Regulations on Utilization of Human Embryonic Stem Cells at Osaka University

(Purpose)

Article 1:

The purpose of these Regulations is to stipulate fundamental bioethical principles to be adhered to in conducting basic research utilizing human embryonic stem (ES) cells at Osaka University (“University”) according to the Guidelines on the Distribution and Utilization of Human Embryonic Stem Cells (Public Notice of the Ministry of Education, Culture, Sports, Science and Technology No. 174 of 2014) (“Guidelines”), thereby ensuring appropriate utilization of human ES cells at the University both ethically and scientifically.

(Definitions)

Article 2:

The following terms as used herein shall have the meanings set forth below:

1. The term “Embryo” shall mean the embryo defined in Item 1 of Paragraph 1 of Article 2 of the Act on Regulation of Human Cloning Techniques (Act No. 146 of 2000).
2. The term “Human Embryo” shall mean an embryo of a human being (including an embryo with the genetic information of a human being).
3. The term “Human ES Cell” shall mean a cell obtained from a human embryo or produced by the division of said cell, excluding an embryo, which has pluripotency (the capability to differentiate into endodermal, mesodermal and ectodermal cells) and retains the ability to proliferate by itself or is presumed to have similar ability.
4. The term “Differentiated Cell” shall mean a cell differentiated from a Human ES Cell, which, as a result, no longer has the property of a Human ES Cell.
5. The term “Germ Cell” shall mean any cell from a primordial germ cell to a spermatozoon or an ovum.
6. The term “Derivation” shall mean production of cells with a specific property.
7. The term “Deriving Institute” shall mean an institute that derives Human ES Cells.
8. The term “Distributing Institute” shall mean an institute that distributes and maintains Human ES Cells which are deposited by a Deriving Institute for the purpose of distributing to third parties exclusively for use in basic research.
9. The term “Utilizing Division” shall mean any of the University’s graduate schools, undergraduate schools/faculty, university hospitals, research institutes, joint-use facilities, national joint-use facilities and other organizations equivalent thereto that utilizes Human ES Cells to carry out basic research.
10. The term “Utilizing Clinical Institute” shall mean an institute that utilizes Human ES Cells following procedures established for the utilization thereof for medical purposes (including clinical research and trials) under applicable laws and regulations. However, this definition shall not apply to any institute that utilizes Human ES Cells to carry out basic research.
11. The term “Utilization Plan” shall mean a plan concerning the utilization of Human ES Cells by a Utilizing Division.
12. The term “Utilization Director” shall mean a person responsible for overseeing the utilization of Human ES Cells by a Utilizing Division.
13. The term “Researcher” shall mean a person engaged in research utilizing Human ES Cells under the Utilization Plan, excluding Utilization Directors.

(Considerations for Human ES Cells)

Article 3:

Utilization Directors and Researchers shall handle Human ES Cells with integrity and great care with recognition that the Derivation of Human ES Cells requires destruction of Human Embryos that are nascent human lives and that have the potential to differentiate into any type of human cells.

(Conditions for Utilization)

Article 4:

1. The Utilization of Human ES Cells at the University shall be allowed only when the following conditions are met:
2. Human ES Cells shall be utilized for basic research conducted for either of the following purposes:
3. To clarify the mechanisms of human development, differentiation and regeneration
4. To develop a new method for diagnosing, preventing or treating diseases or to develop new medicines
5. The Utilization of Human ES Cells in the abovementioned research shall be both scientifically rational and necessary.
6. Human ES Cells may be used at the University only when the following conditions are met:
7. Human ES Cells shall be derived in accordance with the Guidelines on the Derivation of Human Embryonic Stem Cells (Public Notice of the Ministry of Education, Culture, Sports, Science and Technology and the Ministry of Health, Labour and Welfare No. 2 of 2014) (“Derivation Guidelines”). (Human ES Cells to be utilized to produce Germ Cells shall meet the conditions specified in the Derivation Guidelines including obtaining informed consent from the donor thereof.)
8. When utilizing Human ES Cells derived in a foreign country, the cells shall be those recognized as having been derived in accordance with guidelines equivalent to the Derivation Guidelines. When utilizing Human ES Cells derived in a foreign country to produce Germ Cells, the cells shall be those recognized as having been derived in accordance with guidelines equivalent to the Derivation Guidelines, and the utilization of Human ES Cells to produce Germ Cells shall not be prohibited under any of the applicable laws, regulations, guidelines equivalent thereto and/or conditions for provision of Human ES Cells in effect in that country.

