

Table 1. Ongoing clinical trials in China related to MSCs Registered at *ClinicalTrials.gov*.

NCT Number	Trial Status	Diseases	Interventions	Phase s	No. of patients	Start Date	Outcome Measures
01902082	Recruiting	Acute Respiratory Distress Syndrome	Adipose-derived MSCs	I	20	2012-11-1	adverse events; improvement in clinical symptoms;cytokines (IL-6, IL-8, SP-D, TNF-alpha)
01765634	Recruiting	Acute Graft-versus-host Disease	MSCs	II	40	2013-1-1	efficacy of treatment for refractory aGVHD; acute and late toxic side effects of MSCs treatment
00953485	Recruiting	Sjogren's Syndrome	Allogeneic MSCs	I/II	20	2009-6-1	Sjogren's syndrome disease activity index; pSS serology (ANA, dsDNA, SS-A, SS-B); improvement of salivary gland function
01446640	Recruiting	Spinal Cord Injury	BM-MSCs	I/II	20	2011-10-1	adverse events; electromyogram and electroneurophysiologic test; muscle strength assessment; motor and sensory assessment; ;
01446614	Recruiting	Parkinson's Disease	BM-MSCs	I/II	20	2011-10-1	adverse events; effect assessment;
01305694	Recruiting	Aplastic Anemia	BM-MSCs	I/II	50	2011-2-1	adverse events; hematologic response; relapse; clonal evolution to PNH; survival

00962923	Recruiting	Systemic Sclerosis	Allogeneic MSCs	I/II	20	2009-8-1	mRSS score; HRQOL score; SF-36 score ; remission for organ function; serum albumin, creatinin, weight loss, 24h proteinuria; SSc serology (ATA,ACA,ANA,anti-ssDNA,anti-dsDNA,IgM,IgG,and IgA, complement C3 and C4; change of peripheral blood B and T cells.
01360164	Recruiting	Hereditary Ataxia	UC-MSCs	I/II	20	2010-1-1	scores of International Cooperative Ataxia Rating Scale; the volume of cerebellum of brain; adverse Events
01547091	Recruiting	Rheumatoid Arthritis	UC-MSCs	I/II	200	2013-4-1	safety of MSC treatment; RA serology; Disease Activity Score (DAS 28) Index Mean Change From Baseline; patient's assessment of pain.
01724398	Recruiting	Liver Failure	UC-MSC	I/II	120	2012-11-1	survival rate,improve biochemical indexes [alanine aminotransferase (ALT), albumin (ALB), total bilirubin (TBIL), prothrombin time (PT), INR]; clinical symptom improvement; Child-Pugh score and MELD score; immune function improvement [including Th1/Th2]; adverse events and complications ;Incidence of hepatocellular carcinoma
00646724	Recruiting	Type 1 Diabetes Mellitus	cotransplantation of islet and MSCs	I/II	30	2008-1-1	exogenous insulin requirement; hemoglobin A1c; glucose and C-peptide levels; liver function; kidney function; portal vein ultrasound; autoantibodies; complete blood count

01443689	Recruiting	Burns	UC-MSCs	I/II	20	2011-7-1	the ratio of wound contraction and re-epithelialisation; complete healing time; Vancouver Scar Scale; incidence of infections and bleedings; engraftment assessment: vitality of the graft; McGill pain questionnaire; adverse Events
01610440	Recruiting	Duchenne Muscular Dystrophy	UC-MSCs	I/II	15	2011-10-1	Activities of Daily Living(ADL)scale; adverse event; change from baseline in CK, LDH, ALT, AST; manual muscle test(MMT); electromyography (EMG)
01413035	Recruiting	Type 2 Diabetes	UC-/Placenta-Derived-MSC	I/II	30	2011-7-1	ITT; insulin dosage; hemoglobin A1c; fast blood glucose (FBG) and postmeal blood glucose (PBG); C-peptide levels; serum insulin levels; serious adverse event
01714167	Recruiting	Stroke	intracerebral Autologous BM-MSCs transplantation	I	30	2012-6-1	NIH stroke scale; improvement of infarct size measured by brain MRI
01728727	Recruiting	Liver Cirrhosis	UC-MSC	I/II	240	2012-9-1	one year survival rate; MELD score; Child-Pugh score; alpha fetoprotein; renal function
01690247	Recruiting	Induce tolerance of Liver Transplantation	UC-MSC	I	50	2012-2-1	incidence rate of acute rejection; early liver function recovery; patient and graft survival; adverse events

