

# US lifts some restrictions on embryo stem cells

April 17 2009, By LAURAN NEERGAARD , AP Medical Writer

---

(AP) -- When President Barack Obama eased limits on taxpayer-funded embryonic stem cell research, the big question became how far scientists could go. Friday, the government answered: They must use cells culled from fertility clinic embryos that otherwise would be thrown away.

Draft guidelines released by the National Institutes of Health reflect rules with broad congressional support, excluding more controversial sources such as cells derived from embryos created just for experiments.

"We think this will be a huge boost for the science," said Acting NIH Director Raynard Kington. "This was the right policy for the agency at this point in time."

The limit will disappoint some researchers who wanted to use a broader variety of cells. But it still means that perhaps hundreds more stem cell lines will be available for government-funded study soon.

"Some groups and scientists have wanted the administration to go further. But we are happy to have this progress after such a long period of limited opportunities to pursue this very important line of research," said Alan Leshner of the American Association for the Advancement of Science.

The guidelines are "a reasonable compromise based on where the science stands now," said Dr. Sean Morrison, director of the University of Michigan Center for Stem Cell Biology. "We may need to revisit some

of the details down the road depending on how the science develops."

Scientists are trying to harness embryonic stem cells - master cells that can morph into any cell of the body - to one day create replacement tissues and better treat, possibly even cure, ailments ranging from diabetes to Parkinson's to spinal cord injury.

Culling those stem cells - which can propagate indefinitely in lab dishes - destroys a days-old embryo, a result strongly opposed by many on moral grounds. So the Bush administration had limited taxpayer-supported research to a small number of embryonic stem cell "lines" or groups already in existence as of August 2001.

Last month, Obama lifted that restriction, widening the field. But he left it to the NIH to set ethics guidelines determining which cell lines now will qualify for government funding.

Federal law forbids using taxpayer money to create or destroy an embryo. At issue here are rules for working with cells that initially were created using private money.

Many scientists had hoped the guidelines would allow use of stem cells derived from embryos created just for science, perhaps even using cloning techniques that could make them genetically customized for a potential recipient.

But the NIH instead proposed limiting new grants to research using stem cells originally derived from fertility-clinic leftovers, the extra embryos that couples wind up not needing and thus often are thrown out.

That's in line with legislation passed by the last Congress but never signed by President George W. Bush. Besides, Kington noted, no one has yet created a stem cell line using cloning techniques.

"There's compelling broad support both in the scientific community and the public at large" for the fertility-clinic approach, Kington said. "There is not similar broad support for using other sources at this time."

The guidelines also demand that the woman or couple who donate the original embryo give proper informed consent. There are other options for such donors, such as donating the embryo to another infertile woman, and all must be explained. Also, the donation must be voluntary, without pressure from scientists.

Those donation practices are standard today, but they weren't just a few years ago - and Michigan's Morrison said some of the old Bush-approved lines may not meet the new standards. That poses a grave question, he said: Can work based on those older lines continue?

Friday's guidelines also clearly forbid some types of research using human embryonic stem cells, such as mixing them with embryos from monkeys and other primates.

Last year, the NIH funded about \$88 million in research using embryonic stem cells, Kington said. It's unclear how much more the agency may spend under the new policy.

The NIH will accept public comments on the guidelines for a month, and issue final rules by early July.

*©2009 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.*

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.