

SUPPLEMENTARY TABLE S2. TISSUE ENGINEERING-SPECIFIC CLINICAL TRIALS

<i>Category</i>	<i>Title</i>	<i>Phase</i>	<i>Sponsors/ collaborators</i>
Biomaterials	A Comparative Postmarketing Study of Commercially Available Peripheral Nerve Gap Repair Options	Phase 4	Industry
Biomaterials	A Safety and Efficacy Study of INTEGRA® Dermal Regeneration Template for the Treatment of Diabetic Foot Ulcers	Not applicable	Industry
Cells and biomaterials	A Safety Surveillance Study in Subjects with Macular Degenerative Disease Treated with Human Embryonic Stem Cell-Derived Retinal Pigment Epithelial Cell Therapy	Phase 1 phase 2	Industry
Stem cells	A Study of Modified Stem Cells in Traumatic Brain Injury (TBI)	Phase 2	Industry
Biomaterials	A Study of VentriGel in Post-MI Patients	Phase 1	Industry
Stem cells	A Study to Investigate the Safety and Possible Clinical Benefit of Multistem(r) in Patients with Moderate to Severe Ulcerative Colitis	Phase 2	Industry
Biomaterials	Acellular Porcine Dermal Matrix Wound Dressing in the Management of Diabetic Foot Ulcers	Phase 3	Industry, academia
Stem cells	Allogeneic Heart Stem Cells to Achieve Myocardial Regeneration	Phase 1 phase 2	Industry, government
Biomaterials	Amniotic Membrane in Total Knee Replacements to Reduce Scarring	Not applicable	Industry
Cells and biomaterials	Bio ACL Reconstruction Amnion Collagen Matrix Wrap and Stem Cells	Not Applicable	Industry, academia
Biomaterials	Bridge-Enhanced ACL Repair vs ACL Reconstruction	Not applicable	Hospital
Biomaterials	Bridge-Enhanced ACL Repair-Safety Study (BEAR Trial)	Phase 1	Hospital
Biomaterials	Case Series of Weekly Applications of dHACM in Treatment of Pressure Ulcers	Not applicable	Industry
Stem cells	CNS10-NPC-GDNF for the Treatment of ALS	Phase 1	Hospital, government
Biomaterials	Comparative Study of Amniotic Membrane Wound Graft in the Management of Diabetic Foot Ulcers	Not Applicable	Industry
Biomaterials	Comparative Study of Two Application Regimens of Amniotic Membrane Wound Graft in the Management of Diabetic Foot Ulcers	Not applicable	Industry
Biomaterials	Dehydrated Human Amnion Chorion Membrane (dHACM) vs. Control in the Treatment of Partial Thickness Burns.	Not applicable	Industry
Biomaterials	Dehydrated Human Umbilical Cord Allograft in the Management of Diabetic Foot Ulcers	Not applicable	Industry
Biomaterials	DermACELL in Subjects with Chronic Wounds of the Lower Extremities	Phase 4	Industry
Biomaterials	dHACM in Lumbar Decompression and Microdiscectomy Surgery	Not applicable	Industry
Biomaterials	dHACM Mesh in the Treatment of Diabetic Foot Ulcers	Not applicable	Industry
Biomaterials	DHACM vs Other Commercially Available Treatments	Not applicable	Industry
Stem cells	Dose Escalation Study of AST-OPC1 in Spinal Cord Injury	Phase 1 phase 2	Industry
Cells and biomaterials	Endoscopic Mucosal Resection and Cellular Matrix	Not applicable	Hospital
Biomaterials	Enhancing Guided Bone Regeneration by Modifying a Resorbable Membrane	Not applicable	Academia
Biomaterials	Evaluate Esophageal Reinforcement with ACell MatriStem Surgical Matrix: A Degradable Biologic scaffold Material	Phase 2	Industry, hospital
Stem cells	Evaluation of Safety and Exploratory Efficacy of CARTISTEM®, a Cell Therapy Product for Articular Cartilage Defects	Phase 1 phase 2	Industry
Cells and biomaterials	Evaluation of Trinity Evolution in Patients Undergoing Foot and Ankle Fusion	Not applicable	Industry
Cells and biomaterials	Feasibility Study of the TGI Adipose-derived Stromal Cell (ASC)-Coated ePTFE Vascular Graft	Not applicable	Industry
Stem cells	Follow-up Study of Chondrogen® Delivered by Intra-Articular Injection Following Meniscectomy	Phase 1 phase 2	Industry
Biomaterials	Grafix® DFU: Open-Label Extension Option to Evaluate Safety & Efficacy of Grafix® for Chronic Diabetic Foot Ulcers	Phase 4	Industry
Biomaterials	GrafixCORE®: Open-Label Study to Evaluate the Safety and Efficacy of GrafixCORE® for Complex Diabetic Foot Wounds	Phase 4	Industry
Biomaterials	GrafixPRIME® for the Treatment of Chronic Diabetic Foot Ulcers	Phase 4	Industry
Biomaterials	Human Amniotic Membrane Grafting and Standard of Care Versus Standard of Care Alone in the Treatment of Venous Leg Ulcers	Not Applicable	Industry

(continued)

SUPPLEMENTARY TABLE S2. (CONTINUED)

