CLAIMS

1. An aerosolisable formulation comprising

~~Between about 25-50%, w/w free-base nicotine,~~

~~Between about 25-40% w/w of one, or some combination of two or more pharmaceutically and biologically acceptable mono- or di-carboxylic organic acids,~~

~~Between about 50-20% w/w of one or some combination of two or more pharmaceutically and biologically acceptable liquid excipients, and optionally~~

~~Between about 0-5% w/w water.~~

- Between about 25-55%, w/w free-base nicotine,
- Between about 15-35% w/w of one, or some combination of two or more pharmaceutically and biologically acceptable mono- or di-carboxylic organic acids,
- between about 60-10% w/w of one or some combination of two or more pharmaceutically and biologically acceptable liquid excipients, and optionally
- Between about 0-5% w/w water.

2. A formulation according to claim 1 wherein the one or more organic acids is selected from one of the following groups of acids:

- Acids containing an aromatic group,
- Hydroxycarboxylic acids,
- Heterocyclic carboxylic acids,
- aromatic carboxylic acids,
- Terpenoid acids
- Sugar acids;,
- Pectic acids,
- Amino acids,
- Cycloaliphatic acids,
- Aliphatic carboxylic acids, and
- Keto carboxylic acids.

3. A formulation according to claim 1 wherein the one or more organic acids present in the formulation is one or more of the following: 1-hydroxy-2-naphthoic acid, 2,2-dichloroacetic acid, 2-hydroxyethanesulfonic acid, 2-oxoglutaric acid, 4-acetamidobenzoic acid, 4-aminosalicylic acid, acetic acid, adipic acid, ascorbic acid (L), aspartic acid (L), benzenesulfonic acid, benzoic acid, camphoric acid

(+), camphor-10-sulfonic acid (+), capric acid (decanoic acid), caproic acid (hexanoic acid), caprylic acid (octanoic acid), carbonic acid, cinnamic acid, citric acid, cyclamic acid, dodecyl sulfonic acid, ethane-1,2-disulfonic acid, ethanesulfonic acid, formic acid, fumaric acid, galactaric acid, gentisic acid, glucoheptonic acid (D), gluconic acid (D), glucuronic acid (D), glutamic acid, glutaric acid, glycerophosphoric acid, glycolic acid, hippuric acid, isobutyric acid, lactic acid (DL), lactobionic acid, lauric acid, maleic acid, malic acid (- L), malonic acid, mandelic acid (DL), methanesulfonic acid, naphthalene-1,5-disulfonic acid, naphthalene-2-sulfonic acid, nicotinic acid, oleic acid, oxalic acid, palmitic acid, pamoic acid, propionic acid, pyroglutamic acid (- L), salicylic acid, sebacic acid, stearic acid, succinic acid, tartaric acid (+ L), thiocyanic acid, toluenesulfonic acid (p), undecylenic acid.

4. A formulation according to claim 1 wherein the one or more acids is any of: an Alpha-keto acid (2-oxoacid), a Beta-keto acid (3-oxoacid), and a Gamma-keto acid (4-oxoacid).

5. A formulation according to claim 1 wherein the formulation includes one of:

- Only one of: lactic acid, benzoic acid and salicylic acid,
- A binary system of two organic acids, one being one of lactic acid and the other being one of: benzoic acid, salicylic acid, and
- A binary system of two organic acids, one being lactic acid and the other being chosen from the above list excepting lactic acid.

6. A formulation according to claim 5 wherein the formulation includes a binary system of two organic acids, one of which is lactic acid, and the molar ratio between the two acids is about 1:1, and the overall combined w/w percentage of acid in the formulation is at least about 25% w/w.

7. A formulation according to ~~any preceding~~ claim 1 wherein the one or more excipients present in the formulation is/are selected from the following: Glycerol, Vegetable Glycerin (VG), Propylene Glycol (PG), Polyethylene Glycol (PEG), and trimethylene glycol (TMG).

8. A formulation according to ~~any preceding~~ claim 1 which includes only a single excipient component, being one of Glycerol and Polyethylene Glycol.

9. A formulation according to claim 1 comprising
about 25% w/w freebase nicotine
about 25% w/w of one of: benzoic acid, salicylic acid
about 50% glycerol.

10. A formulation according to claim 1 comprising

about 25% w/w freebase nicotine

~~about 6.2% w/w lactic acid solution, said solution consisting of about 12% w/w water and about 88% lactic acid,~~

~~about 1.8% w/w water, and~~

~~about 58% w/w glycerol.~~

~~11. A formulation according to claim 1 comprising~~

~~about 25% w/w freebase nicotine~~

about 24.3% w/w lactic acid,

about 2.7% w/w water, and

about 48% w/w glycerol.

~~12. A formulation according to claim 1 comprising~~

~~- about 25% w/w freebase nicotine~~

~~- about 3.5% w/w lactic acid,~~

~~- about 6% w/w of one of: benzoic acid, salicylic acid~~

~~- about 1.5% w/w water, and~~

~~- about 54% w/w glycerol.~~

~~13~~11. A formulation according to claim 1 comprising

- about 25% w/w freebase nicotine
- about 13.5% w/w lactic acid,
- about 5% w/w of one of: benzoic acid, salicylic acid
- about 1.5% w/w water, and
- about 55% w/w glycerol.

~~14~~12. A formulation according to claim 1 comprising

- about 34% w/w freebase nicotine
- about 16% w/w of a 1:1 molar ratio mixture of lactic acid and benzoic acid, and
- about 50% w/w glycerol.

~~15. A formulation according to claim 1 comprising~~

~~- Between about 26-40%, w/w free-base nicotine,~~

~~- Between about 24-40% w/w of one, or some combination of two or more pharmaceutically and biologically acceptable mono- or di-carboxylic organic acids,~~

~~- Between about 50-20% w/w of one or some combination of two or more pharmaceutically and biologically acceptable liquid excipients, and optionally~~

~~- Between about 0-5% w/w water.~~

13~~16.~~ ~~A formulation according to claim 1 comprising~~

~~- Between about 25-55%, w/w free-base nicotine,~~

~~- Between about 15-35% w/w of one, or some combination of two or more pharmaceutically and biologically acceptable mono- or di-carboxylic organic acids,~~

~~- between about 60-10% w/w of one or some combination of two or more pharmaceutically and biologically acceptable liquid excipients, and optionally~~

~~- Between about 0-5% w/w water.~~

~~17~~. A formulation according to claim 1 comprising

- about 45-46%, w/w free-base nicotine,
- about 31-33% w/w of lactic acid,
- about 24-21% w/w polyethylene glycol.

14. A formulation according to claim 13 wherein the polyethylene glycol is a high molecular weight polyethylene glycol compound having a molecular weight of 3000.

15. An aerosolisable formulation comprising

- Between about 25-50%, w/w free-base nicotine,
- Between about 25-40% w/w of one, or some combination of two or more pharmaceutically and biologically acceptable mono- or di-carboxylic organic acids,
- Between about 50-20% w/w of one or some combination of two or more pharmaceutically and biologically acceptable liquid excipients, and optionally
- Between about 0-5% w/w water.

16. An aerosolisable formulation comprising

- about 25% w/w freebase nicotine,

- about 16.2% w/w lactic acid solution, said solution consisting of 12% w/w water and 88% lactic acid,
- about 1.8% w/w water, and
- about 58% w/w Glycerol.