CLAIMS:

1. Use of a nitric oxide releasing solution (NORS) in the manufacture of a medicament for~~A method of~~ treating a condition responsive to nitric oxide (NO) treatment in a subject comprising:

the subject is to be administered~~administering~~ a volume of a nitric oxide releasing solution (NORS) that provides a therapeutically effective amount of NO to an administration situs of the subject for a treatment duration, wherein the NORS includes a nitric oxide releasing compound and an acidifying agent, wherein when measured by releasing NO from the NORS for a period of 30 minutes into a flow of substantially inert carrier gas at a flow rate of 1 liter per minute and a pressure of 1 atmosphere, coupled to a chemiluminescence detector, said NORS releases NO in an amount of from about 1 ppm*min/mL to about 500 ppm*min/mL based on 1 mL of the NORS.

2. The use~~method~~ of claim 1, wherein the NORS releases the NO in an amount of from about 1 ppm*min to about 60 ppm*min per mL of the NORS.

3. The use~~method~~ of claim 1, wherein the volume of the NORS is from about 0.1 mL to about 10,000 mL.

4. The use~~method~~ of claim 1, wherein the total amount of NO released by the volume of NORS is to be administered is from about 6 ppm*min to about 75,000 ppm*min.

5. The use~~method~~ of claim 1, wherein the condition is a wound, a skin infection, a fungal infection, a respiratory infection, a bacterial infection, or a viral infection.

6. The use~~method~~ of claim 1, wherein the condition is athlete's foot and the administration situs is a foot of the subject, and wherein the NORS releases NO in an amount from about 5 ppm*min/mL to about 15 ppm*min/mL based on 1 mL of the NORS.

7. The use~~method~~ of claim 6, wherein the total amount of NO released by the volume of NORS is to be administered is from about 25,000 ppm*min to about 75,000 ppm*min.

8. The use~~method~~ of claim 6, wherein the volume of NORS is to be administered is from about 500 mL to about 10,000 mL.

9. The use~~method~~ of claim 6, wherein the volume of NORS is to be administered releases a peak NO concentration of from about 5,000 ppm to about 20,000 ppm.

10. The use~~method~~ of claim 1, wherein the condition is onychomycosis and the administration situs is a nail of the subject, and wherein the NORS releases NO in an amount from about 25 ppm*min/mL to about 75 ppm*min/mL based on 1 mL of the NORS.

11. The use~~method~~ of claim 10, wherein the total amount of NO released by the volume of NORS is to be administered is from about 25 ppm*min to about 75 ppm*min.

12. The use~~method~~ of claim 10, wherein the volume of NORS is to be administered is from about 0.1 mL to about 2 mL.

13. The use~~method~~ of claim 10, wherein the volume of NORS is to be administered releases a peak NO concentration of from about 5 ppm to about 30 ppm.

14. The use~~method~~ of claim 1, wherein the condition is influenza and the administration situs is a nasal cavity of the subject, and wherein the NORS releases the NO in an amount from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.

15. The use~~method~~ of claim 14, wherein the total amount of NO released by the volume of NORS is to be administered is from about 1 ppm*min to about 15 ppm*min.

16. The use~~method~~ of claim 14, wherein the volume of NORS is to be administered is from about 0.1 mL to about 2 mL.

17. The use~~method~~ of claim 14, wherein the volume of NORS is to be administered releases a peak NO concentration of from about 0.5 ppm to about 5 ppm.

18. The use~~method~~ of claim 1, wherein the condition is a respiratory viral infection and the administration situs is a nasal cavity or lungs of the subject, and wherein the NORS releases NO in an amount from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.

19. The use~~method~~ of claim 18, wherein the total amount of NO released by the volume of NORS is to be administered is from about 1 ppm*min to about 15 ppm*min.

20. The use~~method~~ of claim 18, wherein the volume of NORS is to be administered is from about 0.1 mL to about 2 mL.

21. The use~~method~~ of claim 18, wherein the volume of NORS is to be administered releases a peak NO concentration of from about 0.5 ppm to about 5 ppm.

22. The use~~method~~ of claim 1, wherein the condition is sinusitis and the administration situs is a sinus cavity of the subject, and wherein the NORS releases NO in an amount from about 0.5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.

23. The use~~method~~ of claim 22, wherein the total amount of NO released by the volume of NORS is to be administered is from about 100 ppm*min to about 5,000 ppm*min.

24. The use~~method~~ of claim 22, wherein the volume of NORS is to be administered is from about 150 mL to about 300 mL.

25. The use~~method~~ of claim 22, wherein the volume of NORS is to be administered releases a peak NO concentration of from about 50 ppm to about 1,500 ppm.

26. The use~~method~~ of claim 1, wherein the condition is a throat infection and the administration situs is the throat of the subject, and wherein the NORS releases NO in an amount from about 10 ppm*min/mL to about 40 ppm*min/mL based on 1 mL of the NORS.

27. The use~~method~~ of claim 26, wherein the total amount of NO released by the volume of NORS is to be administered is from about 200 ppm*min to about 800 ppm*min.

28. The use~~method~~ of claim 26, wherein the volume of NORS is to be administered is from about 5 mL to about 40 mL.

29. The use~~method~~ of claim 26, wherein the volume of NORS is to be administered releases a peak NO concentration of from about 100 ppm to about 200 ppm.

30. The use~~method~~ of claim 1, wherein the condition is acne and the administration situs is a skin area of the subject, and wherein the NORS releases NO in an amount from about 5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.

31. The use~~method~~ of claim 30, wherein the total amount of NO released by the volume of NORS is to be administered is from about 10 ppm*min to about 60 ppm*min.

32. The use~~method~~ of claim 30, wherein the volume of NORS is to be administered is from about 1 mL to about 5 mL.

33. The use~~method~~ of claim 30, wherein the volume of NORS is to be administered releases a peak NO concentration of from about 5 ppm to about 20 ppm.

34. The use~~method~~ of claim 1, wherein the condition is a diabetic foot ulcer and the administration situs is a foot of the subject, and wherein the NORS releases NO in an amount from about 5 ppm*min/mL to about 80 ppm*min/mL based on 1 mL of the NORS.

35. The use~~method~~ of claim 34, wherein the total amount of NO released by the volume of NORS is to be administered is from about 100 ppm*min to about 75,000 ppm*min.

36. The use~~method~~ of claim 34, wherein the volume of NORS is to be administered is from about 5 mL to about 10,000 mL.

37. The use~~method~~ of claim 34, wherein the volume of NORS is to be administered releases a peak NO concentration of from about 50 ppm to about 20,000 ppm.

38. The use~~method~~ of claim 1, wherein the condition is a warts and the administration situs is a skin area of the subject, and wherein the NORS releases NO in an amount from about 10 ppm*min/mL to about 60 ppm*min/mL based on 1 mL of the NORS.

39. The use~~method~~ of claim 38, wherein the total amount of NO released by the volume of NORS is to be administered is from about 20 ppm*min to about 400 ppm*min.

40. The use~~method~~ of claim 38, wherein the volume of NORS is to be administered is from about 0.5 mL to about 10 mL.

41. The use~~method~~ of claim 38, wherein the volume of NORS is to be administered releases a peak NO concentration of from about 1 ppm to about 60 ppm.

42. The use~~method~~ of claim 1, wherein the nitric oxide releasing compound comprises sodium nitrite, potassium nitrite, barium nitrite, calcium nitrite, nitrite orotate, amyl nitrite, magnesium nitrite, silver nitrite, copper nitrite, or a combination thereof.

43. The use~~method~~ of claim 1, wherein the acidifying agent comprises ascorbic acid, ascorbyl palmitate, salicylic acid, malic acid, lactic acid, citric acid, formic acid, benzoic acid, tartaric acid, hydrochloric acid, sulfuric acid, phosphoric acid, or a combination thereof.

44. The use~~method~~ of claim 1, wherein the NORS provides an extended release of NO.

45. The use~~method~~ of claim 1, wherein the NORS is to be administered as an intranasal spray, an open vessel bath for soaking, a liquid sinus wash, a liquid gargling solution, a respiratory inhaler, an aerosol, a gel, a foam, an emulsion, a liquid solution, a cream, or a combination thereof.

46. The use~~method~~ of claim 1, wherein the NORS comprises a pharmaceutically acceptable carrier.

47. The use~~method~~ of claim 46, wherein the pharmaceutically acceptable carrier comprises water, saline, hydroxyethyl cellulose, xanthan gum, or a combination thereof.

