Claims

[Claim 1] Use of umbilical cord-derived adherent stem cells in the manufacture of a pharmaceutical preparation for preventing or treating ovarian insufficiency.

[Claim 2] The use of claim 1, wherein the umbilical cord-derived adherent stem cell has one or more surface antigen characteristics selected from the group consisting of D200+, Tra-1-60-, CD3-, CD1a-, CD11c-, CD16-, CD86-, CD8a-, CD40-, CD141+, CD61+, CD87+, MIC A/B-, and SSEA4+.

[Claim 3] The use of claim 1, wherein the ovarian insufficiency is any one selected from primary ovarian insufficiency, secondary ovarian insufficiency, hyperandrogenemia, polycystic ovary syndrome, amenorrhea, oligomenorrhea, premature menopause, and infertility.

[Claim 4] The use of claim 1, wherein the stem cells increase the number of follicles or primordial follicles.

[Claim 5] The use of claim 1, wherein the stem cells promote ovulation of oocytes.

[Claim 6] The use of claim 1, wherein the stem cells promote development of fertilized embryos.

[Claim 7] The use of claim 1, wherein the stem cells restore the function or activity of any one cell selected from the group consisting of B cells, dendritic cells, and fibroblasts, which are decreased in ovarian insufficiency.

[Claim 8] The use of claim 1, wherein the stem cells decrease the number or activity of luteinizing mural cells or atretic cells, which are increased in ovarian insufficiency.

[Claim 9] The use of claim 1, wherein the stem cells increase the expression or activity of CD19 or CD209a.

[Claim 10] The use of claim 1, wherein the stem cells increase the expression or activity of Itm2a, or decrease the expression or activity of Parm1 or Chf.

[Claim 11] The use of claim 1, wherein the umbilical cord-derived adherent stem cells are suitable for administering in an amount of 1.0×10^3 to 1.0×10^{10} cells per subject.

[Claim 12] Use of umbilical cord-derived adherent stem cells in the manufacture of a pharmaceutical preparation for increasing the number of follicles or primordial follicles in a subject, wherein the umbilical cord-derived adherent stem cells are suitable for administering in an effective amount to the subject in need thereof.

[Claim 13] Use of umbilical cord-derived adherent stem cells in the manufacture of a pharmaceutical preparation for promoting ovulation of oocytes in a subject, wherein the umbilical cord-derived adherent stem cells are suitable for administering in an effective amount to the subject in need thereof.

[Claim 14] Use of umbilical cord-derived adherent stem cells in the manufacture of a pharmaceutical preparation for promoting the development of fertilized embryos in a subject, wherein the umbilical cord-derived adherent stem cells are suitable for administering in an effective amount to the subject in need thereof.

[Claim 15] Use of umbilical cord-derived adherent stem cells in the manufacture of a pharmaceutical preparation for increasing or decreasing, respectively, the function or activity of cells that are decreased or increased in ovarian insufficiency, wherein the umbilical cord-derived adherent stem cells are suitable for administering in an effective amount to a subject in need thereof.

[Claim 16] The use of claim 15, wherein the decreased cells in ovarian insufficiency are any one cell selected from the group consisting of B cells, dendritic cells, and fibroblasts.

[Claim 17] The use of claim 15, wherein the increased cells in ovarian insufficiency are luteinizing mural cells or atretic cells.