(Tentative Translation)

Guidelines on the Handling of Specified Embryos

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Chapter I General Provisions

(Definitions)

Article 1 In these Guidelines, the meanings of the terms listed in the following items shall be as prescribed in the Act on Regulation of Human Cloning Techniques (hereinafter referred to as the "Act") as well as in the items listed below, respectively.

(i) Embryonic stem (ES) cell A cell obtained from an embryo or produced by the division of such a cell, excluding on 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 an ability similar thereto

(ii) Animal cloned embryo An embryo produced by the fusion of an animal somatic cell that has a cell nucleus with an animal enucleated egg (including each of embryos produced successively by single or multiple splitting of the said embryo)

(iii) Donor A person who donates cells necessary to produce specified embryos

(iv) Donor medical facility A medical facility that receives human unfertilized eggs or human fertilized embryos (hereinafter referred to as "unfertilized eggs, etc.") to be utilized in the production of specified embryos and a medical facility that transfers such unfertilized eggs, etc. to a person who intends to produce specified embryos

(v) Somatic cell donor facility A facility that receives human somatic cells (hereinafter referred to simply as "somatic cells") to be utilized in the production of specified embryos and a facility that transfers such somatic cells to a person who intends to produce specified embryos

(Limitation to the Types of Embryos that May be Produced)

Article 2 For the time being, of specified embryos, the types of embryos that may be produced shall be limited to human somatic cell nuclear transfer (hSCNT) embryos and animal-human chimeric embryos.

(Voluntary Donation of Human Cells)

Article 3 Human cells used for the production of specified embryos shall be donated voluntarily, except for transfer and other necessary expenses.

(Import of Specified Embryos)

Article 4 For the time being, import of specified embryos shall not be carried out.

(Period for Handling of Specified Embryos)

Article 5 (1) The production of specified embryos or handling of such embryos after receipt by assignment shall be carried out limited to a period until a primitive streak (a linear ditch-like structure appearing at the central area of an embryo in an early stage of

embryonic development, which develops into an endoderm and an area where the endoderm develops; hereinafter the same should apply in this paragraph) appears. Specified embryos, however, for which such primitive streak does not appear during a certain period (in the following paragraph, referred to as the "lapsed period") of 14 days from the date of said specified embryos being produced, shall not be handled later than the day such period has lapsed (hereinafter in the immediate next paragraph, referred to as the "day the lapsed period ends").

(2) When the specified embryos prescribed in the provision of the last sentence of the preceding paragraph have been frozen and preserved for a certain period, such a period when the embryos have been frozen and preserved shall not be counted in the lapsed period.

(Export of Specified Embryos)

Article 6 For the time being, export of specified embryos shall not carried out.

(Prohibition of Transfer of Specified Embryos to Uterus)

Article 7 For the time being, specified embryos not prescribed in the provisions of Article 3 of the Act may not be transferred to human or animal uterus.

(Publication of Information)

Article 8 A person who intends to produce or receive by assignment specified embryos and to then handle such embryos shall make efforts to make public the details and results of the handling of such specified embryos.

Chapter II Handling of hSCNT Embryos

Section 1 Matters pertaining to Requirements for Production of hSCNT Embryos

(Requirements for Production of hSCNT Embryos)

Article 9 (1) The production of hSCNT embryos shall be carried out limited to when scientific knowledge that cannot be obtained through research in which only animal embryos or cells are utilized and no hSCNT embryos are utilized, can be obtained.

(2) Of basic research on regenerative medicine for patients who have any of the following diseases (limited to inheritable diseases (diseases that develop or can develop by inheritance), when utilizing somatic cells prescribed in Paragraph (6), Item (iii)), the

purpose of producing hSCNT embryos is basic research in which human ES cells are produced and such basic research shall be limited to the kind that has scientific rationality and necessity of newly producing hSCNT embryos.

(i) A disease that can risk human life, has no established medical treatment method and is difficult to treat

(ii) A disease that can cause irreversible and serious disability to human physical function, has no established medical treatment method and is difficult to treat

(3) A person who intends to produce hSCNT embryos (hereinafter referred to as a "producer of hSCNT embryos") shall satisfy all of the following requirements:

(i) The research involves persons who have results in producing cloned embryos of primates as well as have experience of being engaged in research related to the production of ES cells utilizing such primate cloned embryos.

(ii) The said persons have results in producing animal cloned embryos as well as ES cells utilizing the said animal cloned embryos.

(iii) The said persons have enough management capability to carry out research in which hSCNT embryos are handled.

