Cell and Gene Therapy Catapult Clinical Trials Database 2019



Name of sponsor	Title	Clinical Database Numbers	United Kingdom Site(s)	Trial Status	Trial Phase	Year Trial Started	Recruitme nt Target	Cell Type	Gene Modification/ Gene Therapy	Type of Virus Vector Used (if applicable)	Autologous/ Allogeneic	Disease Area	Indication
Barts & The London NHS Trust	Randomised Controlled Clinical Trial of the Use of Autologous Bone Marrow Derived Progenitor Cells to Salvage Myocardium in Patients With Acute Anterior Myocardial Infarction (REGENAMI)	NCT00765453	London Chest Hospital Barts and The London NHS Trust, The Heart Hospital UCLH NHS Foundation Trust, The Royal Free Hospital NHS Foundation Trust	6- Closed	Phase II	2007	100	Bone marrow mononuclear cells	No		Autologous	Cardiovascular	Acute Myocardial Infarction
ReNeuron Limited	A Phase I Safety Trial of CTX0E03 Drug Product Delivered Intracranially in the Treatment of Patients With Stable Ischemic Stroke	2008-000696-19 NCT01151124	Glasgow Southern General Hospital	5- In follow-up	Phase I	2010	12	Neural	Yes ex vivo	Retrovirus	Allogeneic	Neurological	Ischaemic Stroke
Axovant Sciences Ltd.	A Multicentre, Open-label Study to Determine the Long Term Safety, Tolerability and Efficacy of ProSavin in Patients With Bilateral, Idiopathic Parkinson's Disease.	NCT01856439	Addenbrookes Hospital Cambridge	5- In follow-up	Phase I/II	2011	15		Yes in vivo	Lentivirus		Neurological	Parkinson's Disease
Genethon	Phase I/II Clinical Trial of Haematopoietic Stem Cell Gene Therapy for the Wiskott-Aldrich Syndrome	NCT01347242	Great Ormond Street Hospital London, Royal Free Hospital London	6- Closed	Phase I/II	2011	5	CD34 and/or CD133 stem cells	Yes ex vivo	Lentivirus	Autologous	Inflammatory and immune system	Wiskott-Aldrich Syndrome
Great Ormond Street Hospital for Children NHS Foundation Trust	Gene Therapy for SCID-X1 Using a Self- inactivating (SIN) Gammaretroviral Vector	NCT01175239	Great Ormond Street Hospital London	5- In follow-up	Phase I/II	2011	1	CD34 and/or CD133 stem cells	Yes ex vivo	Retrovirus	Autologous	Inflammatory and immune system	X-linked Severe Combined Immunodeficiency
Great Ormond Street Hospital for Children NHS Foundation Trust / University College London	inactivating (SIN) gammaretroviral vector.	2007-000684-16	Great Ormond Street Hospital London	5- In follow-up	Phase I/II	2011	10	CD34 and/or CD133 stem cells	Yes ex vivo	Retrovirus	Autologous	Inflammatory and immune system	X-linked Severe Combined Immunodeficiency
Newcastle upon Tyne Hospitals NHS Foundation Trust	Phase 1 Study of Autologous Tolerogenic Dendritic Cells for Rheumatoid Arthritis	NCT01352858	Newcastle RVI	6- Closed	Phase I	2011	12 plus 3 in extension study	Antigen presenting cells	No		Autologous	Inflammatory and immune system	Rheumatoid and Inflammatory Arthritis
Queen Mary University of London	The effect of intracoronary reinfusion of bone marrow-derived mononuclear cells (BM-MNC) on all cause-mortality in acute myocardial infarction	UK CRN15079; NCT01569178	King's College London, Queen Mary University of London, UCLH, New Cross Hospital, Royal Wolverhampton NHS Trust	5- In follow-up	Phase III	2011	350	Bone marrow mononuclear cells	No		Autologous	Cardiovascular	Acute Myocardial Infarction
Azellon Ltd	A Prospective Open-Label Study to Evaluate the Safety of Cell Bandage (Mesenchymal Stem Cells) in the Treatment of Meniscal Tears	2010-024162-22	Southmead Hospital, Bristol	6- Closed	Phase I/II	2012	10	Mesenchymal stem/stromal cells	No		Autologous	Bone and cartilage	Knee Meniscus Repair
Cell Medica Ltd	WT1 TCR Gene Therapy for Leukaemia: A Phase I/II Safety and Toxicity Study	2006-004950-25 NCT01621724	UCLH, University Hospitals Bristol NHS Foundation Trust	6- Closed	Phase I/II	2012	18	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer (Haematology)	Acute Myeloid Leukaemia Chronic Myeloid Leukaemia
Cook MyoSite	A Prospective Nonrandomized Study of Autologous Muscle Derived Cell (AMDC) Transplantation for Treatment of Fecal Incontinence	NCT01600755	Royal London Hospital	3- Recruiting	Phase I/II	2012	50	Skeletal Muscle	No		Autologous	Musculoskeletal	Faecal Incontinence
Great Ormond Street Hospital for Children NHS Foundation Trust	Phase I/II, non-controlled, open-label, non- randomised, single-centre trial to assess the safety and efficacy of EF1aS-ADA lentiviral vector mediated gene modification of autologus CD34+ cells from ADA-deficient individuals	2010-024253-36; NCT01380990	Great Ormond Street Hospital London	5- In follow-up	Phase I/II	2012	10	CD34 and/or CD133 stem cells	Yes ex vivo	Lentivirus	Autologous	Inflammatory and immune system	Adenosine Deaminase Deficiency
Mesoblast	A Prospective, DB, Randomized, Placebo- controlled Clinical Trial of IC Infusion of Mesenchymal Precursor Cells (MPC) in the Treatment of Patients With ST-elevation Myocardial Infarction	NCT01781390	2 UK Sites	5- In follow-up	Phase II	2012	105	Mesenchymal stem/stromal cells	No		Allogeneic	Cardiovascular	ST-elevation Myocardial Infarction

Newcastle upon Tyne Hospitals NHS Foundation Trust	To evaluate the safety and effectiveness of human ex vivo expanded autologous limbal stem cells for the treatment of unilateral total limbal stem cell deficiency	2011-000608-16 UK CRN 11185	Royal Victoria Infirmary Newcastle	6- Closed	Phase II	2012	24	Corneal	No		Autologous	Eye	Limbal Stem Cell Deficiency
University of Cambridge	An Open Label Study to Assess the Safety and Efficacy of Neural Allo-Transplantation With Fetal Ventral Mesencephalic Tissue in Patients With Parkinson's Disease	NCT01898390	Cardiff University, Imperial College London, UCLH, University of Cambridge	5- In follow-up	Phase I/II	2012	40	Neural	No		Allogeneic	Neurological	Parkinson's Disease
Astellas Institute for Regenerative Medicine	Follow-up to 5 Years of a Phase I/II, Open-Label, Multi-Center, Prospective Study to Determine the Safety and Tolerability of Sub-retial Transplantation of Human Embryonic Stem Cell Derived Retinal Pigmented Epithelial (hESC-RPE) Cells in Patients With Staroardt's	NCT02941991	Moorefields Eye Hospital NHS Foundation Trust London, Newcastle on Tyne NHS Foundation Trust	6- Closed	Phase I/II	2013	12	Retinal	No		Allogeneic	Eye	Stargardt's Macular Dystrophy
Bluebird Bio	A Phase 2/3 Study of the Efficacy and Safety of Hematopoietic Stem Cells Transduced With Lenti-D Lentiviral Vector for the Treatment of Cerebral Adrenoleukodystrophy (CALD)	NCT01896102	Great Ormond Street Hospital NHS Foundation Trust London	5- In follow-up	Phase II/III	2013	30	CD34 and/or CD133 stem cells	Yes ex vivo	Lentivirus	Autologous	Neurological	Cerebral Adrenoleukodystrophy
Genethon	A Phase I/II, Non Randomized, Multicenter, Open-label Study of g1xcgd (Lentiviral Vector Transduced CD34+ Cells) in Patients With X- linked Chronic Granulomatous Disease	NCT01855685	UCLH, Royal Free Hospital London, Great Ormond Street Hospital London	3- Recruiting	Phase I/II	2013	5	CD34 and/or CD133 stem cells	Yes ex vivo	Lentivirus	Autologous	Inflammatory and immune system	X-Linked Chronic Granulomatous Disease
Imperial College London	Stem cells in Rapidly Evolving Active Multiple Sclerosis (STREAMS)	NCT01606215 2012-002357-35	Imperial College Healthcare NHS Trust	6- Closed	Phase I/II	2013	21	Mesenchymal stem/stromal cells	No		Autologous	Inflammatory and immune system	Multiple Sclerosis
Tetec AG	A Prospective Randomized Controlled Multicenter Phase-III Clinical Study to Evaluate the Safety and Effectiveness of NOVOCART® 3D Plus Compared to the Standard Procedure Microfracture in the Treatment of Articular Cartil	2011-005798-22 / :T01656902	Royal Devon and Exeter Hospital	5- In follow-up	Phase III	2013	261	Chondrocytes	No		Autologous	Bone and cartilage	Articular cartilage defects of the knee
