Claims

1. A method of inducing or promoting darkening of the skin and/or melanogenesis, the method comprising administering at least one polycationic aliphatic amine in a pharmaceutically effective amount to a subject in need thereof.

2. A method of treating a skin condition or disorder, the method comprising administering at least one polycationic aliphatic amine in a pharmaceutically effective amount to a subject in need thereof, wherein the skin condition or disorder comprises hypopigmentation.

3. The method of claim 2, wherein the skin condition or disorder is selected from the group consisting of vitiligo, depigmentation, hypopigmentation, focal hypopigmentation, post-inflammatory hypopigmentation, piebaldism, albinism, pityriasis alba, tinea versicolor, photosensitivity, leucism, idiopathic guttate hypomelanosis, progressive macular hypomelanosis, atopic dermatitis, psoriasis, and guttate parapsoriasis.

4. The method of any one of the preceding claims, wherein the polycationic aliphatic amine comprises at least 2, or at least 3, or at least 4, or at least 5 amino groups.

5. The method of any one of the preceding claims, wherein if the polycationic aliphatic amine has at least 2 or more amino groups, two amino groups are terminal amino groups.

6. The method of any one of the preceding claims, wherein if the polycationic aliphatic amine has at least 3 or more amino groups, at least one of the amino groups of the polycationic aliphatic amine is a secondary amino group.

7. The method of any one of the preceding claims, wherein the polycationic aliphatic amine is selected from the group consisting of putrescine, spermidine, spermine and combinations thereof.

8. The method of any one of the preceding claims, wherein the pharmaceutically effective amount of polycationic aliphatic amine is between about 3 mmol to 12 mmol.

9. A method of reducing or preventing darkening of the skin and/or melanogenesis, the method comprising administering at least one inhibitor of polycationic aliphatic amine in a pharmaceutically effective amount to a subject in need thereof.

10. The method of claim 9, wherein the subject is suffering from darkening of the skin and/or melanogenesis associated with pregnancy, inflammation, yeast infection, or aging.

11. The method of claim 9 or 10, wherein the at least one inhibitor of polycationic aliphatic amine is selected from the group consisting of: an inhibitor of the transport of polycationic aliphatic amine, an inhibitor of the synthesis of polycationic aliphatic amine, an inhibitor of the catabolism of polycationic aliphatic amine, and combinations thereof.

12. The method of claim 11, wherein the inhibitor of the transport of polycationic aliphatic amine is trimer44NMe.

13. The method of claim 11, wherein the inhibitor of the synthesis of polycationic aliphatic amine is difluoromethylornithine (DFMO).

14. The method of any of the preceding claims, wherein the at least one polycationic aliphatic amine or the at least one inhibitor of polycationic aliphatic amine is administered in a pharmaceutical composition, wherein the pharmaceutical composition is administered intradermally, cutaneously, subcutaneously, topically, transdermally, or any combination thereof.

15. The method of claim 14, wherein the pharmaceutical composition is provided as pastes, powders, dressings, creams, plasters, solutions, patches, gels, suspensions, aqueous liquid suspensions, non-aqueous liquid suspensions, oil-in-water emulsions, a water-in-oil liquid emulsions, solutions, sterile solids, crystalline solids, amorphous solids, solids for reconstitution or combinations thereof.

16. The method of claim 14 or 15, wherein the pharmaceutical composition is a dermatological composition.

17. The method of any of the preceding claims, wherein the method is used for cosmetic purposes.