Supplementary Table 1. Cellular Therapies in Traumatic Brain Injury and Spinal Cord Injury Clinical Trials

Official Title	ClinicalTrials.gov Identifier	Status	Phase	Target Enrollment	Ages	Cell Type	Route of Administration	Primary Outcome Measure	Sponsor
Autologous Bone Marrow Derived Cell Transplant in Spinal Cord Injury Patients	NCT00816803	This study has been completed.	I, II	80	10 to 36 years	Autologous bone marrow derived cell	N/A	Safety as measured by absence of neuronal changes, infections or increased intracranial tension, and monitoring for any abnormal growth or tumor formation by MRI	Cairo University, Egypt
Autologous Bone Marrow Mononuclear Cell Therapy for Spinal Cord Injury	NCT02027246	This study has been completed.	I	166	8 months to 63 years	BMMNC	N/A	Change in clinical symptoms	Neurogen Brain and Spine Institute, India
Autologous Mesenchymal Stem Cells in Spinal Cord Injury Patients	NCT01694927	This study is enrolling participants by invitation only.	II	30	2 to 65 years	MSC	Intralesional	Safety	Clínica Las Condes. Chile
A Double-Blind, Controlled Phase 2 Study of the Safety and Efficacy of Modified Stem Cells (SB623) in Patients With Chronic Motor Deficit From Traumatic Brain Injury	NCT02416492	This study is not yet open for participant recruitment.	II	52	18 to 75 years	SB623 cells	Surgical implantation	Change in Fugl-Meyer Motor Scale	SanBio, Inc., USA
A Phase 1, Open-label, Single-site, Safety Study of Human Spinal Cord-derived Neural Stem Cell Transplantation for the Treatment of Chronic SCI	NCT01772810	This study is currently recruiting participants.	I	4	18 to 65 years	HSSC	Surgical implantation	Incidence of adverse events	Neuralstem Inc., USA
A Phase I/II Study of the Safety and Preliminary Efficacy of Intramedullary Spinal Cord Transplantation of Human Central Nervous System Stem Cells (HuCNS-SC®) in Subjects With Thoracic (T2-T11) Spinal Cord Trauma	NCT01321333	This study has been completed.	I, II	12	18 to 60 years	HuCNS-SC®	Intramedullary	Incidence/types of adverse events	StemCells, Inc., USA
A Phase II Study of Transplantation of Autologous Adipose Derived Stem Cells in Completely Acute Spinal Cord Injury	NCT02034669	This study is currently recruiting participants.	I, II	48	19 to 60 years	ADSCs	Intradural and intrathecal injection, IV	Incidence of adverse events	Tri Phuoc Biotechnology., JSC, Vietnam
A Phase II/III Clinical Trial to Evaluate the Safety and Efficacy of Bone Marrow-derived Mesenchymal Stem Cell Transplantation in Patients With Chronic Spinal Cord Injury	NCT01676441	This study is currently recruiting participants.	II, III	32	16 to 65 years	MSC	Intramedullary and intrathecal injection	Motor Score of the American Spinal Injury Association (ASIA) scale scores	Pharmicell Co., Ltd., South Korea
A Single-Blind, Randomized, Parallel Arm, Phase II Proof-of-Concept Study of the Safety and Efficacy of Human Central Nervous System Stem Cells Transplantation in Cervical Spinal Cord Injury	NCT02163876	This study is currently recruiting participants.	II	50	18 to 60 years	HuCNS-SC	Intramedullary transplantation	Change from baseline in ISNCSCI upper extremity motor scores	StemCells, Inc., USA
Different Efficacy Between Rehabilitation Therapy and Umbilical Cord Derived Mesenchymal Stem Cells Transplantation in Patients With Chronic Spinal Cord Injury in China	NCT01873547	The recruitment status of this study is unknown because the information has not been verified recently.	III	300	20 to 65 years	UC-MSC	Intrathecal injection	Neurological Function Score (i.e., ASIA and Barthel Index)	General Hospital of Chinese Armed Police Forces, China
Efficacy Difference Between Rehabilitation Therapy and Umbilical Cord Derived Mesenchymal Stem Cells Transplantation in Patients With Acute or Chronic Spinal Cord Injury in China	NCT01393977	The recruitment status of this study is unknown because the information has	II	60	20 to 50 years	UC-MSC	N/A	Electromyogram and electroneurophysiologic test results	General Hospital of Chinese Armed Police Forces, China

		not been verified recently.							
