CLAIMS

1. A method for obtaining human mesenchymal lineage precursor or stem cells suitable for administration for the treatment of a degenerative disc disease, the method comprising:

(i) culturing a population comprising human mesenchymal lineage precursor or stem cells;

(ii) determining the amount of TGFβ1 released by the human mesenchymal lineage precursor or stem cells into the culture medium; and

(iii) selecting the human mesenchymal lineage precursor cells or stem cells for administration if and only if they release TGFβ1 into the culture medium in an amount of at least about 2800 pg/10^6 cells, in which the selected cells are capable of stimulating collagen production in annulus fibrosus cells (AFCs) *in vitro*.

2. A method according to Claim 1, in which the population is enriched for human mesenchymal lineage precursor or stem cells.

3. A method according to Claim 1 or 2, in which the culturing comprises seeding the cells in a culture vessel at a density of about 50,000 viable cells/cm^2.

4. A method according to Claim 1, 2 or 3, in which the population is cultured in chondrogenic basal medium supplemented with 0.5% bovine serum albumin.

5. A method according to any preceding claim, in which the population is cultured for at least 68 to 76 hours.

6. A method according to any preceding claim, in which the method comprises collecting a sample of the culture medium in which the cells were cultured.

7. A method according to Claim 6, in which the method comprises activating latent TGFβ1 in the culture medium prior to determining the amount of TGFβ1 in the culture medium.

8. A method according to Claim 7, in which activating latent TGFβ1 comprises adding an acid to the culture medium sample to lower the pH of the culture medium.

9. A method according to Claim 8, in which the method comprises concentrating the culture medium sample prior to lowering the pH.

10. A method according to Claim 8 or 9, in which, following addition of the acid, the culture medium is neutralised to a pH of 7.2 to 7.6.

11. A method according to any preceding claim, in which the method comprises determining the amount of TGFβ1 in the culture medium by enzyme-linked immunosorbent assay (ELISA).

12. A method according to any preceding claim, in which the stimulated collagen production from the AFCs *in vitro* is at least 0.23 µg.

13. Use of a composition comprising human mesenchymal lineage precursor cells or stem cells selected by a method according to any preceding claim in the manufacture of a medicament for treatment of a degenerative disc disease.

14. Use according to Claim 13, in which the composition further comprises a cryopreservative.

15. Use according to Claim 13 or 14, in which the composition further comprises hyaluronan.