WHAT IS CLAIMED IS:

1. A composition comprising at least two different isolated strains of bacteriophage, each of said strains having a genome that comprises a nucleic acid sequence selected from the group of consisting of SEQ ID NO:1 (F44/10), SEQ ID NO:2 (F125/10), SEQ ID NO:3 (F770/05), SEQ ID NO:4 (F510/08), and SEQ ID NO:5 (F1245/05), or a variant thereof, said variant having at least 95% sequence identity to said nucleic acid sequence and showing antibacterial activity against at least one of *Staphylococcus aureus*, *Pseudomonas aeruginosa*, and/or *Acinetobacter baumannii*.

2. The composition according to claim 1, wherein one of said at least two bacteriophage strains is the strain having a genome that comprises the nucleic acid sequence of SEQ ID NO:1 or SEQ ID NO:2, or said variant thereof.

3. The composition according to claim 1, wherein said at least two bacteriophage strains are the strains having genomes that comprise the nucleic acid sequences of SEQ ID NO:1 and SEQ ID NO:2, or said variants thereof.

4. The composition according to claim 3, further comprising at least a third bacteriophage strain, said third strain having a genome that comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO:3, SEQ ID NO:4, and SEQ ID NO:5, or said variant thereof.

5. The composition according to claim 3, further comprising at least a third and a fourth bacteriophage strain, said third and fourth strains each having a genome that comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO:3, SEQ ID NO:4, and SEQ ID NO:5, or said variant thereof.

6. The composition according to claim 1, wherein one of said at least two bacteriophage strains is the strain having a genome that comprises the nucleic acid sequence of SEQ ID NO:3 or SEQ ID NO:4, or said variant thereof.

7. The composition according to claim 1, wherein said at least two bacteriophage strains are the strains having genomes that comprise the nucleic acid sequences of SEQ ID NO:3 and SEQ ID NO:4 or said variant thereof.

8. The composition according to claim 7, further comprising at least a third bacteriophage strain, said third strain having a genome that comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, and SEQ ID NO:5, or said variant thereof.

9. The composition according to claim 7, further comprising at least third and fourth bacteriophage strains, said third and fourth strains each having a genome that comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, and SEQ ID NO:5, or said variant thereof.

10. The composition according to claim 1, wherein one of said at least two bacteriophage strains is the strain having a genome that comprises the nucleic acid sequence of SEQ ID NO:5, or said variant thereof.

11. The composition according to claim 10, further comprising at least a third bacteriophage strain, said third strain having a genome that comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, and SEQ ID NO:4, or said variant thereof.

12. The composition according to claim 10, further comprising at least third and fourth bacteriophage strains, said third and fourth strains each having a genome that comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, and SEQ ID NO:4, or said variant thereof.

13. A composition comprising at least five isolated bacteriophage strains, said strains having genomes that comprise nucleic acid sequences of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, and SEQ ID NO:5, or a variant thereof, said variant having at least 95% sequence identity to said nucleic acid sequence and showing antibacterial activity against at least one of *Staphylococcus aureus*, *Pseudomonas aeruginosa*, and/or *Acinetobacter baumannii*.

14. The composition according to claim 13, wherein said bacteriophage strains having genomes that comprise the nucleic acid sequences of SEQ ID NOs:1, 2, 4, and 5, or said variants thereof, are each present in said composition in an amount corresponding to about 10 times that of said bacteriophage strain having a genome that comprises the nucleic acid sequence of SEQ ID NO:3, or said variant thereof.

15. The composition according to claim 13, wherein said composition comprises said bacteriophage strains having genomes that comprise nucleic acid sequences of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, and SEQ ID NO:5.

16. A pharmaceutical composition comprising the composition according to any one of claims 1-15 and a pharmaceutically acceptable carrier.

17. The pharmaceutical composition according to claim 16, wherein said composition is formulated for topical application.

18. The pharmaceutical composition according to claim 16 or 17, wherein said composition comprises a further sterile buffer.

19. The pharmaceutical composition according to claim 18, wherein said buffer comprises about 0.05 M Tris-HCl, about 0.1M NaCl, and about 10mM $MgSO_4.7H_2O$.

20. The pharmaceutical composition according to any one of claims 16-19, wherein said composition is contained in an ampoule.

21. The pharmaceutical composition according to any one of claims 16-20, further comprising an additional agent, said additional agent selected from the group consisting of an antibiotic agent, and anti-inflammatory agent, an antiviral agent, a local anesthetic agent, a growth factor, and a corticosteroid.