(iv) A system has been developed for utilizing hSCNT embryos in the production of human ES cells without delay.

(v) When it is intended to produce hSCNT embryos utilizing somatic cells prescribed in Paragraph (6), Item (iii), the said persons have results in producing hSCNT embryos utilizing somatic cells prescribed in the same paragraph, Item (i) or (ii) and producing human ES cells from such hSCNT embryos.

(4) hSCNT embryos may not be produced in a building having facilities with the capability to transfer such embryos to a human or animal uterus.

(5) For the time being, unfertilized eggs, etc. that may be used in the production of hSCNT embryos shall be limited to those corresponding to any of the following items and the donor's intention shall have been confirmed concerning the fact the said unfertilized eggs, etc. will be disposed of.

(i) Unfertilized eggs taken from an ovary (including its sections) that has been removed for treatment of a disease (limited to unfertilized eggs not to be utilized in assisted reproductive treatment (medical treatment for the purpose of assisting reproduction; hereinafter the same should apply in this paragraph) for the donor)

(ii) Of unfertilized eggs taken to be utilized in assisted reproductive treatment, those not planned to be utilized in such treatment or those not successfully fertilized even though utilized in such treatment

(iii) Human fertilized embryos that correspond to the cell prescribed in Item (i) and are produced to be utilized in assisted reproductive treatment and, of human fertilized embryos not planned to be utilized in the assisted reproductive treatment, those that have or had three or more pronuclei (nuclei that originate in sperm or unfertilized eggs existing in human fertilized embryos immediately after fertilization but that have not yet fused with each other)

(6) For the time being, somatic cells that may be utilized in the production of hSCNT embryos shall be limited to those that correspond to any of the following:

(i) Somatic cells removed or taken through surgical operation or biopsy (process to take tissues from a living body to diagnose disease or disorder)

(ii) Somatic cells taken and preserved for the purpose of being utilized in research (not including those prescribed in the immediate next item)

(iii) Somatic cells newly taken to be utilized in the production of hSCNT embryos (limited to those taken with minimum physical influence on the donor)

(Consent of Donors, etc. of Unfertilized Eggs, etc.)

Article 10 (1) A producer of hSCNT embryos shall confirm that the donor medical facility should obtain consent in writing from the donor or other persons whose intention should be confirmed (hereinafter referred to as "donors, etc.") concerning the utilization of unfertilized eggs, etc. in the production of hSCNT embryos.

(2) In the case where the donor medical facility obtains the consent pursuant to the preceding paragraph, the producer of hSCNT embryos shall issue a document describing and giving notification of the following items to the donors, etc. and give an explanation in advance.

(i) The purpose and method of producing hSCNT embryos

(ii) Handling of unfertilized eggs, etc. to be donated

(iii) Predicted results of the research

(iv) The fact that the production of such hSCNT embryos has been notified to the Minister of Education, Culture, Sports, Science and Technology and the minister has confirmed that details of the notification comply with these Guidelines

(v) The fact that the personal information of the donors will not be transferred to the producer of hSCNT embryos and any other methods for protecting such personal information

(vi) The fact that the donors' etc. will receive no reward in the future

(vii) The fact that gene analysis will potentially be carried out on unfertilized eggs, etc., hSCNT embryos to be produced from such unfertilized eggs, etc. and ES cells to be produced from such hSCNT embryos and that such gene analysis will not identify specific individuals

(viii) The fact that research results and other information on hSCNT embryos and ES cells will not be disclosed to the donors

(ix) The possibility that research results may be made public

(x) The fact that ES cells will be maintained for a long period and be provided gratis to institutes that utilize such cells

(xi) The possibility that patent rights, copyrights or other intangible property rights or economic interests may arise from research results and the fact that they will not belong to the donors

(xii) The fact that the manifestation of an intention to donate or not to donate unfertilized eggs, etc. does not bring any advantage or disadvantage to the donors

(xiii) The fact that the unfertilized eggs, etc. will not be transferred to the producer of hSCNT embryos for at least 30 days after the consent has been obtained and the fact that the consent can be revoked as well as the method of revocation

(3) Donors, etc. may revoke their consent prescribed in Paragraph (1) during the period when such unfertilized eggs, etc. are being preserved.

