CLAIMS

1. A method of producing therapeutic microvesicles, the method comprising:

culturing bacteria of a probiotic bacterial strain in a culture medium, wherein the probiotic bacterial strain is selected from the group consisting of a *Lactobacillus* strain, a *Bifidobacterium* strain, and a combination thereof; and

exposing the bacteria to an inducing biotic treatment during culturing to induce production of therapeutic microvesicles by the bacteria, wherein the inducing biotic treatment is selected from the group consisting of co-culturing the bacteria with bacteria of another bacterial strain, culturing the bacteria in presence of a conditioned medium from bacteria of another bacterial strain and a combination thereof, wherein the another bacterial strain is a *Bifidobacterium* strain and wherein the another bacterial strain is different from the probiotic bacterialn strain, wherein the probiotic bacterial strain is selected from the group consisting of *L. reuteri* DSM 17938, *L. reuteri* DSM 32846, and a combination thereof, the another bacterial strain is selected from the group consisting of *B. longum* DSM 32947, *B. longum* DSM 32948 and a combination thereof.

2. The method according to claim 1, wherein exposing the bacteria comprises exposing the bacteria to the inducing biotic treatment during culturing to induce production of the therapeutic microvesicles and release of the therapeutic microvesicles into the culture medium, and optionally isolating the therapeutic microvesicles from the culture medium, and optionally isolating the therapeutic microvesicles from the culture medium.

3. The method according to any of the claims 1 to 2, wherein the probiotic bacterial strain is a *Lactobacillus reuteri* strain, preferably selected from the group consisting of *L. reuteri* DSM 17938, *L. reuteri* DSM 32846, and a combination thereof.

4. The therapeutic microvesicles for use according to claim 3, wherein the probiotic bacterial strain is a *Lactobacillus reuteri* strain, preferably selected from the group consisting of *L. reuteri* DSM 17938, *L. reuteri* DSM 32846, and a combination thereof.

5. A bacterial strain, wherein the bacterial strain is *Bifidobacterium longum* DSM 32947 or *Bifidobacterium longum* DSM 32948, preferably in a dried or lyophilized form.

6. A probiotic composition comprising:

bacteria of a *Lactobacillus reuteri* strain, selected from the group consisting of *L. reuteri* DSM 17938, *L. reuteri* DSM 32846 and a combination thereof; and

bacteria of a *Bifidobacterium longum* strain selected the group consisting of *B. longum* DSM 32947, *B. longum* DSM 32948 and a combination thereof, or a conditioned medium from the *B. longum* strain.