CLAIMS

1. A peptide wherein at least 75% of the amino acids of the peptide are arginine and phenylalanine amino acids, at least 50% of the amino acids being arginine amino acids and at least 15% of the amino acids being phenylalanine amino acids.

2. A peptide as claimed in claim 1 consisting of arginine and phenylalanine amino acids and zero to five non-arginine and non-phenylalanine substitutions.

3. A peptide as claimed in claim 2 comprising one or more substitution selected from the group consisting of lysine, proline, glycine and histidine.

4. A peptide as claimed in claim 3 consisting of arginine, phenylalanine and one of the group consisting of lysine, proline, glycine and histidine.

5. A peptide as claimed in claim 1 consisting of arginine and phenylalanine amino acids.

6. The peptide of any preceding claim comprising 3 to 200 amino acids, preferably 5 to 50 amino acids, more preferably 5 to 15 amino acids.

7. The peptide of claim 6 consisting of 3 to 200 amino acids, preferably 5 to 60 amino acids, more preferably 5 to 15 amino acids.

8. The peptide of any preceding claim comprising an amino acid sequence selected from the group RRRFRFFFRFRRR, HHHFRFFFRFRRR, KKFPWRLRLRYGRR, RRRRRFFFRFRRR, RRRFRFRFRFRRR, RRRFRFPFRFRRR, RRFRRFFFRRFRR, RRRRFFFRRRR, RRRRFRFRRRR, RRRRFPFRRRR, RRFRRRFRRFR, RRFRRRFRRFG, RRFGRRFRRFG, RRFRRFRRRFG, RRFRRFRRRFR, FRRRRFFFRFRRR, RRRRRFFFRRRRF, FFFFRRRRRFRRR, RRRRFFFFFRRRR, FRRRRFFFRRRRF, RRRYRYYYRYRRR, RRRARAAARARRR, RRRFRRRRRFFFF, RRRFFFFFFFRRR.

9. A peptide comprising lysine, phenylalanine and arginine amino acids.

10. A peptide comprising lysine, arginine, phenylalanine, proline, tryptophan, tyrosine and glycine amino acids

11. The peptide of either one of claims 9 and 10 comprising an amino acid sequence KKPRRKPRRPKRKK or KKFPWRLRLRYGRR.

12. The peptide of any preceding claim, or a peptide variant thereof, for use as a medicament.

13. The peptide of any one of claims 1 to 11, or a peptide variant or a pharmaceutically acceptable salt thereof, in the treatment or alleviation of an antimicrobial infection or condition.

14. The peptide as claimed in claim 13 wherein the antimicrobial infection or condition is contributed to or caused by a bacterial, parasitic, protozoal, viral or fungal pathogen.

15. The peptide as claimed in claim 14 wherein the antimicrobial infection or condition is contributed to or caused by a bacterial pathogen.

16. The peptide as claimed in claim 15 wherein the bacterial pathogen is a Gram-negative bacterium.

17. The peptide as claimed in claim 16 wherein the Gram-negative bacterium is selected from the group consisting of *Pseudomonas* spp. (in particular *Pseudomonas aeruginosa*); *Burkholderia* spp (in particular *Burkholderia cepacia*); *Acinetobacter* spp. e.g. *A. baumanii* and *A. calcoaceticus; Streptococcus* spp., e.g. *Streptococcus* Group A or B, *Streptoccocus pneumoniae; Stenotrophomonas* spp., *Stenotrophomonas maltophilia* and *Achromobacter* spp., e.g. *Achromobacter xylosoxidans.*

18. The peptide as claimed in claim 15 wherein the bacterial pathogen is a Gram-positive bacterium.

19. The peptide as claimed in claim 18 wherein the bacterial pathogen is a Gram-positive bacterium is selected from the group consisting of *Staphylococcus* spp. (in particular *Staphylococcus aureus* and *Staphylococcus epidermidis*); *Escherichia coli; Clostridia* spp.,

e.g. *Clostridium botulinum, Clostridium perfringens, Clostridium difficile;* and *Enterococcus* spp., e.g. *Enterococcus faecalis, Enterococcus faecium.*

20. The peptide as claimed in claim 15 wherein the bacterial pathogen is of the genus *Staphylococcus* spp or *Pseudomonas* spp.

