ADULT CELLS successfully TREAT HUMANS with diabetes:

2005 Islet cells can be donated from live donors for patients, opening up many more transplant possibilities. Using this technique, a mother donated cells for her diabetic daughter, alleviating the diabetic symptoms. Matsumota S et al., Insulin independence after living-donor distal pancreatectomy and islet allotransplantation, The Lancet, 365, 1642-1644, 7 May 2005.

2001 The Edmonton protocol was used to isolate cadaveric islet cells to treat 12 people with juvenile diabetes. Ryan A. et al., Glycemic Outcome Post Islet Transplantation, Annual Meeting of the American Diabetes Association, June 22-26, 2001. Since 2001, over 200 diabetic patients have been treated with this protocol.

ADULT STEM CELLS successfully TREAT diabetes in MICE:

2006 Tulane researchers showed that human bone marrow adult stem cells restored normal insulin secretion and blood sugar in mice, and promoted repair of both pancreas and kidney tissue. Lee RH et al., Multipotent stromal cells from human marrow home to and promote repair of pancreatic islets and renal glomeruli in diabetic NOD/scid mice, Proceedings of the National Academy of Sciences USA 103, 17438-17443, November 14, 2006.


2005 Israeli scientists have found that patients could serve as their own donors, converting their liver cells to insulin-secreting cells. Sapir et al.,- Cell-replacement therapy for diabetes: generating functional insulin-producing tissue from adult human liver cells, PNAS 102, 7964-7969, 17 May 2005.

2003 Researchers used spleen cells to help regenerate pancreatic islet cells that produced insulin and permanently reversed diabetes in mice. The lead researcher stated that using this procedure “patients with fully established diabetes possibly could have their diabetes reversed” (BBC News Online, 14 November 2003), and is ready to test the approach in clinical trials. Kodama S, et al., Islet regeneration during the reversal of autoimmune diabetes in NOD mice, *Science* 302, 1223-1227, Nov 14, 2003.

2002 University of Florida researchers turned liver stem cells into pancreatic cells. When implanted into mice, these transformed cells reversed hyperglycemia in 10 days. Yang L. et al., In vitro trans-differentiation of adult hepatic stem cells into pancreatic endocrine hormone producing cells, *Proc Natl Acad Sci USA*, 99, 8078-8083, 11 June 2002.

**Touted ESCR Diabetes Studies—NO CURES:**


2004 Scientists found that what appeared to be insulin-producing cells differentiated from embryonic stem cells did not actually make insulin, and formed tumors. Sipione S *et al.*, Insulin expressing cells from differentiated embryonic stem cells are not beta cells, *Diabetologia* 47, 499-508, 2004.


2003 Repeat of previous studies showed that embryonic stem cells did not make insulin. Rajagopal J *et al.*, Insulin staining of ES cell progeny from insulin uptake, *Science* 299, 363; 17 Jan 2003.

2002 A study showed embryonic stem cells turned into a kind of insulin-producing cell, not beta cells, that produced 13% of the normal insulin levels. When injected, the mice were kept alive but not enough to cure the diabetes. Hori Y, et al., Growth inhibitors promote differentiation of insulin-producing tissue from embryonic stem cells, *Proc Natl Acad Sci USA* 99, 16105-16110, Dec 10, 2002.

2001 Media-heralded study showed that embryonic stem cells turned into pancreatic cells. In fact, the cell made only 1/50 the normal amount of insulin and the mice died. Lumelsky N, et al., Differentiation of embryonic stem cells to insulin-secreting structures similar to pancreatic islets, *Science* 292, 1389-1394; May 18, 2001.