CLAIMS

What is claimed is:

1. An antimicrobial solution, comprising a therapeutically effective amount of:

an extract of the plant *Hypericum spp.*;

optionally in combination with one or more pharmaceutically acceptable carriers, additives, and/or diluents.

2. The antimicrobial solution of claim 1, further comprising Neem oil.

3. The antimicrobial solution of claim 2, wherein the neem oil includes one or more of linoleic acid, oleic acid, palmitic acid, stearic acid, alpha-linoleic acid, or palmitoleic acid.

4. The antimicrobial solution of claim 3, wherein the neem oil includes between 6–16% of linoleic acid, 25–54% of oleic acid, 16–33% of palmitic acid, and 9–24% of stearic acid.

5. The antimicrobial solution of claim 1, wherein the extract of the plant *Hypericum spp.* comprises extract from *Hypericum perforatum*.

6. The antimicrobial solution of claim 1, wherein the extract of the plant *Hypericum spp.* comprises hypericin as a main active ingredient.

7. The antimicrobial solution of claim 2, wherein the neem oil and the extract of the plant *Hypericum spp.* are present in equal ratios (v/v) within the antimicrobial solution.

8. The antimicrobial solution of claim 2, wherein the neem oil comprises at most 10% (v/v) of the antimicrobial solution.

9. The antimicrobial solution of claim 2, wherein the extract of the plant *Hypericum spp.* and the Neem oil are provided in a ratio of greater than 100:1.

10. The antimicrobial solution of claim 1, wherein the extract of the plant *Hypericum spp.* comprises at most 5% (v/v) of the antimicrobial solution.

11. The antimicrobial solution of claim 1, wherein the extract of the plant *Hypericum spp.* comprises at most 10% (v/v) of the antimicrobial solution.

12. The antimicrobial solution of claim 1, further comprising carrageenan.

13. The antimicrobial solution of claim 1, further comprising a chlorhexidine.

14. The antimicrobial solution of claim 1, wherein the pharmaceutically acceptable carrier comprises glycerol.

15. The antimicrobial solution of claim 1, wherein the one or more pharmaceutically acceptable additives includes a flavor-enhancing additive, preferably menthol.

16. The antimicrobial solution of claim 1, wherein the one or more pharmaceutically acceptable carriers, additives, and/or diluents comprise at least 10% (v/v) of the antimicrobial solution.

17. The antimicrobial solution of claim 1, wherein the one or more pharmaceutically acceptable carriers, additives, and/or diluents comprise at least 33% (v/v) of the antimicrobial solution.

18. The antimicrobial solution of claim 1, wherein the antimicrobial solution is delivered in the form a lotion, a hydrogel, a mouth spray, and/or a nasal spray.

19. The antimicrobial solution of claim 18, wherein the antimicrobial solution is delivered in 50 μL – 200 μL doses per actuation of the mouth spray and/or nasal spray.

20. Use of an antimicrobial solution in the manufacture of a medicament for treating or preventing infection of the upper respiratory tract of humans by a microbial pathogen, wherein the antimicrobial solution comprises:

neem oil, and

an extract of the plant *Hypericum spp.*;

optionally in combination with one or more pharmaceutically acceptable carriers, additives, and/or diluents, and

wherein the antimicrobial solution is to be administered to a mouth and/or a nose of a user.