The Robert Jones and Agnes Hunt Orthopaedic Hospital NHS Foundation Trust	Autologous Cell Therapy for Osteoarthritis: An evaluation of the safety and efficacy of autologous transplantation of articular chondrocytes and/or bone marrow-derived stromal cells to repair chondral/osteochondral lesions of the knee (ASCOT).	2010-022072-31	The Robert Jones and Agnes Hunt Orthopaedic Hospital NHS Foundation Trust	3- Recruiting	Phase II	2013	114	Mesenchymal stem/stromal cells	No		Autologous	Bone and cartilage	Osteochondral defects of the knee (early osteoarthritis)
University College London	CMV TCR Gene Therapy: A Phase I Safety, Toxicity and Feasibility Study of Adoptive Immunotherapy with CMV TCR-transduced Donor-derived T cells for Recipients of Allogeneic Haematopoietic Stem Cell Transolantation	2008-006649-18 NCT02988258	University Hospitals Birmingham NHS Foundation Trust, University Hospitals Bristol NHS Foundation Trust, UCLH, Nottingham University Hospital	4- Suspended	Phase I	2013	10	T cells	Yes ex vivo	Retrovirus	Allogeneic	Cancer (Haematology)	CMV seronegative HSCT donors & CMV seropositive HSCT recipients
Unviversity of Birmingham	AdUP: A Phase I Clinical Trial of a Replication Defective Type 5 Adenovirus Vector Expressing Nitroreductase and GMCSF (AdNRGM) Given Via Trans-perineal, Template-guided, Intra- prostatic Injection. Followed by Intravenous	2007-007041-13	Queen Elizabeth Hospital Birmingham, Univeristy of Warwick	5- In follow-up	Phase I	2013	15		Yes ex vivo	Adenovirus		Cancer	Prostate Cancer
Bellicum Pharmaceuticals	Phase I Study of CaspaCIDe T Cells From an HLA-partially Matched Family Donor After Negative Selection of TCR Alpha Beta T Cells in Pediatric Patients Affected by Hematological Disorders	NCT02065869	d Street Hospital London, The Newcastle Upon Tyne Hospitals NHS Foundation Trust	6- Closed	Phase I/II	2014	180	T cells	Yes ex vivo	Retrovirus	Allogeneic	Blood	Haematological Malignancies
Cardiff University	Safety and feasibility of neural transplantation in early to moderate Huntington's disease in the UK.	UKCRN 3827 ISRCTN36485475	The Brain Repair Group, Cardiff	6- Closed	Phase I	2014	60	Neural	No		Allogeneic	Neurological	Neurological
Genethon	Long Term Safety Follow up of Patients Enrolled in the Phase I/II Clinical Trial of Haematopoietic Stem Cell Gene Therapy for the Wiskott Aldrich Syndrome (GTG002-07 and GTG003-08).	NCT02333760	UCL Great Ormond Street Insitute of Child Health	3- Recruiting	Phase I/II	2014	10	CD34 and/or CD133 stem cells	Yes ex vivo	Lentivirus	Autologous	Inflammatory and immune system	Wiskott-Aldrich Syndrome
ReNeuron Limited	A Phase II Efficacy Study of Intracerebral CTX0E03 DP in Patients with Stable Paresis of the Arm Following an Ischaemic Stroke	2012-003482-18 NCT02117635	Queen Elizabeth Hospital Birmingham, NHS Southern General Hospital Glasgow, King's College London, UCLH, Royal Victoria Infirmary Newcastle, Nottingham City Hospital, Salford Royal NHS Foundation Trust. Roval Hallamshire	6- Closed	Phase II	2014	21	Neural	Yes ex vivo	Retrovirus	Allogeneic	Neurological	Ischaemic Stroke

ReNeuron Limited	A Phase I Ascending Dose Safety Study Of Intramuscular CTX0E03 In Patients With Lower Limb Ischaemia	2011-005810-13 NCT01916369	Ninewells Hospital, Dundee	6- Closed	Phase I	2014	9	Neural	Yes ex vivo	Retrovirus	Allogeneic	Cardiovascular	Peripheral Arterial Disease - Lower Limb Ischaemia
University College London	Adoptive Immunotherapy With CD25/71 Allodepleted Donor T Cells to Improve Immunity After Unrelated Donor Stem Cell Transplant	UK CRN14779 NCT01827579	Manchester Royal Infirmary, UCLH	5- In follow-up	Phase II	2014	24	T cells	No		Allogeneic	Cancer (Haematology)	Haematological Malignancies
Adaptimmune	A Phase I Dose Escalation Open Label Clinical Trial Evaluating the Safety and Efficacy of MAGE A10c™T in Subjects With Stage IIIb or Stage IV Non-Small Cell Lung Cancer	NCT02592577	University College Hospital Macmillan Cancer Centre, The Christie NHS Foundation Trust	5- In follow-up	Phase I	2015	28	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer	Non-Small Cell Lung Cancer
Athersys, Inc	A Phase 1/2 Study to Assess the Safety and Efficacy of MultiStem® Therapy in Subjects with Acute Respiratory Distress Syndrome	2015-001586-96 NCT02611609	UCLH, St Georges Hospital London, Queen Elizabeth Hospital Birmingham, John Radcliffe Hospital Oxford, Addenbrookes Hospital Cambridge, Wythenshawe Hospital Manchester, Manchester Roval Infirmary	6- Closed	Phase I/II	2015	40	Mesenchymal stem/stromal cells	No		Allogeneic	Respiratory	Acute Respiratory Distress Syndrome
BioMarin Pharmaceutical	A Phase 1/2, Dose-Escalation, Safety, Tolerability and Efficacy Study of Valoctocogene Roxaparvovec, an Adenovirus-Associated Virus Vector-Mediated Gene Transfer of Human Factor VIII in Patients With Severe Haemophilia A	02576795 2014-003880-38	University Hospitals Bristol NHS Foundation, Cambridge University Hospitals NHS Foundation, Greater Glasgow Health Board, Barts Health NHS Trust, Guy's & St. Thomas' NHS Foundation Trust. Imperial College	5- In follow-up	Phase I/II	2015	15		Yes in vivo	AAV		Blood	Haemophilia A
Cell Medica Ltd	A Phase 2 Single Arm Study to Investigate the Efficacy of Autologous EBV-specific T-cells for the Treatment of Patients With Aggressive EBV Positive Extranodal NKT-cell Lymphoma (ENKTCL)	NCT01948180	UCLH, The Christie Clinic, Manchester	7- Withdrawn	Phase II	2015	35	T cells	No		Autologous	Cancer (Haematology)	NK/T Cell Lymphoma
Cell Medica Ltd	A single arm Phase I/II study of the safety and efficacy of gene-modified WT1 TCR therapy in patients with myelodysplastic syndrome (MDS) or acute myeloid leukaemia (AML) who have failed to achieve or maintain an IWG defined response following hypomethylating agent	2014-003111-10 NCT02550535	UCLH, University Hospitals Bristol NHS Foundation Trust, Leeds Teaching Hospitals NHS Trust, University Hospital of Wales	6- Closed	Phase I/II	2015	25	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer (Haematology)	Myelodysplastic Syndromes Acute Myeloid Leukaemia
CellProthera	EXpanded CELL ENdocardiac Transplantation (EXCELLENT)	NCT02669810	University of Edinburgh, Leeds University & Leeds Teaching Hospitals NHS Trust, Newcastle University	3- Recruiting	Phase II	2015	44	CD34 and/or CD133 stem cells	No		Autologous	Cardiovascular	Acute Myocardial Infarction
Immunicum AB	An open-label, randomized, controlled, multicenter, phase II study evaluating safety and efficacy of intratumorally administered Intuvax pre-nephrectomy followed by Sunitinib postnephrectomy, compared to Sunitinib postne	2014-004510-28 NCT02432846	The Churchill Hospital Oxford, Royal Preston Hospital	6- Closed	Phase II	2015	88	Antigen presenting cells	No		Allogeneic	Cancer	Metastatic Renal Cell Carcinoma
lovance Biotherapeutics, Inc.	A Phase 2, Multicenter Study to Assess the Efficacy and Safety of Autologous Tumor Infiltrating Lymphocytes (LN-144) for Treatment of Patients With Metastatic Melanoma	2017-000760-15 NCT02360579	Royal Marsden NHS Trust London, Beatson West of Scotland Cancer Centre Glasgow, Addenbrooke's Hospital Cambridge, Sarah Cannon Research Institute London	3- Recruiting	Phase II	2015	164	T cells	No		Autologous	Cancer	Metastatic Melanoma
Kiadis Pharma	Safety and Efficacy of Two Doses of ATIR101, a T-lymphocyte Enriched Leukocyte Preparation Depleted of Host Alloreactive T-cells, in Patients With a Hematologic Malignancy Who Received a Hematopoietic Stem Cell Transplantation From a Habloidentical Donor	NCT02500550	Heartlands Hospital Birmingham, Hammersmith Hospital	6- Closed	Phase II	2015	15	T cells	No		Allogeneic	Cancer (Haematology)	Acute Myeloid Leukaemia Acute Lymphoblastic Leukaemia Myelodysplastic Syndrome
King's College London	Phase I Trial: T4 Immunotherapy of Head and Neck Cancer	NCT01818323	Guy's Hospital, London	3- Recruiting	Phase I	2015	30	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer	Head and Neck
