CLAIMS

1. A method for providing angiogenesis in a subject, said method comprising selecting cells that have a desired potency for expression and/or secretion of one or more pro-angiogenic factors; assaying said cells for a desired potency for expression and/or secretion of one or more pro-angiogenic factors; and administering said cells having the desired potency for expression and/or secretion of one or more pro-angiogenic factors to said subject in a therapeutically effective amount and for a time sufficient to achieve a therapeutic result, the cells being non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers.

2. A method for providing angiogenesis in a subject, said method comprising administering cells having a desired potency for expression and/or secretion of one or more pro-angiogenic factors to said subject in a therapeutically effective amount and for a time sufficient to achieve a therapeutic result, the cells being non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers, wherein, prior to administration, said cells have been validated for having this potency.

3. The method of claims 1 or 2, wherein said cells are allogeneic.

4. The method of claims 1 or 2, wherein said subject has a condition selected from the group consisting of acute myocardial infarction, chronic heart failure, peripheral vascular disease, stroke, chronic total occlusion, renal ischemia, and acute kidney injury.

5. The method of any of claims 1-4 wherein said subject is human.

6. A method for constructing a cell bank, said method comprising selecting cells that have a desired potency for expression and/or secretion of one or more pro-angiogenic factors; and expanding and storing said cells for future administration to a subject, the cells being non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers.

7. A method for constructing a cell bank, said method comprising expanding and storing, for future administration to a subject, cells that have a desired potency for expression and/or secretion for one or more pro-angiogenic factors, the cells being non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers, wherein, prior to banking, said cells have been validated for having this potency.

8. A method for drug discovery, said method comprising selecting cells that have a desired potency for expression and/or secretion of one or more pro-angiogenic factors; and exposing said cells to an agent to assess the effect of the agent on the ability of the cells to express and/or secrete one or more pro-angiogenic factors, the cells being non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers.

9. A method for drug discovery, said method comprising exposing cells that have a desired potency for expression and/or secretion of one or more pro-angiogenic factors, to an agent to assess the effect of the agent on the ability of the cells to express and/or secrete one or more pro-angiogenic factors, the cells being non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers, said cells having been selected for having the desired potency and having been validated for having this potency.

10. A composition comprising non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers, said cells secreting one or more pro-angiogenic factors at a level higher than in the parental cell population.

11. A method for increasing the expression of one or more pro-angiogenic factors in a cell, the method comprising exposing the cell to a combination of TNF-α, IL-1β, and IFNγ, wherein said cells are non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers.

12. A method for increasing the expression of one or more pro-angiogenic factors in a cell, the method comprising exposing the cell to a combination of a prostaglandin F analog, wherein said cells are non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers.

13. The method of claim 12 wherein the prostaglandin F analog is latanoprost.

CLAIMS

1. A method for constructing a cell bank, said method comprising expanding and storing cells that have a desired potency for expression and/or secretion of the pro-angiogenic factors VEGF, CXCL5 and IL-8 for future administration to a subject, the cells being non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers.

2. The method of claim 1 wherein the cells are assayed for having the desired potency.

3. A method for constructing a cell bank, said method comprising expanding and storing, for future administration to a subject, cells that have a desired potency for expression and/or secretion of the pro-angiogenic factors VEGF, CXCL5 and IL-8, the cells being non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers, wherein, prior to banking, said cells have been validated for having this potency.

4. A method for drug discovery, said method comprising exposing cells to an agent to assess the effect of the agent on the ability of the cells to express and/or secrete the pro-angiogenic factors VEGF, CXCL5 and IL-8, said cells having a desired potency for expression and/or secretion of the pro-angiogenic factors; the cells being non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers.

5. The method of claim 4 wherein the cells are assayed for having the desired potency.

6. A method for drug discovery, said method comprising exposing cells that have a desired potency for expression and/or secretion of the pro-angiogenic factors VEGF, CXCL5 and IL-8. to an agent to assess the effect of the agent on the ability of the cells to express and/or secrete the pro-angiogenic factors, the cells being non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers, said cells having been selected for having the desired potency and having been validated for having this potency.

7. A composition comprising non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers, said cells secreting the pro-angiogenic factors VEGF, CXCL5 and IL-8 at a level higher than in the parental cell population.

8. A method for increasing the expression of the pro-angiogenic factors VEGF, CXCL5 and IL-8 in a cell, the method comprising exposing the cell to a combination of TNF-α, IL-1β, and IFNγ, wherein said cells are non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers.

9. A method for increasing the expression of the pro-angiogenic factors VEGF, CXCL5 and IL-8 in a cell, the method comprising exposing the cell to a combination of a prostaglandin F analog, wherein said cells are non-embryonic stem, non-germ cells that express one or more of oct4, telomerase, rex-1, or rox-1 and/or can differentiate into cell types of at least two of endodermal, ectodermal, and mesodermal germ layers.

10. The method of claim 9 wherein the prostaglandin F analog is latanoprost.