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THIS WAY IN: To China for Stem Cells

BY LARRY SCHUSTER

If you have amyotrophic lateral sclerosis (ALS, or Lou Gehrig's disease), and you've been in a wheelchair for a year or more, this ad from a company in China for a stem cell therapy (SCT) bolstered by a bone marrow transplant (BMT) is aimed at you:

7 SCTs and 1 BMT at a total cost of \$33,800.00 USD.

The ad, however, fails to note that no rigorous study has ever been conducted on the therapies to determine if they have any benefit on the course of the disease in ALS, in spinal cord injuries, or in any of a large number of neurological illnesses and conditions for which the company offers the treatments, which feature cord-blood derived stem cells.

Lucie Bruijn, Ph.D., scientific director and vice president of the ALS Association, says there's certainly been no evidence that bone marrow transplants have any value in treating ALS patients. She calls commercialization of these various unproven cell transplant therapies unethical.

Sean Hu, Ph.D., chief executive officer of Beike, himself notes the limitations of the therapy in ALS patients.

Before the treatment they could reach their hand only to the chest. After treatment they can comb their hair and wash their face, Dr. Hu says. But the improvements don't last long. That's the problem. Still, he says, many patients return to repeat the therapy.

Some independent research suggests the immediate improvements sometimes seen after such treatments may be due to a powerful placebo effect, triggered in part by intensive community fundraising efforts and support. Dr. Hu disagrees, saying he believes that growth factors released during Beike's therapy are responsible.

Several American researchers have tried to find whether the cell treatments offered by commercial clinics in China have any effect. So far, there's been no clear evidence of benefit. Dr. Hu says that they hope to have trial data soon. As we wait for our international trials to start, we believe we should conduct controlled studies here in China. This is what led us to do the optic nerve hypoplasia study, which we have worked on with physicians from the U.S. to make sure that it was designed in a way that will gain acceptance from the international scientific community.

Yet, after hearing about the billions of dollars allocated for stem cell research in California and elsewhere and reading the hopeful promotions by the stem cell clinics and companies, many patients refuse to wait for evidence of benefit.

I need those stem cells, patients sometimes tell Bruce H. Dobkin, M.D., of the Reed Neurologic Research Center at the University of California-Los Angeles, and editor in chief of the journal *Neurorehabilitation and Neural Repair*. Usually, he can discourage the patient from going to the stem cell clinics after talking about what is known about the therapy and the risks, Dr. Dobkin says. No one has reported a clinically important and lasting gain of function in patients.