

Sponsor	Short title, Title	Clinical Trial Database number, EudraCT/EU CT	Drug/substance and vector (if applicable)	Trial Phase	Trial Status	Disease Area	Indication	ATMP class	Cell Type	Gene Therapy	Autologous/Allogeneic	Site(s) in Sweden	Start Year
Uppsala University	A Phase I-IIa Study of Dose escalating Intravesical AdCD40L instillation in Urinary Bladder Carcinoma.	NCT00891748 2006-000985-34	CD40L gene therapy adenoviral vector	I/II	Completed	Oncology - urology	Urinary bladder cancer	GTMP	N/A	Yes, in vivo		Uppsala University Hospital, Uppsala	2006
Uppsala University	DNA Vaccine Coding for the Rhesus Prostate Specific Antigen (rhPSA) and Electroporation in Patients With Relapsed Prostate Cancer. A Phase I/II Study.	NCT00859729 2006-001128-38	Biological: pVAXrcPSAv53l (DNA encoding rhesus PSA) Device: DERMA VAX™ intradermal DNA delivery system	I/II	Completed	Oncology - urology	Prostate cancer	GTMP	N/A	Yes, in vivo		Uppsala University Hospital, Uppsala	2008
Uppsala University	Phase I/IIa AdCD40L allogeneic dendritic-cell based therapeutic vaccine.	NCT01455259 2010-023103-94	CD40L gene therapy	I/IIa	Completed	Oncology	Malignant melanoma	GTMP	N/A	Yes, in vivo		Uppsala University Hospital, Uppsala	2011
Mendus	IM101. A Phase I Open-label study to evaluate Safety and Immunologic Response of COMBIG-DC administered Intratumorally in Patients with Metastatic Renal Cell Carcinoma.	NCT01525017 2011-002039-25	COMBIG-DC. ilixadencel. allogeneic dendritic-cell based therapeutic vaccine	I	Completed	Oncology	Metastatic Renal Cell Carcinoma (mRCC)	sCTMP	Dendritic cells	No	Allogeneic	Uppsala University Hospital, Uppsala	2012
Karolinska University Hospital	MAT02. A phase I study to evaluate safety, feasibility and immunologic response of adoptive T cell transfer with or without dendritic cell vaccination in patients with metastatic melanoma	2012-000450-63	TIL +/- DC vacc	I	In follow-up	Oncology	Melanoma	GTMP	TILs	Yes, ex vivo		Karolinska University Hospital, Stockholm	2013
Uppsala University	CAR 19 003. CD19-targeting 3rd Generation CAR T Cells for Refractory B Cell Malignancy - a Phase I/IIa Trial.	NCT02132624 2013-001393-19	CAR T cells (CD192841BBz) retroviral vector	I/IIa (FiH)	Completed	Oncology/hematology	Refractory B Cells Malignancy	GTMP	T cells	Yes, ex vivo	Autologous	Uppsala University Hospital, Uppsala	2014
Mendus	MERECa, IM-201. An open-label, randomized, controlled, multicenter, phase II study evaluating safety and efficacy of intratumorally administered Intuvax pre-nephrectomy followed by Sunitinib, post-nephrectomy, compared to Sunitinib post-nephrectomy in metastatic renal cell carcinoma patients.	NCT02432846 2014-004510-28	Intuvax (ilixadencel)	II	Completed	Oncology	Metastatic Renal Cell Carcinoma (mRCC)	sCTMP	Preactivated allogeneic dendritic cells	No	Allogeneic	Uppsala University Hospital, Uppsala	2015
BioNTech	MERIT. First-in-human clinical study with RNA-Immunotherapy combination of IVAC_W_bre1_uID and IVAC_M_uID for Individualized Tumour Therapy in Triple negative Breast Cancer Patients.	NCT02316457 2014-002274-37	IVAC MUTANOME® RNA	I	Completed	Oncology	Breast Cancer (Triple Negative Breast Cancer (TNBC)), Breast Cancer (Triple Negative Breast Cancer (TNBC))	GTMP	N/A			Uppsala University Hospital, Uppsala	2016
