[0003]

[Non Patent Literature 1] Byung-Soon Park et al., Biomedical Research, 31(1): 27-34, 2010

[Summary]

[0004]

The present inventors have found that, when the secretion from adipose stem cells (hereinafter referred to as "ASC-CM") is administered to the skin at a specific dose, it promotes skin regeneration, promotes skin modification, can heal skin wounds or promotes skin rejuvenation. The inventors have also found that, when ASC-CM is administered at a specific dose to the scalp, it promotes the regeneration of the scalp, promotes the modification of the scalp, or promotes the rejuvenation of the scalp. Furthermore, the present inventors have found that, when ASC-CM is administered at a specific dose to the scalp, it promotes hair modification (modification of cuticles, amelioration of gray hair, increase in hair growth rate, increase in hair thickness, etc.).

[0004a]

In one aspect, the present disclosure refers to the use of a composition in the manufacture of a medicament for inducing adipocytes having 25 μm or less in diameter and tissue regeneration in scalp or skin, wherein the composition comprises a secretion from

adipose stem cells as an active ingredient, and wherein 10 to 50 μL of the composition comprising 0.3 to 0.45 μg of the secretion is to be injected in terms of protein abundance of the secretion per injection.

[0004b]

In another aspect, the present disclosure refers to the use of a composition in the manufacture of a medicament for treating a wound, wherein the composition comprises a secretion from adipose stem cells as an active ingredient, and wherein 10 to 30 μL of the composition comprising 0.3 to 0.45 μg of the secretion is to be injected in terms of protein abundance of the secretion per injection.

[0004c]

In another aspect, the present disclosure refers to the use of a composition in the manufacture of a medicament for improvement of hair quality, comprising a secretion from adipose stem cells as an active ingredient, and wherein 10 to 30 μL of the composition comprising 0.3 to 0.45 μg of the secretion is to be injected in terms of protein abundance of the secretion per injection.

[0005]

According to the present invention, the following invention is provided.

(1) A pharmaceutical composition for topical administration, for use in modifying scalp or skin, comprising a secretion from adipose stem cells as an

[Document Name] Claims

[Claim 1]

Use of a composition in the manufacture of a medicament for inducing adipocytes having 25 μm or less in diameter and tissue regeneration in scalp or skin, wherein the composition comprises a secretion from adipose stem cells as an active ingredient, and wherein 10 to 50 μL of the composition comprising 0.3 to 0.45 μg of the secretion is to be injected in terms of protein abundance of the secretion per injection.

[Claim 2]

Use of a composition in the manufacture of a medicament for treating a wound, wherein the composition comprises a secretion from adipose stem cells as an active ingredient, and wherein 10 to 30 μL of the composition comprising 0.3 to 0.45 μg of the secretion is to be injected in terms of protein abundance of the secretion per injection.

[Claim 3]

Use of a composition in the manufacture of a medicament for improvement of hair quality, comprising a secretion from adipose stem cells as an active ingredient, and wherein 10 to 30 μL of the composition comprising 0.3 to 0.45 μg of the secretion is to be injected in terms of protein abundance of the secretion per injection.

[Claim 4]

The use according to claim 3, wherein the improvement is reduction of gray hair.

[Claim 5]

The use according to claim 3, wherein the improvement is amelioration of roughness of hair cuticles.

[Claim 6]

The use according to claim 3, wherein the improvement is amelioration of hair thickness or growth rate.

[Claim 7]

The use according to any one of claims 1 to 6, wherein the composition is to be administered at a rate of 1 injection per 1 cm^2 to 4 cm^2 of a surface of scalp or skin.

[Claim 8]

The use according to any one of claims 1 to 7, wherein the composition is to be administered in a solution volume of 10 to 30 μL per injection.

[Claim 9]

The use according to any one of claims 1 to 8, wherein the administration interval is from twice a month to once every 6 months.