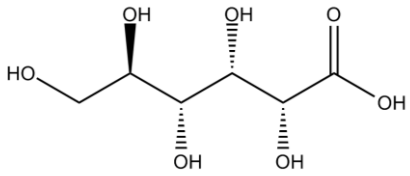
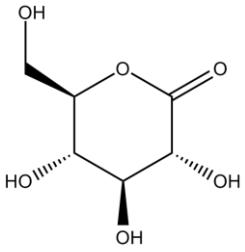
Claims

1. Use of a compound of Formula XX,

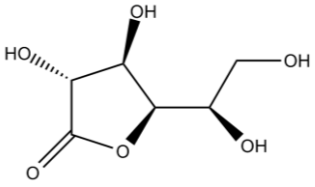


XX

or a lactone thereof, such as a compound of formula XIX or XXI,



XIX



XXI

for the manufacture of a medicament for the treatment and/or prevention of a *Gardnerella vaginalis* infection.

2. The use according to claim 1, wherein the compound is of Formula XX or Formula XIX.

3. The use according to any one of the preceding claims, wherein the microbial infection is a urogenital infection.

4. The use according to any one of the preceding claims, wherein the microbial infection is a vaginal infection.

5. The use according to any one of the preceding claims, wherein the bacterial infection is bacterial vaginosis.

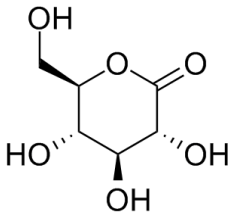
6. The use according to any one of the preceding claims, wherein the infection is an infection in a mammal.

7. The use according to any one of the preceding claims, wherein the mammal is a human.

8. The use according to any one of the preceding claims, wherein the human is a woman.

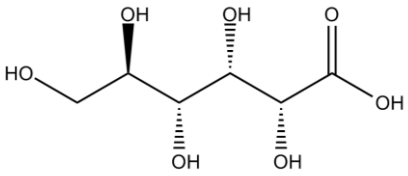
9. The use according to any one of the preceding claims, wherein the woman is pregnant.

10. The use according to any one of the preceding claims, wherein the compound is glucono-δ-lactone (Formula XIX)



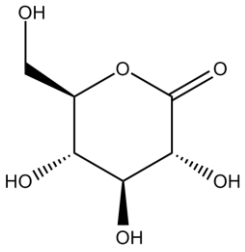
XIX

11. Use of a compound of formula XX,

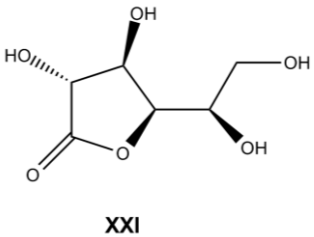


XX

or a lactone thereof, such as a compound of formula XIX or XXI,



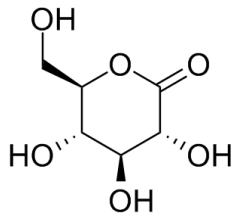
XIX



XXI

for the manufacture of a medicament for the treatment of bacterial vaginosis.

12. The use according to claim 11, wherein the compound is glucono-δ-lactone (Formula XIX),



XIX

13. Use of an oligomer or polymer for the manufacture of a medicament for the treatment and/or prevention of a *Gardnerella vaginalis* infection, wherein the oligomer or polymer comprises one or more compounds selected from the group consisting of gluconic acid, δ-gluconolactone and γ-gluconolactone.

14. The use according to claim 13, wherein the oligomer or polymer comprises one or more compounds selected from the group consisting of gluconic acid and δ-gluconolactone.

15. The use according to claim 13, wherein the oligomer or polymer further comprises lactic acid.

16. The use according to any one of the preceding claims, wherein the compound is in a pharmaceutical composition.

17. The use according to claim 16, wherein the pharmaceutical composition is formulated as a tablet, orally disintegrating tablet, lozenge, gum, chewing gum, cream, lotion, gel, emulsion, solution, foam, ointment, spray, suspension mouthwash, nail polish, dermal patch or shampoo.

