



DATA FACT SHEET

ADULT Stem Cell Research vs. HUMAN EMBRYONIC Stem Cell Research

Q. Why are adult stem cells superior to embryonic stem cells?

A. Adult stem cells have been successfully used on human persons to treat 73 conditions and counting, including brain and many other cancers, multiple sclerosis, Crohn's disease, rheumatoid arthritis, sickle cell anemia, stroke, limb gangrene, corneal regeneration, heart damage, Parkinson's disease, and spinal cord injury.

Embryonic stem cells have not been used to treat one person. There have been no human trials because embryonic stem cells grow uncontrollably and would create tumors if put into a human person.

No one has to die to retrieve adult stem cells. Human embryos must be killed to obtain embryonic stem cells.

Because adult stem cells come from an individual's own body, there is no rejection factor. Because embryonic stem cells come from a separate human being, there is a rejection factor just as if you had received an organ transplant from another individual.

Q. Where are stem cells found?

A. Embryonic stem cells are ONLY found in human embryos at the very earliest stage of life (first few days). Adult stem cells can be found in almost any part of the human body, including skin, fat, bone marrow, baby teeth, and a newborn's cord blood or placenta.

Q. What can stem cells do?

A. Adult stem cells can be kept growing almost indefinitely in culture, with some having the ability to grow cells for treatments and to form any adult body tissue. Some scientists believe that embryonic stem cells are able to produce a more abundant supply of cells and that they can form any adult body tissue.

Q. Because the embryos wanted for research are going to be destroyed anyway, what is the harm in using them for a good purpose?

A. Although there are approximately 400,000 frozen embryos in the United States, only 11,000 are available to be destroyed to obtain their stem cells.

One expert noted that if 10,000 embryos were thawed for research purposes, there would be only 100 that are viable to create stem cell lines.

Frozen embryos can and are adopted and implanted into women to develop fully and be born. It is ethically wrong to destroy or kill one human being to benefit another. In embryonic stem cell research, a human life is destroyed for a "potential," not yet realized, benefit of another.

Q. How does cloning fit into the research picture?

A. Some scientists theorize that they might eliminate the embryonic stem cell rejection factor by creating human clones and destroying them to create stem cell lines for a specific individual.

To create clones, a large number of human eggs are needed since there is a huge failure rate in creating clones evidenced by the attempts at creating animal clones. Researchers would encourage many vulnerable women to subject themselves to undue risk in order to obtain their eggs to create human clones. There is also evidence that embryonic stem cells from cloned embryos will still not avoid transplant rejection.

Q. Why does the Pennsylvania Pro-Life Federation object to the use of taxpayer funding of embryonic stem cell research?

A. As a taxpayer, you should not be forced to pay for the unethical embryonic stem cell research supported by Gov. Ed Rendell.