~~48. A composition for treating a condition responsive to nitric oxide (NO) treatment comprising a nitric oxide releasing solution (NORS), wherein the NORS includes a nitric oxide releasing compound and an acidifying agent, wherein when measured by releasing NO from the NORS into a flow of substantially inert carrier gas at a flow rate of 1 liter per minute and a pressure of 1 atmosphere to be quantified by a chemiluminescence detector for a period of 30 minutes said NORS releases NO in an amount of from about 1 ppm*min/mL to about 500 ppm*min/mL based on 1 mL of the NORS.~~

~~49. The composition of claim 48, wherein the composition is formulated to be administered to a foot of a subject to treat athlete's foot, and wherein the NORS releases NO in an amount of from about 5 ppm*min/mL to about 15 ppm*min/mL based on 1 mL of the NORS.~~

~~50. The composition of claim 48, wherein the composition is formulated to be administered to a nail of a subject to treat onychomycosis, and wherein the NORS releases NO in an amount of from about 25 ppm*min/mL to about 75 ppm*min/mL based on 1 mL of the NORS.~~

~~51. The composition of claim 48, wherein the composition is formulated to be administered to a nasal cavity of a subject to treat influenza, and wherein the NORS releases NO in an amount of from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.~~

~~52. The composition of claim 48, wherein the composition is formulated to be administered to a nasal cavity or lungs of a subject to treat a respiratory viral infection, and wherein the NORS releases NO in an amount of from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.~~

53. The composition of claim 48, wherein the composition is formulated to be administered to a sinus cavity of a subject to treat sinusitis, and wherein the NORS releases NO in an amount of from about 0.5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.

54. The composition of claim 48, wherein the composition is formulated to be administered to a throat of a subject to treat a throat infection, and wherein the NORS releases NO in an amount of from about 10 ppm*min/mL to about 40 ppm*min/mL based on 1 mL of the NORS.

55. The composition of claim 48, wherein the composition is formulated to be administered to a skin area of a subject to treat acne, and wherein the NORS releases NO in an amount of from about 5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.

56. The composition of claim 48, wherein the composition is formulated to be administered to a foot of a subject to treat a diabetic foot ulcer, and wherein the NORS releases NO in an amount of from about 5 ppm*min/mL to about 80 ppm*min/mL based on 1 mL of the NORS.

57. The composition of claim 48, wherein the composition is formulated to be administered to skin of a subject to treat a warts, and wherein the NORS releases NO in an amount of from about 10 ppm*min/mL to about 60 ppm*min/mL based on 1 mL of the NORS.

58. The composition of claim 48, wherein the nitric oxide releasing compound comprises sodium nitrite, potassium nitrite, barium nitrite, calcium nitrite, nitrite orotate, amyl nitrite, magnesium nitrite, silver nitrite, copper nitrite, or a combination thereof.

59. The composition of claim 48, wherein the acidifying agent comprises ascorbic acid, ascorbyl palmitate, salicylic acid, malic acid, lactic acid, citric acid, formic acid, benzoic acid, tartaric acid, hydrochloric acid, sulfuric acid, phosphoric acid, or a combination thereof.

~~60. The composition of claim 48, wherein the NORS provides an extended release of NO.~~

~~61. The composition of claim 48, wherein the composition is formulated to be administered as an intranasal spray, an open vessel bath for soaking, a liquid sinus wash, a liquid gargling solution, a respiratory inhaler, an aerosol, a gel, a foam, an emulsion, a liquid solution, a cream, or a combination thereof.~~

~~62. The composition of claim 48, wherein the composition further comprises a pharmaceutically acceptable carrier.~~

~~63. The composition of claim 62, wherein the pharmaceutically acceptable carrier comprises water, saline, hydroxyethyl cellulose, xanthan gum, or a combination thereof.~~

~~64. The use of a composition as recited in any one of claims 48 to 63 for the manufacture of a medicament for treating a condition responsive to nitric oxide (NO) treatment, comprising:~~

~~administering a therapeutically effective amount of the composition to the subject.~~

~~65.~~48. A composition, comprising:

a combination of a nitric oxide releasing compound, an acidifying agent, and a carrier in amounts that release from about 1 ppm*min/mL to about 500 ppm*min/mL nitric oxide (NO) based on 1 mL of the composition when measured by releasing NO from the composition for a period of 30 minutes into a flow of substantially inert carrier gas at a flow rate of 1 liter per minute and a pressure of 1 atmosphere, coupled to a chemiluminescence detector.

~~66.~~49. The composition of claim 48~~65~~, wherein the pharmaceutically acceptable carrier comprises water, saline, hydroxyethyl cellulose, xanthan gum, or a combination thereof.

~~67.~~50. The composition of claim 48~~65~~, wherein the composition is formulated to be administered as an intranasal spray, an open vessel bath for soaking, a liquid sinus

wash, a liquid gargling solution, a respiratory inhaler, an aerosol, a gel, a foam, an emulsion, a liquid solution, a cream, or a combination thereof.

~~68.~~51. The composition of claim 65, wherein the amount of NO released is from about 1 ppm*min/mL to about 500 ppm*min/mL.

~~69. A composition, comprising:~~

~~a volume of a nitric oxide (NO) releasing solution (NORS) that releases an effective amount of NO to a situs for a duration, wherein the NORS includes a nitric oxide releasing compound and an acidifying agent, wherein when measured by releasing NO from the NORS for a period of 30 minutes into a flow of substantially inert carrier gas at a flow rate of 1 liter per minute and a pressure of 1 atmosphere, coupled to a chemiluminescence detector, said NORS releases NO in an amount of from about 1 ppm*min/mL to about 500 ppm*min/mL based on 1 mL of the NORS.~~

~~70. The composition of claim 69, wherein the NORS releases the NO in an amount of from about 1 ppm*min to about 60 ppm*min per mL of the NORS.~~

~~71. The composition of claim 69, wherein the volume of the NORS is from about 0.1 mL to about 10,000 mL.~~

~~72. The composition of claim 69, wherein the total amount of NO released by the volume of NORS is from about 6 ppm*min to about 75,000 ppm*min.~~

~~73. The composition of claim 69, wherein the NORS releases NO for a duration of less than about 30 minutes.~~

~~74. The composition of claim 69, wherein the NORS releases NO in an amount from about 5 ppm*min/mL to about 15 ppm*min/mL based on 1 mL of the NORS.~~

~~75. The composition of claim 74, wherein the total amount of NO released by the volume of NORS is from about 25,000 ppm*min to about 75,000 ppm*min.~~

~~76. The composition of claim 74, wherein the volume of NORS is from about 500 mL to about 10,000 mL.~~

~~77. The composition of claim 74, wherein the volume of NORS releases a peak NO concentration of from about 5,000 ppm to about 20,000 ppm.~~

~~78. The composition of claim 74, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~79. The composition of claim 69, wherein the NORS releases NO in an amount from about 25 ppm*min/mL to about 75 ppm*min/mL based on 1 mL of the NORS.~~

~~80. The composition of claim 79, wherein the total amount of NO released by the volume of NORS is from about 25 ppm*min to about 75 ppm*min.~~

~~81. The composition of claim 79, wherein the NORS releases NO for a duration of less than about 1 minute.~~

~~82. The composition of claim 79, wherein the volume of NORS is from about 0.1 mL to about 2 mL.~~

~~83. The composition of claim 79, wherein the volume of NORS releases a peak NO concentration of from about 5 ppm to about 30 ppm.~~

~~84. The composition of claim 69, wherein the NORS releases the NO in an amount from about 1 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.~~

~~85. The composition of claim 84, wherein the total amount of NO released by the volume of NORS is from about 1 ppm*min to about 15 ppm*min.~~

~~86. The composition of claim 84, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, or a combination thereof.~~

~~87. The composition of claim 84, wherein the volume of NORS released is from about 0.1 mL to about 2 mL.~~

88. The composition of claim 84, wherein the volume of NORS releases a peak NO concentration of from about 0.5 ppm to about 5 ppm.

89. The composition of claim 69, wherein the NORS releases NO in an amount from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.

90. The composition of claim 89, wherein the total amount of NO released by the volume of NORS is from about 1 ppm*min to about 15 ppm*min.

91. The composition of claim 89, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, or a combination thereof.

92. The composition of claim 89, wherein the volume of NORS is from about 0.1 mL to about 2 mL.

93. The composition of claim 89, wherein the volume of NORS releases a peak NO concentration of from about 0.5 ppm to about 5 ppm.

94. The composition of claim 69, wherein the NORS releases NO in an amount from about 0.5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.

95. The composition of claim 94, wherein the total amount of NO released by the volume of NORS is from about 100 ppm*min to about 5,000 ppm*min.

96. The composition of claim 94, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, or a combination thereof.

97. The composition of claim 94, wherein the volume of NORS is from about 150 mL to about 300 mL.

98. The composition of claim 94, wherein the volume of NORS releases a peak NO concentration of from about 50 ppm to about 1,500 ppm.