(Consent of Donors, etc. of Somatic Cells)

Article 11 (1) The provisions of the preceding article shall apply to consent of donors, etc. of somatic cells. In this case, the terms found in the preceding article shall be deemed to be replaced as follows: the term of "unfertilized eggs, etc." shall be deemed to be replaced with "somatic cells," the term of "donor medical facility" with "somatic cell donor facility," the term "shall confirm" with "shall confirm but the same does not apply when receiving those have no information of the donor of the said somatic cells, which correspond those prescribed in Article 9, Paragraph (6), Item (ii)," the term "shall…to the

donors, etc." with "shall confirm that the said somatic cell donor facility shall…to the donors, etc." and the term "give an explanation" with "confirm that an explanation is given."

(2) In addition to those terms prescribed in each item of the preceding article, Paragraph (2), to be deemed to be replaced pursuant to the provisions of the preceding paragraph, when the somatic cell donor facility obtains consent of donors, etc. of somatic cells, the producer of hSCNT embryos shall, in advance, confirm that the somatic cell donor facility issues a document to the donors, etc. concerning the following items and gives an explanation.

(i) The fact that ES cells have the same genetic information as their donor and have the nature of differentiating themselves into endodermal, mesodermal and ectodermal cells and the capacity to replicate such cells

(ii) When somatic cells are donated pursuant to Article 9, Paragraph (6), Item (iii), the method to obtain such cells and potential physical influence that the donors will have when such cells are taken along with compensation for such physical influence, if any

(3) When donors, etc. of somatic cells request for a detailed explanation concerning the content of research in which such somatic cells are utilized, the producer of hSCNT embryos shall give such an explanation.

Section 2 Matters pertaining to Requirements for Receipt by Assignment and other Handling of hSCNT Embryos

(Requirements for Receipt by Assignment of hSCNT Embryos)

Article 12 hSCNT embryos may be received by assignment only when all of the following requirements are satisfied:

(i) hSCNT embryos to be received by assignment are produced in compliance with these Guidelines.

(ii) hSCNT embryos after receipt by assignment are handled in compliance with the provisions of Article 9, Paragraph (1) and for the purpose of research prescribed in the same article, Paragraph (2).

(iii) Persons who have experience of being engaged in research related to the production of ES cells utilizing primate cloned embryos are involved.

(iv) The person who intends to receive hSCNT embryos by assignment (hereinafter referred to as a "receiver of hSCNT embryos") has results in producing ES cells utilizing animal cloned embryos.

(v) The receiver of hSCNT embryos has enough management capability to carry out research in which hSCNT embryos are handled.

(vi) A system has been in place to utilize hSCNT embryos in the production of human ES cells without delay.

(vii) When it is intended to receive by assignment hSCNT embryos that were produced utilizing somatic cells prescribed in Article 9, Paragraph (6), Item (iii), the receiver of hSCNT embryos should have results in producing ES cells from hSCNT embryos produced utilizing somatic cells prescribed in the same article and paragraph, Item (i) or (ii).

(viii) hSCNT embryos are received by assignment gratis.

(ix) hSCNT embryos are received by assignment in the same building where such hSCNT embryos were produced.

(Requirements for Handling of hSCNT Embryos after Production or Receipt by Assignment)

Article 13 (1) hSCNT embryos shall be handled in the same building where the hSCNT embryos were produced or received by assignment.

(2) hSCNT embryos produced or received by assignment shall be utilized in the production of human ES cells without delay.

(3) hSCNT embryos shall not be lent.

Section 3 Matters pertaining to Procedures that Require Attention with respect to Handling of hSCNT Embryos

(Hearing of Opinion of Ethical Review Board)

Article 14 A person who intends to produce or receive by assignment hSCNT embryos and then handle such hSCNT embryos (hereinafter referred to as a "handler of hSCNT embryos") shall, prior to notifying the Minister of Education, Culture, Sports, Science and Technology concerning the handling of such hSCNT embryos pursuant to Article 6 of the Act, seek the opinions of the institutional ethical review board (ethical review board (an

institution that investigates and reviews the compliance of the handling of specified embryos with these Guidelines from ethical and scientific viewpoints, receives reports from the handler of such specified embryos and offers opinions to the said handler of specified embryos; the same should apply to Article 18) established by the institute to which the handler of hSCNT embryos belongs (when the handler of such embryos is a juridical person, the juridical person)).

Chapter III Handling of Animal-human Chimeric Embryos

Section 1 Matters pertaining to Requirements for Production of Animal-human Chimeric Embryos

(Requirements for Production of Animal-human Chimeric Embryos)

Article 15 (1) Animal-human chimeric embryos may be produced only when the following requirements are satisfied:

(i) Scientific knowledge that cannot be gained through research utilizing only animal embryos or cells, or research not utilizing other animal-human chimeric embryos can be obtained.

