

Researcher admits mistakes in stem cell study

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A blockbuster study in which US researchers [reported that they had turned human skin cells into embryonic stem cells](#) contained errors, its lead author has acknowledged.

Shoukhrat Mitalipov nevertheless adamantly stood by the conclusions of the study published last week in journal *Cell*, which reported that human stem cell lines for the first time had been created via cloning.

The journal *Nature* contacted Mitalipov after an anonymous online critic on PubPeer spotted four separate problems in the paper.

In an interview with *Nature*, Mitalipov confirmed that three errors were made in the rush to publish—but denied the fourth issue raised was an error and said the overall conclusions were unaffected.

"The results are real, the cell lines are real, everything is real," said Mitalipov, a [reproductive biology](#) specialist at the Oregon Health and Science University in Beaverton.

"I personally made the cells," he said. "I saw them grow into [colonies](#)."

He blamed the errors on his rush to publish the research, which he hoped to present next month at the International Society for [Stem Cell Research](#) meeting. "Maybe it was rushed," he said. "It was my [mistake](#)."

Mitalipov said his research team will be issuing an erratum correcting

the flaws, and hopes that other scientists will try to duplicate his findings, which will lend it even more [credibility](#).

"The first thing we want to do is have people confirm our results," Mitalipov said. "We are not hiding these cell lines."

The scientific community was divided as to how seriously to view the errors.

Robin Lovell Badge, who heads the Division of [Stem Cell Biology](#) and [Developmental Genetics](#) at the MRC National Institute for [Medical Research](#) in London, warned against a rush to condemn.

"I expect the errors above were also due to the rush to publish. The authors should be given a chance to answer and correct mistakes," he told Nature.

Others said they were surprised that Cell accepted the paper in just days—a time they deemed insufficient for proper peer review.

"The four-day review process was obviously inadequate," said Arnold Kriegstein, director of the stem cell program at the University of California, San Francisco.

"It's a degree of sloppiness that you wouldn't expect in a paper that was going to have this high profile," Kriegstein told the British journal.

"One worries if there is more than meets the eye and whether there are other issues with the work that are not as apparent," he said.

The cloning method written about in the article was described as an important breakthrough because it does not destroy embryos in creating the type of stem cell that can morph into any other type of cell in the

body.

The technique involves transplanting an individual's DNA into an egg cell that has been stripped of genetic material, a variation of a method called somatic cell nuclear transfer.

Scientists said the research could one day offer new pathways in the fight against Parkinson's disease, multiple sclerosis, spinal cord injuries and blindness.

Since the reprogrammed cells use genetic material from the patient, there is no concern about transplant rejection.

Another advantage of the technique is that it circumvents some of the ethical challenges inherent when using fertilized embryos to obtain stem cells.

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