CLAIMS

1. STRO-1$^+$ multipotential cells for use in a method of reconstituting and/or repairing an invertebral disc in a subject, in which the method comprises administering the STRO-1$^+$ multipotential cells and/or progeny cells thereof to the invertebral disc.

2. STRO-1$^+$ multipotential cells according to Claim 1 for a use as specified therein, in which the STRO-1$^+$ multipotential cells are STRO-1^{bright} multipotential cells.

3. STRO-1$^+$ multipotential cells according to Claim 1 or 2 for a use as specified therein, in which the STRO-1$^+$ multipotential cells and/or progeny cells thereof are administered into the nucleus pulposus of the invertebral disc.

4. STRO-1$^+$ multipotential cells according to Claim 1, 2 or 3 for a use as specified therein, in which the STRO-1$^+$ multipotential cells are also positive for TNAP+ (STRO-3), VCAM-1+, THY-1+, STRO-2+, CD45+, CD146+, 3G5+ or any combination thereof.

5. STRO-1$^+$ multipotential cells according to any preceding claim for a use as specified therein, in which the STRO-1$^+$ multipotential cells are derived from an allogeneic source.

6. STRO-1$^+$ multipotential cells according to any preceding claim for a use as specified therein, in which the method further comprises administering to the invertebral disc a glycosaminoglycan (GAG).

7. STRO-1$^+$ multipotential cells according to Claim 6 for a use as specified therein, in which the GAG is selected from the group consisting of hyaluronic acid (HA), chondroitan sulfate, dermatan sulfate, keratan sulfate, heparin, heparin sulfate, and galactosaminoglycuronglycan sulfate (GGGS).

8. STRO-1$^+$ multipotential cells according to any preceding claim for a use as specified therein, in which the subject has a spinal condition characterized by degeneration of the intervertebral disc.

9. STRO-1$^+$ multipotential cells according to Claim 8 for a use as specified therein, in which the spinal condition is low back pain, age-related changes of the intervertebral disc or spondylolysis.

CLAIMS

1. Use of a cell population enriched for STRO-1^{bright} multipotential cells or progeny thereof in the manufacture of a medicament for reconstituting and/or repairing an intervertebral disc in a subject in need thereof.

2. Use according to Claim 1, in which the medicament is for reconstituting and/or repairing the nucleus pulposus of the intervertebral disc.

3. Use according to Claim 1 or 2, in which the STRO-1^{bright} multipotential cells are also positive for VCAM-1^{+}, THY-1^{+}, STRO-2^{+}, CD45^{+}, CD146^{+}, 3G5^{+} or any combination thereof.

4. Use according to any preceding claim, in which the STRO-1^{bright} multipotential cells are from an allogeneic source.

5. Use according to any preceding claim, in which the medicament further comprises a glycosaminoglycan (GAG).

6. Use according to Claim 5, in which the GAG is selected from the group consisting of hyaluronic acid (HA), chondroitan sulfate, dermatan sulfate, keratan sulfate, heparin, heparin sulfate, and galactosaminoglycuronglycan sulfate (GGGS).

7. Use according to any preceding claim, in which the intervertebral disc is degenerated.

8. Use according to Claim 7, in which the subject is suffering from lower back pain, age-related changes of the intervertebral disc or spondylolysis.