CLAIMS

1. Use of a mesenchymal stem cell exosome in the preparation of a medicament for use in the treatment or prevention of a disease or disorder of immune homeostasis in an individual, in which the disease or disorder is selected from the group consisting of: (a) an autoimmune disease; (b) a neurodegenerative disease; (c) a gerontological condition; and (d) an immune disorder.

2. Use according to Claim 1, in which the mesenchymal stem cell exosome induces Treg differentiation or expansion when immune activity is stimulated, thereby restoring and maintaining immune homeostasis in the individual.

3. Use of a mesenchymal stem cell exosome according to Claim 1 or 2, in which the immune homeostasis comprises maintenance of an immune response.

4. Use of a mesenchymal stem cell exosome according to Claim 1, 2 or 3, in which the exosome promotes, restores or enhances immune homeostasis in a biological environment in need of such.

5. Use of a mesenchymal stem cell exosome according to Claim 4, in which a biological environment comprising an environment in or of a cell, tissue, organ, system or organism is exposed to the exosome.

6. Use of a mesenchymal stem cell exosome according to any preceding claim, in which the autoimmune disease is selected from the group consisting of Crohn’s disease and muscular dystrophy.

7. Use of a mesenchymal stem cell exosome according to any preceding claim, in which the immune disorder is selected from the group consisting of chronic inflammation and reduced immune recognition of self versus non-self.

8. Use of a mesenchymal stem cell exosome according to any preceding claim, in which the preparation containing the mesenchymal stem cell exosome is to be administered daily, weekly or monthly to maintain immune homeostasis.