CLAIMS

1. A method of preparing a cell condensate in vitro, comprising culturing a mixture of cells and/or tissues of a desired type and mesenchymal cells on a gel-like support having a stiffness of a Young's modulus of 1 kPa or more, wherein the total cell count for the cells and/or tissues of a desired type is 400,000 or more and the mesenchymal cells are 100,000 to 400,000 in number.

2. The method of claim 1, wherein the culture is two-dimensional culture.

3. The method of claim 1 or 2, wherein the gel-like support is planar or the side of the gel-like support on which culture is performed has a U- or V-shaped cross-section.

4. The method of any one of claims 1 to 3, wherein the stiffness of the central part of the gel-like support is greater than the stiffness of the peripheral part thereof.

5. The method of any one of claims 1 to 3, wherein the stiffness of the peripheral part of the gel-like support is greater than the stiffness of the central part thereof.

6. The method of any one of claims 1 to 3, wherein the gel-like support is patterned and has one or more patterns in which the stiffness of the central part is greater than the stiffness of the peripheral part.

7. The method of any one of claims 1 to 3, wherein the gel-like support is patterned and has one or more patterns in which the stiffness of the peripheral part is greater than the stiffness of the central part.

8. The method of any one of claims 1 to 7, wherein the size of the cell condensate is 1 mm or more.

9. The method of any one of claims 1 to 8, wherein the cell condensate is formed autonomously.

10. The method of any one of claims 1 to 9, wherein the mixture of cells and/or tissues of a desired type and mesenchymal cells is cultured without using scaffold materials.

11. The method of any one of claims 1 to 10, wherein the cells and/or tissues mixed with the mesenchymal cells are derived from liver, pancreas, intestine, lung, kidney, heart, brain or cancer.

12. The method of any one of claims 1 to 10, wherein the cells mixed with the mesenchymal cells are pluripotent cells.

13. The method of any one of claims 1 to 10, wherein the tissues mixed with the mesenchymal cells are tissues induced from pluripotent cells.

14. The method of claim 12 or 13, wherein the pluripotent cell is a pluripotent cell obtained from a living body, a pluripotent cell obtained by induction from reprogramming or a mixture thereof.

15. A cell condensate comprising cells other than hepatic cells and/or tissues of a desired type and mesenchymal cells but not comprising vascular endothelial cells.

16. A method of preparing a three-dimensional tissue structure, comprising allowing self-organization of a cell condensate prepared by the method of any one of claims 1 to 14 to form a three-dimensional tissue structure.

17. A method of preparing a cell condensate in vitro, comprising culturing a mixture of cells and/or tissues of a desired type and mesenchymal cells on a gel-like support having a stiffness of a Young's modulus of 1 kPa or more.

18. A method of preparing a three-dimensional tissue structure, comprising allowing self-organization of a cell condensate prepared by the method of claim 17 to form a three-dimensional tissue structure.

19. The method of any one of claims 1 to 14 and 17, wherein a gel-like support has a stiffness of a Young's modulus of 200 kPa or less.

20. The method of claim 19, wherein a gel-like support has a stiffness of a Young's modulus of 100 kPa or less.

21. The method of any one of claim 20, wherein a gel-like support has a stiffness of a Young's modulus of 1-50 kPa.