22. The pharmaceutical composition according to claim 21, wherein said additional agent is an antibiotic agent, said antibiotic agent having antibacterial activity against *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and/or *Staphylococcus aureus*.

23. The pharmaceutical composition according to claim 21, wherein said additional agent is an antibiotic agent, said antibiotic agent having antibacterial activity against bacteria other than *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and *Staphylococcus aureus*.

24. The pharmaceutical composition according to any one of claims 16-23, wherein said composition is for use in treating a bacterial infection associated with an area of non-intact skin, and each of said phage strains is present in said composition in an amount corresponding to 10^3 to 10^{13} phage particles/cm^2 of said area.

25. The pharmaceutical composition according to claim 24, wherein each of said phage strains is present in said composition in an amount corresponding to 10^7 to 10^9 phage particles/cm^2 of said area.

26. A pharmaceutical composition comprising the composition according to any one of claims 2-5 and a pharmaceutically acceptable carrier.

27. The pharmaceutical composition according to claim 26, wherein said composition is formulated for topical application.

28. The pharmaceutical composition according to claim 26 or 27, further comprising an additional agent, wherein said additional agent is an antibiotic agent having antibacterial activity against *Staphylococcus aureus*.

29. The pharmaceutical composition according to claim 26 or 27, further comprising an additional agent, wherein said additional agent is an antibiotic agent having antibacterial activity against bacteria other than *Staphylococcus aureus*.

30. A pharmaceutical composition comprising the composition according to any one of claims 6-9 and a pharmaceutically acceptable carrier.

31. The pharmaceutical composition according to claim 30, wherein said composition is formulated for topical delivery.

32. The pharmaceutical composition according to claim 30 or 31, further comprising an additional agent, wherein said additional agent is an antibiotic agent having antibacterial activity against *Pseudomonas aeruginosa*.

33. The pharmaceutical composition according to claim 30 or 31, further comprising an additional agent, wherein said additional agent is an antibiotic agent having antibacterial activity against bacteria other than *Pseudomonas aeruginosa*.

34. A pharmaceutical composition comprising the composition according to any one of claims 10-12 and a pharmaceutically acceptable carrier.

35. The pharmaceutical composition according to claim 34, wherein said composition is formulated for topical application.

36. The pharmaceutical composition according to claim 34 or 35, further comprising an additional agent, wherein said additional agent is an antibiotic agent having antibacterial activity against *Acinetobacter baumannii*.

37. The pharmaceutical composition according to claim 34 or 35, further comprising an additional agent, wherein said additional agent is an antibiotic agent having antibacterial activity against bacteria other than *Acinetobacter baumannii*.

38. A pharmaceutical composition comprising the composition according to any one of claims 13-15 and a pharmaceutically acceptable carrier.

39. The pharmaceutical composition according to claim 38, wherein said composition is formulated for topical application.

40. The pharmaceutical composition according to claim 38 or 39, wherein said composition is for use in treating a bacterial infection associated with an area of non-intact skin, and each of said phage strains is present in said composition in an amount corresponding to 10^7 to 10^9 phage particles/cm^2 of said area.

41. Use of a therapeutically effective amount of the pharmaceutical composition according to any one of claims 16-25 in the manufacture of a medicament for treating or preventing a bacterial infection in a subject in need thereof.

42. The use according to claim 41, wherein said bacterial infection is an infection by one or more of *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and *Staphylococcus aureus*.

43. The use according to claim 41 or 42, wherein the pharmaceutical composition is to be administered topically.

44. The use according to claim 43, wherein said subject is a mammal.

45. The use according to claim 44, wherein said mammal is a human.

46. The use according to any one of claims 41-45, wherein said bacterial infection is associated with a chronic ulcer.

47. The use according to any one of claims 41-46, wherein said bacterial infection is associated with a burn wound.

48. The use according to any one of claims 41-46, wherein said bacterial infection is diabetic foot infection.

49. The use according to claim 48, wherein said diabetic foot infection comprises a cutaneous ulcer.

50. The use according to any one of claims 41-46, wherein said bacterial infection is associated with an area of non-intact skin selected from a sore associated with cellulitis, an erysipelas lesion, a decubitus ulcer, and a pressure sore.

51. Use of a therapeutically effective amount of the pharmaceutical composition according to any one of claims 26-29 in the manufacture of a medicament for treating or preventing a bacterial infection in a subject in need thereof.