Uppsala University	RADNET. Study of Recombinant Adenovirus AdVince in Patients With Neuroendocrine Tumors; Safety and Efficacy.	NCT02749331 2014-000614-64	AdVince Ad5PTD(CgA-E1AmiR122) oncolytic adenovirus	I/IIa (FiH)	In follow-up	Oncology	Progressive neuroendocrine neoplasms with liver metastasis	GTMP	N/A	Yes, in vivo		Uppsala University Hospital, Uppsala	2016
Uppsala University	CAR 19 004. CD19-targeting, 3rd Generation CAR T Cells for Refractory B Cells Malignancy.	NCT03068416 2016-004043-36	CAR T cells (CD192841BBz). retroviral vector	II	Completed	Oncology/hematology	Refractory B Cells Malignancy	GTMP	T cells	Yes, ex vivo	Autologous	Uppsala University Hospital, Uppsala	2017

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NextCell Pharma Ab	PROTRANS 1. Wharton's Jelly Derived Mesenchymal Stromal Cell Treatment of Adult Patients Diagnosed With Type I Diabetes.	NCT03406585 2017-002766-50	Mesenchymal stromal cells	I/II	Completed	Endocrinology	Type 1 Diabetes Mellitus	TEP	Mesenchymal stromal cells	No	Allogeneic	Uppsala University Hospital, Uppsala	2017
Celgene	TRANSFORM, CA082-1170. A Study to Compare the Efficacy and Safety of JCAR017 to Standard of Care in Adult Subjects With High-risk, Transplant-eligible Relapsed or Refractory Aggressive B-cell Non-Hodgkin Lymphomas.	NCT03575351 2018-000929-32	Lisocabtagene Maraleucel	III	Completed	Oncology	Relapsed or Refractory Aggressive B-cell Non-Hodgkin Lymphomas	GTMP	T cells	Yes, ex vivo	Autologous	Karolinska University Hospital, Stockholm	2018
Kite/Gilead	ZUMA-7. A Phase 3, Open-Label Study Evaluating the Efficacy of Axicabtagene Ciloleucel versus Standard of Care Therapy in Subjects with Relapsed/Refractory Diffuse Large B Cell Lymphoma.	NCT03391466 2017-002261-22	axicabtagene ciloleucel (Yescarta) retroviral vector: (MSCV)-based splice-gag γ -retroviral vector (MSGV1).	III	Completed	Oncology	Diffuse large B cell lymphoma (DLBCL)	GTMP	T cells	Yes, ex vivo	Autologous	Skåne University Hospital, Lund Uppsala University Hospital, Uppsala	2018
Herantis Pharma Plc.	AdeLE. Clinical Study With Lymfactin® in the Treatment of Patients With Secondary Lymphedema.	NCT03658967 2017-004443-20	Lymfactin + advanced microsugery. VEGF-C, adenoviral vector.	II	Terminated	Oncology	Breast cancer	GTMP	N/A	Yes, in vivo		Karolinska University Hospital, Stockholm Uppsala University Hospital, Uppsala	2018
Novartis	CPK850. A First-in-human, Proof of Concept Study of CPK850 in Patients With RLBP1 Retinitis Pigmentosa.	NCT03374657 2016-002696-10	CPK850 scAAV8-RLBP1	I/II	In follow-up	Ophthalmology	Bothniadystrofi, retinitis pigmentosa	GTMP		Yes, in vivo		St. Erik Eye Hospital, Stockholm	2018
Celgene/BMS	KarMMA-3. Efficacy and Safety Study of bb2121 Versus Standard Regimens in Subjects With Relapsed and Refractory Multiple Myeloma (RRMM).	NCT03651128 2018-001023-38	Idecabtagene Vicleucel	III	In follow-up	Oncology	Relapsed and Refractory Multiple Myeloma (RRMM)	GTMP	CAR-T	Yes, ex vivo		Karolinska University Hospital, Stockholm	2018
BOOST Pharma	BOOSTB4. Boost Brittle Bones Before Birth.	NCT03706482 2015-003699-60	MSC	II	In follow-up	highly specialized pediatric medicine	Osteogenesis Imperfecta	sCTMP	MSC	No		Karolinska University Hospital, Stockholm	2019
LOKON Pharma	LOKON002. Phase I/II Trial Investigating an Immunostimulatory Oncolytic Adenovirus for Cancer.	2017-002565-22	delolimogene mupadenorepvec (LOAd703). oncolytic adenovirus	I/II	Completed	Oncology - endocrinology	Pancreatic and ovarian cancer	GTMP	N/A	Yes, in vivo		Karolinska University Hospital, Stockholm Uppsala University Hospital, Uppsala	2019
