

**Examples of Research and Review Categories\***

(Note that this list is not an exhaustive list of research examples)

#	Research Examples	Review category (see below)
1	<i>In vitro</i> research utilizing established human embryonic stem cell lines (hESC), including but not limited to those on the <a href="#">NIH Stem Cell Registry</a> .	1
2	Generation of a new hESC line from a human embryo.	2
3	Creation of human embryos for research purposes.	2
4	Procurement of human embryos or human gametes for <i>in vitro</i> research	2
5	Introduction of hESCs, hiPSCs or organoids derived from either into an animal.	1 - if established standard teratoma protocols are used; otherwise category 2 applies.  IACUC review is needed.
6	Generation of human gametes from hESCs or hiPSCs.	2
7	Genetic alteration of human embryos or gametes for <i>in vitro</i> research	2
8	<i>In vitro</i> culture of human embryos for research**	2
9	Generation of embryo models (e.g. gastruloids, blastoids, assembloids) that contain hESCs or hiPSCs.	2
10	Generation of organoids from hESCs or hiPSCs that could contain reproductive cells capable of producing gametes or brain cells capable of developing neural networks.	2
11	<i>In vitro</i> culture of chimeric embryos (human cells into non-human embryos).	2
12	Research involving the use of naturally occurring adult stem cells (e.g., hematopoietic stem cells).	No review by ESCRO necessary
13	Most research using hiPSCs <i>in vitro</i> (with above exceptions).	No review by ESCRO necessary
14	Research involving the use of human cord blood that does not otherwise involve covered research.	No review by ESCRO necessary
15	Procedures conducted for clinical care that do not otherwise involve covered research, such as transplantation of stem cells as part of a recognized	No review by ESCRO necessary

	and accepted medical treatment for a disease or condition.	
16	Reproductive treatments involving gametes or embryos, in an accredited clinical setting.	No review by ESCRO necessary

\*ESCRO aligns with ISSCR guidance at <https://www.isscr.org/guidelines>

\*\*ESCRO continues to monitor the regulatory environment and the community response to this area of research.

**Review Categories:**

1. Administrative review
2. Reviewed by full ESCRO Committee

**Prohibited research (not an all-inclusive list)**

- Research in which the investigators attempt to create a pregnancy from the following types of embryos:
  - Human embryos that were genetically modified in the laboratory,
  - Human embryos made from human stem cell-derived gametes,
  - Human stem cell-generated embryo models,
  - Embryos containing a mixture of human and non-human cells.
- Research involving the transfer of human embryos, or embryos with a mixture of non-human cells and human cells, into an animal uterus.
- Research involving breeding of animals that have had hESC/hiPSC-derived cells introduced into their reproductive organs.
- Research involving human cloning.