CLAIMS

1. Use of a population of cells enriched for STRO-1^+ cells and/or progeny thereof and/or soluble factors derived therefrom in the preparation of a medicament for the treatment or prevention of a disease of vascular endothelial dysfunction or inflammation in a subject.

2. Use according to Claim 1, in which the population of cells enriched for STRO-1^+ cells and/or progeny thereof and/or soluble factors derived therefrom is to be systemically administered to the subject.

3. Use according to Claim 1 or 2, in which the disease is vascular endothelial dysfunction.

4. Use according to Claim 1, 2 or 3, in which 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. Use according to any preceding claim, in which the condition caused by endothelial dysfunction is nephropathy.

6. Use according to Claim 5, in which the nephropathy is diabetic nephropathy.

7. Use e according to Claim 1 or 2, in which the condition caused by inflammation is systemic inflammatory response syndrome.

8. Use according to Claim 7, in which the systemic inflammatory response syndrome is sepsis, septic shock or a sepsis-like condition.

9. Use according to any preceding claim, in which a population of cells enriched for STRO-1^{bright} cells and/or progeny thereof and/or soluble factors derived therefrom is to be administered to the subject.

10. Use according to any preceding claim, in which the population enriched for STRO-1^+ cells and/or progeny thereof and/or soluble factors derived therefrom are to be administered intravenously.

11. Use according to any preceding claim, in which the population enriched for STRO-1^+ cells and/or progeny thereof and/or soluble factors derived therefrom are to be administered in an amount sufficient to increase levels of angiopoietin I in a subject.

12. Use according to any preceding claim, in which the population enriched for STRO-1$^+$ cells and/or progeny thereof and/or soluble factors derived therefrom are to be administered in an amount sufficient to enhance dilation of endothelium in a subject.

13. Use according to any preceding claim, in which between 0.1 x 10^6 to 5 x 10^6 STRO-1$^+$ cells and/or progeny thereof per kilogram are to be administered to the subject.

14. Use according to any preceding claim, in which the population enriched for STRO-1$^+$ cells and/or progeny thereof are to be administered at a constant body dose.

15. Use according to Claim 14, in which the population enriched for STRO-1$^+$ cells and/or progeny thereof are to be administered at a dose of about 100 million to 300 million cells irrespective of the weight of the patient.

16. Use according to Claim 14 or 15, in which the population enriched for STRO-1$^+$ cells and/or progeny thereof are to be administered at a dose of about 150 million cells irrespective of the weight of the patient.

17. Use according to any preceding claim, in which the population enriched for STRO-1$^+$ cells and/or progeny thereof and/or soluble factors derived therefrom are to be administered once weekly or less often.

18. Use according to any preceding claim, in which 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. Use 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 and/or prior to obtaining the soluble factors.

20. Use 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 and/or soluble factors are derived from STRO-1$^+$ cells that are STRO-1^{bright} and/or express TNAP.

21. Use according to any preceding claim, in which the population of cells enriched for STRO-1^{bright} cells and/or progeny thereof and/or soluble factors derived therefrom are to be

administered in combination with pentosan polysulfate (PPS) or a pharmaceutically acceptable salt thereof.

22. Use e according to Claim 21, in which the PPS is the sodium salt of pentosan polysulfate.

23. Use according to Claim 22, in which the total amount of sodium salt of pentosan polysulfate is to be administered at a dose of about 1 to 100mg.

24. Use according to any of Claims 1 to 20, in which the STRO-1^+ cells and/or progeny cells thereof and/or soluble factors derived therefrom are to be 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.