52. The use according to claim 51 wherein said bacterial infection is an infection by *Staphylococcus aureus.*

53. The use according to claim 51 or 52, wherein said bacterial infection is diabetic foot infection.

54. Use of a therapeutically effective amount of the pharmaceutical composition according to any one of claims 30-33 in the manufacture of a medicament for treating or preventing a bacterial infection in a subject in need thereof.

55. The use according to claim 54 wherein said bacterial infection is an infection by *Pseudomonas aeruginosa.*

56. The use according to claim 54 or 55, wherein said bacterial infection is diabetic foot infection.

57. Use of a therapeutically effective amount of the pharmaceutical composition according to any one of claims 34-37 in the manufacture of a medicament for treating or preventing a bacterial infection in a subject in need thereof.

58. The use according to claim 57 wherein said bacterial infection is an infection by *Acinetobacter baumannii.*

59. The use according to claim 57 or 58, wherein said bacterial infection is diabetic foot infection.

60. Use of a therapeutically effective amount of the pharmaceutical composition according to any one of claims 38-40 in the manufacture of a medicament for treating or preventing a bacterial infection in a subject in need thereof.

61. The use according to claim 60, wherein said bacterial infection is diabetic foot infection.

62. The use according to claim 61, wherein said composition is to be topically administered to a cutaneous ulcer associated with said diabetic foot infection.

63. The use according to claim 62, wherein said administration follows mechanical debridement of said ulcer.

64. The use according to claim 62 or 63, wherein said administration comprises use of at least one of a dressing, an instillation device, and a negative pressure wound therapy device.

65. The use according to any one of claims 62-64, wherein said pharmaceutical composition is to be administered every 4 hours or every 6 hours for an initial 24 hours.

66. The use according to claim 65, wherein, following said initial 24 hours, said pharmaceutical composition is to be administered every 12 hours or every 24 hours for at least 3 additional days.

67. The use according to claim 66, wherein said pharmaceutical composition is to be administered every 12 hours or every 24 hours for at least 4 additional days.

68. The use according to any one of claims 61-67, wherein said composition is to be used in combination with a standard therapy for diabetic foot infection.

69. The use according to claim 68, wherein said standard therapy is selected from the group consisting of extracellular matrix replacement therapy, moist wound therapy, negative pressure wound therapy, arterial re-vascularization therapy, hyperbaric oxygen therapy, administration of an antibiotic agent, and administration of a growth factor.

70. The use according to claim 69, wherein said moist wound therapy comprises use of an adhesive-backing film, a silicone-coated foam, a hydrogel, and/or a hydrocolloid.

71. The use according to claim 69 or 70, wherein said extracellular matrix replacement therapy comprises use of bio-engineered tissue.

72. The use according to any one of claims 69-71, wherein said antibiotic agent has antibacterial activity against *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and/or *Staphylococcus aureus*.

73. The use according to claim 72, wherein administration of said antibiotic agent comprises systemic administration.

74. The use according to any one of claims 69-73, wherein said growth factor is at least one selected from the group consisting of platelet-derived growth factor, granulocyte colony-stimulating factor, epidermal growth factor, fibroblast growth factor, nerve growth factor, and vascular endothelial growth factor.

75. The use according to claim 74, wherein administration of said growth factor comprises topical administration.

76. The use according to any one of claims 61-75, wherein said composition is to be used in combination with a non-standard therapy for diabetic foot infection, wherein said diabetic foot infection is refractory to a standard therapy.

WHAT IS CLAIMED IS:

1. A composition comprising at least two different purified strains of bacteriophage, wherein said at least two strains are strains comprising nucleic acid sequences of SEQ ID NO:1 (F44/10) and SEQ ID NO:2 (F125/10), or a variant thereof, said variant having at least 95% sequence identity to said nucleic acid sequence and showing antibacterial activity against *Staphylococcus aureus*.

2. The composition according to claim 1, further comprising at least a third bacteriophage strain, said third strain comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO:3 (F770/05), SEQ ID NO:4 (F510/08), and SEQ ID NO:5 (F1245/05), or a variant thereof, said variant having at least 95% sequence identity to said nucleic acid sequence and showing antibacterial activity against *Pseudomonas aeruginosa* or *Acinetobacter baumannii*.

3. The composition according to claim 2, further comprising at least a third and a fourth bacteriophage strain, said third and fourth strains each comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO:3, SEQ ID NO:4, and SEQ ID NO:5, or said variant thereof.

4. The composition according to claim 3, wherein said third strain comprises the nucleic acid sequence of SEQ ID NO:3, or said variant thereof, and said fourth strain comprises the nucleic acid sequence of SEQ ID NO:4, or said variant thereof.

