V. CLAIMS

What is claimed is:

1.

A method oftreatment composition for use in preparing a medicament for treating, inhibiting, reducing, ameliorating and/or preventing a disease, disorder, injury or symptoms thereof affecting one or more joints in a subject comprising administering to a subject a therapeutically effective amount of a mesenchymal stem cell (MSC) exosome preparation.

1. 2. The method of claim 1, wherein disease or disorder comprises osteoarthritis, juvenile arthritis, psoriatic arthritis, infectious arthritis, rheumatoid arthritis, ankylosing spondylitis, gout, bursitis, tendinosis, tendonitis, sprain, labral tear, tear of a tendon, and/or tear of a ligament, or symptoms thereof affecting one or more joints in a subject, comprising a therapeutically effective amount of a mesenchymal stem cell (MSC) exosome preparation; wherein the exosomes are obtained from MSCs cultured in a 1.0% to about 10% oxygen environment, and in media with about a pH from about 6.0 to about 7.4, and between about 5% and 40% reduction in glucose.

2. 3. The methodtreatment composition of any of claimsclaim 1 or 2, wherein the joint comprises the ankle, knee, hip, writs, elbow, shoulder, knuckle, and/or neck.

3. 4. The methodtreatment composition of any of claims 1-3 or 2, wherein the MSC exosome preparation is administered to each joint effected by the disorder, disease, or injury.

4. 5. The methodtreatment composition of any of claims 1-4, 2, or 3, wherein the MSC exosome preparation further comprises growth factors obtained from MSC in addition to the MSC exosome.

1.5. 6. The methodtreatment composition of any of claims 1-5 or 2-4, wherein the MSC exosomes are to be administered via injection, MSC exosome carrying scaffold, hydrogel.

6. A treatment composition comprising a therapeutically effective amount of a mesenchymal stem cell (MSC) exosome preparation; wherein the exosomes are obtained from MSCs cultured in a 1.0% to about 10% oxygen environment, and/or topical cream or salve. in media with about a pH from about 6.0 to about 7.4, and between about 5% and 40% reduction in glucose.