

"As to diseases, make a habit of two things to help, or at least do no harm." Hippocrates, *The Epidemics* —

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Paper in Journal of American Medical Association again Demonstrates **Therapeutic Benefits of Adult Stem Cells**

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New Research Validates the Do No Harm List of Adult Stem Cell Treatments

A paper published late Tuesday, February 26, in the Journal of the American Medical Association (JAMA) (1) validates a list posted on the DNH website that shows the therapeutic benefits of adult stem cells for human patients for a variety of diseases and conditions (2). Proponents of human embryonic stem cell research and human cloning for research have in the past attempted to discredit the DNH list, but the newly published research attests to its veracity (3).

Researchers at Northwestern University did a rigorous analysis of publications related to adult stem cell treatments for autoimmune and cardiovascular diseases. They limited their analysis only to those specific diseases, and further limited their review to published studies with larger numbers of patients and specific outcome measurements, finally analyzing 69 studies in detail out of 926 total articles. They specifically excluded traditional adult stem cell treatments related to cancers or blood diseases.

No embryonic stem cell studies were reviewed because there have been no studies in human patients; as the authors note, embryonic stem cells are "difficult to control due to their tendency to form tumors" and have other practical problems.

While the authors are cautious to point out the early stage of development of these treatments, and the need for more extensive clinical trials, their analyses of the outcomes show that adult stem cells were effective at improving the health of patients. The published reports that were analyzed examined studies of adult stem cells to treat autoimmune diseases including multiple sclerosis, systemic lupus, system sclerosis, type I (juvenile) diabetes, rheumatoid arthritis, Crohn disease, and cardiovascular diseases including acute heart attack damage, chronic coronary artery disease, and peripheral vascular disease. In the studies examined, the range of patient health improvement ranged from modest to significant.

Adult stem cells continue to show their ability to successfully treat human disease and injury, while embryonic stem cells continue to demonstrate zero benefits for humans, and only limited results in animal models.

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- Burt RK, Loh Y, Pearce W, Beohar N, Barr WG, Craig R, Wen Y, Rapp JA, Kessler J, Clinical applications of blood-derived and marrow-derived stem cells for nonmalignant diseases, Journal of the American Medical Association 299, 925-935, 27 February 2008
- Benefits of Stem Cells to Human Patients- http://stemcellresearch.org/facts/treatments.htm; Peer-Reviewed References Showing Applications of Adult Stem Cells that Produce Therapeutic Benefit for Human Patients- http://stemcellresearch.org/facts/asc-refs.pdf;
- See also: Prentice DA and Tarne G (2007) Treating Diseases with Adult Stem Cells. Science 315, 328, 19 January 2007:

Prentice DA and Tarne G (2007) Adult versus embryonic stem cells: Treatments. Science 316, 1422-1423, 8 June 2007