indicates that emergence of CD34 positive cells, increase in the number of PPAR-γ-positive fat cells and maturity of fat cells are related to growth of growing hair. Non Patent Literature 2 reports that the number of tissue-resident M2-like macrophages increases in the occurrence of tissue regeneration in tissues.

Citation List

Non Patent Literature

[0004]

Non Patent Literature 1: Festa E et al., Cell, 146: 761-71, 2011

Non Patent Literature 2: Satoh T. et al, Nature, 495: 524-528, 2013

Summary

[0005a]

In one aspect, the present disclosure refers to the cosmetic use of a composition comprising a saturated fatty acid or an acceptable salt thereof and an excipient in regenerating scalp, skin or hair, wherein the saturated fatty acid comprises one or more saturated fatty acid selected from the group consisting of palmitic acid, stearic acid and myristic acid, and wherein the pharmaceutical composition is to be administered by intracutaneous or subcutaneous injection, wherein the amount of administration is 10 microliters to 50 microliters per location.

[0005b]

In another aspect, the present disclosure refers to the use of a saturated fatty acid or a pharmaceutically acceptable salt thereof in the manufacture of a pharmaceutical composition for treating a wound, wherein the saturated fatty acid comprises one or more saturated fatty acid selected from the group consisting of palmitic acid, stearic acid and myristic acid, and wherein the pharmaceutical composition is to be administered by intracutaneous or subcutaneous injection, wherein the amount of administration is 10 microliters to 50 microliters per location.

[0005c]

In another aspect, the present disclosure refers to the use of a saturated fatty acid or a pharmaceutically acceptable salt thereof in the manufacture of a pharmaceutical composition for treating for promoting osteogenesis, wherein the saturated fatty acid comprises one or more saturated fatty acid selected from the group consisting of palmitic acid, stearic acid and myristic acid, and wherein the pharmaceutical composition is to be administered to a damaged site of bone, wherein the amount of administration is 10 microliters to 50 microliters per location.

[0005d]

In another aspect, the present disclosure refers to a cosmetic use of a pharmaceutical composition comprising a saturated fatty acid or an acceptable salt thereof and an

excipient in regenerating scalp, skin or hair, wherein the pharmaceutical composition comprises soybean oil or milk or an extracted product or a processed product thereof which comprises a saturated fatty acid or a pharmaceutically acceptable salt thereof, and wherein the pharmaceutical composition is to be administered by intracutaneous or subcutaneous injection, wherein the amount of administration is 10 microliters to 50 microliters per location.

[0005e]

In yet another aspect, the present disclosure refers to the use of a saturated fatty acid or a pharmaceutically acceptable salt thereof in the manufacture of a pharmaceutical composition for treating a wound, wherein the pharmaceutical composition comprises soybean oil or milk or an extracted product or a processed product thereof which comprises a saturated fatty acid or a pharmaceutically acceptable salt thereof, and wherein the pharmaceutical composition is to be administered by intracutaneous or subcutaneous injection, wherein the amount of administration is 10 microliters to 50 microliters per location.

[0005]

The present disclosure provides a pharmaceutical composition for topical administration for use in modifying scalp or skin. The present disclosure also

Claims

[Claim 1]

Cosmetic use of a composition comprising a saturated fatty acid or an acceptable salt thereof and an excipient in regenerating scalp, skin or hair, wherein the saturated fatty acid comprises one or more saturated fatty acid selected from the group consisting of palmitic acid, stearic acid and myristic acid, and wherein the pharmaceutical composition is to be administered by intracutaneous or subcutaneous injection, wherein the amount of administration is 10 microliters to 50 microliters per location.

[Claim 2]

Use of a saturated fatty acid or a pharmaceutically acceptable salt thereof in the manufacture of a pharmaceutical composition for treating a wound, wherein the saturated fatty acid comprises one or more saturated fatty acid selected from the group consisting of palmitic

acid, stearic acid and myristic acid, and wherein the pharmaceutical composition is to be administered by intracutaneous or subcutaneous injection, wherein the amount of administration is 10 microliters to 50 microliters per location.

[Claim 3]

The cosmetic use according to claim 1, wherein the use is regenerating scalp or skin.

[Claim 4]

The cosmetic use according to claim 1, wherein the use is promoting hair increase.

[Claim 5]

Use of a saturated fatty acid or a pharmaceutically acceptable salt thereof in the manufacture of a pharmaceutical composition for treating for promoting osteogenesis, wherein the saturated fatty acid comprises one or more saturated fatty acid selected from the group consisting of palmitic acid, stearic acid and myristic

acid, and wherein the pharmaceutical composition is to be administered to a damaged site of bone, wherein the amount of administration is 10 microliters to 50 microliters per location.

[Claim 6]

Cosmetic use of a pharmaceutical composition comprising a saturated fatty acid or an acceptable salt thereof and an excipient in regenerating scalp, skin or hair, wherein the pharmaceutical composition comprises soybean oil or milk or an extracted product or a processed product thereof which comprises a saturated fatty acid or a pharmaceutically acceptable salt thereof, and wherein the pharmaceutical composition is to be administered by intracutaneous or subcutaneous injection, wherein the amount of administration is 10 microliters to 50 microliters per location.

[Claim 7]

Use of a saturated fatty acid or a pharmaceutically acceptable salt thereof in the manufacture of a pharmaceutical composition for treating a wound, wherein the pharmaceutical composition comprises soybean oil or milk or an extracted product or a processed product thereof which comprises a saturated fatty acid or a pharmaceutically acceptable salt thereof, and wherein the pharmaceutical composition is to be administered by intracutaneous or subcutaneous injection, wherein the amount of administration is 10 microliters to 50 microliters per location.

[Claim 8]

Use of a saturated fatty acid or a pharmaceutically acceptable salt thereof in the manufacture of a pharmaceutical composition for promoting osteogenesis, wherein the pharmaceutical composition comprises soybean oil or milk or an extracted product or a processed product thereof which comprises a saturated fatty acid or

a pharmaceutically acceptable salt thereof, and wherein the pharmaceutical composition is to be administered to a damaged site of bone, wherein the amount of administration is 10 microliters to 50 microliters per location.

[Claim 9]

The cosmetic use according to claim 6, or the use according to claims 7 or 8, wherein the milk is sterilized.

[Claim 10]

The cosmetic use according to claim 9, or the use according to claim 9, wherein the milk is sterilized at a high temperature.

Abstract

The present invention provides a pharmaceutical composition for use in increasing hair, modifying scalp or skin, healing a wound, promoting osteogenesis or modifying hair, the pharmaceutical composition comprising a therapeutically effective amount of a saturated fatty acid or a pharmaceutically acceptable salt thereof as an active ingredient.