King's College London	Phase I study of COL7A1 gene-modified autologous fibroblasts in adults with recessive dystrophic epidermolysis bullosa.	NCT02493816	Guy's and St Thomas' NHS Foundation Trust	6- Closed	Phase I	2015	5	Fibroblasts	Yes ex vivo	Lentivirus	Autologous	Skin	Recessive Dystrophic Epidermolysis Bullosa
Moorfields Eye Hospital NHS Foundation Trust	Phase 1, Open-label, Safety And Feasibility Study Of Implantation Of Pf-05206386 (Human Embryonic Stem Cell Derived Retinal Pigment Epithelium Living Tissue Equivalent) In Subjects With Acute Wet Age Related Macular Deceneration and Recent Rabid Vision Decline	NCT01691261	Moorfields Eye Hospital NHS Foundation Trust London	5- In follow-up	Phase I	2015	10	Retinal	No		Allogeneic	Eye	Acute Wet Age Related Macular Degeneration

University College London	Autologous Stem Cells in Achilles Tendinopathy (ASCAT)	NCT02064062 2013-000966-12	Royal National Orthopaedic Hospital	6- Closed	Phase II	2015	10	Mesenchymal stem/stromal cells	No		Autologous	Musculoskeletal	Achilles Tendinopathy
Adaptimmune LLC	A Pilot Study of Genetically Engineered NY- ESO-1 Specific NY-ESO-1c259T in HLA-A2+ Patients with Synovial Sarcoma	2015-005594-21	The Christie Hospital NHS Foundation Trust, UCLH	5- In follow-up	Phase II	2016	60	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer	Synovial Sarcoma
Amgen	A Phase 3, Multicenter, Trial of Talimogene Laherparepvec in Combination With MK3475 for Treatment of Unresected, Stage IIIB to IVM1c Melanoma (Masterkey-265)	NCT02263508	University Hospitals Birmingham, Royal Surrey County Hospital, St James's University Hospital Leeds, Leicester Royal Infirmary, Guy's and St. Thomas' NHS Foundation Trust, The Royal Marsden Hospital London. The Christie NHS	5- In follow-up	Phase III	2016	660		Yes ex vivo	HSV-1		Cancer	Melanoma
Amgen	A Phase 1b Multicenter, Randomized, Open- label Trial of Talimogene laherparepvec in combination with Pembrolizumab for the Treatment of Subjects With Recurrent or Metastatic Squamous Cell Carcinoma of the Head and Neck	NCT02626000 2015-003011-38	University Hospitals Birmingham, St. Thomas' Hospital London, The Royal Marsden London, Churchill Hospital Oxford, The Royal Marsden London, Clatterbridge Hospital	5- In follow-up	Phase I	2016	40		Yes ex vivo	HSV-1		Cancer	Head and Neck
Bluebird Bio	Long-term Follow-up of Subjects With Cerebral Adrenoleukodystrophy Who Were Treated With Lenti-D Drug Product	NCT02698579	Great Ormond Street Hospital London	3- Recruiting	Phase III	2016	50	CD34 and/or CD133 stem cells	Yes ex vivo	Lentivirus	Autologous	Neurological	Cerebral Adrenoleukodystrophy
Bluebird Bio	A Phase 3 Single Arm Study Evaluating the Efficacy and Safety of Gene Therapy in Subjects With Transfusion-dependent β-Thalassemia, Who do Not Have β0/β0 Genotype, by Transplantation of Autologous CD34+ Stem Cells Transduced Ex Vivo With a Lentiviral βA-T870-	NCT02906202	London	3- Recruiting	Phase III	2016	23	CD34 and/or CD133 stem cells	Yes ex vivo	Lentivirus	Autologous	Blood	Transfusion-Dependent β- Thalassemia
Cancer Research UK	A Cancer Research UK Phase I Trial of Anti-GD2 Chimeric Antigen Receptor (CAR) Transduced T- cells (1RG-CART) in Patients With Relapsed or Refractory Neuroblastoma	NCT02761915	Great Ormond Street Hospital NHS Foundation Trust, London	3- Recruiting	Phase I	2016	27	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer	Neuroblastoma
Gamida Cell Ltd	A Multicenter, Randomized, Phase III Registration Trial of Transplantation of NiCord®, Ex Vivo Expanded, UCB-derived, Stem and Progenitor Cells, vs. Unmanipulated UCB for Patients With Hematological Malignancies	NCT02730299	The Royal Marsden NHS Foundation Trust, Queen Elizabeth Hospital Birmingham, St James Hospitial Leeds, Manchester University NHS Foundation Trust	3- Recruiting	Phase III	2016	120	CD34 and/or CD133 stem cells	No		Allogeneic	Cancer (Haematology)	Haematological Malignancies Acute Lymphoblastic Leukemia Acute Myelogenous Leukemia Chronic Myelogenous Leukemia
GenSight Biologics	A Randomized, double-masked, sham-controlled clinical trial to evaluate the efficacy of a single intravitreal injection of GS010 in subjects affected for 6 months or less by Leber Hereditary Optic Neuropathy (LHON) due to the G11778A mutation in the mitochondrial ND4 dene	NCT02652767	Moorfields Eye Hospital NHS Foundation Trust London	6- Closed	Phase III	2016	36		Yes in vivo	AAV		Eye	Leber Hereditary Optic Neuropathy
GenSight Biologics	Randomized, Double-Masked, Sham-Controlled Clinical Trial to Evaluate the Efficacy of a Single Intravitreal Injection of GS010 in Subjects Affected for More Than 6 Months and To 12 Months by LHON Due to the G11778A Mutation in the ND4 Gene	NCT02652780	Moorfields Eye Hospital NHS Foundation Trust London	6- Closed	Phase III	2016	36		Yes in vivo	AAV		Eye	Leber Hereditary Optic Neuropathy
Institut de Recherches Internationales Servier	A phase 1, open label, non-comparative, monocenter study to evaluate the safety and the ability of UCART19 to induce molecular remission in paediatric patients with relapsed /refractory B acute lymphoblastic leukaemia (UCART19 PALL)	NCT02808442	UCL Great Ormond Hospital London	3- Recruiting	Phase I	2016	18	T cells	Yes ex vivo	Lentivirus	Allogeneic	Cancer (Haematology)	B-Cell Acute Lymphoblastic Leukaemia
Institut de Recherches Internationales Servier	Phase I, Open Label, Dose-escalation Study to Evaluate the Safety, Expansion, Persistence and Biological Activity of a Single Dose of UCART19 (Allogeneic Engineered T-cells Expressing Anti- CD19 Chimeric Antigen Receptor), Administered Intravenously in Patients With Relassed or	NCT02746952	King's College Hospital NHS Foundation Trust Christie NHS Foundation Trust	3- Recruiting	Phase I	2016	30	T cells	Yes ex vivo	Lentivirus	Allogeneic	Cancer (Haematology)	B-Cell Acute Lymphoblastic Leukaemia
Institut de Recherches Internationales Servier	Cong-term follow-up study of patients who have previously been exposed to UCART19 (allogeneic engineered T-cells expressing a lentiviral-based anti-CD19 chimeric antigen receptor)	NCT02735083 2016-000297-38	King's College Hospital NHS Foundation Trust, UCL Great Ormond Street Institute of Child Health, The Christie NHS Foundation Trust Manchester	3- Recruiting	Phase I	2016	300	T cells	Yes ex vivo	Lentivirus	Allogeneic	Cancer (Haematology)	Advanced Lymphoid Malignancies
Kiadis Pharma Netherlands B.V.	An exploratory, open-label study to evaluate the safety and feasibility of ATIR201, a T-lymphocyte enriched leukocyte preparation depleted ex vivo of host alloreactive T-cells (using photodynamic treatment), as adjuvant treatment to a T-cell depleted habloidentical hematoooietic stem cell	2016-002959-17	2 UK Sites	6- Closed	Phase I/II	2016	10	T cells	No		Allogeneic	Blood	β-Thalassemia Major

MeiraGTx UK II Ltd	An Open Label, Multi-centre, Phase I/II Dose Escalation Trial of a Recombinant Adeno- associated Virus Vector (AAV2/8-hCARp, hCNGB3) for Gene Therapy of Adults and Children With Achromatopsia Owing to Defects in CNGB3	NCT03001310	Moorfields Eye Hospital NHS Foundation Trust London	5- In follow-up	Phase I/II	2016	18		Yes in vivo	AAV		Eye	Achromatopsia
MeiraGTx UK II Ltd	An Open-label, Multi-centre, Phase I/II Dose Escalation Trial of an Adeno Associated Virus Vector for Gene Therapy of Adults And Children With Retinal Dystrophy Associated With Defects in RPE65 (LCA)	NCT02781480	Moorfields Eye Hospital NHS Foundation Trust London	6- Closed	Phase I/II	2016	27		Yes in vivo	AAV		Eye	Leber Congenital Amaurosis
MeiraGTx UK II Ltd	Long-term Follow-up Study of Participants Following an Open Label, Multi-centre, Phase I/II Dose Escalation Trial of an Adeno-associated Virus Vector (AAV2/5-OPTIRPE65) for Gene Therapy of Adults and Children With Retinal Dvstroohy Owina to Defects in RPE65 (LCA2)	NCT02946879	Moorfields Eye Hospital NHS Foundation Trust London	3- Recruiting	Phase I/II	2016	27		Yes in vivo	AAV		Eye	Leber Congenital Amaurosis