CSL Behring/ UniQure	AMT-061. Phase III, open-label, single-dose, multi-centre 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 moderately-severe hemophilia B.	NCT03569891 2017-004305-40	Etranacogene dezaparvovec. AAV5 (Factor IX).	III	In follow-up	Haematology	Hemophilia B	GTMP	N/A	Yes, in vivo		Skåne University Hospital, Malmö	2019

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NextCell Pharma Ab	PROTRANS 2. Wharton's Jelly Derived Mesenchymal Stromal Cell Repeated Treatment of Adult Patients Diagnosed With Type I Diabetes.	NCT03973827 2018-004158-11	Protrans Mesenchymal stromal cells	I/II	Completed	Endocrinology	Type 1 Diabetes Mellitus	TEP	Mesenchymal stromal cells	No	Allogeneic	Uppsala University Hospital, Uppsala	2019
GSK	ZENYTH-ESO. Master Protocol to Assess Safety and Dose of First Time in Human Next Generation Engineered T Cells in NY-ESO-1 and/or LAGE-1a Positive Advanced Solid Tumors.	NCT04526509	TCR T cells	I (FiH)	Terminated	Oncology	Y-ESO-1 and/or LAGE-1a Positive Advanced Solid Tumors	GTMP	engineered T cells	Yes, ex vivo	Allogeneic	Karolinska University Hospital, Stockholm	2019
LOKON Pharma	LOKON003. A Phase I/II Trial Investigating LOAd703 in Combination with Atezolizumab in Malignant Melanoma.	NCT04123470 2019-003300-12	delolimogene mupadenorepvec (LOAd703). oncolytic adenovirus	I/II	Completed	Oncology	malignant melanoma	GTMP	N/A	Yes, in vivo		Uppsala University Hospital, Uppsala	2020
DCprime bv	Advance II. An international multicentre open-label study to evaluate the efficacy and safety of two different vaccination regimens of immunotherapy with allogeneic dendritic cells, DCP-001, in patients with acute myeloid leukemia that are in remission with persistent MRD.	NCT03697707 2017-003426-32	DCP-001 (DCOne). Allogeneic dendritic cell vaccine	II	Completed	Hematology	AML	sCTMP	Dendritic cells	No	Allogeneic	Uppsala University Hospital, Uppsala	2020
Uppsala University Hospital	ARDS-MSC-205 (Covid19). Mesenchymal stromal cell therapy for the treatment of acute respiratory distress syndrome. Validation of Mechanistic Pathways and Clinical Efficacy.	NCT04447833 2019-004462-18	allogeneic BM-MSC: EMA/864885/2016	I	In follow-up	Acute Respiratory Distress Syndrome, Adult	COVID19- induced ARDS	sCTMP	Mesenchymal stromal cells	No	Allogeneic	Uppsala University Hospital, Uppsala	2020
NextCell Pharma AB	Treatment of Respiratory Complications Associated With COVID-19, Influenza A, Metapneumovirus, Respiratory Syncytial Virus Infection Using Wharton's Jelly-Umbilical Cord Mesenchymal Stromal Cells (ProTrans®): Open Phase IB Clinical Trial.	NCT04896853 2020-002078-29	ProTrans®	Ib	Recruiting	COVID-19 Acute Respiratory Distress Syndrome	Severe respiratory complications associated with pneumonia caused by COVID-19.	TEP	Wharton's Jelly-Umbilical Cord Mesenchymal Stromal Cells	No	Allogeneic	Örebro University Hospital, Örebro	2020
Kite/Gilead	Zuma-4. A Phase 1/2 Multi-Center Study Evaluating the Safety and Efficacy of KTE-C19 in Pediatric and Adolescent Subjects with Relapsed/Refractory B precursor Acute Lymphoblastic Leukemia (r/r ALL).	2015-005010-30	KTE-X19	I/II	Completed	Oncology/hematology	Relapsed/Refractory B-precursor Acute Lymphoblastic Leukemia (r/r ALL)	GTMP	CAR T cells	Yes, ex vivo	Autologous	Karolinska University Hospital, Stockholm	2021
