CLAIMS

1. An extracellular vesicle (EV)wherein the EV is derived/obtained/isolated from a mesenchymal stem cell (MSC) which has been primed with one or more species of live bacteria.

2. A method of manufacturing an EV having anti-bacterial and wound healing properties, comprising the steps of priming a mesenchymal stem cell (MSC) with one or more species of live bacteria; and isolating the EV.

3. The EV or method according to any one of the preceding claims, wherein the MSC has been primed by incubating/co-culturing the MSC with the one or more species of live bacteria, wherein the priming of the MSC is performed
(i) in the absence of serum,
(ii) in the presence of a minimal medium consisting of a media; and a buffer, and/or
(iii) in the presence of one or more of the following:

- D-glucose;
- a serum; and
- a buffer, and.

optionally wherein the MSC is cultured, prior to the priming step.

4. The EV or method according to any preceding claims, wherein the EV is isolated from MSC conditioned media (CM),
optionally wherein the CM is filtered prior to isolation of the EV, and
optionally wherein the EV is isolated from the CM by centrifuging the CM, obtaining a pellet containing the EV, and reconstituting the EV in a suitable buffer.

5. The EV or method according to any one of the preceding claims, wherein the MSC originates from an organism selected from the group consisting of:
a human, and mouse, or
wherein the MSC is a human MSC, or
wherein the MSC is obtained from one or more selected from the group consisting of:
bone marrow, cord cells, adipose tissue, molar cells, amniotic fluid, muscle, and liver, or
wherein the MSC is selected from the group consisting of an adipose-derived stem cell (ASC), an epidermal stem cell (EPSC), a hair follicle stem cell (HFSC), and a hematopoietic stem cell (HSC), and or
wherein the MSC is an adipose-derived stem cell (ASC).

6. The EV or method according to any one of the preceding claims, wherein differentiation of the ASC is induced with an adipogenic cocktail,
optionally wherein the adipogenic cocktail comprises one of more of the following:

- dexamethasone;

- IBMX;
- Insulin; and
- Indomethacin.

7. The EV or method according to any one of the preceding claims, wherein the MSC/ASC is an intermediate differentiating MSC/ASC,

optionally wherein the MSC/ASC is a Day 6 intermediate differentiating MSC/ASC.

8. The EV or method according to any one of the preceding claims, wherein the EV is an exosome, and/or

wherein the EV has a size in the range 80 to 140 nm.

9. A composition comprising an EV according to any one of the preceding claims.

10. An EV or a composition according to any one of claims 1 to 9, for use in therapy.

11. Use of an EV or a composition according to any one of claims 1 to 9, in the manufacture of a medicament for the treatment of a patient,

wherein the treatment is for one or more of the following: a wound, a bacterial infection or a disease/condition caused by a bacterial infection caused by one or more species of bacteria.

12. The EV or composition for use, or use according to any one of claims 9 to 11, wherein the treatment is for non-infective wounds or damaged skin, or

wherein the treatment is for chronic wound healing, or

wherein the chronic wound is selected from the group consisting of a vascular ulcer, , a diabetic ulcer, a pressure ulcer, a surgical wound, a traumatic wound, anda diabetic foot ulcer.

13. The EV or composition for use, or use according to any one of claims 9 to 12, wherein the treatment is for a bacterial infection caused by one or more species of bacteria selected from the group consisting of: *Acinetobacter baumannii, Bacillus anthracis, Bacillus cereus, Bartonella henselae, Bartonella quintana, Bordetella pertussis, Borrelia burgdorferi, Borrelia garinii, Borrelia afzelii, Borrelia recurrentis, Brucella abortus, Brucella canis, Brucella melitensis, Brucella suis, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Chlamyophila psittaci, Clostridium botulinum, Clostridium difficile, Clostridium perfringens, Clostridium tetani, Corynebacterium diphtheriae, Enterobacter spp Enterococcus faecalis, Enterococcus faecium, Escherichia coli, Francisella tularensis, Hemophilus influenzae, Helicobacter pylori, Klebsiella pneumoniae, Legionella pneumophila, Leptospira interrogans, Leptospira santarosai, Leptospira weilii, Leptospira noguchii, listeria monocytogenes, Mycobacterium leprae, Mycobacterium tuberculosis, Mycobacterium ulcerans, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Psedomonas aeruginosa, Rickettsia rickettsia, Salmonella typhi, Salmonella typhimurium, Shigella sonnei, Staphylococcus aureus, Staphylococcus epidermidis,*

Staphylococcus saprophyticus, Streptococcus agalactiae, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae, Yersinia pestis, Yersinia enterocolitica, and *Yersinia pseudotuberculosis,*

optionally wherein the one or more species of bacteria are selected from the group consisting of *Salmonella Typhimurium, Staphylococcus aureus* and *Pseudomonas aeruginosa,*and

optionally wherein the treatment is for biofilm disruption and/or planktonic bacteria killing.

14. The EV or composition for use, or use according to any one of claims 9 to 13, wherein the patient is aa diabetic patient.

15. An EV or composition according to any one of claims 1, 3 to 9, for use in an aesthetic procedure for treating aesthetic skin issues selected from the group consisting of scars, skin laxity, wrinkles, liver spots, cellulite and skin discoloration.