

Generating tissue to repair knee cartilage and hearts more likely in wake of stem cell study

A new study from the National Institutes of Health, or NIH, has found that induced pluripotent stem cells would be safe to use in genetic engineering.

Induced pluripotent stem cells, or iPSCs, are the result of a breakthrough technique developed by Dr. Shinya Yamanaka, Ph.D., and Kazutoshi Takahashi, Ph.D., to return adult human cells to their earliest stage of development, and then change it into different types of cells in the body.

The practice of using iPSCs in medical advancements such as generating cartilage cell tissue to repair knees or cardiac cells to restore damaged heart tissue has been slowed by concerns from the medical community that the cells could be more susceptible to genetic mutations.

But the new study from the National Human Genome Research Institute, or NHGRI, part of the NIH, has found that iPSCs are no more likely to develop genetic mutations than cells duplicated by subcloning, a process where single cells are cultured individually and then grown into a cell line.

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“These findings suggest that the question of safety shouldn’t impede research using iPSC,” said Dr. Pu Paul Llu, senior investigator in NHGRI’s Translational and Functional Genomics Branch....

[The study can be found [here](#).]

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Induced pluripotent stem cells don’t increase mutations: Study](#)