Research With Stem Cells

Code of Medical Ethics Opinion 7.3.8

Human stem cells are widely seen as offering a source of potential treatment for a range of diseases and are thus the subject of much research. Clinical studies have validated the use of adult stem cells in a limited number of therapies, but have yet to confirm the utility of embryonic stem cells.

Physicians who conduct research using stem cells obtained from any source (established tissue, umbilical cord blood, or embryos) must, at a minimum:

1. Adhere to institutional review board (IRB) requirements.
2. Ensure that the research is carried out with appropriate oversight and monitoring.
3. Ensure that the research is carried out with appropriate informed consent. In addition to disclosure of research risks and potential benefits, at minimum, the consent disclosure should address:
   1. For a donor of cells to be used in stem cell research
      1. The process by which stem cells will be obtained
      2. What specifically will be done with the stem cells
      3. Whether an immortal cell line will result
      4. The primary and anticipated secondary uses of donated embryos and/or derived stem cells, including potential commercial uses
   2. For a recipient of stem cells in clinical research
      1. The types of tissue from which the stem cells derive (e.g., established tissue, umbilical cord blood, or embryos)
      2. Unique risks posed by investigational stem cell products (when applicable), such as tumorigenesis, immunological reactions, unpredictable behavior of cells, and unknown long-term health effects
The professional community as well as the public remains divided about the use of embryonic stem cells for either research or therapeutic purposes. The conflict regarding research with embryonic stem cells centers on the moral status of embryos, a question that divides ethical opinion and that cannot be resolved by medical science. Regardless whether they are obtained from embryos donated by individuals or couples undergoing in vitro fertilization, or from cloned embryos created by somatic cell nuclear transfer (SCNT), use of embryonic stem cells currently requires the destruction of the human embryo from which the stem cells derive.

The pluralism of moral visions that underlies this debate must be respected. Participation in research involving embryonic stem cells requires respect for embryos, research participants, donors, and recipients. Embryonic stem cell research does not violate the ethical standards of the profession. Every physician remains free to decide whether to participate in stem cell research or to use its products. Physicians should continue to be guided by their commitment to the welfare of patients and the advancement of medical science.

Physicians who conduct research using embryonic stem cells should be able to justify greater risks for subjects, and the greater respect due embryos than stem cells from other sources, based on expectations that the research offers substantial promise of contributing significantly to scientific or therapeutic knowledge.

*AMA Principles of Medical Ethics: V*

**Read more opinions about this topic**

Code of Medical Ethics: Special issues in research

Visit the Ethics main page to access additional Opinions, the Principles of Medical Ethics and more information about the Code of Medical Ethics.