

# ADULT STEM CELL RESEARCH: THE CLEAR WINNER



**Adult stem cells have treated over 58 diseases in human patients in published clinical studies. Embryonic stem cells have not treated even ONE patient.**

For EVERY treatment success claimed by embryo stem cell proponents, there is an ethical therapy either available or in the pipeline that is much more promising.

<p><b>HYPED EMBRYONIC STEM CELL TREATMENTS:</b> Mixed results in animal models.</p>	<p><b>MORE SUCCESSFUL, ETHICAL ALTERNATIVE:</b> Treating HUMANS today.</p>
<p><b>Parkinson's Disease</b></p>	
<p>In 2004, human embryonic stem cells were differentiated into dopamine-producing neurons and transplanted into a rat model of Parkinson's. This treatment only "slightly" improved symptoms in rats (about 25%).</p> <p><b>In a similar study in 2002, one-fifth (20%) of the rats died of brain tumors caused by the embryonic stem cells. Hardly a successful treatment when 20% of subjects are killed in the process.</b></p>	<p>Parkinson's patient treated with his own adult stem cells continues to exhibit relief from 80% of his symptoms more than 6 years after his surgery. <b><u>A Phase I human clinical trial using this therapy is currently underway.</u></b></p> <p><b><u>A Phase II clinical trial is underway</u></b> in human patients using a growth factor to stop the destruction of neurons in the brain. In the Phase I trial, patients showed 60% improvement in their symptoms.</p>
<p><b>Spinal Cord Injury</b></p>	
<p>In 2002 researchers reported using human ES cells to treat SCI in rats. This result has only recently been published, and the treatment only marginally helped a few rats.</p>	<p>Dr. Carlos Lima has <b><u>treated over 34 patients</u></b> with spinal cord injury in Portugal with their own adult stem cells.</p> <p><b><u>Umbilical cord blood cells were used to treat a South Korean woman</u></b> who had been paralyzed for 19 years. She can now walk with braces.</p>
<p><b>Juvenile Diabetes</b></p>	
<p>Several reports have claimed to turn human ES cells into insulin-producing cells. In each case, the insulin levels produced have been very low, and other researchers, including Dr. Doug Melton from Harvard, have demonstrated that <b><u>these cells were likely not producing insulin at all.</u></b></p>	<p>Dr. Denise Faustman, a leading diabetes researcher from Harvard, has <b><u>completely reversed</u></b> end-stage Juvenile diabetes in mice and has FDA approval to begin a <b><u>human clinical trial.</u></b></p>

## Published treatments in HUMAN PATIENTS

### Embryonic

### Adult

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| <ol style="list-style-type: none"> <li>1 Brain Cancer</li> <li>2 Retinoblastoma</li> <li>3 Ovarian Cancer</li> <li>4 Merkel Cell Cancer</li> <li>5 Testicular Cancer</li> <li>6 Lymphoma</li> <li>7 Acute Lymphoblastic Leukemia</li> <li>8 Acute Myelogenous Leukemia</li> <li>9 Chronic Myelogenous Leukemia</li> <li>10 Juvenile Myelomonocytic Leukemia</li> <li>11 Angioimmunoblastic Lymphadenopathy with Dysproteinemia</li> <li>12 Multiple Myeloma</li> <li>13 Myelodysplasia</li> <li>14 Breast Cancer</li> <li>15 Neuroblastoma</li> <li>16 Non-Hodgkin's Lymphoma</li> <li>17 Hodgkin's Lymphoma</li> <li>18 Renal Cell Carcinoma</li> <li>19 Various Solid Tumors</li> <li>20 Soft Tissue Sarcoma</li> <li>21 Scleromyxedema</li> <li>22 Multiple Sclerosis</li> <li>23 Crohn's Disease</li> <li>24 Rheumatoid Arthritis</li> <li>25 Juvenile Arthritis</li> <li>26 Systemic Lupus</li> <li>27 Polychondritis</li> <li>28 Systemic Vasculitis</li> <li>29 Sjogren's Syndrome</li> <li>30 Behcet's Disease</li> <li>31 Myasthenia Gravis</li> <li>32 Red Cell Aplasia</li> </ol> | <ol style="list-style-type: none"> <li>33 Autoimmune Cytopenia</li> <li>34 X-Linked Lymphoproliferative Syndrome</li> <li>35 X-Linked Hyperimmunoglobulin e-M Syndrome</li> <li>36 Severe Combined Immunodeficiency Syndrome-X1</li> <li>37 Sickle Cell Anemia</li> <li>38 Sideroblastic Anemia</li> <li>39 Waldenstrom's Macroglobulinemia</li> <li>40 Aplastic Anemia</li> <li>41 Amegakaryocytic Thrombocytopenia</li> <li>42 Chronic Epstein-Barr Infection</li> <li>43 Fanconi's Anemia</li> <li>44 Diamond Blackfan Anemia</li> <li>45 Thalassemia Major</li> <li>46 Stroke</li> <li>47 Osteogenesis Imperfecta</li> <li>48 Sandhoff Disease</li> <li>49 Corneal Degeneration</li> <li>50 Hemophagocytic Lymphohistiocytosis</li> <li>51 Primary Amyloidosis</li> <li>52 Limb Gangrene</li> <li>53 Surface Wound Healing</li> <li>54 Heart Damage</li> <li>55 Parkinson's Disease</li> <li>56 Spinal Cord Injury</li> <li>57 Scleroderma</li> <li>58 Hurler's Syndrome</li> </ol> |
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**58**