

Harvard offers new hope for diabetics

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Researchers at the Harvard University have successfully produced insulin-producing beta cells using human embryonic stem cells. The stem cell-derived beta cells are currently undergoing trials in animal models, including non-human primates. Researchers believe that these cells can be ready for human transplantation within a few years. This research marks a major discovery for the treatment of type 1 diabetes.

"There have been previous reports of other labs deriving beta cell types from stem cells, [but] no other group has produced mature beta cells as suitable for use in patients," said Professor Doug Melton of Harvard University, lead author of the study in a statement. He added, "We are now just one pre-clinical step away from the finish line."

According to the researchers, the mice treated with the transplanted pancreatic cells are still producing insulin many months after being injected. Trials on laboratory monkeys are however needed before the technology can be transferred to humans. Experts in the field believe that this is an important advance for the field of diabetes and particularly people with Type 1 diabetes. The discovery could lead to the cure of the disease.