00698191	Recruiting	Refractory Systemic Lupus Erythematosus	Allogeneic MSC	I/II	20	2007-3-1	Systemic lupus erythematosus disease activity index (SLEDAI); lupus serology (ANA, dsDNA, C3, C4);renal function (GFR, BUN, urinalysis); percentage of systemic T regulatory population
01420432	Recruiting	Ankylosing Spondylitis	UC-MSCs	I	10	2011-1-1	the Assessment of Spondyloarthritis International Society (ASAS) response; erythrocyte sedimentation rate (ESR); imageology; C-reactive protein (CRP); percentage of systemic T regulatory cell population; adverse events
01129739	Recruiting	Myelodysplastic Syndromes	UC-MSCs	II	30	2010-5-1	MDS clinical symptoms (mainly anemia symptoms); routine blood test; bone marrow cytomorphologic examination; percentage of T regulatory cell population in peripheral blood
01661842	Recruiting	Autoimmune Hepatitis	UC-MSCs	I/II	100	2011-10-1	serum alanine aminotransferase (ALT), AST, serum Tbil, immunoglobulin G (IgG), globulin; MELD score; adverse events
01213186	Recruiting	Immune Reconstitution in HIV-infected Patients	UC-MSCs	II	72	2013-1-1	adverse Events; the total CD4 T cell counts; the CD38 expression on CD8 T cells; plasma RNA copies/mL; the ratio of CD4 and CD8 T cells; the HLA-DR expression on CD8 T cells; quality of live; the occurring rate of tumor; opportunistic infections
NCT01219452	Not yet recruiting	Dilated Cardiomyopathy	UC-MSCs	I/II	30	2010-10-1	echocardiography; 24h HOLTER; the level of serum BNP,TNI,HGF, IF and G/M-CSF, c-kit,CD31,CD133

01946048	Not yet recruiting	Ischemic Cardiomyopathy	UC-MSCs	I	10	2013-9-1	heart function; all-cause mortality; all-cause morbidity; adverse events
00659217	Not yet recruiting	Lupus Nephritis	MSCs	I/II	20	2008-5-1	patient survival; creatinine and proteinuria; SLE disease activity index; serology (ANA, dsDNA); Complement C3 and C4
01494480	Enrolling by invitation	Amyotrophic Lateral Sclerosis	UC-MSCs	II	30	2012-3-1	nerve functional evaluation; forced vital capacity; blood test; urinal test; electrophysiology examination
01291329	Completed	Myocardial Infarction	Wharton's Jelly-Derived MSCs	II	160	2011-2-1	quantify myocardium metabolic and perfusion measured by F-18-fluorodeoxyglucose (F-18-FDG) positronemission tomography (PET) and 99mTctetrofosmine single-photon (SPET); global left ventricular ejection fraction measured by echocardiography; major adverse coronary events (MACE).
00658073	Completed	Renal Transplant Rejection	BM-MSCs	-	165	2008-3-1	incidence rate of biopsy-proven acute rejection; early renal function recovery; patient and graft survival ; prevalence of adverse events
01343511	Completed	Autism	UC-MSCsand human cord blood mononuclear cells	I/II	37	2009-3-1	Childhood Autism Rating Scale (ARS); clinical Global Impression Scale (GI); Aberrant Behavior Checklist; adverse Event
01221428	Active, not recruiting	Ulcerative Colitis	UC-MSCs	I/II	50	2010-9-1	enteroscopy and pathological report; the clinical symptom (including stomachache, abdominal distention, bloody purulent stool)

00813267	Active, not recruiting	Osteochondritis of the Femoral Head	BM mononuclear cell and MSCs	I	15	2009-12-1	the femoral head blood-supply artery angiographies; the areas of femoral head necrosis; coxa joint paining; walking distance; joint functions; quality of life
01809769	Active, not recruiting	Osteoarthritis	Adipose Tissue-derived MSCs	I/II	18	2013-3-1	WOMAC Score (the Western Ontario and McMaster Universities Osteoarthritis Index); adverse Events
01526850	Recruiting	Chronic Graft Versus Host Disease	Allogenic MSCs	II/III	100	1-Feb-12	total response rate (complete and partial response); one-year survival rate; disease relapse; quality of life
01873547	Recruiting	Spinal Cord Injury	UC-MSCs	III	300	4-Jun-13	neurological function score (ASIA and Barthel Index); electromyogram and electroneurophysiologic test; blood test
01929434	Not yet recruiting	Cerebral Palsy	UC-MSCs	II/III	300	20-Aug-13	Gross Motor Function Measure score; routine blood test; biochemical test