99. The composition of claim 69, wherein the NORS releases NO in an amount from about 10 ppm*min/mL to about 40 ppm*min/mL based on 1 mL of the NORS.

~~100. The composition of claim 99, wherein the total amount of NO released by the volume of NORS is from about 200 ppm*min to about 800 ppm*min.~~

~~101. The composition of claim 99, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, or a combination thereof.~~

~~102. The composition of claim 99, wherein the volume of NORS is from about 5 mL to about 40 mL.~~

~~103. The composition of claim 99, wherein the volume of NORS releases a peak NO concentration of from about 100 ppm to about 200 ppm.~~

~~104. The composition of claim 69, wherein the NORS releases NO in an amount from about 5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.~~

~~105. The composition of claim 104, wherein the total amount of NO released by the volume of NORS is from about 10 ppm*min to about 60 ppm*min.~~

~~106. The composition of claim 104, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~107. The composition of claim 104, wherein the volume of NORS administered is from about 1 mL to about 5 mL.~~

~~108. The composition of claim 104, wherein the volume of NORS releases a peak NO concentration of from about 5 ppm to about 20 ppm.~~

~~109. The composition of claim 69, wherein the NORS releases NO in an amount from about 5 ppm*min/mL to about 80 ppm*min/mL based on 1 mL of the NORS.~~

~~110. The composition of claim 109, wherein the total amount of NO released by the volume of NORS is from about 100 ppm*min to about 75,000 ppm*min.~~

~~111. The composition of claim 109, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~112. The composition of claim 109, wherein the volume of NORS is from about 5 mL to about 10,000 mL.~~

~~113. The composition of claim 109, wherein the volume of NORS releases a peak NO concentration of from about 50 ppm to about 20,000 ppm.~~

~~114. The composition of claim 69, wherein the NORS releases NO in an amount from about 10 ppm*min/mL to about 60 ppm*min/mL based on 1 mL of the NORS.~~

~~115. The composition of claim 114, wherein the total amount of NO released by the volume of NORS is from about 20 ppm*min to about 400 ppm*min.~~

~~116. The composition of claim 114, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~117. The composition of claim 114, wherein the volume of NORS is from about 0.5 mL to about 10 mL.~~

~~118. The composition of claim 114, wherein the volume of NORS releases a peak NO concentration of from about 1 ppm to about 60 ppm.~~

~~119.~~52. The composition of claim 48~~69~~, wherein the nitric oxide releasing compound comprises sodium nitrite, potassium nitrite, barium nitrite, calcium nitrite, nitrite orotate, amyl nitrite, magnesium nitrite, silver nitrite, copper nitrite, or a combination thereof.

~~120.~~53. The composition of claim 48~~69~~, wherein the acidifying agent comprises ascorbic acid, ascorbyl palmitate, salicylic acid, malic acid, lactic acid, citric acid, formic acid, benzoic acid, tartaric acid, hydrochloric acid, sulfuric acid, phosphoric acid, or a combination thereof.

~~121.~~54. The composition of claim 48~~69~~, wherein the composition~~NORS~~ provides an extended release of NO.

~~122.~~55. The composition of claim 48~~69~~, wherein the composition is~~NORS is formulated as~~ an intranasal spray, an open vessel bath for soaking, a liquid sinus wash, a liquid gargling solution, a respiratory inhaler, an aerosol, a gel, a foam, an emulsion, a liquid solution, a cream, or a combination thereof.

~~123. The composition of claim 69, wherein the NORS comprises a pharmaceutically acceptable carrier.~~

~~124. The composition of claim 123, wherein the pharmaceutically acceptable carrier comprises water, saline, hydroxyethyl cellulose, xanthan gum, or a combination thereof.~~

~~125. A composition comprising a nitric oxide releasing solution (NORS), wherein the NORS includes a nitric oxide releasing compound and an acidifying agent, wherein when measured by releasing NO from the NORS into a flow of substantially inert carrier gas at a flow rate of 1 liter per minute and a pressure of 1 atmosphere to be quantified by a chemiluminescence detector for a period of 30 minutes said NORS releases NO in an amount of from about 1 ppm*min/mL to about 500 ppm*min/mL based on 1 mL of the NORS.~~

~~126. The composition of claim 125, wherein the NORS releases NO in an amount of from about 5 ppm*min/mL to about 15 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~127. The composition of claim 125, wherein the NORS releases NO in an amount of from about 25 ppm*min/mL to about 75 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~128. The composition of claim 125, wherein the NORS releases NO in an amount of from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~129. The composition of claim 125, wherein the NORS releases NO in an amount of from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~130. The composition of claim 125, wherein the NORS releases NO in an amount of from about 0.5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~131. The composition of claim 125, wherein the NORS releases NO in an amount of from about 10 ppm*min/mL to about 40 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~132. The composition of claim 125, wherein the NORS releases NO in an amount of from about 5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~133. The composition of claim 125, wherein the NORS releases NO in an amount of from about 5 ppm*min/mL to about 80 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~134. The composition of claim 125, wherein the NORS releases NO in an amount of from about 10 ppm*min/mL to about 60 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~135. The composition of claim 125, wherein the nitric oxide releasing compound comprises sodium nitrite, potassium nitrite, barium nitrite, calcium nitrite, nitrite orotate, amyl nitrite, magnesium nitrite, silver nitrite, copper nitrite, or a combination thereof.~~

~~136. The composition of claim 125, wherein the acidifying agent comprises ascorbic acid, ascorbyl palmitate, salicylic acid, malic acid, lactic acid, citric acid, formic acid, benzoic acid, tartaric acid, hydrochloric acid, sulfuric acid, phosphoric acid, or a combination thereof.~~

~~137. The composition of claim 125, wherein the NORS provides an extended release of NO.~~

~~138. The composition of claim 125, wherein the composition is formulated as an intranasal spray, an open vessel bath for soaking, a liquid sinus wash, a liquid gargling solution, a respiratory inhaler, an aerosol, a gel, a foam, an emulsion, a liquid solution, a cream, or a combination thereof.~~

~~139. The composition of claim 125, wherein the composition further comprises a pharmaceutically acceptable carrier.~~

~~140. The composition of claim 139, wherein the pharmaceutically acceptable carrier comprises water, saline, hydroxyethyl cellulose, xanthan gum, or a combination thereof.~~

~~141. A composition, comprising:~~

~~a combination of a nitric oxide releasing compound, an acidifying agent, and a carrier in amounts that release from about 1 ppm*min/mL to about 500 ppm*min/mL nitric oxide (NO) based on 1 mL of the composition when measured~~

by releasing NO from the composition for a period of 30 minutes into a flow of substantially inert carrier gas at a flow rate of 1 liter per minute and a pressure of 1 atmosphere, coupled to a chemiluminescence detector.

142. The composition of claim 141, wherein the pharmaceutically acceptable carrier comprises water, saline, hydroxyethyl cellulose, xanthan gum, or a combination thereof.

143. The composition of claim 141, wherein the composition is formulated as an intranasal spray, an open vessel bath for soaking, a liquid sinus wash, a liquid gargling solution, a respiratory inhaler, an aerosol, a gel, a foam, an emulsion, a liquid solution, a cream, or a combination thereof.

144. The composition of claim 141, wherein the amount of NO released is from about 1 ppm*min/mL to about 500 ppm*min/mL.

145. The composition of claim 141, wherein the nitric oxide releasing compound comprises sodium nitrite, potassium nitrite, barium nitrite, calcium nitrite, nitrite orotate, amyl nitrite, magnesium nitrite, silver nitrite, copper nitrite, or a combination thereof.

146. The composition of claim 141, wherein the acidifying agent comprises ascorbic acid, ascorbyl palmitate, salicylic acid, malic acid, lactic acid, citric acid, formic acid, benzoic acid, tartaric acid, hydrochloric acid, sulfuric acid, phosphoric acid, or a combination thereof.

147. The composition of claim 69 or 141, wherein the composition further comprises a preservative comprising ascorbic acid, acetylcysteine, bisulfite, metabisulfite, monothioglycerol, phenol, meta-cresol, benzyl alcohol, methyl paraben, propyl paraben, butyl paraben, benzalkonium chloride, benzethonium chloride, butylated hydroxyl toluene, myristyl gamma-picolimium chloride, 2-phenoxyethanol, phenyl mercuric nitrate, chlorobutanol, thimerosal, tocopherols, or a combination thereof.

148. The composition of claim 69, 125, or 141, wherein the composition further

comprises a stabilizing carrier, an emollient, an adjuvant, or a combination thereof.

