Claims

1. Use of low content of benzoic acid and/or sodium salt thereof in combination with one or more organic acid preservatives as active ingredients in the manufacture of a vaginal composition, wherein the composition has weak inhibition effect on normal vaginal lactobacilli while has strong inhibition effect on vaginal fungi and/or pathogenic vaginal lactobacilli; the organic acid preservatives are selected from the group consisting of dehydroacetic acid and/or sodium salt thereof, propionic acid and/or a salt thereof, sorbic acid and/or a salt thereof; wherein the propionic acid salt is calcium salt or sodium salt thereof, preferably sodium salt thereof; and the sorbic acid salt is potassium salt thereof or sodium salt thereof, preferably, sodium salt thereof; the composition is useful in inhibiting vaginal fungi, and/or inhibiting pathogenic vaginal lactobacilli, and/or promoting normal vaginal lactobacilli, and/or maintaining normal vaginal acidity, and/or modulating vaginal microecosystem, and/or modulating vaginal microbials, and/or selectively decontaminating vagina.

2. The use according to claim 1, wherein the composition is useful in eliminating or alleviating discomforts such as vulvovaginal pruritus, vulvovaginal burning pain, and/or algopareunia, or improving leucorrhea nature, or eliminating the odor of leucorrhea, or cleaning and nursing the vagina.

3. The use according to claim 1 or 2, wherein the composition is useful in prevention and/or treatment of vaginal microbial diseases, wherein the vaginal microbial diseases are selected from the group consisting of Candidal vaginitis, cytolytic vaginosis, vaginal dysbacteriosis, or atrophic vaginitis.

4. The use according to any one of claims 1 to 3, wherein the composition is a vaginal use microecosystem modulator, microbial modulator, medicine,

disinfectant, antibacterial agent, bacteriostatic agent, topical microbicide; or disposable medical product; or a component for a vaginal use disinfecting device, medical device, or medicine device, and etc.; or a vaginal use sanitary product, cosmetic, nursing product for vaginal microecosystem, cleaning-nursing product, deodorizing agent, lubricant, humectant, or lotion.

5. The use according to any one of claims 1 to 4, wherein the unit administration dosage of the composition is as follows: the total amount of benzoic acid and/or sodium salt thereof, calculated based on sodium benzoate, is 0.25 ~ 10mg, preferably 0.5 ~ 6.25mg; the total amount of dehydroacetic acid and/or sodium salt thereof, calculated based on sodium dehydroacetate, is 0.025 ~ 2.5mg, preferably 0.05 ~ 1.25mg; the total amount of propionic acid and/or a salt thereof, calculated based on sodium propionate, is 0.5 ~ 50mg, preferably 1.0 ~ 25mg; the total amount of sorbic acid, calculated based on sodium sorbate, is 0.05 ~ 5mg, preferably 0.1 ~ 2.5mg.

6. A composition for vaginal use, wherein the composition is in a dosage form of an effervescent tablet, a capsule, a suppository, a tablet, an ointment (preferably a water-soluble gel and an emulsion ointment), or a solution, the following active ingredients are comprised per unit administration dose or per unit dosage form: the total amount of benzoic acid and/or sodium salt thereof, calculated based on sodium benzoate, is 0.25 ~ 10mg, preferably 0.5 ~ 6.25mg; one or more organic acid preservatives selected from the group consisting of: dehydroacetic acid and/or sodium salt thereof, the total amount of which, calculated based on sodium dehydroacetate, is 0.025 ~ 2.5mg, preferably 0.05 ~ 1.25mg per unit dosage form; and/or propionic acid and/or a salt thereof, the total amount of which, calculated based on sodium propionate, is 0.5 ~ 50mg, preferably 1.0 ~ 25mg per unit dosage

form; and/or sorbic acid and/or a salt thereof, the total amount of which, calculated based on sodium sorbate, is 0.05 ~ 5mg, preferably 0.1 ~ 2.5mg per unit dosage form.

7. The use or composition according to any one of claims 1 to 6, wherein the composition further comprises amino acids, wherein the amino acids are one or more amino acids and/or a salt thereof selected from the group consisting of: glutamic acid, glutamine, aspartic acid, asparagines, isoleucine, phenylalanine, valine, leucine, proline, threonine; preferably glutamic acid, aspartic acid or a mixture thereof, at a total amount of 0.03 ~ 1.75mmol per unit administration dose and/or per unit dosage form; the preferred total amount of the amino acids is 0.08 ~ 1.0mmol.

8. The use or composition according to any one of claims 1 to 7, wherein the composition further comprises saccharides, wherein the saccarides are one or more saccharides selected from the group consisting of: glucose, fructose, mannose, sucrose, maltose, isomaltose, trehalose, cellobiose, melibiose, raffinose, panose, malto-oligosaccharide, fructo-oligosaccharide, dextrin, starch, glycogen, or a mixture thereof, at a total amount of 1 ~ 750mg per unit administration dose and/or per unit dosage form; the preferred saccharide is glucose, fructose, mannose, sucrose, maltose, trehalose, or a mixture thereof, the preferred total amount of saccharides are 60 ~ 600mg.

9. The use or composition according to claim 8, wherein the composition is further useful in the treatment of bacterial vaginosis.

