**Supplementary Table S1**: Search Strategy

| | |
|---|---|
| **1** | mesenchymal stem cell*.mp |
| **2** | multipotent stromal cell*.mp |
| **3** | multipotent stem cell*.mp |
| **4** | mesenchymal stromal cell*.mp |
| **5** | multipotent mesenchymal stromal cell*.mp |
| **6** | extra-cellular vesicle*.mp |
| **7** | extracellular vesicle*.mp |
| **8** | exosom*.mp |
| **9** | microvesicle*.mp |
| **10** | ectosom*.mp |
| **11** | microparticle*.mp |
| **12** | tendon*.mp |
| **13** | ligament*.mp |
| **14** | articular ligament*.mp |
| **15** | connective tissue*.mp |
| **16** | elastic fibre*.mp |
| **17** | collagen fibre*.mp |
| **18** | strain*.mp |
| **19** | tear*.mp |
| **20** | 1 OR 2 OR 3 OR 4 OR 5 |
| **21** | 6 OR 7 OR 8 OR 9 OR 10 OR 11 |
| **22** | 12 OR 13 OR 14 OR 15 OR 16 OR 17 OR 18 OR 19 |
| **23** | 20 AND 21 AND 22 |

**Supplementary Table S2:** Inclusion and Exclusion Criteria

| | Inclusion Criteria | Exclusion Criteria |
|---|---|---|
| **Population** | - In vivo experiments on animal models of tendon and ligament injury.<br>- Animals of all ages, sexes, and species. | - Animals with co-morbidities<br>- Animal models of periodontal ligament injury |
| **Intervention** | - Treatment with extracellular vesicles derived from human or animal derived mesenchymal stem cells.<br>- Any dosage, timing, frequency, location of extracellular vesicle application will be included.<br>- Tendon and ligament injury induced by surgical or non-surgical means | None |
| **Control** | - Studies with at least one control arm, whereby control medium or saline was injected into animal models. | - Studies that alter the biological properties of the animal model by injecting other chemicals. |
| **Outcomes** | - Source and cell origin of mesenchymal stem cells (MSCs).<br>- How the cell was treated/cultured to obtain MSCs.<br>- MSC characterisation using flow cytometry/western blotting.<br>- How the MSCs were treated to obtain extracellular vesicles (EVs).<br>- Dimensions of EVs obtained, EV surface biomarkers.<br>- How ligament and tendon damage was induced in the animal model.<br>- Method and quantity of EV delivery into the animal model.<br>- Age, weight, gender of animal model, and total number used.<br>- Follow-up time.<br>- Experimental groups in each study.<br>- Macroscopic appearance of animal model after EV delivery.<br>- Imaging and histological results after EV delivery.<br>- Biochemical analysis.<br>- Biomechanical analysis. | - Exclude studies with no description of MSCs that were harvested, or no description of EVs, or no description of in vivo findings in the animal model after EV delivery. |
| **Study Design** | - Randomised control trials, case-control studies published in any year.<br>- English language studies.<br>- Studies with any length of follow-up. | - Exclude studies not written in or translated to English.<br>- Exclude conference abstracts, dissertations, letter to the editor, review articles.<br>- In vitro, ex vivo, in silico experiments.<br>- In vivo studies in humans. |