149. The composition of claim 69, 125, or 141, wherein the composition further comprises an emollient comprising aloe vera, lanolin, urea, petrolatum, shea butter, cocoa butter, mineral oil, paraffin, beeswax, squalene, jojoba oil, coconut oil, sesame oil, almond oil, cetyl alcohol, stearyl alcohol, olive oil, oleic acid, triethylhexanoin, glycerol, sorbitol, propylene glycol, cyclomethicone, dimethicone, or a combination thereof.

150. The composition of claim 69, 125, or 141, wherein the composition further comprises an adjuvant comprising analgesic adjuvants, aluminum hydroxide, aluminum phosphate, calcium phosphate hydroxide, paraffin oil, detergents, plant saponins, cytokines, or a combination thereof.

151. The composition of claim 69, 125, or 141, wherein the composition further comprises a surfactant, a polymer, and a combination thereof.

152. The composition of claim 69, 125, or 141, wherein the composition further comprises a thickener, a penetration enhancer, and a combination thereof.

153. The composition of claim 69, 125, or 141, wherein the composition further comprises a thickener comprising a hydrophobically modified cross-linked acrylate copolymer, PEG-150 distearate, PEG-7 glyceryl cocoate, PEG-200 hydrogenated glyceryl palmitate, PEG-120 methyl glucose dioleate, carboxymethylene polymer, carboxyvinyl polymer, acrylates, C10-C30 alkyl acrylate crosspolymers, polyacrylic acids, gelatin, pectin, tragacanth, methyl cellulose, hydroxylethylcellulose, hydroxypropylcellulose, HPMC, CMC, alginate, starch, polyvinyl alcohol, polyvinyl pyrrolidone, co-polymers of polyoxyethylene and polyoxypropylene, polyethylene glycol, or a combination thereof.

154. The composition of claim 69, 125, or 141, wherein the composition further comprises a penetration enhancer comprising ethanol, propylene glycol, oleic acid and other fatty acids, azone, terpenes, terpenoids, bile acids, isopropyl myristate and other fatty esters, dimethyl sulphoxides, N-methyl-2-pyrrolidone and other

~~pyrrolidones, or a combination thereof.~~

~~155. The composition of claim 69, 125, or 141, wherein the composition further comprises fumed silica, mica, talc, titanium dioxide, kaolin, aluminum glycinate, ethylenediaminetetraacetic acid, fragrances, colorants, or a combination thereof.~~

~~156. A method of treating a condition responsive to nitric oxide (NO) treatment in a subject comprising:~~

~~administering a volume of a nitric oxide releasing solution (NORS) that provides a therapeutically effective amount of NO to an administration situs of the subject for a treatment duration, wherein the NORS includes a nitric oxide releasing compound and an acidifying agent, wherein when measured by releasing NO from the NORS for a period of 30 minutes into a flow of substantially inert carrier gas at a flow rate of 1 liter per minute and a pressure of 1 atmosphere, coupled to a chemiluminescence detector, said NORS releases NO in an amount of from about 1 ppm*min/mL to about 500 ppm*min/mL based on 1 mL of the NORS.~~

~~157. The method of claim 156, wherein the NORS releases the NO in an amount of from about 1 ppm*min per mL to about 60 ppm*min per mL of the NORS.~~

~~158. The method of claim 156, wherein the NORS releases the NO in an amount of from about 20 ppm*min per mL to about 60 ppm*min per mL of the NORS.~~

~~159. The method of claim 156, wherein the NORS releases the NO in an amount of from about 20 ppm*min per mL to about 40 ppm*min per mL of the NORS.~~

~~160. The method of claim 156, wherein the NORS releases the NO in an amount of from about 10 ppm*min per mL to about 40 ppm*min per mL of the NORS.~~

~~161. The method of claim 156, wherein the volume of the NORS is from about 0.1 mL to about 10,000 mL.~~

~~162. The method of claim 156, wherein the volume of the NORS is from about 0.1 mL to about 5 mL.~~

~~163. The method of claim 156, wherein the total amount of NO released by the volume of NORS administered is from about 6 ppm*min to about 75,000 ppm*min.~~

~~164. The method of claim 156, wherein the total amount of NO released by the volume of NORS administered is from about 0.1 ppm*min to about 3,000 ppm*min.~~

~~165. The method of claim 156, wherein the total amount of NO released by the volume of NORS administered is from about 0.1 ppm*min to about 1,000 ppm*min.~~

~~166. The method of claim 165, wherein the total amount of NO released by the volume of NORS administered is from about 200 ppm*min to about 800 ppm*min.~~

~~167. The method of claim 165, wherein the total amount of NO released by the volume of NORS administered is from about 600 ppm*min to about 800 ppm*min.~~

~~168. The method of claim 165, wherein the total amount of NO released by the volume of NORS administered is from about 0.1 ppm*min to about 60 ppm*min.~~

~~169. The method of claim 168, wherein the total amount of NO released by the volume of NORS administered is from about 20 ppm*min to about 40 ppm*min.~~

~~170. The method of claim 156, wherein the NORS releases NO for a duration of less than about 30 minutes.~~

~~171. The method of claim 156, wherein the condition is a wound, a skin infection, a fungal infection, a respiratory infection, a bacterial infection, or a viral infection.~~

~~172. The method of claim 156, wherein the condition is athlete's foot and the administration situs is a foot of the subject, and wherein the NORS releases NO in an amount from about 5 ppm*min/mL to about 15 ppm*min/mL based on 1 mL of the NORS.~~

~~173. The method of claim 172, wherein the total amount of NO released by the volume of NORS administered is from about 25,000 ppm*min to about 75,000 ppm*min.~~

~~174. The method of claim 172, wherein the volume of NORS administered is from about 500 mL to about 10,000 mL.~~

~~175. The method of claim 172, wherein the volume of NORS administered releases a peak NO concentration of from about 5,000 ppm to about 20,000 ppm.~~

~~176. The method of claim 172, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~177. The method of claim 156, wherein the condition is onychomycosis and the administration situs is a nail of the subject, and wherein the NORS releases NO in an amount from about 25 ppm*min/mL to about 75 ppm*min/mL based on 1 mL of the NORS.~~

~~178. The method of claim 177, wherein the total amount of NO released by the volume of NORS administered is from about 25 ppm*min to about 75 ppm*min.~~

~~179. The method of claim 177, wherein the volume of NORS administered is from about 0.1 mL to about 2 mL.~~

~~180. The method of claim 177, wherein the volume of NORS administered releases a peak NO concentration of from about 5 ppm to about 30 ppm.~~

~~181. The method of claim 177, wherein the NORS releases NO for a duration of less than about 1 minute.~~

~~182. The method of claim 156, wherein the condition is influenza and the administration situs is a nasal cavity of the subject, and wherein the NORS releases the NO in an amount from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.~~

~~183. The method of claim 182, wherein the total amount of NO released by the volume of NORS administered is from about 1 ppm*min to about 15 ppm*min.~~

~~184. The method of claim 182, wherein the volume of NORS administered is from about 0.1 mL to about 2 mL.~~

~~185. The method of claim 182, wherein the volume of NORS administered releases a peak NO concentration of from about 0.5 ppm to about 5 ppm.~~

~~186. The method of claim 182, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, or a combination thereof.~~

~~187. The method of claim 156, wherein the condition is a respiratory viral infection and the administration situs is a nasal cavity or lungs of the subject, and wherein the NORS releases NO in an amount from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.~~

~~188. The method of claim 187, wherein the total amount of NO released by the volume of NORS administered is from about 1 ppm*min to about 15 ppm*min.~~

~~189. The method of claim 187, wherein the volume of NORS administered is from about 0.1 mL to about 2 mL.~~

~~190. The method of claim 187, wherein the volume of NORS administered releases a peak NO concentration of from about 0.5 ppm to about 5 ppm.~~

~~191. The method of claim 187, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, or a combination thereof.~~

~~192. The method of claim 156, wherein the condition is sinusitis and the administration situs is a sinus cavity of the subject, and wherein the NORS releases NO in an amount from about 0.5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.~~

~~193. The method of claim 192, wherein the total amount of NO released by the volume of NORS administered is from about 100 ppm*min to about 5,000 ppm*min.~~

~~194. The method of claim 192, wherein the volume of NORS administered is from about 150 mL to about 300 mL.~~

~~195. The method of claim 192, wherein the volume of NORS administered releases a peak NO concentration of from about 50 ppm to about 1,500 ppm.~~

~~196. The method of claim 192, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, or a combination thereof.~~

~~197. The method of claim 156, wherein the condition is a throat infection and the administration situs is the throat of the subject, and wherein the NORS releases NO in an amount from about 10 ppm*min/mL to about 40 ppm*min/mL based on 1 mL of the NORS.~~