21. The peptide as claimed in claim 14 wherein the antimicrobial infection or condition is selected from the group consisting of boils, furuncles, cellulitis, impetigo, nosocomial infections, bacteraemia, pneumonia, osteomyelitis, endocarditis, meningitis, abscesses, cystic fibrosis, gastrointestinal infections, genitourinary infections, septicemia, pharyngitis, necrotizing fasciitis, acute glomerulonephritis, otitis media, wounds, anthrax, encephalitis, diphtheria, gas gangrene, botulism and tetanus.

22. A method for the treatment, prevention or delay of progression of an antimicrobial infection which comprises administering to a patient a therapeutically effective amount of a peptide as claimed in any one of claims 1 to 10, or a pharmaceutically acceptable salt thereof.

23. A method as claimed in claim 22 wherein the peptide, or pharmaceutically acceptable salt thereof, is administered via topical, oral, parenteral (including subcutaneous, intravenous, intramuscular and intraperitoneal), rectal, dermal, transdermal, intrathoracic, intrapulmonary, mucosal and intranasal (respiratory) routes.

24. A composition comprising a pharmaceutically effective amount of at least one peptide as claimed in any one of claims 1 to 11 and a pharmaceutically acceptable carrier, excipient or diluent.

25. A composition as claimed in claim 24 wherein the composition comprises at least two peptides as claimed in any one of claims 1 to 11 wherein the peptides are different.

26. A composition as claimed in either one of claims 24 and 25 comprising cysteamine and/or polylysine.

27. A substrate to which is attached or applied a peptide or peptide variant as claimed in any of claims 1 to 10 or a composition as claimed in any one of claims 24 to 26.

The invention claimed is:

1. A peptide consisting of amino acid sequence selected from the group RRRFRFFFRFRRR (SEQ ID NO: 1), HHHFRFFFRFRRR (SEQ ID NO: 2), KKFPWRLRLRYGRR (SEQ ID NO: 3), RRRRRFFFRFRRR (SEQ ID NO: 4), RRRFRFRFRFRRR (SEQ ID NO: 5), RRRFRFPFRFRRR (SEQ ID NO: 6), RRFRRFFFRRFRR (SEQ ID NO: 7), RRRRFFFRRRR (SEQ ID NO: 8), RRRRFRFRRRR (SEQ ID NO: 9), RRRRFPFRRRR (SEQ ID NO: 10), RRFRRRFRRFR (SEQ ID NO: 11), RRFRRRFRRFG (SEQ ID NO: 12), RRFGRRFRRFG (SEQ ID NO: 13), RRFRRFRRRFG (SEQ ID NO: 14), RRFRRFRRRFR (SEQ ID NO: 15), FRRRRFFFRFRRR (SEQ ID NO: 16), RRRRRFFFRRRRF (SEQ ID NO: 17), FFFFRRRRRFRRR (SEQ ID NO: 18), RRRRFFFFFRRRR (SEQ ID NO: 19), FRRRRFFFRRRRF (SEQ ID NO: 20), RRRYRYYYRYRRR (SEQ ID NO: 21), RRRARAAARARRR (SEQ ID NO: 22), RRRFRRRRRFFFF (SEQ ID NO: 23), and RRRFFFFFFFRRR (SEQ ID NO: 24).

2. A composition comprising a pharmaceutically effective amount of at least one peptide of claim 1 and a pharmaceutically acceptable carrier, excipient or diluent.

3. A composition comprising a pharmaceutically effective amount of at least two peptides of claim 1 and a pharmaceutically acceptable carrier, excipient or diluent, wherein the peptides are different.

4. The composition of claim 2 further comprising cysteamine and/or polylysine.

5. A substrate to which is attached or applied a peptide of claim 1.