(Prohibition)

Article 5:

Utilization Directors and Researchers shall not engage in any of the following acts:

1. Creating an individual by transplanting an Embryo produced by utilizing Human ES Cells into a human or animal uterus or by any other means.
2. Introducing Human ES Cells into a Human Embryo.
3. Introducing Human ES Cells into a human fetus.
4. Creating a Human Embryo using Germ Cells produced from Human ES Cells.

(Distribution of Human ES Cells)

Article 6:

At the University, distribution and transfer of Human ES Cells shall not be allowed, provided, however that this shall not apply to Human ES Cells processed by introducing genes or by any other means and to the case prescribed in Article 7 below.

(Distribution of Human ES Cells to Utilizing Clinical Institute)

Article 7:

Human ES Cells may be distributed to a Utilizing Clinical Institute only when said Human ES Cells are not the ones distributed by a Distributing Institute and the following conditions are met:

1. The Utilizing Division shall enter into an agreement in writing with the Utilizing Clinical Institute that stipulates:
2. The Utilizing Clinical Institute shall be prohibited from: creating an individual by transplanting an Embryo produced by utilizing Human ES Cells into a human or animal uterus or by any other means; introducing Human ES Cells into a Human Embryo or human fetus; and creating Germ Cells from Human ES Cells.
3. The Utilizing Clinical Institute shall not redistribute or transfer to any third party the Human ES Cells distributed to it by the Utilizing Division.
4. The Utilizing Clinical Institute shall put in place ethical rules to be observed when utilizing Human ES Cells.
5. The Utilizing Clinical Institute shall put in place a plan for education and training for improving ethical awareness concerning the utilization of Human ES Cells.
6. The Utilizing Clinical Institute shall take sufficient measures for personal information protection.
7. The Utilizing Clinical Institute shall return or transfer the Human ES Cells to the Utilizing Division through which said Human ES Cells were distributed if it failed to meet any of the conditions stipulated in this Article.
8. When the Utilizing Clinical Institute transfers Differentiated Cells it has produced, the Utilizing Clinical Institute shall notify the transferee that said cells were derived from Human ES Cells.
9. When the Utilizing Clinical Institute terminates the utilization of Human ES Cells, it shall dispose of the remaining Human ES Cells or return or transfer them to the Utilizing Division through which said cells were distributed.
10. The Utilizing Division shall distribute Human ES Cells at no cost to the Utilizing Clinical Institute except for necessary expenses.

(Conditions for Human ES Cells to be Distributed to Utilizing Clinical Institute)

Article 8:

Human ES Cells to be distributed pursuant to Article 7 shall be limited to the following:

1. Human ES Cells that have been derived pursuant to the Derivation Guidelines or that have been distributed from overseas under the Guidelines exclusively for use in basic research.
2. Human ES Cells that have been distributed, deposited or transferred at no cost to the Utilizing Division excluding necessary expenses.

(Duties of the President)

Article 9:

The President shall be responsible for overseeing the utilization of Human ES Cells at the University and shall perform the following duties:

1. Consult the Osaka University Research Ethics Committee about the establishment, amendment and abolition of regulations on the utilization of Human ES Cells at the University and other important matters relating thereto, hear opinions of the Committee, and take necessary measures as appropriate.
2. Give instructions to the Dean or Director of the Utilizing Division (“Division Director”) and Utilization Directors related to matters that require attention or improvement concerning the utilization of Human ES Cells at the University, as necessary.
3. Make sure that the Guidelines and these Regulations are known to and fully observed by all people concerned within the University.

