Claims

1. Use of a peptide or a composition thereof in the manufacture of a medicament for the treatment of an infection associated with a pore-forming toxin-producing pathogen or with an antibiotic-resistant pathogen, wherein the peptide comprises a sequence of YPPGGP.

2. Use according to claim 1, wherein the composition further comprises a peptide comprising a sequence selected from YPVEPF, YPPG, NQPY, and any combination thereof.

3. Use according to claim 1 or 2, wherein the peptide is derived from a probiotic bacteria selected from Lactobacillus, Lactococcus, Streptococcus, Bifidobacterium, Pediococcus, Enterococcus and any combination thereof, wherein the Lactobacillus is selected from Lactobacillus acidophilus (La-5), Lactobacillus fermentum, Lactobacillus rhamnosus, Lactobacillus reuteri, Lactobacillus helveticus, and Lactobacillus plantarum; the Lactococcus is Lactococcus lactis; the Bifidobacterium is selected from Bifidobacterium longum, Bifidobacterium bifidum, Bifidobacterium infantis, Bifidobacterium crudilactis and any mixtures thereof; the Streptococcus is Streptococcus thermophiles; and the Enterococcus is Enterococcus faecium.

4. Use according to any one of claims 1 to 3, wherein the non-enteric infection associated with the pore-forming toxin-producing pathogen is urinary tract infection.

5. Use according to any one of claims 1 to 4, wherein the pore-forming toxin-producing pathogen is uropathogenic Escherichia coli.

6. Use according to any one of claims 1 to 3, wherein the non-enteric infection associated with the antibiotic-resistant pathogen is methicillin-resistant Staphylococci infection.

7. Use according to any one of claims 1 to 6, wherein the composition further comprises an antibiotic, an antiviral, a sugar source, an edible food product, a nutritional supplement, ingestible liquid, or any combination thereof.

8. Use according to any one of claims 1 to 7, wherein the peptide is concentrated from a cell-free supernatant or fraction thereof.

9. Use according to any one of claims 1 to 8, wherein the peptide is in the form of a dried culture fraction, the dried culture fraction being a lyophilized culture fraction or a spray-dried culture fraction.

10. Use according to claim 9, wherein the dried culture fraction is a cell-free supernatant.

11. Use according to any one of claims 1 to 10, wherein the composition is a food product, beverage product, health product, medicament, or nutritional supplement.

12. Use according to any one of claims 1 to 11, wherein the composition further comprises any one or a combination of a live probiotic bacteria from which the peptides are derived and a live probiotic bacteria other than the bacteria from which the peptides are derived.

13. Use according to any one of claims 1 to 12, wherein the peptides in the composition are purified.

14. Use of a peptide or a composition thereof in the manufacture of a medical device for the treatment of an infection associated with a pore-forming toxin-producing pathogen or with an antibiotic-resistant pathogen, wherein the peptide comprises a sequence of YPPGGP, and the medical device is a stent, catheter, or wound dressing comprising the peptide or the composition, which is to be released from the medical device over a period of time.

15. Use according to claim 14, wherein the composition further comprises a peptide comprising a sequence selected from YPVEPF, YPPG, NQPY, and any combination thereof.

16. Use according to claim 14 or 15, wherein the peptide is derived from a probiotic bacteria selected from Lactobacillus, Lactococcus, Streptococcus, Bifidobacterium, Pediococcus, Enterococcus and any combination thereof, wherein the Lactobacillus is selected from Lactobacillus acidophilus (La-5), Lactobacillus fermentum, Lactobacillus rhamnosus, Lactobacillus reuteri, Lactobacillus helveticus, and Lactobacillus plantarum; the Lactococcus is Lactococcus lactis; the Bifidobacterium is selected from Bifidobacterium longum, Bifidobacterium bifidum, Bifidobacterium infantis, Bifidobacterium crudilactis and any mixtures thereof; the Streptococcus is Streptococcus thermophiles; and the Enterococcus is Enterococcus faecium.

17. Use according to any one of claims 14 to 16, wherein the non-enteric infection associated with the pore-forming toxin-producing pathogen is urinary tract infection.

18. Use according to any one of claims 14 to 17, wherein the pore-forming toxin-producing pathogen is uropathogenic Escherichia coli.

19. Use according to any one of claims 14 to 16, wherein the non-enteric infection associated with the antibiotic-resistant pathogen is methicillin-resistant Staphylococci infection.

20. Use according to any one of claims 14 to 19, wherein the composition further comprises an antibiotic, an antiviral, a sugar source, an edible food product, a nutritional supplement, ingestible liquid, or any combination thereof.

21. Use according to any one of claims 1 to 20, wherein the peptide is concentrated from a cell-free supernatant or fraction thereof.

22. Use according to any one of claims 1 to 21, wherein the peptide is in the form of a dried culture fraction, the dried culture fraction being a lyophilized culture fraction or a spray-dried culture fraction.

23. Use according to claim 22, wherein the dried culture fraction is a cell-free supernatant.

24. Use according to any one of claims 14 to 23, wherein the composition is a food product, beverage product, health product, medicament, or nutritional supplement.

25. Use according to any one of claims 14 to 24, wherein the composition further comprises any one or a combination of a live probiotic bacteria from which the peptides are derived and a live probiotic bacteria other than the bacteria from which the peptides are derived.

26. Use according to any one of claims 14 to 25, wherein the peptides in the composition are purified.