Genentech, Inc.	AteVacc. A phase IA/IB open-label, dose-escalation study of the safety and pharmacokinetics of RO7198457 as a single agent and in combination with atezolizumab in patients with locally advanced or metastatic tumours	NCT03289962 2017-001475-23	autogene cevumeran (RO7198457)	I	In follow-up	Oncology	Locally Advanced or Metastatic Tumors	GTMP		Yes, in vivo		Karolinska University Hospital, Stockholm	2021

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Novartis	Cassiopeia. 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	CTL019, Kymriah	II	In follow-up	Paediatric oncology	Paediatric and young adult patients with B-cell acute lymphoblastic leukemia (B ALL)	GTMP	T cells	Yes, ex vivo	Autologous	Karolinska University Hospital, Stockholm Sahlgrenska University Hospital, Göteborg	2021
Janssen-Cilag	CARTITUDE-4. A Phase 3 Randomized Study Comparing JNJ-68284528, a Chimeric Antigen Receptor T cell (CAR-T) Therapy Directed Against BCMA, versus Pomalidomide, Bortezomib and Dexamethasone (PvD) or Daratumumab, Pomalidomide and Dexamethasone (DPd) in Subjects with Relapsed and Lenalidomide- Refractory Multiple Myeloma.	NCT04181827 2019-001413-16	Ciltacabtagene Autoleucel (cilta-cel) lentiviral vector	III	In follow-up	Oncology	multiple myeloma	GTMP	T cells	Yes, ex vivo	Autologous	Karolinska University Hospital, Stockholm Skåne University Hospital, Lund Uppsala University Hospital, Uppsala	2021
Region Uppsala	DSC-BROMS-1. A multicenter, open-label, randomized, phase I/II clinical trial comparing safety and durable overall response rate (DOR) at 56 days in patients with steroid resistant severe acute GvHD after allogeneic hematopoietic stem cell transplantation treated with decidua stromal cells (DSC) or best available therapy (BAT).	NCT04118556 2019-002186-36	Placenta-derived (decidua) stromal cells	I/II	Recruiting	GvHD	steroid resistant severe acute GvHD after allogeneic hematopoietic stem cell transplantation	sCTMP	Decidua stromal cells	No	Allogeneic	Skåne University Hospital, Lund Uppsala University Hospital, Uppsala	2021
Pfizer/Sparks	Phase 3, open label, single arm study to evaluate efficacy and safety of FIX gene transfer with PF-06838435 (rAAV-Spark100-hFIX-Padua) in adult male participants with moderately severe to severe hemophilia B (FIX:C <=2%) (BeneGene-2)	NCT03861273 2018-003086-33/ 2022-502844-11-00	fidanacogene elaparvovec	III	In follow-up	Haematology	Hemophilia B	GTMP	N/A	Yes, in vivo		Skåne University Hospital, Malmö	2021
Intellia Therapeutics	Phase 1/2 Study to Evaluate Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of NTLA-2002 in Adults with Hereditary Angioedema (HAE).	NCT04601051	NTLA-2002 CRISPR/Cas9	I/II	In follow-up	Congenital, Hereditary, and Neonatal Diseases and Abnormalities	Hereditary Angioedema	GTMP	N/A	Yes, in vivo		University Hospital of Umeå, Umeå	2021
BioNTech Cell & Gene Therapies	CLDN 6. Phase I/IIa, first-in-human, open-label, dose escalation trial with expansion cohorts to evaluate safety and preliminary efficacy of CLDN6 CAR-T with or without CLDN6 RNA-LPX in patients with CLDN6-positive relapsed or refractory advanced solid tumors.	2019-004323-20 NCT04503278	Cloudin-6 BNT211-01	I/IIa	Recruiting	Oncology - advanced solid tumors	relapsed/ refractory CLDN6 positive tumors	GTMP	CAR T cells	Yes, ex vivo	Autologous	Karolinska University Hospital, Stockholm	2021

