sterile filtration of the formulation as defined herein wherein the formulation is given onto a sterile filter, preferably a hydrophobic sterile filter.

In yet another aspect, there is provided a method for the preparation of the formulation as defined above comprising a radiotracer obtained through an automated device for radiopharmaceutical use comprising the steps: Obtaining a radiotracer, Purification of the radiotracer using a solid-phase-extraction cartridges or column wherein the radiotracer is eluted with alcohol, Adding the alcohol eluat into polyether for obtaining the invention formulation and Sterile filtration of the formulation onto a sterile filter; wherein the radiotracer is a lipophilic Amyloid βeta ligand stilbene based derivative.

Detailed description

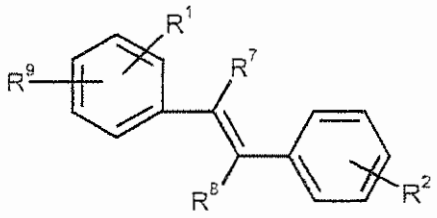
The present invention concerns formulations comprising radiopharmaceutical wherein the formulation is suitable for parental administration into mammal.

In a **first aspect**, the invention is directed to formulations comprising

- Lipophilic Amyloid βeta ligand stilbene based derivative,
- Alcohol, and
- Polyether.

Lipophilic Amyloid βeta ligand stilbene based derivative:

The Lipophilic Amyloid βeta ligand stilbene based derivative is preferably a compound of formula I



(I)

or a suitable salt thereof

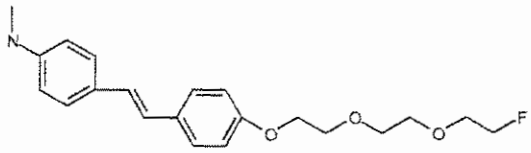
7. A method for the preparation of the formulation according to claim 1 comprising a radiotracer obtained through an automated device for radiopharmaceutical use comprising the steps:

- Obtaining a radiotracer,
- Purification of the radiotracer using a solid-phase-extraction cartridges or column wherein the radiotracer is eluted with alcohol,
- Adding the alcohol eluat into polyether for obtaining the invention formulation and
- Sterile filtration of the formulation onto a sterile filter;

wherein the radiotracer is a lipophilic Amyloid βeta ligand stilbene based derivative.

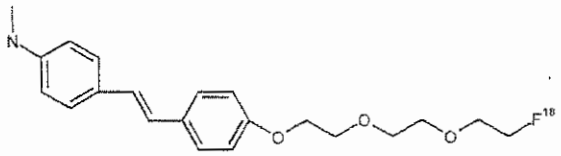
8. The formulation according to claims 1 or 2 comprising

- Compound 1



Methyl-[4-((F)-2-{4-[2-(2-propoxy-ethoxy)-ethoxy]-phenyl}-vinyl)-phenyl]-amine

or compound 2



Methyl-[4-((F18)-2-{4-[2-(2-propoxy-ethoxy)-ethoxy]-phenyl}-vinyl)-phenyl]-amine

or mixtures thereof

- Alcohol,
- Polyether, and
- pH adjusting agent.