5. The composition according to claim 1, further comprising at least a third bacteriophage strain, said third strain comprising the nucleic acid sequence of SEQ ID NO:5, or a variant thereof, said variant having at least 95% sequence identity to said nucleic acid sequence and showing antibacterial activity against *Acinetobacter baumannii*.

6. The composition according to claim 5, further comprising at least a fourth bacteriophage strain, said fourth strain comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO:3, and SEQ ID NO:4, or a variant thereof, said variant

having at least 95% sequence identity to said nucleic acid sequence and showing antibacterial activity against *Pseudomonas aeruginosa*.

7. A composition comprising at least five purified bacteriophage strains, said strains comprising nucleic acid sequences of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, and SEQ ID NO:5, or a variant thereof, said variant having at least 95% sequence identity to said nucleic acid sequence and showing antibacterial activity against at least one of *Staphylococcus aureus*, *Pseudomonas aeruginosa*, and/or *Acinetobacter baumannii*.

8. The composition according to claim 7, wherein said bacteriophage strains comprising the nucleic acid sequences of SEQ ID NOs:1, 2, 4, and 5, or said variants thereof, are each present in said composition in an amount corresponding to about 10 times that of said bacteriophage strain comprising the nucleic acid sequence of SEQ ID NO:3, or said variant thereof.

9. The composition according to claim 7, wherein said composition comprises said five bacteriophage strains comprising nucleic acid sequences of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, and SEQ ID NO:5.

10. A pharmaceutical composition comprising the composition according to any one of claims 1-9 and a pharmaceutically acceptable carrier.

11. The pharmaceutical composition according to claim 10, wherein said composition is formulated for topical application.

12. The pharmaceutical composition according to claim 10 or 11, wherein said composition comprises a further sterile buffer.

13. The pharmaceutical composition according to claim 12, wherein said buffer comprises about 0.05 M Tris-HCl, about 0.1M NaCl, and about 10mM $MgSO_4.7H_2O$.

14. The pharmaceutical composition according to any one of claims 10-13, wherein said composition is contained in an ampoule.

15. The pharmaceutical composition according to any one of claims 10-14, further comprising an additional agent, said additional agent selected from the group consisting of an

antibiotic agent, an anti-inflammatory agent, an antiviral agent, a local anesthetic agent, a growth factor, and a corticosteroid.

16. The pharmaceutical composition according to claim 15, wherein said additional agent is an antibiotic agent, said antibiotic agent having antibacterial activity against *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and/or *Staphylococcus aureus*.

17. The pharmaceutical composition according to claim 16, wherein said additional agent is an antibiotic agent having antibacterial activity against *Staphylococcus aureus*.

18. The pharmaceutical composition according to claim 15, wherein said additional agent is an antibiotic agent, said antibiotic agent having antibacterial activity against bacteria other than *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and *Staphylococcus aureus*.

19. The pharmaceutical composition according to any one of claims 10-18, wherein said composition is for use in treating a bacterial infection associated with an area of non-intact skin, and each of said phage strains is present in said composition in an amount corresponding to 10^3 to 10^{13} phage particles/cm^2 of said area.

20. The pharmaceutical composition according to claim 19, wherein each of said phage strains is present in said composition in an amount corresponding to 10^7 to 10^9 phage particles/cm^2 of said area.

21. A pharmaceutical composition comprising the composition according to any one of claims 7-9 and a pharmaceutically acceptable carrier.

22. The pharmaceutical composition according to claim 21, wherein said composition is formulated for topical application.

23. The pharmaceutical composition according to claim 21 or 22, wherein said composition is for use in treating a bacterial infection associated with an area of non-intact skin, and each of said phage strains is present in said composition in an amount corresponding to 10^7 to 10^9 phage particles/cm^2 of said area.

24. Use of a therapeutically effective amount of the pharmaceutical composition according to any one of claims 10-23 in the manufacture of a medicament for treating or preventing a bacterial infection in a subject in need thereof.

25. The use according to claim 24, wherein said bacterial infection is an infection by one or more of *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and *Staphylococcus aureus*.