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Celgene/BMS	TRANSCEND. An open-label, single-arm, multicohort, multicenter Phase 2 trial to evaluate the efficacy and safety of JCAR017 in adult subjects with relapsed or refractory non-Hodgkin's lymphoma (NHL) of the indolent B-cell lymphoma type.	NCT04245839	JCAR017	II	In follow-up	Oncology	relapsed or refractory indolent B-cell non-Hodgkin's lymphoma (NHL)	GTMP	T cells	Yes, ex vivo	Autologous	Karolinska University Hospital, Stockholm	2021
Karolinska Institute	Cell protect - ISA HC NK. An Open, Randomised, Controlled, Phase II Trial of CellProtect in Combination With Isatuximab Antibody Versus Isatuximab Antibody Alone as Maintenance Treatment in Patients With Multiple Myeloma Undergoing High Dose Treatment.	2020-000994-26	Cell protect ACP-001	II	Recruiting	Oncology/hematology	Multiple myeloma	GTMP	NK cells	Yes, ex vivo		Karolinska University Hospital, Stockholm	2021
Karolinska Institute	MSC-KI-PL-204. A Study of Local Administration of Autologous Mesenchymal Stromal Cells in Dysphonic Patients With Vocal Fold Scarring.	NCT04290182 2019-001180-73	MSC-KI	I	In follow-up	ENT	Vocal fold scarring	sCTMP	MSC	No		Karolinska University Hospital, Stockholm	2021
Janssen-Cilag	CARTITUDE-5. A Phase 3 Randomized Study Comparing Bortezomib, Lenalidomide and Dexamethasone (VRd) followed by Ciltacabtagene Autoleucel, a Chimeric Antigen Receptor T cell (CAR-T) Therapy Directed Against BCMA versus Bortezomib, Lenalidomide, and Dexamethasone (VRd) followed by Lenalidomide and Dexamethasone (Rd) Therapy in Participants with Newly Diagnosed Multiple Myeloma for Whom Hematopoietic Stem Cell Transplant is Not Planned as Initial Therapy.	NCT04923893 2021-001242-35	Ciltacabtagene Autoleucel (cilta-cel) lentiviral vector	III	In follow-up	Oncology	multiple myeloma	GTMP	T cells	Yes, ex vivo	Autologous	Linköping University Hospital, Linköping Sahlgrenska University Hospital, Göteborg Skåne University Hospital, Lund	2022
Ilya Pharma	SITU-HEAL (IP-CT-003). A Randomized, Double-Blind, Placebo-controlled, Parallel, Exploratory Phase 2a Study to Evaluate Safety and Biological Effect on Wound Healing of ILP100-Topical in Subjects With Diabetic Foot Ulcers.	NCT05608187 2021-000563-69	ILP100, emilimogene sigulactibac. CXCL12-α via Limosilactobacillus reuteri bacteria.	IIa	Terminated	Endocrinology, Chronic wounds.	Diabetic Foot Ulcers	GTMP	Lyophilized Lactobacillus reuteri expressing CXCL12	Yes, in vivo		Skåne University Hospital, Lund Uppsala University Hospital, Uppsala	2022
Pfizer	Phase 3, Open-Label, Single-Arm Study to Evaluate the Efficacy and Safety of PF-07055480 (Recombinant AAV2/6 Human Factor VIII Gene Therapy) in Adult Male Participants With Moderately Severe to Severe Hemophilia A(FVIII:C≤1%) (Affine)	NCT04370054 2019-004451-37	giroctocogene fitelparvovec	III	In follow-up	Haematology	Hemophilia A	GTMP	N/A	Yes, in vivo		Skåne University Hospital, Malmö	2022

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AlloVir	VIR303. Phase 3, Randomized, Double-Blind, Placebo-Controlled Trial, With Cross-Over, of Posoleucel (ALVR105) for the Treatment of Adenovirus Infection in Pediatric and Adult Participants Receiving Standard of Care Following Allogeneic Hematopoietic Cell Transplantation.	NCT05179057 2021-003450-22	Posoleucel	III	Completed	Paediatrics - adenovirus infection after allogeneic transplantation	Adenovirus Infection after allogeneic transplantation	sCTMP	Multi-virus specific T cell therapy; Virus infected previously in hematopoietic cell transplanted patients	No	Allogeneic	Karolinska University Hospital, Stockholm Sahlgrenska University Hospital, Göteborg Skåne University Hospital, Lund	2022