Evaluation of Autologous Mesenchymal Stem Cell Transplantation in Chronic Spinal Cord Injury: a Pilot Study	NCT02152657	This study is currently recruiting participants.	I, II	5	18 to 65 years	MSC	Percutaneous injection	Adverse events as detected by MRI, laboratorial, and radiological exams	Hospital Sao Rafael, Brazil
Long-term Follow-up Study of the Phase I/II Safety and Preliminary Efficacy Investigation of Intramedullary Spinal Cord Transplantation of HuCNS-SC® in Subjects With Thoracic (T2-T11) Spinal Cord Trauma	NCT01725880	This study is enrolling participants by invitation only.	N/A	12	18 to 65 years	HuCNS-SC	Intramedullary	ASIA Impairment Scale scores	StemCells, Inc., USA
Open Label Study of Autologous Bone Marrow Mononuclear Cells in Spinal Cord Injury	NCT02009124	This study is currently recruiting participants.	II	500	12 months to 65 years	BMMNC	Intrathecal injection	Change in clinical symptoms of spinal cord injury after 6 months	Neurogen Brain and Spine Institute, India
Open Label Study of Autologous Bone Marrow Mononuclear Cells in Traumatic Brain Injury	NCT02028104	This study is currently recruiting participants.	I	50	6 months to 65 years	BMMNC	N/A	Change in clinical symptoms of TBI	Neurogen Brain and Spine Institute, India
Phase I Pilot Study to Evaluate the Security of Local Administration of Autologous Stem Cells Obtained From the Bone Marrow Stroma, in Traumatic Injuries of the Spinal Cord	NCT01909154	This study has been completed.	I	12	18 to 60 years	BMStC	Intermedular, subarachnoid, and intrathecal	Incidence of adverse events	Puerta de Hierro University Hospital, Spain
Phase I, Single Center, Trial to Asses Safety and Tolerability of the Intrathecal Infusion of Ex-vivo Expanded Bone-marrow Derived Mesenchymal Stem Cells for the Treatment of Spinal Cord Injury	NCT01162915	This study has suspended participant recruitment.	I	10	18 to 65 years	BMMSC	Intrathecal injection	Safety evaluation	TCA Cellular Therapy, LLC, USA
Phase 1 Study of Autologous Bone Marrow Stem Cell Transplantation in Patients With Spinal Cord Injury	NCT01325103	This study has been completed.	I	20	18 to 50 years	BMMSC	Transplantation into the lesion area	Feasibility and safety	Hospital Sao Rafael, Brazil
Phase I/II Trial of Autologous Bone Marrow Derived Mesenchymal Stem Cells to Patients With Spinal Cord Injury	NCT01446640	The recruitment status of this study is unknown because the information has not been verified recently.	I, II	20	16 to 60 Years	BMMSC	IV and intrathecal	Incidence of adverse events	Guangzhou General Hospital of Guangzhou Military Command, China
Phase 2 Trial of Pediatric Autologous Bone Marrow Mononuclear Cells for Severe Traumatic Brain Injury	NCT01851083	This study is currently recruiting participants.	I/II	50	5 to 17 years	BMMNC	IV	White and gray matter structural preservation on DTMRI	The University of Texas Health Science Center, USA
Safety and Effect of Adipose Tissue Derived Mesenchymal Stem Cell Implantation in Patients With Spinal Cord Injury	NCT01769872	This study is currently recruiting participants.	I, II	15	19 to 70 years	ADSC	Intrathecal	ASIA scores	K-Stemcell Co Ltd, South Korea
Safety and Efficacy of Autologous Neural Stem Cell Transplantation in Patients With Traumatic Spinal Cord Injury	NCT02326662	This study is currently recruiting participants.	I, II	30	18 to 50 years	MSC-derived NSC + 3D matrix as needed	Intraspinal and intrathecal injection	Incidence of adverse events	Federal Research Clinical Center of Federal Medical & Biological Agency, Russia
