CLAIMS

1. Use of a cell suspension comprising from 4 x 10^8 to 1.2 x 10^9 autologous or allogeneic white blood cells derived from the bone marrow of a human subject, wherein of the total number of from 4 x 10^8 to 1.2 x 10^9 white blood cells:

    i. 20% to 51% are lymphocytes, and 3.9% to 22.3% are monocytes;
    ii. 1.4% to 10% are hematopoietic stem cells that express CD34;
    iii. 25.3% to 83.3% of the total number of white blood cells are mononuclear cells;
    iv. 16.7% to 74.7% are granulocytes;
    v. 5.4% to 38.8% of the total number of white blood cells express CXCR4;
    vi. 0.07% to 24.7% of total number of white blood cells express VEGFR2;
    vii. Of the total number of hematopoietic stem cells that express CD34, 7.7% to 55.5% are early, non-committed hematopoietic stem cells that do not express CD38 and 0.7% to 10.3% are stem cells that express CD34 and CXCR4; and
    viii. The maximum ratio of red blood cells to leucocyte cells is 6.7 and the maximum ratio of platelets to leucocyte cells is 32.

In the manufacture of a medicament for the treatment or amelioration of lower extremity peripheral artery disease.

2. The use according to claim 1, wherein of the total number of white blood cells 32.3% to 80.0% are mononuclear cells selected from the list consisting of lymphocytes, monocytes and hematopoietic stem cells that express CD34 cells and 20.0% to 67.7%, are granulocytes.

3. The use according to claims 1 or 2, wherein the cell suspension comprises 5 x 10^8 to 1.2 x 10^9.

4. The use according to claims 1 or 2, wherein the cell suspension comprises 8 x 10^8 to 1.2 x 10^9.

5. The use according to claims 1 or 2, wherein the cell suspension comprises 9 x 10^8 to 1.1 x 10^9.

6. The use according to claims 1 or 2, wherein the cell suspension comprises 9.5 x 10^8 to 1.05 x 10^9.

7. The use according to claims 1 or 2, wherein the cell suspension comprises 9.8 x 10^8 to 1.02 x 10^9.

8. The use according to any of claims 1 to 7, wherein the lower extremity peripheral artery disease is critical limb ischemia.

9. The use according to any of claims 1 to 8, wherein the cells of such cell suspension are suspended in a volume of from 5 to 30 ml of a heparinized saline solution or lactated Ringer solution.

10. The use according to claim 9, wherein the heparinized saline solution or lactated Ringer solution comprises about 1% human serum albumin (HSA) and about 2.5% glucose.

11. The use as defined in any of claims 1 to 7, for treatment of lower extremity peripheral artery disease, wherein said cell suspension is to be administered via intra-arterial administration, and wherein a low pressure blood flow of up to 4 atmospheres is to be obtained by positioning an inflatable balloon proximal to the occlusive vascular lesion at the distal femoral or popliteal artery.

12. The use according to claim 11, for the treatment of critical limb ischemia.