(Duties of Division Directors)

Article 10:

1. Division Directors shall be responsible for overseeing the utilization of Human ES Cells by Utilization Directors and Researchers.
2. Division Directors shall perform the following duties at the respective Divisions:
3. Establish an ethics review committee on the utilization of Human ES Cells (“Ethics Review Committee”) within the respective Divisions to review the propriety of Utilization Plans or amendment thereto, provided, however, that any Division Director may request an Ethics Review Committee established in another Division in the University to review the propriety thereof if the Division Director has difficulty in establishing an Ethics Review Committee within the Division or has difficulty in having the Ethics Review Committee established in the Division conduct said review.
4. Specify matters necessary for the utilization of Human ES Cells at the respective Divisions.
5. Consult the Ethics Review Committee about the propriety of a Utilization Plan or amendment thereto pursuant to the Guidelines and these Regulations, confirm the conformity of the Utilization Plan or amendment thereto to the Guidelines and these Regulations, and approve the implementation of the Utilization Plan or amendment thereto after notifying the Minister of Education, Culture, Sports, Science and Technology thereof. The Ethics Review Committee shall mean the one established in another Division in the case specified in the proviso of Item (1) of this Article hereafter.
6. Oversee the progress and results of the utilization of Human ES Cells and give instructions to Utilization Directors related to matters that require attention or improvement concerning the utilization thereof as necessary.
7. Supervise the utilization of Human ES Cells.
8. Make sure that the Guidelines and these Regulations are known to and fully observed by all people concerned within the respective Divisions.
9. Formulate a plan for education and training necessary for improving technical skills and ethical awareness concerning the utilization of Human ES Cells (“Education and Training”), and provide Education and Training based on the plan.
10. Prepare and maintain records on the utilization of Human ES Cells.

3. Division Directors shall report how they have performed the duties specified in Items (1) to (4) and Item (7) of the preceding Paragraph to the President from time to time.

4. If a Division Director is a Utilization Director or Researcher, a person designated by the Division Director in advance shall perform the duties of the Division Director.

(Duties of Utilization Directors)

Article 11:

1. Utilization Directors shall perform the following duties:
2. Examine the scientific and ethical propriety of the Utilization Plan or amendment thereto based on the materials and information related to the utilization of Human ES Cells available in Japan and/or abroad.
3. Prepare a document stating the Utilization Plan (“Written Utilization Plan”) or amendment thereto (“Written Amendment to the Utilization Plan”) based on the results of the examination set forth in the preceding Item.
4. Oversee the utilization of Human ES Cells, and give instructions to Researchers concerned.
5. Confirm that Human ES Cells are appropriately utilized in accordance with the Written Utilization Plan or Written Amendment to the Utilization Plan from time to time.
6. Have Researchers participate in Education and Training provided pursuant to Item (7) of Paragraph 2 of Article 10 and provide any other Education and Training on the utilization of Human ES Cells.
7. Take measures for overseeing the Utilization Plan as necessary in addition to performing the duties set forth in the preceding Items.
8. One Utilization Director shall be assigned to each Utilization Plan.

(Ethics Review Committee)

Article 12:

1. Reviews of the scientific and ethical propriety of the utilization of Human ES Cells shall be conducted by the Ethics Review Committee.
2. The Ethics Review Committee shall perform the following duties.
3. Conduct a comprehensive review of the scientific and ethical propriety of the Utilization Plan or amendment thereto in accordance with the Guidelines and these Regulations, and report the results of the review, along with matters that require attention and/or improvement as appropriate, to the Division Director.
4. Keep itself informed of the progress and results of the utilization of Human ES Cells, conduct an investigation when necessary, and report matters that require attention and/or improvement as appropriate to the Division Director.
5. The Ethics Review Committee shall prepare and maintain records on the reviews specified in Item (1) of the preceding Paragraph.
6. The Ethics Review Committee shall meet the following conditions to ensure it can conduct comprehensive reviews of the scientific and ethical propriety of the Utilization Plan or amendment thereto:
7. The Ethics Review Committee shall consist of experts in biology, medicine and law as well as individuals who are sufficiently knowledgeable to discuss bioethical issues, and those who can represent the views of the general public.
8. The Ethics Review Committee members shall include at least two (2) individuals who are not staff of the University.
9. The Ethics Review Committee shall include at least two (2) male and two (2) female members.
10. Utilization Directors and Researchers shall not take part in the review of the Utilization Plan they implement.
11. Any person who has a relationship of interest with a Utilization Director and Researcher, and third-degree or closer relative of a Utilization Director and Researcher, shall not take part in the review of the Utilization Plan to be implemented by said Utilization Director and Researcher.
12. Appropriate operational procedures that ensure the freedom and independence of the activities of the Ethics Review Committee shall be in place.
13. Rules on the constitution, organization and operation of the Ethics Review Committee, as well as procedures for the disclosure of minutes of meetings held by the Ethics Review Committee and the review of Utilization Plans, shall be in place and made public.