Mina Alpha Ltd	First-in-Human Safety and Tolerability Study of MTL-CEBPA in Patients With Advanced Liver Cancer (OUTREACH)	NCT02716012	University Hospitals Birmingham NHS Foundation Trust, Cambridge University Hospitals NHS Trust, The Beatson West of Scotland Cancer Centre, Clatterbridge Cancer Centre NHS Foundation Trust, Guv's and St. Thomas' NHS Foundation	3- Recruiting	Phase I	2016	51		Yes in vivo	Non viral - liposomes		Cancer	Advanced Liver Cancer
Sangamo Therapeutics, Inc.	Ascending Dose Study of Genome Editing by Zinc Finger Nuclease Therapeutic SB-FIX in Subjects With Severe Hemophilia B	NCT02695160	Glasgow Royal Infirmary, Hammersmith Hospital, St Thomas' Hospital London	5- In follow-up	Phase I	2016	12		Yes in vivo	AAV		Blood	Haemophilia B
TC BioPharm Ltd	An Adaptive Study of the Safety, Tolerability and Efficacy of Autologous yô T Lymphocyte Therapy (ImmuniCell™) in Patients with Advanced Cancers which are Refractory to Current Treatment or who have Indolent Disease for which Immunotherapy may be Beneficial	NCT02459067 2015-000402-19	Beatson West of Scotland Cancer Centre, Southampton General Hospital, Western General Hospital, Leeds Teaching Hospitals NHS Trust	5- In follow-up	Phase II/III	2016	52	T cells	No		Autologous	Cancer	Advanced Cancers
The University of Edinburgh	Phase I/II Clinical assessment of autologous Macrophage therapy for Liver Cirrhosis (MATCH)	2015-000963-15	Edinburgh Royal Infirmary, Glasgow Royal Infirmary	3- Recruiting	Phase I/II	2016	74	Other	No		Autologous	Liver	Advanced Liver Cirrhosis
University College Londor	COBALT: Evaluation of CAR19 T-cells as an Optimal Bridge to Allogeneic Transplantation	NCT02431988	UCLH, Queen Elizabeth Hospital Birmingham	3- Recruiting	Phase I	2016	12	T cells	Yes ex vivo	Lentivirus	Autologous	Cancer (Haematology)	Diffuse Large B-Cell Lymphoma
University College Londor	CARPALL: Immunotherapy with CD19 CAR redirected T-cells for high risk, relapsed paediatric CD19+ acute lymphoblastic leukaemia and other haematological malignancies.	NCT02443831	Great Ormond Street Hospital London, UCLH, Royal Manchester Children's Hospital	3- Recruiting	Phase I	2016	32	T cells	Yes ex vivo	Lentivirus	Autologous	Cancer (Haematology)	Paediatric Acute Lymphoblastic Leukaemia and other haematological malignancies (e.g. Burkitt's Lymphoma)
Adaptimmune	A Phase I Open Label Clinical Trial Evaluating the Safety and Anti-Tumor Activity of Autologous T Cells Expressing Enhanced TCRs Specific for Alpha Fetoprotein (AFPe ³³² T) in HLA-A2 Positive Subjects With Advanced Hepatocellular Carcinoma (HCC)	NCT03132792	NIHR UCLH Clinical Research	3- Recruiting	Phase I	2017	24	T cells	Yes ex vivo		Autologous	Cancer	Hepatocellular Carcinoma
Audentes Therapeutics	VALENS: A Phase 1/2, Randomized, Open- Label, Ascending-Dose, Delayed-Treatment Concurrent Control Clinical Study to Evaluate the Safety and Preliminary Efficacy of AT342, an AAV8-Delivered Gene Transfer Therapy in Crioler-Naiiar Syndrome Subiects Aced 1 Year	NCT03223194	King's College Hospital NHS Foundation Trust London	4- Suspended	Phase I/II	2017	12		Yes in vivo	AAV		Metabolic and Endocrine	Crigler-Najjar Syndrome
Autolus Limited	CD19/22 CAR T Cells (AUTO3) for the Treatment of Diffuse Large B Cell Lymphoma	2016-004682-11	UCLH, The Christie NHS Foundation Trust, Freeman Hospital Newcastle	3- Recruiting	Phase I/II	2017	146	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer (Haematology)	B-Cell Lymphoma
Autolus Limited	APRIL CAR T Cells (AUTO2) Targeting BCMA and TACI for the Treatment of Multiple Myeloma	2016-003893-42	UCLH, The Christie NHS Foundation Trust, Freeman Hospital Newcastle	7- Withdrawn	Phase I/II	2017	80	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer (Haematology)	Multiple Myeloma
Autolus Limited	A Single-Arm, Open-Label, Multi-Centre, Phase I/II Study Evaluating the Safety and Clinical Activity Of AUTO3, a CAR T Cell Treatment Targeting CD19 And CD22 in Paediatric And Young Adult Patients With Relapsed or Refractory B Cell Acute Lymphoblastic	NCT03289455	Great Ormond Street Hospital NHS Foundation Trust, UCLH, Royal Manchester Children's Hospital	5- In follow-up	Phase I/II	2017	23	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer (Haematology)	B-Cell Acute Lymphoblastic Leukaemia

Bellicum Pharmaceuticals	Follow-up of Phase 1/2 Study of CaspaCIDe T Cells (BPX-501) From an HLA-partially Matched s Family Donor After Negative Selection of TCR αβ+T Cells in Pediatric Patients Affected by Hematological Disorders	NCT03733249	UCL Great Ormond Street Institute of Child Health, Great North Children's Hospital Newcastle Upon Tyne	3- Recruiting	Phase I/II	2017	193	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer (Haematology)	Haematological Malignancies
BioMarin Pharmaceutical	Phase 3 Open-Label Single-Arm Study To Evaluate The Efficacy and Safety of Valoctocogene Roxaparvovec an AAV Vector- Mediated Gene Transfer of Human Factor VIII in Hemophilia A Patients With Residual FVIII Levels ≤1 UJdL Receiving Prophylactic FVIII	NCT03370913	Queen Elizabeth Hospital Birmingham, Addenbrooke's Hospital Cambridge, Glasgow Royal Infirmary, Barts and The London School of Medicine and Dentistry, Hammersmith Hospital London, St Thomas' Hosoital London. Churchill	5- In follow-up	Phase III	2017	40		Yes in vivo	AAV		Blood	Haemophilia A
Bluebird Bio	A Phase 3 Single Arm Study Evaluating the Efficacy and Safety of Gene Therapy in Subjects With Transfusion-dependent β-Thalassemia, Who Have a β0/β0 Genotype, by Transplantation of Autologous CD34+ Stem Cells Transduced Ex Vivo With a Lentiviral 8A-T87Q-Globin Vector in	NCT03207009	UCLH	3- Recruiting	Phase III	2017	18	CD34 and/or CD133 stem cells	Yes ex vivo	Lentivirus	Autologous	Blood	Transfusion-dependent β- Thalassemia
Cancer Vaccines Ltd	A Phase I Clinical Study to Determine the Optimal Dose for the Safe Immune Restoration and Immune Response of Allogeneic Cell Immunotherapy (ACIT-1) in Adult Cancer Patients	NCT03096093	Royal Liverpool University Hospital, The Clatterbridge Cancer Centre NHS Foundation Trust Bebington	3- Recruiting	Phase I/II	2017	34	Antigen presenting cells	No	Unknown	Allogeneic	Cancer	Pancreatic Cancer Other late-stage cancers
Cynata Therapeutics Limited	An Open-Label Phase 1 Study to Investigate the Safety and Efficacy of CYP-001 for the Treatment of Adults With Steroid-Resistant Acute Graft Versus Host Disease	NCT02923375	NHS Foundation Trust Bristol, NHS Trust Leeds, NHS Foundation Trust Liverpool, NHS Foundation Trust Manchester, NHS Foundation Trust Nottingham	5- In follow-up	Phase I	2017	16	Mesenchymal stem/stromal cells	Yes ex vivo		Allogeneic	Inflammatory and immune system	Steroid-Resistant Acute Graft Versus Host Disease
Gyroscope Therapeutics	FOCUS: An open label first in human Phase 1/2 multicentre study to evaluate the safety, dose response and efficacy of GT005 administered as a single subretinal injection in subjects with Macular Atrophy due to Age-related Macular Deceneration	NCT03846193 2017-003712-39	Bristol Eye Hospital, Moorefields Eye Hospital London, Manchester Eye Hospital, Nottingham University Hospital, Oxford University Hospital, Southampton General Hospital, Sunderland Eye Infirmary	3- Recruiting	Phase I/II	2017	10		Yes in vivo	AAV		Eye	Age-related Macular Degeneration
Iovance Biotherapeutics, Inc.	Study of LN-145, Autologous Tumor Infiltrating Lymphocytes in the Treatment of Patients With Cervical Carcinoma	2016-003447-11	Iovance Cervical Investigative Site	3- Recruiting	Phase II	2017	138	T cells	No		Autologous	Cancer	Cervical Carcinoma
Kiadis Pharma	A Phase III, Multicenter, Randomized Controlled Study to Compare Safety and Efficacy of a Haploidentical HSCT and Adjunctive Treatment With ATIR101, a T-lymphocyte Enriched Leukocyte Preparation Depleted ex Vivo of Host Alloreactive T-cells. Versus a Handoidentical	2016-004672-21	Heartlands Hospital, St James University Hospital, Royal Liverpool University Hospital, Hammersmith Hospital, Manchester Royal Infirmary	5- In follow-up	Phase III	2017	195	T cells	No		Allogeneic	Cancer (Haematology)	Acute Myeloid Leukaemia Acute Lymphoblastic Leukaemia Myelodysplastic Syndrome