26. The use according to claim 25, wherein said bacterial infection is an infection by *Staphylococcus aureus*.

27. The use according to any one of claims 24-26, wherein the pharmaceutical composition is administered topically.

28. The use according to claim 27, wherein said subject is a mammal.

29. The use according to claim 28, wherein said mammal is a human.

30. The use according to any one of claims 24-29, wherein said bacterial infection is associated with a chronic ulcer.

31. The use according to any one of claims 24-30, wherein said bacterial infection is associated with a burn wound

32. The use according to any one of claims 24-30, wherein said bacterial infection is diabetic foot infection.

33. The use according to claim 32, wherein said diabetic foot infection comprises a cutaneous ulcer.

34. The use according to any one of claims 24-30, wherein said bacterial infection is associated with an area of non-intact skin selected from a sore associated with cellulitis, an erysipelas lesion, a decubitus ulcer, and a pressure sore.

35. Use of a therapeutically effective amount of the pharmaceutical composition according to any one of claims 21-23 in the manufacture of a medicament for treating or preventing a bacterial infection in a subject in need thereof.

36. The use according to claim 35, wherein said bacterial infection is diabetic foot infection.

37. The use according to claim 36, wherein said composition is to be topically administered to a cutaneous ulcer associated with said diabetic foot infection.

38. The use according to claim 37, wherein said administration follows mechanical debridement of said ulcer.

39. The use according to claim 37 or 38, wherein said administration comprises use of at least one of a dressing, an instillation device, and a negative pressure wound therapy device.

40. The use according to any one of claims 37-39, wherein said pharmaceutical composition is to be administered every 4 hours or every 6 hours for an initial 24 hours.

41. The use according to claim 40, wherein, following said initial 24 hours, said pharmaceutical composition is to be administered every 12 hours or every 24 hours for at least 3 additional days.

42. The use according to claim 41, wherein said pharmaceutical composition is to be administered every 12 hours or every 24 hours for at least 4 additional days.

43. The use according to any one of claims 36-42, wherein said composition is to be used in combination with a standard therapy for diabetic foot infection.

44. The use according to claim 43, wherein said standard therapy is selected from the group consisting of extracellular matrix replacement therapy, moist wound therapy, negative pressure wound therapy, arterial re-vascularization therapy, hyperbaric oxygen therapy, administration of an antibiotic agent, and administration of a growth factor.

45. The use according to claim 44, wherein said moist wound therapy comprises use of an adhesive-backing film, a silicone-coated foam, a hydrogel, and/or a hydrocolloid.

46. The use according to claim 44 or 45, wherein said extracellular matrix replacement therapy comprises use of bio-engineered tissue.

47. The use according to any one of claims 44-46, wherein said antibiotic agent has antibacterial activity against *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and/or *Staphylococcus aureus*.

48. The use according to claim 47, wherein administration of said antibiotic agent comprises systemic administration.

49. The use according to any one of claims 44-48, wherein said growth factor is at least one selected from the group consisting of platelet-derived growth factor, granulocyte colony-stimulating factor, epidermal growth factor, fibroblast growth factor, nerve growth factor, and vascular endothelial growth factor.

50. The use according to claim 49, wherein administration of said growth factor comprises topical administration.

51. The use according to any one of claims 36-50, wherein said compositions is to be used in combination with a non-standard therapy for diabetic foot infection, wherein said diabetic foot infection is refractory to a standard therapy.

2011. *Expert Rev Anti Infect Ther* 9:775-785), antibacterial activity against bacteria in biofilms, and activity in microaerophilic environments, even with high bacterial load (Azeredo J, *et al.* 2008. *Curr Pharm Biotechnol* 9:261-266), as well as the generally accepted safety of bacteriophage therapy in some parts of the world (Sulakvelidze A, *et al.*, 2001, *Antimicrob Agents Chemother.* 45(3): 649-659). Recent animal trials of bacteriophage therapy have demonstrated its potential to heal or improve skin bacterial diseases, both in internal (McVay CS, *et al.* 2007. *Antimicrob Agents Chemother* 51:1934-1938) and external applications (Soothill JS. 1994. Burns 20:209-211; Wills QF, *et al.* 2005. *Antimicrob Agents Chemother* 49:1220-1221). However, there is little published evidence supporting the use of bacteriophage to cure infections established for longer than a few hours (Ryan EM, *et al.* 2011 *J Pharm Pharmacol* 63:1253-1264).

[0008] In particular, phage cocktails may provide advantages to the use of phages individually, *e.g.*, to increase the lytic activity against a particular bacterial strain, and to decrease the possibility of emergence of bacteria resistant to an individual bacteriophage. That is, different bacteriophage can be mixed as cocktails to broaden their properties, preferably resulting in a collectively greater antibacterial spectrum of activity *e.g.*, an expanded host range, to which development of resistance is less likely. Nonetheless, to date, few phage cocktails exist with antimicrobial activity against different bacteria, possibly because of the difficulty in combining different specificities of bacteriophage while maintaining storage stability.