(Technical Conditions to be Met)  
Article 13:

The following technical conditions shall be met in utilizing Human ES Cells:

1. Utilization Directors shall have knowledge of the properties of Human ES Cells including the capacity for differentiation into Germ Cells and sufficient expertise and technical skills to utilize Human ES Cells.
2. Utilization Directors shall have a sufficient track record and experience in research activities utilizing animal ES cells and/or human iPS cells and shall be able to appropriately perform the duties stipulated in Paragraph 1 of Article 11.
3. Researchers shall have sufficient technical skills to utilize Human ES Cells.
4. The laboratory where research utilizing Human ES Cells is conducted shall be locked at all times and any third person shall not be allowed to enter the laboratory without the consent of a person concerned.
5. The laboratory shall be equipped with incubators, clean benches, cell storage containers and experimental devices for cell culture, necessary for research utilizing Human ES Cells.
6. Incubators shall be used exclusively for Human ES Cells.

(Ethical Conditions to be Met)  
Article 14:

Utilization Directors and Researchers shall comply with the following ethical requirements:

1. Utilization Directors and Researchers shall have sufficient ethical awareness concerning Human ES Cells and shall endeavor to maintain such awareness.
2. Utilization Directors and Researchers shall examine the ethical propriety of the utilization of Human ES Cells at all times.

(Progress Report)  
Article 15:

1. Utilization Directors shall submit a report on the progress of the utilization of Human ES Cells to the Division Director and the Ethics Review Committee from time to time.
2. In addition to the report set forth in the preceding Paragraph, Utilization Directors involved in the production of Germ Cells shall prepare and submit to the Division Director a Germ Cell Production Report at least once a year.
3. Utilization Directors involved in the distribution of Human ES Cells to a Utilizing Clinical Institute shall prepare and submit to the Division Director a report thereon each time Human ES Cells are distributed thereto.
4. The Division Director, upon receipt of the report set forth in Paragraphs 2 and 3 above, shall submit a copy thereof to the Ethics Review Committee, the President, and the Minister of Education, Culture, Sports, Science and Technology without delay.

(Termination of Utilization of Human ES Cells)  
Article 16:

1. Upon termination of the utilization of Human ES Cells, Utilization Directors shall promptly dispose of the remaining Human ES Cells pursuant to the agreement concluded with the Deriving Institute or Distributing Institute through which the Human ES Cells were distributed, or return or transfer the remaining cells to said Deriving Institute or Distributing Institute, and shall prepare and submit to the Division Director a Report on the Termination of Human ES Cell Utilization stating the results of the utilization thereof.
2. The Division Director, upon receipt of the report set forth in the preceding Paragraph, shall submit a copy thereof to the Deriving Institute or Distributing Institute through which the Human ES Cells were distributed, the Ethics Review Committee, the President, and the Minister of Education, Culture, Sports, Science and Technology without delay.