Kite Pharma, Inc.	A Phase 3, Randomized, Open-Label Study Evaluating Efficacy of Axicabtagene Ciloleucel Versus Standard of Care Therapy in Subjects With Relapsed/Refractory Diffuse Large B Cell Lymphoma	NCT03391466	University Hospitals Birmingham NHS Foundation Trust, Barts Health NHS Trust London, UCLH, The Christie NHS Foundation Trust Manchester, The Royal Marsden NHS Foundation Trust	5- In follow-up	Phase III	2017	359	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer (Haematology)	B-Cell Lymphoma
Mario Negri Institute for Pharmacological Research	Novel Stromal Cell Therapy for Diabetic Kidney Disease (NEPHSTROM)	NCT02585622 2016-000661-23	Belfast Health and Social Care Trust - Belfast City HospitaL, University Hospital Birmingham NHS Foundation Trust	3- Recruiting	Phase I/II	2017	48	Mesenchymal stem/stromal cells	No		Allogeneic	Renal and Urogenital	Diabetic Kidney Disease
MeiraGTx UK II Ltd	An Open Label, Multi-centre, Phase I/II Dose Escalation Trial of a Recombinant Adeno- associated Virus Vector (AAV2/5-RHKp.RPGR) for Gene Therapy of Adults and Children With X- linked Retinitis Pigmentosa Owing to Defects in Retinitis Pimentosa OTPase Reoulator (RPGR)	NCT03252847	Moorfields Eye Hospital NHS Foundation Trust London	3- Recruiting	Phase I/II	2017	36		Yes in vivo	AAV		Eye	X-Linked Retinitis Pigmentosa
MeiraGTx UK II Ltd	Long-term Follow-up Study of Participants Following an Open Label, Multi-centre, Phase I/II Dose Escalation Trial of a Recombinant Adeno- associated Virus Vector for Gene Therapyof Adults and Children With Achromatopsia Owing to Defects in CNGB3	NCT03278873	Moorfields Eye Hospital NHS Foundation Trust London	3- Recruiting	Phase I/II	2017	72		Yes in vivo	AAV		Eye	Achromatopsia
Neurotech Pharmaceuticals	A Phase III Multicenter Randomized, Sham Controlled, Study to Determine the Safety and Efficacy of Renexus® in Macular Telangiectasia Type 2	NCT03316300	Oxford Eye Hospital, Moorfields Eye Hospital London	3- Recruiting	Phase III	2017	112	Retinal	Yes ex vivo	Plasmid	Allogeneic	Eye	Macular Telangectasia
NightstaRx Ltd	A Randomised, Open Label, Outcomes- Assessor Masked, Prospective, Parallel Controlled Group, Phase 3 Clinical Trial Of Retinal Gene Therapy For Choroideremia Using An Adeno-Associated Viral Vector (AAV2) Encoding Rab Escort Protein 1 (REP1)	NCT03496012 2015-003958-41	Manchester Royal Infirmary, John Radcliffe Hospital Oxford	3- Recruiting	Phase III	2017	140		Yes in vivo	AAV		Eye	Choroideremia

NightstaRx Ltd	A Dose Escalation (Phase 1), and Dose Expansion (Phase 2/3) Clinical Trial of Retinal Gene Therapy for X-linked Retinitis Pigmentosa Using an Adeno-Associated Viral Vector (AAV8) Encoding Retinitis Pigmentosa GTPase Reculator (RPGR)	NCT03116113 2016-003852-60	Manchester Oxford Southampton	3- Recruiting	Phase II/III	2017	63		Yes in vivo	AAV		Eye	X-Linked Retinitis Pigmentosa
Pluristem, Ltd.	Efficacy, Tolerability and Safety of Intramuscular Injections of PLX PAD for the Treatment of Subjects With Critical Limb Ischemia (CLI) With Minor Tissue Loss Who Are Unsuitable for Revascularization	NCT03006770 2015-005532-18	Vascular Research Clinical Research Centre Beaufort Way Southmead Hospital Westbury on Trym Bristol, Hull And East Yorkshire Women And Children's Hospital-Hull And East Yorkshire Hospitals NHS Trust. Kings College	3- Recruiting	Phase III	2017	246	Mesenchymal stem/stromal cells	No		Allogeneic	Cardiovascular	Critical Limb Ischemia
Rexgenero	The Efficacy and Safety of Intra-Arterial Administration of REX-001 to Treat Ischaemic Ulcers in Subjects with Critical Limb Ischaemia Rutherford Category 5 and Diabetes Mellitus: A Pivotal, Placebo- Controlled, Double-Blind, Parallel-Group. Adaptive Trial	NCT03174522	Addenbrooke's Hospital Cambridge, University Hospital of Wales, Freeman Hospital	3- Recruiting	Phase III	2017	78	Bone marrow mononuclear cells	No		Autologous	Cardiovascular	Critical Limb Ischemia in patients with Diabetes Mellitus
Rexgenero Limited	The Efficacy and Safety of Intra-arterial Administration of REX-001 to Treat Ischemic Rest Pain in Subjects With Critical Limb Ischemia (CLI) Rutherford Category 4 and Diabetes Mellifus (DM): a Pivotal, Placebo- controlled. Double-blind. Parallel-arouo. Adaptive	NCT03111238 2016-000240-34	Addenbrooke's Hospital Cambridge, University Hospital of Wales, Freeman Hospital Newcastle	3- Recruiting	Phase III	2017	60	Bone marrow mononuclear cells	No		Autologous	Cardiovascular	Critical Limb Ischemia in patients with Diabetes Mellitus
Sangamo Therapeutics, Inc.	A Phase I / 2, Multicenter, Open-label, Single- dose, Dose-ranging Study to Assess the Safety and Tolerability of SB-318, a rAAV2/6-based Gene Transfer in Subjects With Mucopolysaccharidosis I (MPS I)	NCT02702115 2018-000206-28	4 UK Sites	5- In follow-up	Phase I/II	2017	3		Yes in vivo	AAV		Other	Mucopolysaccharidosis Type I
Sangamo Therapeutics, Inc.	A Phase I / 2, Multicenter, Open-label, Single- dose, Dose-ranging Study to Assess the Safety and Tolerability of SB-913, a rAAV2/6-based Gene Transfer in Subjects With Mucopolysaccharidosis II (MPS II)	NCT03041324 2018-000192-33	4 UK Sites	5- In follow-up	Phase I/II	2017	9		Yes in vivo	AAV		Other	Mucopolysaccharidosis Type II
Solid Biosciences Inc	A Randomized, Controlled, Open-label, Single- ascending Dose, Phase I/II Study to Investigate the Safety and Tolerability, and Efficacy of Intravenous SGT-001 in Male Adolescents and Children With Duchenne Muscular Dystrophy	NCT03368742 2017-002213-60	1 UK Site	4- Suspended	Phase I/II	2017	16		Yes in vivo	AAV		Musculoskeletal	Duchenne Muscular Dystrophy
Ultragenyx Pharmaceutical Inc	A Phase 1/2, Open-Label Safety and Dose- Finding Study of Adeno-Associated Virus (AAV) Serotype 8 (AAV8)-Mediated Gene Transfer of Human Ornithine Transcarbamy/ase (OTC) in Adults With Late-Onset OTC Deficiency	NCT02991144 2016-001057-40	National Hospital for Neurology & Neurosurgery London, Queen Elizabeth Hospital Birmingham	3- Recruiting	Phase I/II	2017	15		Yes in vivo	AAV		Liver	Ornithine Transcarbamylase Deficiency
University College London	GO-8: Gene Therapy for Haemophilia A Using a Novel Serotype 8 Capsid Pseudotyped Adeno- associated Viral Vector Encoding Factor VIII-V3	NCT03001830	Royal Free Hospital London	3- Recruiting	Phase I	2017	18		Yes in vivo	AAV		Blood	Haemophilia A
University College Londor	GO-8: Gene Therapy for Haemophilia A Using a n Novel Serotype 8 Capsid Pseudotyped Adeno-associated Viral Vector Encoding Factor VIII-V3	NCT03001830	Royal Free Hospital London	3- Recruiting	Phase I	2017	18		Yes in vivo	AAV		Blood	Haemophilia A
University College Londor	A Phase I/II, Open Label, Multicentre, Ascending Single Dose, Safety Study of a Novel Adeno- Associated Viral Vector (FLT180a) in Patients With Haemophilia B	NCT03369444	Royal Free Hospital London, Oxford University Hospital	3- Recruiting	Phase I	2017	18		Yes in vivo	AAV		Blood	Haemophilia B
University College Londor	Immunotherapy for High Risk/Relapsed CD19+ Acute Lymphoblastic Leukaemia Using CAR T- cells to Target CD19 (ALLCAR19)	NCT02935257	UCLH, Queen Elizabeth University Hospital Glasgow	3- Recruiting	Phase I	2017	20	T cells	Yes ex vivo	Lentivirus	Autologous	Cancer (Haematology)	B-Cell Acute Lymphoblastic Leukaemia
University College Londor	Chimeric Antigen Receptor (CAR)19 Donor Lymphocytes for Relapsed Cluster of Differentiation (CD)19+ Malignancies Following Allogeneic Transplantation (CARD)	NCT02893189	UCLH	3- Recruiting	Phase I	2017	16	T cells	Yes ex vivo	Unknown	Allogeneic	Cancer (Haematology)	CD19+ Malignancies: Relapse Post-allogeneic Transplant
Amphera BV	A Randomized, Open-Label Phase II/III Study With Dendritic Cells Loaded With Allogeneic Tumour Cell Lysate (PheraLys) in Subjects With Mesothelioma as Maintenance Treatment (MesoPher) After Chemotherapy. [DENIM]	2017-001774-41 NCT03610360	University of Leicester	3- Recruiting	Phase II/III	2018	230	Antigen presenting cells	No		Autologous	Cancer	Malignant Mesothelioma