10. A vaginal composition, characterized in that:

(1) comprising benzoic acid and/or sodium salt thereof as active ingredients, the total concentration of which, calculated based on sodium benzoate, is 0.025 ~

0.2% (w/v), preferably 0.05 ~ 0.125% (w/v);

(2) comprising one or more preservatives as active ingredients selected from the following group consisting of: dehydroacetic acid and/or sodium salt thereof, and/or propionic acid and/or a salt thereof, and/or sorbic acid and/or a salt thereof; wherein the total concentration of the dehydroacetic acid and/or sodium salt thereof, calculated based on sodium dehydroacetate, is 0.0025 ~ 0.05% (w/v), preferably 0.005 ~ 0.025%(w/v); the total concentration of propionic acid and/or a salt thereof, calculated based on sodium propionate, is 0.05 ~ 1.0%(w/v), preferably 0.1 ~ 0.5%(w/v); the total concentration of sorbic acid and/or a salt thereof, calculated based on sodium sorbate, is 0.005 ~ 0.1%(w/v), preferably 0.01 ~ 0.05%(w/v);

(3) comprising ointment matrix or water; preferably non-flowable, viscous, water-soluble gel matrix; particularly and preferably Xanthan gum;

(4) the pH value of the composition is from 3.5 to 6.5, preferably from 4.0 to 5.5;

wherein the composition may be in the form of packaged in many kinds of manners, including but not limited to, sterilized and sealed single dose package, or packaged in a vagina use device, or packaged in a disposable vagina use device; preferably sterilized and sealed single dose package.

11. The use or composition according to any one of claims 1 to 10, wherein the composition further optionally comprises 0.001 ~ 0.5mg metronidazole or tinidazole, preferably 0.01 ~ 0.25mg metronidazole or tinidazole per unit administration dose and/or per unit dosage form.

12. The use or composition according to any one of claims 1 to 11, wherein the composition further optionally comprises one or more estrogens, selected from the

group consisting of stilbestrol, estradiol and/or estriol, preferably estriol, at a total amount of 0.01 ~ 3mg per unit administration dose and/or per unit dosage form.

13. A method for inhibiting vaginal fungi, and/or inhibiting pathogenic vaginal lactobacilli, and/or promoting normal vaginal lactobacilli, and/or maintaining normal vaginal acidity, and/or modulating vaginal microecosystem, and/or modulating vaginal microbials, and/or selectively decontaminating vagina, wherein the method comprises intravaginal administration of an effective amount of the composition according to any one of claims 6-12 to a female in need thereof.

14. The method according to claim 13, wherein the method is a method for eliminating or alleviating discomforts such as vulvovaginal pruritus, vulvovaginal burning pain, or algopareunia, or improving leucorrhea nature; or eliminating the odor of leucorrhea; or cleaning vagina; or nursing and/or modulating vaginal microecosystem.

15. The method according to claim 13 or 14, wherein the method is a method for prevention and/or treatment of vaginal microbial diseases, wherein the vaginal microbial diseases are Candidal vaginitis, cytolytic vaginosis, vaginal dysbacteriosis, or atrophic vaginitis.

16. A method for the treatment of bacterial vaginosis, wherein the method comprises intravaginal administration of an effective amount of the composition according to claim 8 to a female in need thereof.

CLAIMS

1. A vaginal composition for inhibiting vaginal fungi, comprising the following:

(1) benzoic acid and/or sodium salt thereof, the total concentration of which, calculated based on sodium benzoate, is 0.025-0.2% (w/v);

(2) dehydroacetic acid and/or sodium salt thereof, wherein the total concentration of the dehydroacetic acid and/or sodium salt thereof, calculated based on sodium dehydroacetate, is 0.005-0.025% (w/v);

(3) an ointment matrix or water;

(4) the pH value of the composition is from 3.5 to 6.5;

wherein the composition is packaged in the form of one of a sterilized and sealed single dose package, a vagina use device, or a disposable vagina use device.

2. The composition according to claim 1, further comprising 0.001~0.5 mg metronidazole or tinidazole per unit dosage form.

3. The composition according to claim 1, further comprising one or more estrogens, selected from the group consisting of stilbestrol, estradiol and/or estriol, at a total amount of 0.01~3 mg per unit-dosage form.

4 . The composition according to claim 1, the composition further comprising 0.01~0.25 mg metronidazole or tinidazole per unit dosage form.

5 . The composition according to claim 1, wherein the composition further comprises estriol.

6 . The vaginal composition according to claim 1, wherein the total concentration of benzoic acid and/or sodium salt thereof is 0.05~0.125% (w/v) calculated based on sodium benzoate.

7 . The vaginal composition according to claim 1, wherein the ointment matrix is non-flowable, viscous, water-soluble gel matrix.

8 . The vaginal composition according to claim 1, wherein the ointment matrix comprises Xanthan gum.

9 . The vaginal composition according to claim 1, wherein the pH value of the composition is from 3.5 to 6.5.

10 . The vaginal composition according to claim 1, wherein the composition is in the form of a sterilized and sealed single dose package.

11 . The vaginal composition according to claim 1, wherein the pH value of the composition is from 4.0 to 5.5.

12 .The vaginal composition according to claim 1, further comprising propionic acid and/or a salt thereof, and the total concentration of propionic acid and/or a salt thereof, calculated based on sodium propionate is 0.05~1.0% (w/v).

13 . The vaginal composition according to claim 12, wherein the total concentration of propionic acid and/or a salt thereof is 0.1~0.5% (w/v) calculated based on sodium propionate.