[0005]

Patent Literature 1: International Publication No. WO 2003/035647

Patent Literature 2: International Publication No. WO 2003/105830

Non-Patent Literature

[0006]

Non Patent Literature 1: 2012 Alzheimer's Disease Facts and Figures. (http://www.alz.org/downloads/facts_figures_2012.pdf)

Non Patent Literature 2: YAKUGAKU ZASSHI, 2010, Vol. 130, No. 4, pp. 521-526

Non Patent Literature 3: Japanese Journal of Clinical Medicine, 2008, Vol. 66 (Extra ed. 1), pp. 23-27

Non Patent Literature 4: Press Release by Seed Planning (December 28, 2010) (http://www.seedplanning.co.jp/press/2010/2010122801.html)

Non Patent Literature 5: Japanese Journal of Clinical Psychopharmacology, 2011, Vol. 14, No. 7, pp. 1123-1129

Non Patent Literature 6: Japanese Journal of Clinical Psychopharmacology, 2012, Vol. 15, No. 3, pp. 311-321

Non-patent Literature 7: Proceedings of the Annual Meeting of the Japanese Research Group on Senile Dementia, 2010, Vol. 15, pp. 79-81

Non-patent Literature 8: Archives of Neurology, 2011, Vol. 68, No. 10, pp. 1257-1266

Non-patent Literature 9: Japanese Journal of Geriatrics, 2013, Vol. 50, No. 1, pp. 1-8

Summary

[0006a]

In one aspect, the present disclosure refers to an agent for reducing the amount of amyloid β protein in the brain, comprising 1-(3-(2-(1-Benzothiophen-5-yl)ethoxy)propyl)azetidin-3-ol or a salt thereof as an active ingredient.

[0006b]

In another aspect, the present disclosure refers to a use of agent comprising 1-(3-(2-(1-Benzothiophen-5-yl)ethoxy)propyl)azetidin-3-ol or a salt thereof as an active ingredient in the manufacture of a medicament for reducing the amount of amyloid β protein in the brain.

Problem to be Solved by the Invention

[0007]

Drugs which suppress progress of AD by inhibiting neurodegeneration need to be developed early. An object of the present invention is to provide a drug and a method which suppress progress of disease in which the amount of Aβ in the brain is increased, such as AD.

Means for Solving Problem

CLAIMS

[Claim 1] An agent for reducing the amount of amyloid β protein in the brain, comprising 1-(3-(2-(1-Benzothiophen-5-yl)ethoxy)propyl)azetidin-3-ol or a salt thereof as an active ingredient.

[Claim 2] The agent for reducing the amount of amyloid β protein according to claim 1, wherein the amount of amyloid β protein in the brain is reduced by increasing the amount of amyloid β protein in cerebrospinal fluid.

[Claim 3] The agent for reducing the amount of amyloid β protein according to claim 1 or 2, wherein the agent is to be orally administered once a day in a dose of 100 mg to 400 mg in terms of 1-(3-(2-(1-Benzothiophen-5-yl)ethoxy)propyl)azetidin-3-ol per administration.

[Claim 4] The agent for reducing the amount of amyloid β protein according to claim 1 or 2, wherein the agent is to be orally administered once a day in a dose of 160 mg or 320 mg in terms of 1-(3-(2-(1-Benzothiophen-5-yl)ethoxy)propyl)azetidin-3-ol per administration.

[Claim 5] The agent for reducing the amount of amyloid β protein according to any one of claims 1 to 4, wherein the agent is for administration to a patient with a disease in which the amount of amyloid β protein in the brain is increased.

[Claim 6] The agent for reducing the amount of amyloid β protein according to any one of claims 1 to 4, wherein the agent is for administration to a patient with Alzheimer's disease, Probable Alzheimer's disease, Possible Alzheimer's disease, Preclinical Alzheimer's disease, Prodromal Alzheimer's disease, mild cognitive impairment due to Alzheimer's disease (MCI due to AD) or mild cognitive impairment.

[Claim 7] The agent for reducing the amount of amyloid β protein according to any one of claims 1 to 4, wherein the agent is for administration to a patient with Alzheimer's disease, mild cognitive impairment due to Alzheimer's disease (MCI due to AD) or mild cognitive impairment.

[Claim 8] Use of agent comprising 1-(3-(2-(1-Benzothiophen-5-yl)ethoxy)propyl)azetidin-3-ol or a salt thereof as an active ingredient in the manufacture of a medicament for reducing the amount of amyloid β protein in the brain.

[Claim 9] The use according to claim 8, wherein the amount of amyloid β protein in the brain is reduced by increasing the amount of amyloid β protein in cerebrospinal fluid.

[Claim 10] The use according to claim 8 or 9, wherein the medicament is to be orally administered once a day in a dose of 100 mg to 400 mg in terms of 1-(3-(2-(1-Benzothiophen-5-yl)ethoxy)propyl)azetidin-3-ol per administration.

[Claim 11] The use according to claim 8 or 9, wherein the medicament is to be orally administered once a day in a dose of 160 mg or 320 mg in terms of 1-(3-(2-(1-Benzothiophen-5-yl)ethoxy)propyl)azetidin-3-ol per administration.

[Claim 12] The use according to any one of claims 8 to 11, wherein the medicament is for administration to a patient with a disease in which the amount of amyloid β protein in the brain is increased.

[Claim 13] The use according to any one of claims 8 to 11, wherein the medicament is for administration to a patient with Alzheimer's disease, Probable Alzheimer's disease, Possible Alzheimer's disease, Preclinical Alzheimer's disease, Prodromal Alzheimer's disease, mild cognitive impairment due to Alzheimer's disease (MCI due to AD) or mild cognitive impairment.

[Claim 14] The use according to any one of claims 8 to 11, wherein the medicament is for administration to a patient with Alzheimer's disease, mild cognitive impairment due to Alzheimer's disease (MCI due to AD) or mild cognitive impairment.