<i>Category</i>	<i>Title</i>	<i>Phase</i>	<i>Sponsors/ collaborators</i>
Cells and biomaterials	Human Amniotic Tissue-derived Allograft, NuCel, in Posterolateral Lumbar Fusions for Degenerative Disc Disease	Not Applicable	Industry, hospital
Biomaterials	HyaloFAST Trial for Repair of Articular Cartilage in the Knee	Not applicable	Industry
Biomaterials	INFUSE® Bone Graft/PEEK Interbody Spacer/Anterior Cervical Plate Pivotal Clinical Trial	Not applicable	Industry
Biomaterials	Investigation of A-ECM for the Correction of Soft Tissue Defects	Phase 1	Industry
Biomaterials	Long-Term Follow-Up to the DEVO Pivotal Trial of Dermagraft(R) to Treat Venous Leg Ulcers	Phase 3	Industry
Biomaterials	Musculotendinous Tissue Repair Unit and Reinforcement (MTURR)	Not applicable	Academia, government
Biomaterials	NOVOCART®3D for Treatment of Articular Cartilage of the Knee	Phase 3	Industry
Biomaterials	OsteoStrux™ Collagen Ceramic scaffold in Instrumented Lumbar Spine Fusion	Not applicable	Industry
Biomaterials	Phase IV Study to Evaluate the Efficacy of AMNIOEXCEL in Diabetic Foot Ulcers	Not applicable	Industry
Biomaterials	Postmarket Study to Evaluate Biovance® in Diabetic Foot Ulcers	Not applicable	Industry
Biomaterials	PriMatrix for the Management of Diabetic Foot Ulcers	Not applicable	Industry
Cells and biomaterials	Prospective Study of Thoracolumbar Spinal Fusion Graft	Phase 3	Academia
Cells and biomaterials	ReCell® Combined with Meshed Skin Graft in the Treatment of Acute Burn Injuries	Not applicable	Industry
Stem cells	Safety & Efficacy of Adipose-Derived Regenerative Cells in the Treatment of Chronic Myocardial Ischemia (ATHENA II)	Phase 2	Industry
Cells and biomaterials	Safety and Feasibility of CALEC for LSCD	Phase 1	Academia, hospital
Cells and biomaterials	Safety and Feasibility Study of Autologous Engineered Urethral Constructs for the Treatment of Strictures	Phase 1	Academia, government
Stem cells	Safety and Feasibility Trial of Adipose-Derived Regenerative Cells in the Treatment of Chronic Myocardial Ischemia	Phase 2	Industry
Cells and biomaterials	Safety and Preliminary Efficacy Study of NeoFuse in Subjects Requiring Lumbar Interbody Fusion	Phase 2	Industry
Cells and biomaterials	Safety and Preliminary Efficacy Study of NeoFuse in Subjects Undergoing Multilevel Anterior Cervical Discectomy	Phase 2	Industry
Biomaterials	Safety Study of Acellular Adipose Tissue for Soft Tissue Reconstruction	Phase 1	Academia, government
Stem cells	Safety Study of GRNOPC1 in Spinal Cord Injury	Phase 1	Industry
Cells and biomaterials	Study of 3 Doses of NeoFuse Combined with MasterGraft Granules in Subjects Requiring Posterolateral Lumbar Fusion (PLF)	Phase 1 phase 2	Industry
Biomaterials	Study of Nerve Reconstruction Using AVANCE in Subjects Who Undergo Robotic-Assisted Prostatectomy for Treatment of Prostate Cancer	Phase 4	Industry
Cells and biomaterials	Study of Subretinal Implantation of Human Embryonic Stem Cell-Derived RPE Cells in Advanced Dry AMD	Phase 1 phase 2	Industry
Stem cells	Study to Evaluate the Safety and Preliminary Efficacy of IDCT, a Treatment for Symptomatic Lumbar Intervertebral Disc Degeneration	Phase 1 phase 2	Industry
Stem cells	Study to Examine the Effects of MultiStem in Ischemic Stroke	Phase 2	Industry
Biomaterials	The Effectiveness of Ologen® Collagen Matrix in Preventing Intraocular Pressure (IOP) Spikes After Ahmed Glaucoma Valve Surgery (AGV-FP7)	Phase 2	Hospital
Biomaterials	The INSPIRE Study: Probable Benefit of the Neuro-Spinal scaffold for Treatment of AIS a Thoracic Acute Spinal Cord Injury	Phase 3	Industry
Cells and biomaterials	Treatment of Alveolar Bone Defects Using Aastrom Biosciences Autologous Tissue Repair Cell Therapy	Phase 1 phase 2	Academia, industry
Biomaterials	Trial of Dehydrated Human Amnion/Chorion Membrane (dHACM) in the Management of Diabetic Foot Ulcers	Not applicable	Industry
Biomaterials	Use of a Collagen Membrane for Soft Tissue Grafting	Phase 1	Hospital
Biomaterials	Use of dHACM in the Treatment of Venous Leg Ulcers	Not applicable	Industry

Tissue engineering-specific clinical trials that were either completed or ongoing between June 2011 and March 2018 were gathered by searching through the online clinical trials database (available from clinicaltrials.gov).