Astellas Institute for Regenerative Medicine	A Safety Surveillance Study of Events of Special Interest Occurring in Subjects With Macular Degenerative Disease Treated With Human Embryonic Stem Cell-derived Retinal Pigment Epithelial Cell Therapy	NCT03167203	Site GB44001 - London	3- Recruiting	Phase I/II	2018	36	Retinal	No		Allogeneic	Eye	Macular Degenerative Disease
Autolus Limited	Long-term Follow-up of Patients Previously Treated With Autologous T Cells Genetically Modified With Retroviral Vectors	NCT03628612	Great Ormond Street Hospital NHS Foundation Trust, UCLH, Royal Manchester Children's Hospital, The Christie NHS Foundation Trust, Freeman Hospital Newcastle	3- Recruiting	Phase II	2018	500	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer (Haematology)	Multiple Myeloma Diffuse Large B-Cell Lymphoma Acute Lymphoblastic Leukaemia
Autolus Limited	A Single Arm, Open Label, Multi-centre, Phase I/II Study Evaluating the Safety and Clinical Activity of AUTO4, a CAR T-cell Treatment Targeting TRBC1, in Patients With Relapsed or Refractory TRBC1 Positive Selected T Cell Non-Hoddkin I wmphoma	NCT03590574 2017-001965-26	UCLH, Manchester Royal Infirmary, Freeman Hospital Newcastle	3- Recruiting	Phase I/II	2018	55	T Cells	Yes ex vivo	Retrovirus	Autologous	Cancer (Haematology)	Non-Hodgkin Lymphoma
AveXis, Inc.	European, Phase 3, Open-Label, Single-Arm, Single-Dose Gene Replacement Therapy Clinical Trial for Patients With Spinal Muscular Atrophy Type 1 With One or Two SMN2 Copies Delivering AVXS-101 by Intravenous Infusion (STRIVE-EU)	NCT03461289 2017-000266-29	Great Ormond Street Hospital London, The John Walton Muscular Dystrophy Research Centre MRC Centre for Neuromuscular Diseases at Newcastle	5- In follow-up	Phase III	2018	33		Yes in vivo	AAV		Neurological	Spinal Muscular Atrophy
AveXis, Inc.	A Global Study of a Single, One-Time Dose of AVXS-101 Delivered to Infants With Genetically Diagnosed and Pre-symptomatic Spinal Muscular Atrophy With Multiple Copies of SMN2 (SPR1NT)	NCT03505099 2017-004087-35	Great Ormond Street Hospital London	5- In follow-up	Phase III	2018	27		Yes in vivo	AAV		Neurological	Spinal Muscular Atrophy
Axovant Sciences Ltd.	A Phase I/II Safety and Dose Evaluation Study of OXB-102 in Patients With Bilateral Idiopathic Parkinson's Disease	GDC30006795 GDCT0235747	University of Cambridge Centre for Brain Repair,The National Hospital for Neurology and Neurosurgery UCLH	3- Recruiting	Phase I/II	2018	30		Yes in vivo	Lentivirus		Neurological	Parkinson's Disease
Barts & The London NHS Trust	Phase II Study Assessing the Combined Use of Autologous Bone Marrow Derived Mononuclear Cells and G-csf With Percutaneous Circulatory Assistance in the Treatment of Dilated Cardiomyopathy	NCT03572660	St Bartholomew's Hospital London	3- Recruiting	Phase II	2018	20	Bone marrow mononuclear cells	No		Autologous	Cardiovascular	Dilated Cardiomyopathy
Bayer AG	A Phase 1/2 Open-label Safety and Dose-finding Study of BAY2599023 (DTX201), an Adeno- associated Virus (AAV) hu37-mediated Gene Transfer of B-domain Deleted Human Factor VIII, in Adults With Severe Hemophilia A	NCT03588299 2017-000806-39	St Thomas' Hospital London, Manchester Royal Infirmary London	3- Recruiting	Phase I/II	2018	30		Yes in vivo	AAV		Blood	Haemophilia A
Bayer AG	Factor VIII Gene Therapy Study in Patients With Hemophilia A - A Phase 1/2 Open-label Safety and Dose-finding Study of BAY2599023 (DTX201), an Adeno-associated Virus (AAV) hu37-mediated Gene Transfer of B-domain Deleted Human Factor VIII. in Adults With	NCT03588299 2017-000806-39	St Thomas' Hospital London, Manchester Royal Infirmary	3- Recruiting	Phase I/II	2018			Variable	Adenovirus			Haemophilia A
						2010	30		Yes ex vivo	714011071140		Blood	наеторпііа А
BioMarin Pharmaceutical	Single-Arm Study To Evaluate The Efficacy and	NCT03392974	Addenbrookes Hospital Cambridge, Glasgow Royal Infirmary, Barts and The London School of Medicine and Dentistry London, Hammersmith Hospital London, St Thomas' Hospital London, Churchill Hospital Cyfrord University Hospi	5- In follow-up	Phase III	2018	40		Yes in vivo	AAV		Blood	Haemophilia A
BioMarin Pharmaceutical	Single-Arm Study To Evaluate The Efficacy and Safety of Valoctocogene Roxaparvovec in Hemophilia A Patients at a Dose of 4E13 vg/kg A Phase 1/2 Safety, Tolerability, and Efficacy Study of Valoctocogene Roxaparvovec, an Adeno-Associated Virus Vector-Mediated Gene Transfer of Human Factor VIII in Hemophilia A Patients With Residual FVIII Levels 5 1 IU/dL	NCT03392974 NCT03520712	Glasgow Royal Infirmary, Barts and The London School of Medicine and Dentistry London, Hammersmith Hospital London,	5- In follow-up 3- Recruiting	Phase III Phase I/II								,
	Single-Arm Study To Evaluate The Efficacy and Safety of Valoctocogene Roxaparvovec in Hemophilia A Patients at a Dose of 4E13 vg/kg A Phase 1/2 Safety, Tolerability, and Efficacy Study of Valoctocogene Roxaparvovec, an Adeno-Associated Virus Vector-Mediated Gene Transfer of Human Factor VIII in Hemophilia A Patients With Residual FVIII Levels 5 1 IJ/dL, and Pre-existing Antibodies Against AAV5 Phase I/II Trial of Lentiviral Gene Transfer for		Glasgow Royal Infirmary, Barts and The London School of Medicine and Dentistry London, Hammersmith Hospital London, St Thomas' Hospital London, Churchill Hospital Oxford. University Hospital Royal Free Hospital London, University Hospital Southampton NHS Foundation	·		2018	40	CD34 and/or CD133 stem cells	Yes in vivo	AAV	Autologous	Blood	Haemophilia A
BioMarin Pharmaceutical Boston Children's Hospita	Single-Arm Study To Evaluate The Efficacy and Safety of Valoctocogene Roxaparvovec in Hemophilia A Patients at a Dose of 4E13 vg/kg A Phase 1/2 Safety, Tolerability, and Efficacy Study of Valoctocogene Roxaparvovec, an Adeno-Associated Virus Vector-Mediated Gene Transfer of Human Factor VIII in Hemophilia A Patients With Residual FVIII Levels ≤ 1 IU/dL and Pre-existino Antibodies Acainst AAV5 Phase I/II Trial of Lentiviral Gene Transfer for SCID-X1 With Low Dose Targeted Busulfan	NCT03520712	Glasgow Royal Infirmary, Barts and The London School of Medicine and Dentistry London, Hammersmith Hospital London, St Thomas' Hospital London, Churchill Hospital Oxford: University Hospital Royal Free Hospital London, University Hospital Southampton NHS Foundation Trust	3- Recruiting	Phase I/II	2018	40	CD34 and/or CD133 stem cells Antigen presenting cells	Yes in vivo	AAV	Autologous Allogeneic	Blood Blood Inflammatory and immune	Haemophilia A Haemophilia A X-linked Severe Combined

Celgene	A Global Randomized Multicenter Phase 3 Trial of JCAR017 Compared to Standard of Care in Adult Subjects With High-risk, Second-line, Transplant-eligible Relapsed or Refractory Aggressive B-cell Non-Hodgkin Lymphomas (TRANSFORM).	NCT03575351	UCL Cancer Institute London, University Hospital Southampton NHS Foundation Trust	3- Recruiting	Phase III	2018	182	T cells	Yes ex vivo	Lentivirus	Autologous	Cancer (Haematology)	B-Cell Non-Hodgkin Lymphoma
Celgene	A Phase 3, Multicenter, Randomized, Open Label Study to Compare the Efficacy and Safety of BB2121 Versus Standard Triplet Regimens in Subjects with Relapsed and Refractory Multiple Myeloma (Rrmm) (KarMMa-3)	2018-001023-38	2 sites	3- Recruiting	Phase III	2018	381	T cells	Yes ex vivo	Lentivirus	Autologous	Cancer (Haematology)	Multiple Myeloma
Celgene	Long-Term Follow-up Protocol for Subjects Treated With CAR T Cells	NCT03435796	The Leeds Teaching Hospitals NHS Trust - St James's University Hospital, Kings College Hospital London, UCL Cancer Institute London, Christie Hospital NHS Trust Manchester, Somers Cancer Research Building Shirley Southamoton	3- Recruiting	Phase II/III	2018	191	T cells	Yes ex vivo	Lentivirus	Autologous	Cancer	Neoplasms