~~198. The method of claim 197, wherein the total amount of NO released by the volume of NORS administered is from about 200 ppm*min to about 800 ppm*min.~~

~~199. The method of claim 197, wherein the volume of NORS administered is from about 5 mL to about 40 mL.~~

~~200. The method of claim 197, wherein the volume of NORS administered releases a peak NO concentration of from about 100 ppm to about 200 ppm.~~

~~201. The method of claim 197, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, or a combination thereof.~~

~~202. The method of claim 156, wherein the condition is acne and the administration situs is a skin area of the subject, and wherein the NORS releases NO in an amount from about 5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.~~

~~203. The method of claim 202, wherein the total amount of NO released by the volume of NORS administered is from about 10 ppm*min to about 60 ppm*min.~~

~~204. The method of claim 202, wherein the volume of NORS administered is from about 1 mL to about 5 mL.~~

~~205. The method of claim 202, wherein the volume of NORS administered releases a peak NO concentration of from about 5 ppm to about 20 ppm.~~

~~206. The method of claim 202, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~207. The method of claim 156, wherein the condition is a diabetic foot ulcer and the administration situs is a foot of the subject, and wherein the NORS releases NO in an amount from about 5 ppm*min/mL to about 80 ppm*min/mL based on 1 mL of the NORS.~~

~~208. The method of claim 207, wherein the total amount of NO released by the volume of NORS administered is from about 100 ppm*min to about 75,000 ppm*min.~~

~~209. The method of claim 207, wherein the volume of NORS administered is from about 5 mL to about 10,000 mL.~~

~~210. The method of claim 207, wherein the volume of NORS administered releases a peak NO concentration of from about 50 ppm to about 20,000 ppm.~~

~~211. The method of claim 207, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~212. The method of claim 156, wherein the condition is a warts and the administration situs is a skin area of the subject, and wherein the NORS releases NO in an amount from about 10 ppm*min/mL to about 60 ppm*min/mL based on 1 mL of the NORS.~~

213. The method of claim 212, wherein the total amount of NO released by the volume of NORS administered is from about 20 ppm*min to about 400 ppm*min.

214. The method of claim 212, wherein the volume of NORS administered is from about 0.5 mL to about 10 mL.

215. The method of claim 212, wherein the volume of NORS administered releases a peak NO concentration of from about 1 ppm to about 60 ppm.

216. The method of claim 212, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.

217. The method of claim 156, wherein the nitric oxide releasing compound comprises sodium nitrite, potassium nitrite, barium nitrite, calcium nitrite, nitrite orotate, amyl nitrite, magnesium nitrite, silver nitrite, copper nitrite, or a combination thereof.

218. The method of claim 156, wherein the acidifying agent comprises ascorbic acid, ascorbyl palmitate, salicylic acid, malic acid, lactic acid, citric acid, formic acid, benzoic acid, tartaric acid, hydrochloric acid, sulfuric acid, phosphoric acid, or a combination thereof.

219. The method of claim 156, wherein the NORS provides an extended release of NO.

220. The method of claim 156, wherein the NORS is administered as an intranasal spray, an open vessel bath for soaking, a liquid sinus wash, a liquid gargling solution, a respiratory inhaler, an aerosol, a gel, a foam, an emulsion, a liquid solution, a cream, or a combination thereof.

221. The method of claim 156, wherein the NORS comprises a pharmaceutically acceptable carrier.

222. The method of claim 221, wherein the pharmaceutically acceptable carrier comprises water, saline, hydroxyethyl cellulose, xanthan gum, or a combination thereof.

223. The method of claim 156, wherein the NORS is administered daily for the treatment duration of from about 1 day to about 50 days.

224. A composition for treating a condition responsive to nitric oxide (NO) treatment comprising a nitric oxide releasing solution (NORS), wherein the NORS includes a nitric oxide releasing compound and an acidifying agent, wherein when measured by releasing NO from the NORS into a flow of substantially inert carrier gas at a flow rate of 1 liter per minute and a pressure of 1 atmosphere to be quantified by a chemiluminescence detector for a period of 30 minutes said NORS releases NO in an amount of from about 1 ppm*min/mL to about 500 ppm*min/mL based on 1 mL of the NORS.

225. The composition of claim 224, wherein the composition is formulated to be administered to a foot of a subject to treat athlete's foot, and wherein the NORS releases NO in an amount of from about 5 ppm*min/mL to about 15 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.

226. The composition of claim 224, wherein the composition is formulated to be administered to a nail of a subject to treat onychomycosis, and wherein the NORS releases NO in an amount of from about 25 ppm*min/mL to about 75 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.

227. The composition of claim 224, wherein the composition is formulated to be administered to a nasal cavity of a subject to treat influenza, and wherein the NORS releases NO in an amount of from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5

seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.

228. The composition of claim 224, wherein the composition is formulated to be administered to a nasal cavity or lungs of a subject to treat a respiratory viral infection, and wherein the NORS releases NO in an amount of from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.

229. The composition of claim 224, wherein the composition is formulated to be administered to a sinus cavity of a subject to treat sinusitis, and wherein the NORS releases NO in an amount of from about 0.5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.

230. The composition of claim 224, wherein the composition is formulated to be administered to a throat of a subject to treat a throat infection, and wherein the NORS releases NO in an amount of from about 10 ppm*min/mL to about 40 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.

231. The composition of claim 224, wherein the composition is formulated to be administered to a skin area of a subject to treat acne, and wherein the NORS releases NO in an amount of from about 5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.

232. The composition of claim 224, wherein the composition is formulated to be administered to a foot of a subject to treat a diabetic foot ulcer, and wherein the NORS releases NO in an amount of from about 5 ppm*min/mL to about 80

~~ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~233. The composition of claim 224, wherein the composition is formulated to be administered to skin of a subject to treat a warts, and wherein the NORS releases NO in an amount of from about 10 ppm*min/mL to about 60 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~234. The composition of claim 224, wherein the nitric oxide releasing compound comprises sodium nitrite, potassium nitrite, barium nitrite, calcium nitrite, nitrite orotate, amyl nitrite, magnesium nitrite, silver nitrite, copper nitrite, or a combination thereof.~~

~~235. The composition of claim 224, wherein the acidifying agent comprises ascorbic acid, ascorbyl palmitate, salicylic acid, malic acid, lactic acid, citric acid, formic acid, benzoic acid, tartaric acid, hydrochloric acid, sulfuric acid, phosphoric acid, or a combination thereof.~~

~~236. The composition of claim 224, wherein the NORS provides an extended release of NO.~~

~~237. The composition of claim 224, wherein the composition is formulated to be administered as an intranasal spray, an open vessel bath for soaking, a liquid sinus wash, a liquid gargling solution, a respiratory inhaler, an aerosol, a gel, a foam, an emulsion, a liquid solution, a cream, or a combination thereof.~~

~~238. The composition of claim 224, wherein the composition further comprises a pharmaceutically acceptable carrier.~~

~~239. The composition of claim 238, wherein the pharmaceutically acceptable carrier comprises water, saline, hydroxyethyl cellulose, xanthan gum, or a combination thereof.~~

240. The use of a composition as recited in any one of claims 224 to 239 for the manufacture of a medicament for treating a condition responsive to nitric oxide (NO) treatment, comprising:

administering a therapeutically effective amount of the composition to the subject.

241. A composition, comprising:

a combination of a nitric oxide releasing compound, an acidifying agent, and a carrier in amounts that release from about 1 ppm*min/mL to about 500 ppm*min/mL nitric oxide (NO) based on 1 mL of the composition when measured by releasing NO from the composition for a period of 30 minutes into a flow of substantially inert carrier gas at a flow rate of 1 liter per minute and a pressure of 1 atmosphere, coupled to a chemiluminescence detector.

242. The composition of claim 241, wherein the pharmaceutically acceptable carrier comprises water, saline, hydroxyethyl cellulose, xanthan gum, or a combination thereof.

243. The composition of claim 241, wherein the composition is formulated to be administered as an intranasal spray, an open vessel bath for soaking, a liquid sinus wash, a liquid gargling solution, a respiratory inhaler, an aerosol, a gel, a foam, an emulsion, a liquid solution, a cream, or a combination thereof.

244. The composition of claim 241, wherein the amount of NO released is from about 1 ppm*min/mL to about 60 ppm*min/mL.

245. The composition of claim 241, wherein the nitric oxide releasing compound comprises sodium nitrite, potassium nitrite, barium nitrite, calcium nitrite, nitrite orotate, amyl nitrite, magnesium nitrite, silver nitrite, copper nitrite, or a combination thereof.