Amniotics	Amnio-PUL. A First-In-Human Phase 1b, Open-Label Trial to Evaluate Safety and Tolerability of a Novel Somatic Cell Therapy - AmnioPul-02 - in Subjects with Confirmed COVID-19.	NCT05348772 2020-004171-40	AmnioPul-02	Ib	Completed	Infectious diseases	hospitalized moderate to severe SARS-CoV-2 infection (Covid-19)	sCTMP	Allogeneic mesenchymal stem cells (MSCs) extracted from term amniotic fluid	No	Allogeneic	Skåne University Hospital, Lund	2022
Sarepta therapeutics	ENVISION. A Phase 3, Multinational, Randomized, Double-Blind, Placebo-Controlled Systemic Gene Transfer Therapy Study to Evaluate the Safety and Efficacy of SRP-9001 in Non-Ambulatory and Ambulatory Subjects With Duchenne Muscular Dystrophy.	2020-002372-13	SRP-9001, Delandistrogene moxeparvovec rAAVrh74 containing human micro-dystrophin gene	III	Recruiting	Pediatric neurology	Non-Ambulatory and Ambulatory Subjects With Duchenne Muscular Dystrophy	GTMP	N/A	Yes, in vivo		Sahlgrenska University Hospital, Göteborg Karolinska University Hospital, Stockholm	2022
Miltenyi	Miltenyi DALY 2-EU. A pivotal Phase II randomised, multi-centre, open-label study to evaluate the efficacy and safety of MB-CART2019.1 compared to standard of care therapy in participants with relapsed/refractory diffuse large B-cell lymphoma (R-R DLBCL), who are not eligible for high-dose chemotherapy and autologous stem cell transplantation.	2020-003908-14	MB-CART2019.1	II	Completed	Oncology/hematology	Relapsed/refractory diffuse large B cell lymphoma (R-R DLBCL)	GTMP	Autologous CD20-CD19 CAR transduced CD4/CD8 enriched T cells	Yes, ex vivo	Autologous	Uppsala University Hospital, Uppsala	2022
Uppsala University Hospital	PROTRANS YOUNG. A Double-blinded, Randomized, Parallel, Placebo-controlled trial of Wharton's Jelly-derived Allogeneic Mesenchymal Stromal Cells to treat Type I Diabetes in Children and Adolescents.	2020-004520-42	Mesenchymal stromal cells	I/II	Recruiting	Endocrinology	Type 1 Diabetes Mellitus	TEP	Mesenchymal stromal cells		Allogeneic	Uppsala University Hospital, Uppsala	2022
NeoGap	NeoGap (NEOGAP-CRC-01). A First-In-Human, Phase I/IIa Trial of the novel T cell Immunotherapy pTTL in Patients with Advanced Colorectal Cancer.	NCT05908643 2022-000394-96	NeoGap NEOGAP-CRC-01	I/IIa	Recruiting	Oncology	Advanced colorectal cancer	GTMP	personalised tumour-trained lymphocytes - pTTL (T cells)	Yes, ex vivo		Karolinska University Hospital, Stockholm	2022

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AnGes MG	AG-CLI-0206. A phase 3 double-blind, randomized, placebo-controlled study to evaluate the safety and efficacy of AMG0001 in subjects with critical limb ischemia.	NCT02144610 2014-001129-34	AMG0001, beperminogen perplasmid, Collatogene. Vector: Hepatocyte Growth Factor (HGF) cDNA Plasmid.	III	Terminated	Surgery/ Cardiovascular Diseases	Critical limb ischemia	GTMP	N/A	Yes, in vivo		Uppsala University Hospital, Uppsala	2022
