CLAIMS

1. A composition comprising genetically unmodified stem cells in which the genetically unmodified stem cells express angiopoietin-1 (Ang1) in an amount of at least 0.1 $\mu g/10^6$ cells.

2. A composition according to Claim 1 in which the stem cells express Ang1 in an amount of at least 0.5 $\mu g/10^6$ cells.

3. A composition according to Claim 1 in which the stem cells express Ang1 in an amount of at least 1 $\mu g/10^6$ cells.

4. A composition according to Claim 1, 2 or 3, in which the stem cells express Vascular Endothelial Growth Factor (VEGF) in an amount less than about 0.05 $\mu g/10^6$ cells.

5. A composition according to Claim 1, 2 or 3, in which the stem cells express VEGF in an amount less than about 0.03 $\mu g/10^6$ cells.

6. A composition according to any preceding claim, in which the stem cells express Ang1:VEGF at a ratio of at least about 2:1.

7. A composition according to any of Claims 1 to 5, in which the stem cells express Ang1:VEGF at a ratio of at least about 30:1.

8. A composition according to any preceding claim, in which the stem cells are mesenchymal precursor cells.

9. An *in vitro* method for inducing Ang1 expression in stem cells, the method comprising: culturing a population of stem cells in a cell culture media, in which the cell culture media

contains a short acting L-ascorbic acid derivative but does not contain a substantial amount of a long acting L-ascorbic acid derivative; and/or

is supplemented with fetal calf serum (FCS) in an amount less than 10% v/v; and/or, is supplemented with non-fetal serum.

10. A method according to Claim 9, in which the short acting L-ascorbic acid derivative is a L-ascorbic acid salt.

11. A method according to Claim 10, in which the short acting L-ascorbic acid salt is L-ascorbic acid sodium salt.

12. A method according to Claim 9, 10 or 11, in which the cell culture media is supplemented with:

- non-fetal serum;

- neo-natal serum;

- new born calf serum (NBCS);

- human neo-natal serum;

- non-fetal adult serum; or

- human adult serum.

13. A method according to any of Claims 9 to 12, in which the cell culture media is supplemented with at least about:

- 5% v/v fetal calf serum (FCS);

- 5% v/v new born calf serum (NBCS);

- 2% v/v new born calf serum (NBCS);

- a mixture of NBCS and FCS;

- a mixture of NBCS and FCS at a ratio of about 1:1;

- 5% v/v FCS and 5% v/v NBCS;

and/or

- one or more stimulatory factors selected from the group consisting of lα,25-dihydroxyvitamin D_3 (1,25D), platelet derived growth factor (PDGF), tumor necrosis factor α (TNF- α), interleukin -lβ (IL-lβ) and stromal derived factor lα (SDF-lα).

14. A method for obtaining genetically unmodified stem cells suitable for use in promoting vascularisation and/or angiogenesis, comprising:

culturing stem cells contained in at least one cell population obtained from at least one donor;

determining the amount of Ang1 expressed by the stem cells in each of the at least one cell population(s); and

selecting stem cells which express Ang1 in an amount of at least 0.1 $\mu g/10^6$ cells.

15. A method according to Claim 14 which further comprises:

determining the amount of VEGF expressed by the stem cells in each of the at least one cell population(s); and

selecting stem cells which express Ang1:VEGF at a ratio of at least 10:1.

16. A method according to Claim 14 or 15 in which the stem cells which express Ang1:VEGF at a ratio of at least 20:1, at least 30:1 or at least 50:1 are selected.