246. The composition of claim 241, wherein the acidifying agent comprises ascorbic acid, ascorbyl palmitate, salicylic acid, malic acid, lactic acid, citric acid, formic acid, benzoic acid, tartaric acid, hydrochloric acid, sulfuric acid, phosphoric acid,

or a combination thereof.

247. The composition of any one of claims 224 or 241, wherein the composition further comprises a preservative comprising ascorbic acid, acetylcysteine, bisulfite, metabisulfite, monothioglycerol, phenol, meta-cresol, benzyl alcohol, methyl paraben, propyl paraben, butyl paraben, benzalkonium chloride, benzethonium chloride, butylated hydroxyl toluene, myristyl gamma-picolimium chloride, 2-phenoxyethanol, phenyl mercuric nitrate, chlorobutanol, thimerosal, tocopherols, or a combination thereof.

248. The composition of any one of claims 224 or 241, wherein the composition further comprises a stabilizing carrier, an emollient, an adjuvant, or a combination thereof.

249. The composition of any one of claims 224 or 241, wherein the composition further comprises an emollient comprising aloe vera, lanolin, urea, petrolatum, shea butter, cocoa butter, mineral oil, paraffin, beeswax, squalene, jojoba oil, coconut oil, sesame oil, almond oil, cetyl alcohol, stearyl alcohol, olive oil, oleic acid, triethylhexanoin, glycerol, sorbitol, propylene glycol, cyclomethicone, dimethicone, or a combination thereof.

250. The composition of any one of claims 224 or 241, wherein the composition further comprises an adjuvant comprising analgesic adjuvants, aluminum hydroxide, aluminum phosphate, calcium phosphate hydroxide, paraffin oil, detergents, plant saponins, cytokines, or a combination thereof.

251. The composition of any one of claims 224 or 241, wherein the composition further comprises a surfactant, a polymer, and a combination thereof.

252. The composition of any one of claims 224 or 241, wherein the composition further comprises a thickener, a penetration enhancer, and a combination thereof.

253. The composition of any one of claims 224 or 241, wherein the composition further comprises a thickener comprising a hydrophobically modified cross-linked acrylate copolymer, PEG-150 distearate, PEG-7 glyceryl cocoate, PEG-200 hydrogenated glyceryl palmitate, PEG-120 methyl glucose dioleate,

~~carboxymethylene polymer, carboxyvinyl polymer, acrylates, C10-C30 alkyl acrylate crosspolymers, polyacrylic acids, gelatin, pectin, tragacanth, methyl cellulose, hydroxylethylcellulose, hydroxypropylcellulose, HPMC, CMC, alginate, starch, polyvinyl alcohol, polyvinyl pyrrolidone, co-polymers of polyoxyethylene and polyoxypropylene, polyethylene glycol, or a combination thereof.~~

~~254. The composition of any one of claims 224 or 241, wherein the composition further comprises a penetration enhancer comprising ethanol, propylene glycol, oleic acid and other fatty acids, azone, terpenes, terpenoids, bile acids, isopropyl myristate and other fatty esters, dimethyl sulphoxides, N-methyl-2-pyrrolidone and other pyrrolidones, or a combination thereof.~~

~~255. The composition of any one of claims 224 or 241, wherein the composition further comprises fumed silica, mica, talc, titanium dioxide, kaolin, aluminum glycinate, ethylenediaminetetraacetic acid, fragrances, colorants, or a combination thereof.~~

~~256. The composition of any one of claims 224 or 241, wherein the composition has a pH of less than about 4.0.~~

~~257. The composition of any one of claims 224 or 241, wherein the composition has a pH of between about 3.0 and about 4.0.~~

~~258. The composition of any one of claims 224 or 241, wherein the composition has a concentration of nitric oxide releasing compound of from about 0.1% w/v to about 1.5% w/v.~~

~~259. The composition of any one of claims 224 or 241, wherein the composition has a concentration of nitric oxide releasing compound of not greater than 0.8% w/v.~~

~~260. The composition of any one of claims 224 or 241, wherein the composition has a concentration of nitric oxide releasing compound of not greater than 1% w/v.~~

~~261. The composition of any one of claims 224 or 241, wherein the composition has a concentration of nitric oxide releasing compound of not greater than 0.5% w/v.~~

~~262. The composition of any one of claims 224 or 241, wherein the composition has a concentration of nitric oxide releasing compound of from about 0.4% to about 0.7% w/v.~~

~~263. The composition of any one of claims 224 or 241, wherein the composition has a concentration of acidifying agent of from about 0.1% w/v to about 4% w/v.~~

~~264. The composition of any one of claims 224 or 241, wherein the composition has a concentration of acidifying agent of from about 0.4% to about 0.7% w/v.~~

~~265. The composition of any one of claims 224 or 241, wherein the composition has a concentration of acidifying agent of not greater than 0.5% w/v.~~

~~266. The composition of any one of claims 224 or 241, wherein the composition has a pH of from about 3.7 to about 4.0 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.07% w/v to about 0.7% w/v.~~

~~267. The composition of any one of claims 224 or 241, wherein the composition has a pH of from about 3.6 to about 3.7 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.07% w/v to about 0.7% w/v.~~

~~268. The composition of any one of claims 224 or 241, wherein the composition has a pH of from about 3.2 to about 3.6 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.2% w/v to about 0.9% w/v.~~

~~269. The composition of any one of claims 224 or 241, wherein the composition has a pH of from about 3.0 to about 3.2 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.2% w/v to about 0.9% w/v.~~

~~270. The composition of any one of claims 224 or 241, wherein the composition has a pH of from about 2.0 to about 3.0 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.4% w/v to about 1.5% w/v.~~

~~271. The composition of any one of claims 224 or 241, wherein the composition has a pH of from about 2.0 to about 3.0 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.5% w/v to about 1.5% w/v.~~

~~272. The composition of any one of claims 224 or 241, wherein the composition has a pH of from about 2.0 to about 3.0 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.7% w/v to about 1.5% w/v.~~

~~273. The composition of any one of claims 224 or 241, wherein the composition has a pH of from about 2.0 to about 3.0 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.9% w/v to about 1.5% w/v.~~

~~274. A composition, comprising:~~

~~a volume of a nitric oxide (NO) releasing solution (NORS) that releases an effective amount of NO to a situs for a duration, wherein the NORS includes a nitric oxide releasing compound and an acidifying agent, wherein when measured by releasing NO from the NORS for a period of 30 minutes into a flow of substantially inert carrier gas at a flow rate of 1 liter per minute and a pressure of 1 atmosphere, coupled to a chemiluminescence detector, said NORS releases NO in an amount of from about 1 ppm*min/mL to about 500 ppm*min/mL based on 1 mL of the NORS.~~

~~275. The composition of claim 274, wherein the NORS releases the NO in an amount of from about 1 ppm*min per mL to about 60 ppm*min per mL of the NORS.~~

~~276. The composition of claim 274, wherein the NORS releases the NO in an amount of from about 20 ppm*min per mL to about 60 ppm*min per mL of the NORS.~~

~~277. The composition of claim 274, wherein the NORS releases the NO in an amount of from about 20 ppm*min per mL to about 40 ppm*min per mL of the NORS.~~

~~278. The composition of claim 274, wherein the NORS releases the NO in an amount of from about 10 ppm*min per mL to about 40 ppm*min per mL of the NORS.~~

~~279. The composition of claim 274, wherein the volume of the NORS is from about 0.1 mL to about 10,000 mL.~~

~~280. The composition of claim 274, wherein the volume of the NORS is from about 0.1 mL to about 5 mL.~~

~~281. The composition of claim 274, wherein the total amount of NO released by the volume of NORS is from about 6 ppm*min to about 75,000 ppm*min.~~

~~282. The composition of claim 274, wherein the total amount of NO released by the volume of NORS is from about 0.1 ppm*min to about 3,000 ppm*min.~~

~~283. The composition of claim 274, wherein the total amount of NO released by the volume of NORS is from about 0.1 ppm*min to about 1,000 ppm*min.~~

~~284. The composition of claim 283, wherein the total amount of NO released by the volume of NORS is from about 200 ppm*min to about 800 ppm*min.~~

~~285. The composition of claim 283, wherein the total amount of NO released by the volume of NORS is from about 600 ppm*min to about 800 ppm*min.~~

~~286. The composition of claim 283, wherein the total amount of NO released by the volume of NORS is from about 0.1 ppm*min to about 60 ppm*min.~~

~~287. The composition of claim 286, wherein the total amount of NO released by the volume of NORS is from about 20 ppm*min to about 40 ppm*min.~~