[0009] There is therefore a need to develop novel phage products as therapeutic and/or prophylactic agents for use *in vivo* against pathogenic bacteria. There also is a need for better treatments, particularly topical treatments, for DFIs. In particular, there is a need for bacteriophage cocktails capable of lysing bacteria responsible for DFIs, including *Staphylococcus aureus*, *Pseudomonas aeruginosa*, and/or *Acinetobacter baumannii*. This application addresses this and other needs.

4. SUMMARY

[0010] Provided herein are compositions comprising phage cocktails. In one aspect, there is provided a composition comprising at least two different ~~isolated~~ purified strains of bacteriophage, ~~each of~~wherein said at least two strains ~~having a genome that comprises~~are strains comprising ~~a~~ nucleic acid sequences ~~selected from the group of consisting~~ of SEQ ID NO:1 (F44/10)~~,~~) and SEQ ID NO:2 (F125/10)~~, SEQ ID NO:3 (F770/05), SEQ ID NO:4 (F510/08), and SEQ ID NO:5 (F1245/05)~~, or a variant thereof, said variant having at least 95% sequence identity to said nucleic acid sequence

and showing antibacterial activity against ~~at least one of~~ *Staphylococcus aureus*~~, *Pseudomonas aeruginosa*, and/or *Acinetobacter baumannii*~~.

In some embodiments, the disclosure provides compositions comprising at least two different isolated strains of bacteriophage, each having a genome that comprises a nucleic acid sequence selected from the group of consisting of SEQ ID NO:1 (F44/10), SEQ ID NO:2 (F125/10), SEQ ID NO:3 (F770/05), SEQ ID NO:4 (F510/08), and SEQ ID NO:5 (F1245/05),

a genome that comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, and SEQ ID NO:4, or the variant thereof.

[0010a] In one aspect, there is provided a composition comprising at least five ~~isolated~~ purified bacteriophage strains, said strains ~~having genomes that comprise~~comprising nucleic acid sequences of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, and SEQ ID NO:5, or a variant thereof, said variant having at least 95% sequence identity to said nucleic acid sequence and showing antibacterial activity against at least one of *Staphylococcus aureus*, *Pseudomonas aeruginosa*, and/or *Acinetobacter baumannii*.

[0011] In some preferred embodiments, the disclosure is directed to a composition comprising at least five isolated bacteriophage strains, the strains having genomes that comprise nucleic acid sequences of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, and SEQ ID NO:5, or a variant thereof, where the variant has at least 95% sequence identity to the corresponding nucleic acid sequence and shows antibacterial activity against at least one of *Staphylococcus aureus*, *Pseudomonas aeruginosa*, and/or *Acinetobacter baumannii*. In some embodiments, the bacteriophage strains having genomes that comprise the nucleic acid sequences of SEQ ID NOs:1, 2, 4, and 5, or the variants thereof, are each present in the composition in an amount corresponding to about 10 times that of the bacteriophage strain having a genome that comprises the nucleic acid sequence of SEQ ID NO:3, or the variant thereof. In some embodiments, the composition comprises bacteriophage strains having genomes that comprise nucleic acid sequences of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, and SEQ ID NO:5.

[0011a] In one aspect, there is provided a pharmaceutical composition comprising a composition as described herein and a pharmaceutically acceptable carrier.

[0012] In another embodiment, the instant disclosure is directed to pharmaceutical compositions comprising phage cocktails, specifically, pharmaceutical compositions comprising any of the compositions described above and a pharmaceutically acceptable carrier. In some embodiments, the pharmaceutical composition is formulated for topical application. In some embodiments, the pharmaceutical composition comprises a sterile buffer, *e.g.*, a buffer comprising about 0.05 M Tris-HCl, about 0.1M NaCl, and about 10mM $MgSO_4.7H_2O$. In some embodiments, the pharmaceutical composition is contained in an ampoule.

[0013] In some embodiments, the pharmaceutical composition further comprises an additional agent, *e.g.*, an agent selected from the group consisting of an antibiotic agent, an anti-inflammatory agent, an antiviral agent, a local anesthetic agent, a growth factor, and a corticosteroid. In some embodiments, the additional agent is an antibiotic agent, *e.g.*, an antibiotic agent having antibacterial activity against *Acinetobacter baumannii*, *Pseudomonas*