

Translational Cell Therapies in Beigang Hospital of China Medical University, Taiwan

Shinn-Zong Lin, M.D., Ph.D., C.P.I., FNAI

Department of Neurosurgery, China Medical University Beigang Hospital, Yunlin, Taiwan

Center for Neuropsychiatry, China Medical University Hospital, Taichung, Taiwan

Graduate Institute of Immunology, China Medical University, Taichung, Taiwan

Cell Therapies in neurological diseases and liver cirrhosis were approved by Taiwan Food and Drug Administration (TFDA). A phase II, open label, randomized trial in chronic stroke patients by transplanting autologous CD34+ hematopoietic stem cells into peri stroke brain were conducted and results showed that it is safe, feasible and possibly has beneficial effect in neurogenesis and motor improvement. A combined intracranial implantation of autologous Adipose tissue-derived stem cells (ADSCs) into the brain along the surrounding pyramidal tract areas with intravenous injections in an ALS patients was approved by TFDA as a compassionate trial. Three months after therapy, the ALS patient has had modest improvement in respiration, salivation and hand movement. Other trials by using cord blood cells in stroke, by using autologous ADSCs in treating cirrhosis of liver, chronic stroke and tendon injury will be reported in the meeting.