18. The use according to any one of claims 16 to 17, wherein the pharmaceutical composition comprises at least 5 wt %, such as at least 10 wt %, such as at least 15 wt %, such as at least 20 wt %, such as at least 25 wt %, such as at

least 30 wt %, such as at least 40 wt %, such as at least 50 wt %, such as at least 60 wt % of the compound of Formula XX or a lactone thereof.

19. The use according to any one of claims 16 to 18, wherein the pharmaceutical composition comprises no more than 99 wt %, such as no more than 95 wt %, such as no more than 90 wt %, such as no more than 85 wt %, such as no more than 80 wt %, such as no more than 75 wt % of the compound of Formula XX or a lactone thereof.

20. The use according to any one of claims 16 to 19, wherein the pharmaceutical composition comprises 5 to 99 wt %, such as in 10 to 95 wt %, such as in 15 to 95 wt %, such as in 20 to 90 wt %, such as in 40 to 95 wt %, such as in 40 to 95 wt %, such as in 50 to 95 wt % of the compound of Formula XX or a lactone thereof.

21. The use according to any one of claims 16 to 20, wherein the pharmaceutical composition comprises no more than 10 wt % water, such as no more than 5 wt % water.

22. The use according to any one of claims 16 to 21, wherein the pharmaceutical composition is formulated as a tampon, vagitorium, vaginal aerosol, vaginal cup, vaginal gel, vaginal insert, vaginal patch, vaginal ring, vaginal sponge, vaginal suppository, vaginal cream, vaginal emulsion, vaginal foam, vaginal lotion, vaginal ointment, vaginal powder, vaginal shampoo, vaginal solution, vaginal spray, vaginal suspension, vaginal tablet, vaginal rod, vaginal disc, vaginal device, and any combination thereof, or wherein the composition is present on a sanitary article, such as a tampon, a sanitary napkin, an incontinence pad or diaper, or a panty liner.

23. The use according to any one of claims 16 to 22, wherein, the pharmaceutical composition is adapted for administration for at least once daily during at least a week.

24. The use according to any one of claims 16 to 23, wherein the pharmaceutical composition is formulated to release the compound according to Formula I

over an extended period of time, such as over at least 4 hours, such as over at least 6 hours, such as over at least 24 hours after administration.

25. The use according to any one of claims 16 to 24, wherein the pharmaceutical composition is adapted for administration at least once daily, such as at least twice daily, such as at least three times daily.

26. The use according to any one of claims 16 to 25, wherein the pharmaceutical composition is adapted for administration no more than every second day, such as no more than every third day, such as no more than once a week.

27. The use according to any one of claims 16 to 26, wherein the pharmaceutical composition is adapted for administration for no more than six days.

28. The use according to any one of claims 16 to 27, wherein the pharmaceutical composition is adapted for administration during at least one week, such as during at least two weeks, such as during at least three weeks, such as during at least four weeks.

29. Use of a compound of Formula XX or a lactone thereof for the manufacture of a medicament for preventing preterm birth caused by an infection.

30. The use according to claim 29, wherein the compound is administered vaginally.

31. The use according to any one of claims 29 to 30, wherein the compound is formulated as a tampon, vagitorium, vaginal aerosol, vaginal cup, vaginal gel, vaginal insert, vaginal patch, vaginal ring, vaginal sponge, vaginal suppository, vaginal cream, vaginal emulsion, vaginal foam, vaginal lotion, vaginal ointment, vaginal powder, vaginal shampoo, vaginal solution, vaginal spray, vaginal suspension, vaginal tablet, vaginal rod, vaginal disc, vaginal device, and any combination thereof, or wherein the compound is present on a sanitary article, such as a tampon, a sanitary napkin, an incontinence pad or diaper, or a panty liner.