Proponents of embryonic stem cell research have created a false impression that these cells have a proven therapeutic use. On *Nightline* on June 20, for example, Ted Koppel said that while adult stem cells have some uses, embryonic stem cells are "the most successful to date." In fact the embryonic cells have *never* helped a human patient; any claim that they may someday do so is guesswork. Adult stem cells have proven benefits, and new uses are constantly being found:

CURRENT CLINICAL USE OF ADULT STEM CELLS TO HELP HUMAN PATIENTS

Autoimmune diseases (multiple sclerosis, lupus, juvenile and other rheumatoid arthritis)

Stroke

Immunodeficiencies, including a new treatment for severe combined immune deficiency (when used with gene therapy)

Anemia

Epstein-Barr virus infection

Corneal damage (full vision restored in most patients treated in clinical trials)

Blood and liver diseases

Osteogenesis imperfecta

Cancer treatment (in combination with

chemotherapy and/or radiation):

Brain tumors Retinoblastoma Ovarian cancer Solid tumors Testicular cancer

Multiple myeloma, leukemias

Breast cancer Neuroblastoma

Non-Hodgkin's lymphoma Renal cell carcinoma

Cardiac repair after heart attack (clinical trials announced Spring 2001)

Type I diabetes (not stem cells as such, but pancreatic islet cells from donors)

Cartilage and bone damage

(For details and citations see http://stemcellresearch.org)

LIST OF CONDITIONS FOR WHICH EMBRYONIC STEM CELLS HAVE HELPED HUMAN PATIENTS: There is no list. These cells have never helped a human patient.

Two quotes from a June 22, 2001 Workshop sponsored by the National Academy of Sciences' Institute of Medicine in Washington DC, "Stem Cells and the Future of Regenerative Medicine":

- "There is no evidence of therapeutic benefit from embryonic stem cells."
- Marcus Grompe, M.D., Ph.D., Department of Molecular and Medical Genetics, Oregon Health Sciences University an expert in cell transplantation to repair damaged livers
- "There is no experience with embryonic stem cells in humans, and very little in mice."
- Bert Vogelstein, Professor of Oncology and Pathology at Johns Hopkins University and Chairman of the Institute of Medicine's committee studying stem cell research. Dr. Vogelstein described all claims of therapeutic benefit from embryonic stem cells as "conjectural."