CLAIMS:

1. A method for treating or preventing a disease of vascular endothelial dysfunction or inflammation in a subject, the method comprising systemically administering to the subject a population of cells enriched for STRO-1$^+$ cells and/or progeny thereof and/or soluble factors derived therefrom.

2. A method for treating or preventing a disease of vascular endothelial dysfunction or inflammation in a subject, the method comprising systemically administering to the subject a population of cells enriched for STRO-1$^+$ cells and/or progeny thereof and/or soluble factors derived therefrom.

3. The method of claim 1 or 2, wherein the endothelial dysfunction is vascular endothelial dysfunction.

4. The method of claim 2 or 3, wherein the condition caused by endothelial dysfunction is selected from the group consisting of hypertension, coronary artery disease, chronic heart failure and peripheral artery disease, nephropathy and chronic renal failure.

5. The method of claim 2 or 3, wherein the condition caused by endothelial dysfunction is nephropathy.

6. The method of claim 5, wherein the nephropathy is diabetic nephropathy.

7. The method of claim 2 or 3, wherein the condition caused by inflammation is systemic inflammatory response syndrome.

8. The method of claim 7, wherein the systemic inflammatory response syndrome is sepsis, septic shock or a sepsis-like condition.

9. The method of any one of claims 1 to 8 comprising administering a population of cells enriched for STRO-1^{bright} cells and/or progeny thereof and/or soluble factors derived therefrom.

10. The method of any one of claims 1 to 9, wherein the population enriched for STRO-1$^+$ cells and/or progeny thereof and/or soluble factors derived therefrom are administered intravenously.

11. The method of any one of claims 1 to 10, wherein the population enriched for STRO-1$^+$ cells and/or progeny thereof and/or soluble factors derived therefrom are administered in an amount sufficient to increase levels of angiopoietin I in a subject.

12. The method of any one of claims 1 to 11, wherein the population enriched for STRO-1$^+$ cells and/or progeny thereof and/or soluble factors derived therefrom are administered in an amount sufficient to enhance dilation of endothelium in a subject.

13. The method of any one of claims 1 to 12, comprising administering between 0.1 x 10^6 to 5 x 10^6 STRO-1$^+$ cells and/or progeny thereof per kilogram.

14. The method of any one of claims 1 to 12, wherein the population enriched for STRO-1$^+$ cells and/or progeny thereof are administered at a constant body dose.

15. The method of claim 14, wherein the population enriched for STRO-1$^+$ cells and/or progeny thereof are administered at a dose of about 100 million to 300 million cells irrespective of the weight of the patient.

16. The method of claim 14 or 15, wherein the population enriched for STRO-1$^+$ cells and/or progeny thereof are administered at a dose of about 150 million cells irrespective of the weight of the patient.

17. The method of any one of claims 1 to 16, wherein the population enriched for STRO-1$^+$ cells and/or progeny thereof and/or soluble factors derived therefrom are administered once weekly or less often.

18. The method of any one of claims 1 to 17, wherein the population enriched for STRO-1$^+$ cells and/or progeny cells are autogeneic or allogeneic and/or the soluble factors can be derived from autogeneic or allogeneic cells.

19. The method of any one of claims 1 to 18, wherein the population enriched for STRO-1^+ cells and/or progeny cells have been culture expanded prior to administration and/or prior to obtaining the soluble factors.

20. The method of any one of claims 1 to 19, wherein the population enriched for STRO-1^+ cells are STRO-1^{bright}, and/or express tissue non-specific alkaline phosphatase (TNAP) and/or the progeny cells and/or soluble factors are derived from STRO-1^+ cells that are STRO-1^{bright} and/or express TNAP.

21. The method of any one of claims 1 to 20, wherein the population of cells enriched for STRO-1^{bright} cells and/or progeny thereof and/or soluble factors derived therefrom are administered in combination with pentosan polysulfate (PPS) or a pharmaceutically acceptable salt thereof.

22. The method of claim 21 wherein the PPS is the sodium salt of pentosan polysulfate.

24. The method of claim 22 wherein the total amount of sodium salt of pentosan polysulfate is administered at a dose of about 1 to 100mg.

24. The method of any one of claims 1 to 20, wherein the STRO-1^+ cells and/or progeny cells thereof and/or soluble factors derived therefrom are administered in the form of a composition comprising said STRO-1^+ cells and/or progeny cells thereof and/or soluble factors derived therefrom and, optionally, a sodium salt of pentosan polysulfate and a carrier and/or excipient.

CLAIMS

1. A population of cells enriched for STRO-1^+ mesenchymal precursor cells and/or progeny thereof for use in the manufacture of a medicament for treating or preventing nephropathy or systemic inflammatory response syndrome.

2. A population according to Claim 1, in which the nephropathy is diabetic nephropathy.

3. A population according to Claim 1, in which the systemic inflammatory response syndrome is sepsis, septic shock or a sepsis-like condition.

4. A population according to Claim 1 or 2, in which the population of cells is enriched for STRO-1^{bright} cells and/or progeny thereof.

5. A population according to any preceding claim, in which the medicament is suitable for intravenous administration.

6. A population according to any preceding claim, in which the medicament comprises between 0.1×10^6 to 5×10^6 STRO-1^+ cells and/or progeny thereof per kilogram of human subject in need of treatment.

7. A population according to any preceding claim, in which the medicament comprises a dose of about 100 million to 300 million cells irrespective of the weight of the patient.

8. A population according to Claim 7, in which the medicament comprises a dose of about 150 million cells irrespective of the weight of the patient.

9. A population according to any preceding claim, in which the population enriched for STRO-1^+ cells and/or progeny thereof are administered once weekly or less often.

10. A population according to any preceding claim, in which the population enriched for STRO-1^+ cells and/or progeny cells is autogeneic or allogeneic.

11. A population according to any preceding claim, in which the population enriched for STRO-1^+ cells and/or progeny cells have been culture expanded prior to administration.

12. A population according to any preceding claim, in which the population enriched for STRO-1^+ cells are STRO-1^{bright} and/or express tissue non-specific alkaline phosphatase

(TNAP) and/or the progeny cells are derived from STRO-1^{+} cells that are STRO-1^{bright} and/or express TNAP.

13. A population according to any preceding claim, in which the population of cells enriched for STRO-1^{bright} cells and/or progeny thereof are administered in combination with pentosan polysulfate (PPS) or a pharmaceutically acceptable salt thereof

14. A population according to Claim 13 in which the PPS is the sodium salt of pentosan polysulfate.

15. A population according to Claim 14 in which the total amount of sodium salt of pentosan polysulfate is administered at a dose of about 1 to 100 mg.