Claims

1. Use of an antimicrobial peptide selected from the group consisting of: hBD-2, truncated hBD-2 , hBD-1 , hBD-4 , HD5, and HD6 (SEQ ID NO: 6) and functionally equivalent variants having 1-2 amino acid modifications for the manufacture of a medicament for the prevention or treatment of a mucosal disorder in the gut and/or lung of a preterm infant.

2. The use according to claim 1, wherein the antimicrobial peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 16, SEQ ID NO: 1, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, and functionally equivalent variants thereof having 1-2 amino acid modifications.

3. The use according to claim 1, wherein the mucosal disorder is in the gut and is selected from the group consisting of: necrotizing enterocolitis, acute and prolonged diarrhea, and short bowel syndrome, preferably necrotizing enterocolitis.

4. The use according to claim 1, wherein the mucosal disorder is in the lung and is selected from the group consisting of: respiratory illness, lung inflammation, respiratory tract infection, respiratory failure, pneumonia, obstructive apnea, bronchopulmonary dysplasia, respiratory distress syndrome, and primary atelectasis.

5. The use according to claim 1, wherein said antimicrobial peptide is hBD-2 and/or HD5.

6. The use according to claim 1, wherein the mucosal disorder is necrotizing enterocolitis.

7. The use according to claim 1, wherein the mucosal disorder is necrotizing enterocolitis and the antimicrobial peptide is hBD2.

8. The use according to claim 1, wherein more than one antimicrobial peptide,

such as two antimicrobial peptides, such as three antimicrobial peptides, such as four antimicrobial peptides, such as five antimicrobial peptides are administered to a preterm infant.

9. The use according to claim 1, wherein two antimicrobial peptides, such as for example hBD-2 and HD5, are administered to a preterm infant.

10. The use according to claim 1, wherein said antimicrobial peptide further comprises at least one additional moiety selected from the group consisting of a cell penetrating peptide (CPP), an Albumin Binding Moiety (ABM), a detectable moiety (Z), and a half-life extending peptide.

11. The use according to claim 10, wherein the additional moiety is a half-life extending peptide.

12. The use according to claim 10, wherein the additional moiety is a molecule capable of binding to a compound selected from a group consisting of a neonatal Fc receptor (FcRn), transferrin, albumin (HSA), XTEN or PEG, a homo-amino acid polymer (HAP), a proline-alanine-serine polymer (PAS), or an elastin-like peptide (ELP), hyaluronic acid, a negatively charged sialylated peptide such as the carboxy-terminal peptide (CTP) of chorionic gonadotropin (CG) β-chain, human IgG, and $CH3(CH2)_nCO$- wherein n is 8 to 22.

13. The use according to claim 1, wherein the antimicrobial peptide is administered in combination with surfactants and/or prebiotics and/or probiotics and/or tryptophane, and/or glucocorticoids and/or antibiotics and/or immunosuppressants and/or GLP-2 and/or GLP-2 analogs or any combination thereof.

14. The use according to claim 1, wherein said antimicrobial peptide is administered to a preterm infant at least every other day, such as one time a day, such as at least twice a day, such as at least three times a day, such as at least four times a day, such as five times a day or continuously.

15. The use according to claim 1, wherein the antimicrobial peptide is

administered to the preterm infant starting on the date of birth.

16. The use according to claim 1, wherein said antimicrobial peptide is administered by oral, buccal, sublingual, rectal, vaginal, intratracheal, intrapulmonary, intranasal, intracranial, subcutaneous, intravenous, dermal or transdermal administration.

17. The use according to claim 1, wherein said antimicrobial peptide is administered by oral administration.

18. The use according to any claim 1, wherein said antimicrobial peptide is administered by intrapulmonary, intratracheal or intranasal administration.

19. The use according to claim 17, wherein said intrapulmonary, intratracheal or intranasal administration is by an inhaler, nebulizer, or vaporizer.

20. The use according to claim 1, wherein the preterm infant has a birth weight of 1,500 grams or less, such as 1,000 grams or less.