~~288. The composition of claim 274, wherein the NORS releases NO for a duration of less than about 30 minutes.~~

~~289. The composition of claim 274, wherein the NORS releases NO in an amount from about 5 ppm*min/mL to about 15 ppm*min/mL based on 1 mL of the NORS.~~

~~290. The composition of claim 289, wherein the total amount of NO released by the volume of NORS is from about 25,000 ppm*min to about 75,000 ppm*min.~~

~~291. The composition of claim 289, wherein the volume of NORS is from about 500 mL to about 10,000 mL.~~

~~292. The composition of claim 289, wherein the volume of NORS releases a peak NO concentration of from about 5,000 ppm to about 20,000 ppm.~~

~~293. The composition of claim 289, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~294. The composition of claim 274, wherein the NORS releases NO in an amount from about 25 ppm*min/mL to about 75 ppm*min/mL based on 1 mL of the NORS.~~

~~295. The composition of claim 294, wherein the total amount of NO released by the volume of NORS is from about 25 ppm*min to about 75 ppm*min.~~

~~296. The composition of claim 294, wherein the volume of NORS is from about 0.1 mL to about 2 mL.~~

~~297. The composition of claim 294, wherein the volume of NORS releases a peak NO concentration of from about 5 ppm to about 30 ppm.~~

~~298. The composition of claim 294, wherein the NORS releases NO for a duration of less than about 1 minute.~~

~~299. The composition of claim 274, wherein the NORS releases the NO in an amount from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.~~

~~300. The composition of claim 299, wherein the total amount of NO released by the volume of NORS is from about 1 ppm*min to about 15 ppm*min.~~

~~301. The composition d of claim 299, wherein the volume of NORS is from about 0.1 mL to about 2 mL.~~

~~302. The composition of claim 299, wherein the volume of NORS releases a peak NO concentration of from about 0.5 ppm to about 5 ppm.~~

~~303. The composition of claim 299, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, or a combination thereof.~~

~~304. The composition of claim 274, wherein the NORS releases NO in an amount from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.~~

~~305. The composition of claim 304, wherein the total amount of NO released by the volume of NORS is from about 1 ppm*min to about 15 ppm*min.~~

~~306. The composition of claim 304, wherein the volume of NORS is from about 0.1 mL to about 2 mL.~~

~~307. The composition of claim 304, wherein the volume of NORS releases a peak NO concentration of from about 0.5 ppm to about 5 ppm.~~

~~308. The composition of claim 304, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, or a combination thereof.~~

~~309. The composition of claim 274, wherein the NORS releases NO in an amount from about 0.5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.~~

~~310. The composition of claim 309, wherein the total amount of NO released by the volume of NORS is from about 100 ppm*min to about 5,000 ppm*min.~~

~~311. The composition of claim 309, wherein the volume of NORS is from about 150 mL to about 300 mL.~~

~~312. The composition of claim 309, wherein the volume of NORS releases a peak NO concentration of from about 50 ppm to about 1,500 ppm.~~

~~313. The composition of claim 309, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, or a combination thereof.~~

~~314. The composition of claim 274, wherein the NORS releases NO in an amount from about 10 ppm*min/mL to about 40 ppm*min/mL based on 1 mL of the NORS.~~

~~315. The composition of claim 314, wherein the total amount of NO released by the volume of NORS is from about 200 ppm*min to about 800 ppm*min.~~

~~316. The composition of claim 314, wherein the volume of NORS is from about 5 mL to about 40 mL.~~

~~317. The composition of claim 314, wherein the volume of NORS releases a peak NO concentration of from about 100 ppm to about 200 ppm.~~

~~318. The composition of claim 314, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, or a combination thereof.~~

~~319. The composition of claim 274, wherein the NORS releases NO in an amount from about 5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS.~~

~~320. The composition of claim 319, wherein the total amount of NO released by the volume of NORS is from about 10 ppm*min to about 60 ppm*min.~~

~~321. The composition of claim 319, wherein the volume of NORS is from about 1 mL to about 5 mL.~~

~~322. The composition of claim 319, wherein the volume of NORS releases a peak NO concentration of from about 5 ppm to about 20 ppm.~~

~~323. The composition of claim 319, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~324. The composition of claim 274, wherein the NORS releases NO in an amount from about 5 ppm*min/mL to about 80 ppm*min/mL based on 1 mL of the NORS.~~

~~325. The composition of claim 324, wherein the total amount of NO released by the volume of NORS is from about 100 ppm*min to about 75,000 ppm*min.~~

~~326. The composition of claim 324, wherein the volume of NORS is from about 5 mL to about 10,000 mL.~~

~~327. The composition of claim 324, wherein the volume of NORS releases a peak NO concentration of from about 50 ppm to about 20,000 ppm.~~

~~328. The composition of claim 324, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~329. The composition of claim 274, wherein the NORS releases NO in an amount from about 10 ppm*min/mL to about 60 ppm*min/mL based on 1 mL of the NORS.~~

~~330. The composition of claim 329, wherein the total amount of NO released by the volume of NORS is from about 20 ppm*min to about 400 ppm*min.~~

~~331. The composition of claim 329, wherein the volume of NORS is from about 0.5 mL to about 10 mL.~~

~~332. The composition of claim 329, wherein the volume of NORS releases a peak NO concentration of from about 1 ppm to about 60 ppm.~~

~~333. The composition of claim 329, wherein the NORS releases NO for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~334. The composition of claim 274, wherein the nitric oxide releasing compound comprises sodium nitrite, potassium nitrite, barium nitrite, calcium nitrite, nitrite orotate, amyl nitrite, magnesium nitrite, silver nitrite, copper nitrite, or a combination thereof.~~

~~335. The composition of claim 274, wherein the acidifying agent comprises ascorbic acid, ascorbyl palmitate, salicylic acid, malic acid, lactic acid, citric acid, formic acid, benzoic acid, tartaric acid, hydrochloric acid, sulfuric acid, phosphoric acid, or a combination thereof.~~

~~336. The composition of claim 274, wherein the NORS provides an extended release of NO.~~

~~337. The composition of claim 274, wherein the NORS is formulated as an intranasal spray, an open vessel bath for soaking, a liquid sinus wash, a liquid gargling solution, a respiratory inhaler, an aerosol, a gel, a foam, an emulsion, a liquid solution, a cream, or a combination thereof.~~

~~338. The composition of claim 274, wherein the NORS comprises a pharmaceutically acceptable carrier.~~

~~339. The composition of claim 338, wherein the pharmaceutically acceptable carrier comprises water, saline, hydroxyethyl cellulose, xanthan gum, or a combination thereof.~~

~~340. The method of claim 274, wherein the NORS is administered daily for the treatment duration of from about 1 day to about 50 days.~~

~~341. A composition comprising a nitric oxide (NO) releasing solution (NORS), wherein the NORS includes a nitric oxide releasing compound and an acidifying agent, wherein when measured by releasing NO from the NORS into a flow of substantially inert carrier gas at a flow rate of 1 liter per minute and a pressure of~~

~~1 atmosphere to be quantified by a chemiluminescence detector for a period of 30 minutes said NORS releases NO in an amount of from about 1 ppm*min/mL to about 500 ppm*min/mL based on 1 mL of the NORS.~~

~~342. The composition of claim 341, wherein the NORS releases NO in an amount of from about 5 ppm*min/mL to about 15 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~343. The composition of claim 341, wherein the NORS releases NO in an amount of from about 25 ppm*min/mL to about 75 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~344. The composition of claim 341, wherein the NORS releases NO in an amount of from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~345. The composition of claim 341, wherein the NORS releases NO in an amount of from about 2 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~346. The composition of claim 341, wherein the NORS releases NO in an amount of from about 0.5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~347. The composition of claim 341, wherein the NORS releases NO in an amount of from about 10 ppm*min/mL to about 40 ppm*min/mL based on 1 mL of the~~

~~NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~348. The composition of claim 341, wherein the NORS releases NO in an amount of from about 5 ppm*min/mL to about 30 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~349. The composition of claim 341, wherein the NORS releases NO in an amount of from about 5 ppm*min/mL to about 80 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~350. The composition of claim 341, wherein the NORS releases NO in an amount of from about 10 ppm*min/mL to about 60 ppm*min/mL based on 1 mL of the NORS for a duration of: less than about 5 seconds, less than about 30 seconds, less than about 1 minute, less than about 20 minutes, less than about 30 minutes, or a combination thereof.~~

~~351. The composition of claim 341, wherein the nitric oxide releasing compound comprises sodium nitrite, potassium nitrite, barium nitrite, calcium nitrite, nitrite orotate, amyl nitrite, magnesium nitrite, silver nitrite, copper nitrite, or a combination thereof.~~

~~352. The composition of claim 341, wherein the acidifying agent comprises ascorbic acid, ascorbyl palmitate, salicylic acid, malic acid, lactic acid, citric acid, formic acid, benzoic acid, tartaric acid, hydrochloric acid, sulfuric acid, phosphoric acid, or a combination thereof.~~

~~353. The composition of claim 341, wherein the NORS provides an extended release of NO.~~

354. The composition of claim 341, wherein the composition is formulated as an intranasal spray, an open vessel bath for soaking, a liquid sinus wash, a liquid gargling solution, a respiratory inhaler, an aerosol, a gel, a foam, an emulsion, a liquid solution, a cream, or a combination thereof.