(ii) The person who intends to produce animal-human chimeric embryos (hereinafter in this Article and the immediate next Article, referred to as a "producer of animal-human chimeric embryos") has enough technical capability to carry out research in which animal-human chimeric embryos are handled.

(2) The production of animal-human chimeric embryos shall be carried out only for the purpose of basic research for the production of human cell-derived internal organs that can be transferred to human body.

(3) The producer of animal-human chimeric embryos shall not utilize unfertilized eggs, etc. in the production of animal-human chimeric embryos.

(Consent of Donor of Cells Necessary for Production of Animal-human Chimeric Embryos)

Article 16 (1) A producer of animal-human chimeric embryos shall obtain consent in writing from the donor with respect to the utilization of human cells in the production of animal-human chimeric embryos.

(2) A producer shall take the following items into consideration when obtaining the consent prescribed in the preceding paragraph:
(i) The donors are not treated to their disadvantage for the reason that they do not consent.
(ii) The producer respects intention of donors and gives the explanation prescribed in the following paragraph fairly and appropriately from the standpoint of the donors.
(iii) There is sufficient time necessary for the donors to decide whether they consent or not.
(3) When intending to obtain consent prescribed in Paragraph (1), the producer of animal-human chimeric embryos shall, in advance, issue a document describing the following matters and give an explanation on their content.
(i) The purpose for and method of the production of animal-human chimeric embryos
(ii) Handling of cells to be donated
(iii) Handling of animal-human chimeric embryos after production
(iv) The method to protect personal information of the donor
(v) The fact that the donor will receive no reward in the future
(vi) The fact that the donor will not be discriminated against his/her interest for the reason he/she does not give consent
(vii) The fact that the donor may revoke his/her consent
(4) The donor may revoke his/her consent prescribed in Paragraph (1).

Section 2 Matters pertaining to Requirements for Receipt by Assignment of Animal-human Chimeric Embryos

(Requirements for Receipt by Assignment of Animal-human Chimeric Embryos)
Article 17 Animal-human chimeric embryos may be received by assignment only when all of the following requirements are satisfied:
(i) Animal-human chimeric embryos to be received by assignment were produced in compliance with the provisions of these Guidelines.
(ii) Animal-human chimeric embryos are handled in compliance with the requirements prescribed in Article 15, Paragraph (1), Item (i) and for the purpose of research prescribed in the same article, Paragraph (2).
(iii) The person who intends to receive animal-human chimeric embryos by assignment has enough technical capability to carry out research in which such embryos are handled.

(iv) Animal-human chimeric embryos are received by assignment gratis except for transfer and other necessary expenses.

Section 3 Matters pertaining to Procedures that Require Attention with respect to Handling of Animal-Human Chimeric Embryos

(Hearing of Opinion of Ethical Review Board)

Article 18 (1) A person who intends to produce or receive by assignment animal-human chimeric embryos and then handle specified embryos (hereinafter in this article, referred to as a "handler of animal-human chimeric embryos") shall, prior to notifying the Minister of Education, Culture, Sports, Science and Technology concerning the handling of such animal-human chimeric embryos pursuant to Article 6 of the Act, seek the opinions of the institutional ethical review board (an ethical review board established by the institute to which the handler of such embryos belongs (when the handler is a juridical person, the juridical person; hereinafter the same should apply in this article)).

(2) In case of the preceding paragraph, when the handler of animal-human chimeric embryos does not belong to the relevant institute or the institute has no institutional ethical review board, the handler may be deemed to have sought the opinions prescribed in the preceding paragraph when the handler has sought the opinions of an ethical review board established by any of the following institutes:

(i) An experiment and research institute of the national or local governments

(ii) A university (as prescribed in Article 1 of the School Education Act (Act No. 26 of 1947)) or inter-university research institute (as prescribed in Article 2, Paragraph (4) of the National University Corporation Act (Act No. 112 of 2003))

(iii) An incorporated administrative agency (as prescribed in Article 2, Paragraph (1) of the Act on General Rules for Incorporated Administrative Agencies (Act No. 103 of 1999))

(iv) A special corporation (as established directly pursuant to laws or by special acts of establishment pursuant to a special act and applied with provisions of Article 4, Paragraph (15) of the Act for Establishment of the Ministry of Internal Affairs and Communications (Act No. 91 of 1999))

(v) An authorized corporation (as established by a special act and required to obtain their relevant administrative agency's approval for their establishment)

(vi) A general incorporated association or general incorporated foundation

Supplementary Provision

These Guidelines shall come into effect as of the date of promulgation.