CLAIMS

1. A topical formulation comprising: a nanoparticle composition comprising a population of particles, wherein the majority of particles have diameters between approximately 10 and approximately 300 nanometers,

wherein the nanoparticle composition comprises at least one aqueous dispersion medium, at least one oil, and at least one surfactant,

wherein the oil is a medium chain triglyceride,

wherein the surfactant is a polysorbate, and

wherein the ratio of oil to surfactant is between about 0.5:1 to about 1:1; and,

wherein the topical formulation further comprises one or more excipients selected from the group consisting of: emulsifying wax, isopropyl myristate, mineral oil, white petrolatum, gelatin, methylparaben, propylparaben, or any combinations thereof,

wherein the topical formulation has a degree of transdermal penetration higher than when said one or more excipients is absent; and

wherein the particles can penetrate skin without altering or changing the structure of skin or without the use of skin permeation enhancers or abrasives.

2. The topical formulation of claim 1, wherein the topical formulation further comprises emulsifying wax, isopropyl myristate, mineral oil, white petrolatum and gelatin.

3. The topical formulation of claim 1, wherein the topical formulation does not contain parabens.

4. The topical formulation of claim 1, wherein the medium chain triglyceride is an acid containing 6-12 carbons atoms or is Labracfac Lipophile WL 1349 oil.

5. The topical formulation of claim 1, wherein the polysorbate is polysorbate 80.

6. The topical formulation of claim 1, further comprising a known therapeutic agent or independently active biologically active agent, optionally wherein the known therapeutic agent

or independently active biologically active agent is a protein, a protein complex, an antibody or botulinum toxin.

7. The topical formulation of claim 6, wherein the known therapeutic agent or independently active biologically active agent is botulinum toxin the botulinum toxin is selected from the group comprising type A, type Ab, type Af, type B, type Bf, type C1, type C2, type D, type E, type F, and type G.

8. The topical formulation of any one of claims 1-7, wherein the topical formulation is a pharmaceutical formulation or cosmetic formulation.

9. The topical formulation of any one of claims 1-8, wherein the particles can penetrate the top layer of skin without the use of skin permeation enhancers or abrasives.

10. The topical formulation of claim 9, wherein the top layer of the skin is characterized in that:

a) the top layer of the skin is the surface of the stratum corneum;
b) the top layer of the skin includes dermal pores;
c) the top layer of the skin includes dermal glands; or
any combination thereof.

11. The topical formulation of any one of claims 1-10, wherein the nanoparticles have a zeta potential ranging between -25 mV and +25 mV.

12. The topical formulation of any one of claims 6-11, wherein the known therapeutic agent or independently active biologically active agent remains stable for an extended period of time when stored at 2 °C to 8 °C.

13. The formulation of claim 7, formulated as

(i) a deodorant, an antiperspirant, a sunscreen, a shampoo, a conditioner, or any combination thereof, or

(ii) into a cream, a gel, a liniment, a lotion, an ointment, a powder, drops, an oil, a foam, a spray, a patch, a liquid or thickening lotion, or

(iii) as a cosmetic formulation selected from the group consisting of:

skin softeners, nutritional lotion type emulsions, cleansing lotions, cleansing creams, skin milks, emollient lotions, massage creams, emollient creams, make-up bases, lipsticks, facial packs, facial gels, shampoos, rinses, conditioners, body cleansers, hair-tonics, soaps, and any combination thereof.

14. Use of the topical formulation of any one of claims 1-13, wherein the topical formulation comprises botulinum toxin, in the manufacture of a medicament for treatment of a condition or disorder selected from the group consisting of acne, hyperhidrosis, unwanted sweating, bromhidrosis, chromhidrosis, excess sebum-producing disorders, seborrhea, seborrheic dermatitis, rosacea, psoriasis, dermal infections, viral infection, bacterial infection, fungal infection, actinic keratosis, eczematous dermatitis, atopic dermatitis, burns, Raynaud's phenomenon, lupus erthythematosus, hyperpigmentation disorders, melasma, hypopigmentation disorders, vitiligo, skin cancer, squamous cell skin carcinoma, basal cell skin carcinoma, and/or combinations thereof, wherein said medicament is to be administered to the skin of a subject.

15. A method for manufacturing a topical formulation, the method comprising steps of:

i) providing:

(a) a premix comprising: an aqueous dispersion medium, an oil, surfactant and botulinum toxin;

(b) a cream or lotion formulation comprising one or more excipients selected from the group consisting of: mineral oil, isopropyl myristate, white petrolatum, emulsifying wax, methylparaben and propylparaben; and,

(c) providing a saline solution;

ii) combining the (a), (b) and (c) to generate the topical formulation of any one of claims 1-13, optionally wherein the premix (a) further comprises propylparaben, methylparaben or combination thereof, and/or wherein the cream or lotion formulation (b) comprises two phases admixed with one another, wherein the first phase comprises methylparaben, optionally wherein

the second phase comprises mineral oil, isopropyl myristate, white petrolatum, emulsifying wax, and propylparaben, and/or wherein the saline solution further comprises a paraben.

16. Use of the topical formulation of any one of claims 1-13 for treating a cosmetic condition selected from the group consisting of facial wrinkles, wrinkles involving the forehead, glabellar, rhytids and/or periorbital regions, unsightly facial expressions, neck lines, hyperfunctional facial lines, hyperkinetic facial lines, and platysma bands.