Celgene	A Phase 2, Multicohort, Open-label, Multicenter Study to Evaluate the Efficacy and Safety of bb2121 in Subjects With Relapsed and Refractory Multiple Myeloma and in Subjects With Clinical High-Risk Multiple Myeloma (KarMMa-2)	NCT03601078	King's College Hospital GKT School of Medicine, London	3- Recruiting	Phase II	2018	181	T cells	Yes ex vivo	Lentivirus	Autologous	Cancer (Haematology)	Multiple Myeloma
Celixir (Cell Therapy Ltd)	A Phase IIB, Randomised, Double-Blinded, Placebo-Controlled Study of the Efficacy and	2017-000516-42	Royal Brompton Imperial College London	2- In set-up	Phase II	2018	50	Mesenchymal stem/stromal cells	No		Allogeneic	Cardiovascular	Myocardial Fribrosis
Celyad (formerly named Cardio3 BioSciences)	An Open-label, Phase I Study to Assess the Safety, Cell Kinetics and Clinical Activity of Multiple Doses of CYAD-101, Administered Concurrently With the FOLFOX Treatment in Patients With Unresectable Metastatic Colorectal Cancer	NCT03692429	Guy's and St Thomas' NHS Foundation Trust London, The Christie NHS Foundation Trust Manchester	3- Recruiting	Phase I	2018	36	T cells	Yes ex vivo	Retrovirus	Allogeneic	Cancer	Metastatic Colorectal Cancer
Freeline Therapeutics	An Open-Label, Multicentre, Long-Term Follow- Up Study to Investigate the Safety and Durability of Response Following Dosing of a Novel Adeno- Associated Viral Vector (FLT180a) in Patients With Haemophilia B	2017-005080-40 NCT03641703	Royal Free London NHS Foundation Trust, Oxford University Hospitals NHS Foundation Trust	3- Recruiting	Phase II/III	2018	50		Yes in vivo	AAV		Blood	Haemophilia B
GenSight Biologics	Long-term Follow-up of ND4 LHON Subjects Treated With GS010 Ocular Gene Therapy in the RESCUE or REVERSE Phase III Clinical Trials	NCT03406104	Moorfields Eye Hospital NHS Foundation Trust London	3- Recruiting	Phase III	2018	74		Yes in vivo	AAV		Eye	Leber Hereditary Optic Neuropathy
GenSight Biologics	Efficacy and Safety of Bilateral Intravitreal Injection of GS010: A Randomized, Double-Masked, Placebo-Controlled Trial in Subjects Affected with G11778A ND4 Leber Hereditary Optic Neuropathy for Up to One Year (RFFI ECT)	NCT03293524	Moorfields Eye Hospital NHS Foundation Trust London	5- In follow-up	Phase III	2018	90		Yes in vivo	AAV		Eye	Leber Hereditary Optic Neuropathy
Gensight Biologics	A Phase 1/2a, Open-Label, Non-Randomized, Dose-Escalation Study to Evaluate the Safety and Tolerability of GS030 in Subjects With Retinitis Pigmentosa	NCT03326336 2017-002204-27	Moorfields Eye Hospital NHS Foundation Trust London	3- Recruiting	Phase I/II	2018	18		Yes in vivo	AAV		Eye	Retinitis Pigmentosa
Gensight Biologics	Efficacy and Safety of Bilateral Intravitreal Injection of GS010: A Randomized, Double- Masked, Placebo-Controlled Trial in Subjects Affected With G11778A ND4 Leber Hereditary Optic Neuropathy for Up to One Year	2017-002187-40	Moorfields Eye Hospital NHS Foundation Trust London	5- In follow-up	Phase III	2018	90		Yes in vivo	AAV		Eye	Leber Hereditary Optic Neuropathy
Great Ormond Street Hospital for Children NHS Foundation Trust	Efficacy and safety of a cryopreserced formulation of autologous CD34+ haematopoietic stem cells transduced ex vivo with EFS lentiviral vector encoding for human ADA gene in subjects with severe combined immunodeficiency due to Adenocine Deaminase Deficiency	2017-001275-23	Great Ormond Street Hospital NHS Trust London	3- Recruiting	Phase II	2018	10	CD34 and/or CD133 stem cells	Yes ex vivo	Lentivirus	Autologous	Inflammatory and immune system	Adenosine Deaminase Deficiency
Great Ormond Street Hospital for Children NHS Foundation Trust	Phone I/II study of locativiral gaps transfer for	NCT03601286	Great Ormond Street Hospital NHS Foundation Trust	3- Recruiting	Phase I	2018	5	CD34 and/or CD133 stem cells	Yes ex vivo	Lentivirus	Autologous	Inflammatory and immune system	X-linked Severe Combined Immunodeficiency
Immunocore Ltd	Safety and Efficacy of IMCnyeso in Advanced NY-ESO-1 and/or LAGE-1A Positive Cancers	NCT03515551 2017-002243-15	Sarah Cannon Research Institute, The hristie Hospital, Royal Marsden Hospital	3- Recruiting	Phase I/II	2018	63	T cells	No		Allogeneic	Cancer	Advanced Solid Tumours

Kite Pharma, Inc.	Phase 1/2 Multicenter Study Evaluating the Safety and Efficacy of KTE-X19 in Adult Subjects with Relapsed/Refractory Chronic Lymphocytic Leukemia	2018-001923-38	3 UK Sites	3- Recruiting	Phase I/II	2018	108	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer (Haematology)	Chronic Lymphocytic Leukaemia
MeiraGTx UK II Ltd	Long term follow-up study of participants following an open label, multicentre, Phase I/II dose escalation trial of a recombinant adeno-associated virus vector (AAV2/5-hRKp.RPGR) for gene therapy of adults and children with X-linked Retinitis Piomentosa owina to defects in	2018-000425-31	Moorfields Eye Hospital NHS Foundation Trust London	3- Recruiting	Phase I/II	2018	36		Yes in vivo	AAV		Eye	Retinitis Pigmentosa
NightstaRx Ltd	A Long-term Follow-up Study to Evaluate the Safety and Efficacy of Retinal Gene Therapy in Subjects with Choroideremia Previously Treated with Adeno-Associated Viral Vector Encoding Rab Escort Protein-1 (AAV2-REP1) and in Subiects with X-Linked Retinitis Pigmentosa	2017-003104-42	2 UK Sites	3- Recruiting	Phase III	2018	440		Yes in vivo	AAV		Eye	Choroideremia
Pluristem, Ltd.	Phase III, Multicenter, Randomized, Double- Blind, Placebo-Controlled Study, Designed to Determine the Efficacy, Safety, and Tolerability of Intramuscular Administration of Allogeneic PLX-PAD Cells for the Treatment of Muscle Iniury Following Arthroplasty for Hip Fracture	NCT03451916 2017-005165-49	Norfolk and Norwich University Hospital, John Radcliffe Hospital Oxford	3- Recruiting	Phase III	2018	240	Mesenchymal stem/stromal cells	No		Allogeneic	Musculoskeletal	Muscle Injury Following Arthroplasty for Hip Fracture
Replimune Ltd	An Open-Label, Multicenter, Phase 1/2 Study of RP1 as a Single Agent and in Combination with Immune Checkpoint Blockade or Other Standard of Care Regimens in Patients with Solid Tumors	NCT03767348 2016-004548-12	Leeds Teaching Hospitals NHS Trust, Oxford University Hospitals NHS Foundation Trust, The Beatson West of Scotland Cancer Centre, The Clatterbridge Cancer Centre NHS Foundation Trust. The Royal Marsden	3- Recruiting	Phase I/II	2018	168		Yes in vivo	HSV-1		Cancer	Solid Tumours
Ultragenyx Pharmaceutical Inc	Long Term Follow Up to Evaluate DTX301 in Adults With Late-Onset OTC Deficiency (CAPtivate)	NCT03636438	Queen Elizabeth Hospital Birmingham	3- Recruiting	Phase I/II	2018	12		Yes in vivo	AAV		Metabolic and Endocrine	Ornithine Transcarbamylase Deficiency
uniQure biopharma B.V.	Phase III, open-label, single-dose, multi-center multinational trial investigating a serotype 5 adeno-associated viral vector containing the Padua variant of a codon-optimized human factor IX gene (AAV5-hFIXco-Padua, AMT-061) administered to adult subjects with severe or	NCT03569891 2017-004305-40	University Hospitals Bristol NHS Foundation Trust, The Cambridge Haemophilia and Thrombophilia Centre, University Hospitals NHS Foundation Trust Cambridge, The Royal London Hospital (Rarts Health NHS Trust)	3- Recruiting	Phase III	2018	56		Yes in vivo	AAV		Blood	Haemophilia B
University of Birmingham	An Adaptive, Multicentre, Phase Ila, Multi-disease Trial Investigating the Safety & Activity of a Single Infusion of Selected Mesenchymal Stromal Cells in the Treatment of Patients With Primary Sclerosing Cholangitis & Autoimmune Henatitis	EudraCT-2016- 000181-36 NCT02997878	University Hospitals Birmingham NHS foundation Trust	3- Recruiting	Phase I/II	2018	56	Mesenchymal stem/stromal cells	No		Allogeneic	Liver	Primary Sclerosing Cholangitis & Autoimmune Hepatitis
Vertex Pharmaceuticals Incorporated	A Phase 1/2 Study of the Safety and Efficacy of a Single Dose of Autologous CRISPR-Cas9 Modified CD34+ Human Hematopoietic Stem and Progenitor Cells (hHSPCs) in Subjects with Transfusion-Dependent β Thalassemia	NCT03655678 2017-003351-38	Imperial College Healthcare	3- Recruiting	Phase I/II	2018	45	CD34 and/or CD133 stem cells	Yes ex vivo		Autologous	Blood	β-Thalassemia