Safety and Efficacy of Nerve Regeneration-guided Collagen Scaffold Combined With Mesenchymal Stem Cells Transplantation in Spinal Cord Injury Patients	NCT02352077	This study is currently recruiting participants.	I	30	18 to 65 years	Nerve regeneration -guided collagen scaffold + MSC	N/A	Incidence of adverse events	Chinese Academy of Sciences, China

Safety and Feasibility Study of Cell Therapy in Treatment of Spinal Cord Injury	NCT02237547	This study is currently recruiting participants.	I, II	20	18 to 50 years	UC-MSC and BMMNC	Intrathecal and IV	Incidence of adverse events	Translational Biosciences, Rep. of Panama
Safety of Autologous Adipose Derived Mesenchymal Stem Cells in Patients With Spinal Cord Injury	NCT01274975	This study has been completed.	I	8	19 to 60 years	AdMSCs (Astrostem®)	IV	Safety evaluation	K-Stemcell Co Ltd., South Korea
Safety of Autologous Stem Cell Treatment for Spinal Cord Injury in Children	NCT01328860	This study has been terminated.	I	10	1 to 15 years	BMPC	IV	ASIA - Standard Neurological Classification of Spinal Cord Injury scores	James E.Baumgartner, MD, USA
Safety of Autologous Stem Cell Treatment for Traumatic Brain Injury in Children	NCT00254722	This study has been completed.	I	10	5 to 14 years	BMPC	IV	Neurological events and infectious morbidity	The University of Texas Health Science Center, USA
Study the Safety and Efficacy of Bone Marrow Derived Autologous Cells for the Treatment of Spinal Cord Injury. It is Self Funded (Patients' Own Funding) Clinical Trial	NCT01833975	This study is currently recruiting participants.	I, II	50	18 to 55 years	BMMNC	Intrathecal injection	Improvement in overall sensory for motor control using Frankel score	Chaitanya Hospital, India
Surgical Transplantation of Autologous Bone Marrow Stem Cells With Glial Scar Resection for Patients of Chronic Spinal Cord Injury and Intra-thecal Injection for Acute and Subacute Injury - A Preliminary Study	NCT01186679	This study has been completed.	I, II	12	20 to 55 years	BMSC	N/A	Incidence of adverse events	International Stemcell Services Limited, India
The Effect of Intrathecal Transplantation of Autologous Adipose Tissue Derived Mesenchymal Stem Cells in the Patients With Spinal Cord Injury, Phase I Clinical Study	NCT01624779	This study has been completed.	I	15	19 to 70 years	AdMSCs	Intrathecal injection	MRI changes	Bukwang Pharmaceutical, South Korea
The Safety of Autologous Human Schwann Cells in Subjects With Chronic Spinal Cord Injury Receiving Rehabilitation	NCT02354625	This study is currently recruiting participants.	I	10	18 to 65 years	ahSC	Autologously transplanted into the epicenter of the participant's spinal cord injury	International Standards of Neurological Classification for Spinal Cord Injury scores, MRI, neuropathic pain	W. Dalton Dietrich, The Miami Project to Cure Paralysis, USA
The Safety of Autologous Human Schwann Cells in Subjects With Subacute Spinal Cord Injury	NCT01739023	This study is currently recruiting participants.	I	10	18 to 60 years	ahSC	Autologously transplanted into the epicenter of the participant's spinal cord injury	International Standards of Neurological Classification for Spinal Cord Injury scores, MRI, neuropathic pain	W. Dalton Dietrich, The Miami Project to Cure Paralysis, USA
To Study the Safety and Efficacy of Autologous Bone Marrow Stem Cells in Patients With Spinal Cord Injury	NCT01730183	The recruitment status of this study is unknown because the information has not been verified recently.	I, II	15	18 to 60 years	BMSC	Intrathecal injection	Incidence of adverse events	Max Institute of Neurosciences, India
Treatment of Severe Adult Traumatic Brain Injury Using Bone Marrow Mononuclear Cells	NCT01575470	This study has been completed.	I, II	20	18 to 55 years	BMMNC	IV	Neurological events	The University of Texas Health Science Center, USA