355. The composition of claim 341, wherein the composition further comprises a pharmaceutically acceptable carrier.

356. The composition of claim 355, wherein the pharmaceutically acceptable carrier comprises water, saline, hydroxyethyl cellulose, xanthan gum, or a combination thereof.

357. A composition, comprising:

a combination of a nitric oxide releasing compound, an acidifying agent, and a carrier in amounts that release from about 1 ppm*min/mL to about 500 ppm*min/mL nitric oxide (NO) based on 1 mL of the composition when measured by releasing NO from the composition for a period of 30 minutes into a flow of substantially inert carrier gas at a flow rate of 1 liter per minute and a pressure of 1 atmosphere, coupled to a chemiluminescence detector.

358. The composition of claim 357, wherein the pharmaceutically acceptable carrier comprises water, saline, hydroxyethyl cellulose, xanthan gum, or a combination thereof.

359. The composition of claim 357, wherein the composition is formulated as an intranasal spray, an open vessel bath for soaking, a liquid sinus wash, a liquid gargling solution, a respiratory inhaler, an aerosol, a gel, a foam, an emulsion, a liquid solution, a cream, or a combination thereof.

360. The composition of claim 357, wherein the amount of NO released is from about 1 ppm*min/mL to about 60 ppm*min/mL.

361. The composition of claim 357, wherein the nitric oxide releasing compound comprises sodium nitrite, potassium nitrite, barium nitrite, calcium nitrite, nitrite orotate, amyl nitrite, magnesium nitrite, silver nitrite, copper nitrite, or a

combination thereof.

362. The composition of claim 357, wherein the acidifying agent comprises ascorbic acid, ascorbyl palmitate, salicylic acid, malic acid, lactic acid, citric acid, formic acid, benzoic acid, tartaric acid, hydrochloric acid, sulfuric acid, phosphoric acid, or a combination thereof.

363. The composition of any one of claims 274 or 341 or 357, wherein the composition further comprises a preservative comprising ascorbic acid, acetylcysteine, bisulfite, metabisulfite, monothioglycerol, phenol, meta-cresol, benzyl alcohol, methyl paraben, propyl paraben, butyl paraben, benzalkonium chloride, benzethonium chloride, butylated hydroxyl toluene, myristyl gamma-picolimium chloride, 2-phenoxyethanol, phenyl mercuric nitrate, chlorobutanol, thimerosal, tocopherols, or a combination thereof.

364. The composition of any one of claims 274 or 341 or 357, wherein the composition further comprises a stabilizing carrier, an emollient, an adjuvant, or a combination thereof.

365. The composition of any one of claims 274 or 341 or 357, wherein the composition further comprises an emollient comprising aloe vera, lanolin, urea, petrolatum, shea butter, cocoa butter, mineral oil, paraffin, beeswax, squalene, jojoba oil, coconut oil, sesame oil, almond oil, cetyl alcohol, stearyl alcohol, olive oil, oleic acid, triethylhexanoin, glycerol, sorbitol, propylene glycol, cyclomethicone, dimethicone, or a combination thereof.

366. The composition of any one of claims 274 or 341 or 357, wherein the composition further comprises an adjuvant comprising analgesic adjuvants, aluminum hydroxide, aluminum phosphate, calcium phosphate hydroxide, paraffin oil, detergents, plant saponins, cytokines, or a combination thereof.

367. The composition of any one of claims 274 or 341 or 357, wherein the composition further comprises a surfactant, a polymer, and a combination thereof.

368. The composition of any one of claims 274 or 341 or 357, wherein the composition further comprises a thickener, a penetration enhancer, and a

~~combination thereof.~~

~~369. The composition of any one of claims 274 or 341 or 357, wherein the composition further comprises a thickener comprising a hydrophobically modified cross-linked acrylate copolymer, PEG-150 distearate, PEG-7 glyceryl cocoate, PEG-200 hydrogenated glyceryl palmitate, PEG-120 methyl glucose dioleate, carboxymethylene polymer, carboxyvinyl polymer, acrylates, C10-C30 alkyl acrylate crosspolymers, polyacrylic acids, gelatin, pectin, tragacanth, methyl cellulose, hydroxylethylcellulose, hydroxypropylcellulose, HPMC, CMC, alginate, starch, polyvinyl alcohol, polyvinyl pyrrolidone, co-polymers of polyoxyethylene and polyoxypropylene, polyethylene glycol, or a combination thereof.~~

~~370. The composition of any one of claims 274 or 341 or 357, wherein the composition further comprises a penetration enhancer comprising ethanol, propylene glycol, oleic acid and other fatty acids, azone, terpenes, terpenoids, bile acids, isopropyl myristate and other fatty esters, dimethyl sulphoxides, N-methyl-2-pyrrolidone and other pyrrolidones, or a combination thereof.~~

~~371. The composition of any one of claims 274 or 341 or 357, wherein the composition further comprises fumed silica, mica, talc, titanium dioxide, kaolin, aluminum glycinate, ethylenediaminetetraacetic acid, fragrances, colorants, or a combination thereof.~~

~~372. The composition of any one of claims 274 or 341 or 357, wherein the composition has a pH of less than about 4.0.~~

~~373. The composition of any one of claims 274 or 341 or 357, wherein the composition has a pH of between about 3.0 and about 4.0.~~

~~374. The composition of any one of claims 274 or 341 or 357, wherein the composition has a concentration of nitric oxide releasing compound of from about 0.1% w/v to about 1.5% w/v.~~

~~375. The composition of any one of claims 274 or 341 or 357, wherein the composition has a concentration of nitric oxide releasing compound of not greater than 0.8% w/v.~~

~~376. The composition of any one of claims 274 or 341 or 357, wherein the composition has a concentration of nitric oxide releasing compound of not greater than 1% w/v.~~

~~377. The composition of any one of claims 274 or 341 or 357, wherein the composition has a concentration of nitric oxide releasing compound of not greater than 0.5% w/v.~~

~~378. The composition of any one of claims 274 or 341 or 357, wherein the composition has a concentration of nitric oxide releasing compound of from about 0.4% to about 0.7% w/v.~~

~~379. The composition of any one of claims 274 or 341 or 357, wherein the composition has a concentration of acidifying agent of from about 0.1% w/v to about 4% w/v.~~

~~380. The composition of any one of claims 274 or 341 or 357, wherein the composition has a concentration of acidifying agent of from about 0.4% to about 0.7% w/v.~~

~~381. The composition of any one of claims 274 or 341 or 357, wherein the composition has a concentration of acidifying agent of not greater than 0.5% w/v.~~

~~382. The composition of any one of claims 274 or 341 or 357, wherein the composition has a pH of from about 3.7 to about 4.0 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.07% w/v to about 0.7% w/v.~~

~~383. The composition of any one of claims 274 or 341 or 357, wherein the composition has a pH of from about 3.6 to about 3.7 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.07% w/v to about 0.7% w/v.~~

~~384. The composition of any one of claims 274 or 341 or 357, wherein the composition has a pH of from about 3.2 to about 3.6 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.2% w/v to about 0.9% w/v.~~

~~385. The composition of any one of claims 274 or 341 or 357, wherein the composition has a pH of from about 3.0 to about 3.2 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.2% w/v to about 0.9% w/v.~~

~~386. The composition of any one of claims 274 or 341 or 357, wherein the composition has a pH of from about 2.0 to about 3.0 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.4% w/v to about 1.5% w/v.~~

~~387. The composition of any one of claims 274 or 341 or 357, wherein the composition has a pH of from about 2.0 to about 3.0 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.5% w/v to about 1.5% w/v.~~

~~388. The composition of any one of claims 274 or 341 or 357, wherein the composition has a pH of from about 2.0 to about 3.0 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.7% w/v to about 1.5% w/v.~~

~~389. The composition of any one of claims 274 or 341 or 357, wherein the composition has a pH of from about 2.0 to about 3.0 and wherein the composition has a concentration of nitric oxide releasing compound of from about 0.9% w/v to about 1.5% w/v.~~