BioNTech SE	An open label Phase II randomized trial of BNT113 in combination with pembrolizumab versus pembrolizumab monotherapy as a first line therapy in patients with unresectable recurrent, or metastatic Head and Neck Squamous Cell Carcinoma (HNSCC) which is positive for human papilloma virus 16 (HPV16+) and expresses PD-L1	NCT04534205 2020-001400-41	BNT113	II	Completed	Oncology	unresectable recurrent, or metastatic Head and Neck Squamous Cell Carcinoma (HNSCC) which is positive for human papilloma virus 16 (HPV16+) and expresses PD-L1	GTMP	N/A	Yes, in vivo		Sahlgrenska University Hospital, Göteborg Skåne University Hospital, Lund	2022
Syneos Health	IDUNN. A Randomised, Open label, Multicentre, Phase 3 Trial of First line Treatment with Mesenchymal Stromal Cells MC0518 Versus Best Available Therapy in Adult and Adolescent Subjects with Steroid refractory Acute Graft versus host Disease After Allogeneic Haematopoietic Stem Cell Transplantation (IDUNN Trial).	2019-001462-15	MC0518	III	Recruiting	Immune system disorders	steroid refractory aGvHD	sCTMP	Mesenchymal stromal cells	No		Karolinska University Hospital, Stockholm	2022
Göteborg University	HAITILS. A Phase I Study Using Hepatic Arterial Infusion of Autologous Tumor Infiltrating Lymphocytes in Patients With Melanoma and Liver Metastases.	NCT04812470 2020-006126-31	Autologous Tumor Infiltrating Lymphocytes	I	In follow-up	Oncology - melanoma	Patients with melanoma and liver metastases		Tumor Infiltrating Lymphocytes		Autologous	Sahlgrenska University Hospital, Göteborg	2023
Merck Sharp & Dohme LLC	A Phase 3, Randomized, Double-Blind, Placebo- and Active- Comparator-Controlled Clinical study of Adjuvant V940 (mRNA-4157) Plus Pembrolizumab Versus Adjuvant Placebo Plus Pembrolizumab in Participants With High-Risk Stage II-IV Melanoma.	NCT05933577 2023-503652-27-00	mRNA-4157 (V940) liposomally formulated mRNA.	III	In follow-up	Oncology	Malignant melanoma	GTMP	N/A	Yes, in vivo		Sahlgrenska University Hospital, Göteborg Skåne University Hospital, Lund	2023
Xintela	XIN-XSTEM-201. A single-centre, randomised, single-blind Phase I/IIa study to evaluate the safety, tolerability and efficacy of a single topical dose of allogeneic integrin $\alpha 10\beta 1$ - selected mesenchymal stem cells (XSTEM-VLU) in patients with difficult-to-heal venous leg ulcers.	NCT05549609 2022-000492-39	XSTEM-VLU	I/II	In follow-up	Skin. Chronic wounds	Venous leg ulcers	sCTMP	Integrin $\alpha 10\beta 1$ - No selected mesenchymal stem cells	No	Allogeneic	Sahlgrenska University Hospital, Göteborg Skåne University Hospital, Lund	2023

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European Myeloma Network	CARTITUDE-6. A Phase 3 Randomized Study Comparing Daratumumab, Bortezomib, Lenalidomide and (DVRd) followed by Ciltacabtagene Autoleucl versus Daratumumab, Bortezomib, Lenalidomide and Dexamethasone (DVRd) followed by Autologous Stem Cell Transplant (ASCT) in Participants with Newly Diagnosed Multiple Myeloma who are Transplant Eligible.	NCT05257083 2021-003284-10/ 2023-507632-20-00	Ciltacabtagene Autoleucl (cilta-cel) lentiviral vector	III	In follow-up	Oncology	multiple myeloma	GTMP	CAR T cells	Yes, ex vivo	Autologous	Linköping University Hospital, Linköping Sahlgrenska University Hospital, Göteborg Skåne University Hospital, Lund. Uppsala University Hospital, Uppsala	2023
Region Skåne	STEM-PD trial: A multicentre, single arm, first in human, dose-escalation trial, investigating the safety and tolerability of intraputamenal transplantation of human embryonic stem cell derived dopaminergic cells for Parkinson's disease (STEM-PD product).	NCT05635409 2021-001366-38/ 2024-511237-35-00	STEM-PD	I/IIa (FiH)	In follow-up	Neurology	Parkinson disease	sCTMP	Human embryonic stem cell (hESC) derived dopaminergic cells	No	Allogeneic	Skåne University Hospital, Lund	2023