(Handling of Differentiated Cells)

Article 17:

1. When the Utilizing Division transfers Differentiated Cells it has produced, it shall notify the transferee that said cells were derived from Human ES Cells.
2. When the Utilizing Division transfers Germ Cells it has produced, it shall notify the transferee that said cells were derived from Human ES Cells and shall also ensure that the conditions set forth below are met in handling said cells by concluding an agreement with the transferee or by any other means:
3. Germ Cells shall be utilized exclusively for basic research conducted for either of the following purposes:
4. To clarify the mechanisms of human development, differentiation and regeneration
5. To develop a new method for diagnosing, preventing or treating diseases or to develop new medicines
6. Germ Cells shall not be utilized to produce a Human Embryo.
7. Germ Cells shall not be transferred to any other institute.
8. The Utilizing Division that has transferred Germ Cells shall be able to request the transferee to submit a report on the handling of Germ Cells to ensure the compliance of the transferee with the preceding three Items, as necessary.
9. Notwithstanding the provisions of the preceding Paragraph, the Utilizing Division shall not transfer Germ Cells to any Utilizing Clinical Institute.
10. When the Utilizing Division is to transfer Germ Cells pursuant to the provisions of Paragraph 2 of this Article, the Utilization Director shall obtain approval from the Division Director in advance.
11. Prior to giving approval pursuant to the provision of the preceding Paragraph, the Division Director shall make sure that the transfer of Germ Cells produced by the Division is in compliance with the provisions of Paragraph 2 of this Article.
12. When giving approval for the transfer of Germ Cells pursuant to the provisions of Paragraph 4 of this Article, the Division Director shall, without delay, notify the Ethics Review Committee, the President and the Minister of Education, Culture, Sports, Science and Technology to that effect.

(Handling of Germ Cells upon Termination of the Utilization of Human ES Cells)

Article 18:

1. If a Division continues to utilize Germ Cells it has produced even after the termination of the utilization of Human ES Cells, the Division shall be deemed a Utilizing Division hereunder and shall be subject to these Regulations, excluding: Paragraph 2 of Article 4; Items 1 to 3 of Article 5; Article 6; Items 3 and 8 of Paragraph 2 of Article 10; Items 3 to 6 of Article 13; Paragraph 1 of Article 15; and Article 16, and the term “Human ES Cells” in Paragraph 1 of Article 4, Article 9, Paragraphs 1 and 2 (excluding Item 8 hereafter) of Article 10, Paragraph 1 of Article 11, Article 13 (excluding Items 3 to 6), and Article 14 shall be read as “Germ Cells produced from Human ES Cells” and “education and training necessary for improving technical skills and ethical awareness” (“Education and Training”) in Item 7 of Paragraph 2 of Article 10 shall be read as “education and training necessary for improving ethical awareness” (“Ethical Education and Training”), “Education and Training” in said Item of Article 10 and Item 5 of Paragraph 1 of Article 11 shall be read as “Ethical Education and Training” and “Utilization Directors shall have knowledge of the properties of Human ES Cells including the capacity for differentiation into Germ Cells and sufficient expertise and technical skills to utilize Human ES Cells” in Item 1 of Article 13 shall be read as “Utilization Directors shall have sufficient expertise to utilize Germ Cells produced from Human ES Cells.”
2. Utilization Directors of the Division that is deemed a Utilizing Division pursuant to the provisions of the preceding Paragraph shall, upon termination of the utilization of Germ Cells that the Division produced, dispose of the remaining Germ Cells and prepare and submit to the Division Director a Report on the Termination of Germ Cell Utilization stating the results of the utilization thereof without delay.
3. The Division Director, upon receipt of the report set forth in the preceding Paragraph, shall submit a copy thereof to the Ethics Review Committee, the President, and the Minister of Education, Culture, Sports, Science and Technology without delay.

(Disclosure of Research Results)  
Article 19:

1. The results of research utilizing Human ES Cells shall be made public in principle.
2. When disclosing the results of research utilizing Human ES Cells, the Division Director shall make it clear that Human ES Cells have been utilized in the research in accordance with the Guidelines.

(Miscellaneous Provision)

Article 20:

Matters concerning the utilization of Human ES Cells not specified herein shall be set forth separately.

Supplementary Provision

These Regulations shall come into effect on December 15, 2010.

Supplementary Provision

These Regulations as amended shall come into effect on March 17, 2015.