Achilles Therapeutics Ltd	An Open-Label, Multi-Centre Phase I/IIa Study Evaluating the Safety and Clinical Activity of Neoantigen Reactive T Cells in Patients With Advanced Non-Small Cell Lung Cancer	NCT04032847	UCLH, Freeman Hospital, Queen Elizabeth Hospital Birmingham	3- Recruiting	Phase I/II	2019	50	T cells	No		Autologous	Cancer	Advanced Non-Small Cell Lung Cancer
Achilles Therapeutics Ltd	An Open-Label, Multi-Centre Phase I/IIa Study Evaluating the Safety and Clinical Activity of Neoantigen Reactive T Cells in Patients With Advanced Non-Small Cell Lung Cancer	NCT03997474	UCLH, Freeman Hospital Newcastle	3- Recruiting	Phase I/II	2019	50	T cells	No		Autologous	Cancer	Advanced Non-Small Cell Lung Cancer
Adaptimmune	A Phase 2 Single Arm Open-Label Clinical Trial of ADP-A2M4 SPEAR™ T Cells in Subjects With Advanced Synovial Sarcoma or Myxoid/Round Cell Liposarcoma	NCT04044768	UCLH, The Christie NHS Fouandation Trust	3- Recruiting	Phase II	2019	60	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer	Synovial Sarcoma Myxoid/Round Cell Liposarcoma
AveXis, Inc.	A Long-term Follow-up Study of Patients in the Clinical Trials for Spinal Muscular Atrophy Receiving AVXS-101	NCT04042025 2019-002611-26	Great Ormond Street Hospital London, Great North Children's Hospital Research Unit Newcastle Upon Tyne	3- Recruiting	Phase IV	2019	308		Yes in vivo	AAV		Neurological	Spinal Muscular Atrophy
Belfast Health and Social Care Trust	Repair of Acute Respiratory Distress Syndrome by Stromal Cell Administration (REALIST): An Open Label Dose Escalation Phase 1 Trial Followed by a Randomized, Double-blind, Placebo-controlled Phase 2 Trial	NCT03042143 2017-000584-33	Belfast Health and Social Care Trust, Royal Hospitals	3- Recruiting	Phase I/II	2019	75	Mesenchymal stem/stromal cells	No		Allogeneic	Respiratory	Acute Respiratory Distress Syndrome

Bluebird Bio	A Phase 3 Study of Lenti-D Drug Product After Myeloablative Conditioning Using Busulfan and Fludarabine in Subjects 417 Years of Age With Cerebral Adrenoleukodystrophy (CALD)	NCT03852498	UCL Great Ormond Street Insitute of Child Health	3- Recruiting	Phase III	2019	20	CD34 and/or CD133 stem cells	Yes ex vivo	Lentivirus	Autologous	Neurological	Cerebral Adrenoleukodystrophy
Cellectis SA	Phase I, Open Label Dose-escalation Study to Evaluate the Safety, Expansion, Persistence and Clinical Activity of Multiple Infusions of UCART123 (Allogeneic Engineered T-cells Expressing Anti-CD123 Chimeric Antigen Receator) in Patients With Adverse Genetic Risk	NCT04106076	King's College Hospital NHS Foundation Trust	3- Recruiting	Phase I	2019	18	T cells	Yes ex vivo	Lentivirus	Allogeneic	Cancer (Haematology)	Acute Myeloid Leukaemia
Freeline Therapeutics	A Phase 1/2, Baseline-controlled, Non- randomised, Open-label, Single-ascending Dose Study of a Novel Adeno-associated Viral Vector (FLT190) in Patients With Fabry Disease	NCT04040049	Royal Free Hospital London	3- Recruiting	Phase I/II	2019	12		Yes in vivo	AAV		Liver	Fabry Disease Lysosomal Storage Disease
GlaxoSmithKline Research & Development Ltd	Master Protocol to Assess the Safety and Antitumor Activity of Genetically Engineered NY- ESO-1-Specific (c259) T Cells, alone or in combination with other agents, in HLA-A2+ Participants with NY-ESO-1 and/or LAGE-1a Positive Solid Tumors (IGNYTE-ESO)	2019-000415-87	2 UK Sites	2- In set-up	Phase II	2019	65	T cells	Yes ex vivo	Retrovirus	Autologous	Cancer	Synovial Sarcoma
lovance Biotherapeutics, Inc.	A Phase 2, Multicenter Study of Autologous Tumor Infiltrating Lymphocytes (LN-144 or LN- 145) in Patients with Solid Tumors	2018-001608-12	Guy's Hospital London	3- Recruiting	Phase II	2019	48	T cells	No		Autologous	Cancer	Metastatic Melanoma Squamous Cell Carcinoma of the Head and Neck Non-Small Cell Lung Cancer
Kuopio University Hospital	ReGenHeart: Clinical development and proof of principle testing of new regenerative VEGF-D therapy for cost effective treatment of refractory angina. A Phase II randomised, double-blinded, placebo-controlled study.	2017-000789-31 NCT03039751	Bart's Health NHS Trust/Queen Mary University London	2- In set-up	Phase II	2019	180		Yes in vivo	Adenovirus		Cardiovascular	Refractory Angina
MeiraGTx UK II Ltd	An Open Label, Multi-centre, Phase I/II Dose Escalation Trial of a Recombinant Adeno- associated Virus Vector (AAV2/8-hG1.7p. coCNGA3) for Gene Therapy of Children With Achromatopsia Owing to Defects in CNGA3	NCT03758404	Moorfields Eye Hospital NHS Foundation Trust London	3- Recruiting	Phase I/II	2019	18		Yes in vivo	AAV		Eye	Achromatopsia
Novartis Pharma AG	A Phase II, single arm, multicenter open label trial to determine the safety and efficacy of tisagenlecleucel in pediatric patients with relapsed or refractory mature B-cell non-Hodgkin lymphoma (NHL) (BIANCA)	NCT03610724 2017-005019-15	2 UK Sites	3- Recruiting	Phase II	2019	35	T cells	Yes ex vivo	Lentivirus	Autologous	Cancer (Haematology)	Non-Hodgkin Lymphoma
	A phase II trial of tisagenlecleucel in first-line high-risk (HR) pediatric and young adult patients with B-cell acute lymphoblastic leukemia (B-ALL) who are minimal residual disease (MRD) positive at the end of consolidation (EOC) therapy	NCT03876769 2017-002116-14	2 UK Sites	3- Recruiting	Phase II	2019	140	T cells	Yes ex vivo	Lentivirus	Autologous	Cancer (Haematology)	B-Cell Acute Lymphoblastic Leukaemia
Oragenics, Inc.	A Phase 2, Multi-center, Randomized, Double- blind, Placebo-controlled Study to Assess the Safety and Efficacy of Topically-applied AG013 for the Attenuation of Oral Mucositis in Subjects With Cancers of the Head and Neck Receiving Concomitant Chemoradiation Therapy	NCT03234465 2016-004161-68	Derriford Hospital, Queen Elizabeth Hospital Birmingham, Beatson West of Scotland Cancer Centre, Guy's Hospital London, The Christie NHS Foundation Trust, Royal Cornwall Hospital	3- Recruiting	Phase II	2019	200		Yes ex vivo	L. lactis		Inflammatory and immune system	Oral mucositis (OM)
	An Interventional, Multicenter, Single Arm, Phase	NCT03529877 2018-001009-98	King's College London; St John's Institute of Dermatology, Great Ormond Street Hospital London; Dermatology Department	3- Recruiting	Phase I/II	2019	18	Mesenchymal stem/stromal cells	No		Allogeneic	Skin	Recessive Dystrophic Epidermolysis Bullosa
St Georges University London	Clinical development of erythrocyte encapsulated thymidine phosphorylase - a therapy for mitochondrial neurogastrointestinal encephalomyopathy	NCT03866954	1 UK Site	2- In set-up	Phase II	2019	20	Other	No		Autologous	Metabolic and Endocrine	Mitochondrial Neurogastrointestinal Encephalomyopathy
Trizell Ltd	Phase 3, Open-Label, Randomized, Parallel Group Study to Evaluate the Efficacy and Safety of Intrapleural Administration of Adenovirus- Delivered Interferon Alpha-2b (rAd-IFN) in Combination With Celecoxib and Gemcitabine in Patients With Malionant Pleural Mesothelioma	NCT03710876 2017-003169-82	Beatson West of Scotland Cancer Centre, Royal Marsden Foundation Trust, Guy's and St. Thomas' NHS Trust London, Wythenshawe Hospital UHSM Manchester, Churchill Hospital Oxford	3- Recruiting	Phase III	2019	300		Yes in vivo	AAV		Cancer	Malignant Pleural Mesothelioma
University College London	Targeted Stem Cells Expressing TRAIL as a Therapy for Lung Cancer	UCL/14/0453	UCLH	3- Recruiting	Phase I/II	2019	46	Mesenchymal stem/stromal cells	Yes ex vivo	Lentivirus	Allogeneic	Cancer	Adenocarinoma of Lung
University College London	Immunotherapy With Tacrolimus Resistant EBV CTL for Lymphoproliferative Disease After Solid Organ Transplant	NCT03131934	Great Ormond Street Hospital London	3- Recruiting	Phase I	2019	18	T cells	Yes ex vivo	Retrovirus	Autologous	Inflammatory and immune system	Post-transplant Lymphoproliferative Disease