Intellia Therapeutics	Long-Term Follow-Up of Subjects Treated With NTLA-2001.	NCT05697861	NTLA-2001 CRISPR/Cas10		In follow-up		Transthyretin-Related (ATTR) Familial Amyloid Polyneuropathy, Transthyretin-Related (ATTR) Familial Amyloid Cardiomyopathy, Wild-Type Transthyretin Cardiac Amyloidosis.	GTMP	N/A	Yes, in vivo		University Hospital of Umeå, Umeå	2023
Boeinger Ingelheim	OnkoVir	NCT05839600 2022-502125-17-00	BI 1467-0001 VSV-GP	I (FiH)	Terminated	Oncology	Advanced solid tumours	GTMP		Yes, in vivo		Karolinska University Hospital, Stockholm	2023
BioNTech SE	BNT 122-01. A multi-site, open-label, Phase II, randomized, controlled trial to compare the efficacy of RO7198457 versus watchful waiting in resected, Stage II (high risk) and Stage III colorectal cancer patients who are ctDNA positive following resection.	NCT04486378 2020-000451-12	RO7198457. Personalized cancer vaccine (PCV), liposomally formulated mRNA encoding up to 20 tumor neoantigens.	II	Recruiting	Oncology	Colorectal cancer stage II and III	GTMP	N/A	Yes, in vivo		Skåne University Hospital, Lund	2023
Merck Sharp & Dohme LLC	V940-005 - A Phase 2 Study Evaluating Adjuvant V940 + Pembrolizumab vs. Placebo + pembrolizumab in High-Risk Muscle-Invasive Urothelial Carcinoma.	NCT06305767 2023-505658-17	mRNA-4157 (V940) liposomally formulated mRNA	II	Recruiting	Oncology	Bladder cancer	GTMP	N/A	Yes, in vivo		Uppsala University Hospital, Uppsala	2024

Sponsor	Short title, Title	Clinical Trial Database number, EudraCT/EU CT	Drug/substance and vector (if applicable)	Trial Phase	Trial Status	Disease Area	Indication	ATMP class	Cell Type	Gene Therapy	Autologous/Allogeneic	Site(s) in Sweden	Start Year
Advesya	RESOLVE. An adaptive open-label multicenter, phase 1/2 trial to determine the recommended phase 2 dose of CCTx-001 and assess safety, tolerability and clinical activity in patients with relapsed/refractory acute myeloid leukaemia.	NCT06281847	CCTx-001 IL-1RAP-targeted CAR T	I/IIa	In planning/ set-up	Oncology/ hematology	Acute myeloid leukaemia	GTMP	CAR T cells	Yes, ex vivo	Autologous	Karolinska University Hospital, Stockholm	2024
Uppsala University	CARMA-01. A Phase I/IIa multicenter study evaluating the safety and efficacy of CAR20(NAP)-T in patients with relapsed/refractory B cell lymphoma.	NCT06002659 2022-004157-31	CAR20(NAP)	I/IIa (FiH)	Recruiting	Oncology/ hematology	Relapsed/ refractory B cell lymphoma	GTMP	CAR T cells	Yes, ex vivo	Autologous	Uppsala University Hospital, Uppsala Karolinska University Hospital, Stockholm	2024
AprilApri	UP421-ET1D. First-in-human safety study of hypoimmune pancreatic islet transplantation in adult subjects with type 1 diabetes.	NCT06239636 2023-507988-19-00	Genetically modified human pancreatic islets (UP421). Lentiviral vector and CRISPR/Cas are used for genetic modification of the cells.	I (FiH)	Recruiting	Endocrinology	Type 1 Diabetes Mellitus	GTMP	Pancreatic islet cells	Yes, ex vivo	Allogeneic	Uppsala University Hospital, Uppsala	2024
Iovance Biotherapeutics	A Phase 3, multicenter, randomized, open-label, parallel group, treatment study to assess the efficacy and safety of the lifileucel (LN-144, autologous tumor-infiltrating lymphocytes [TIL]) regimen in combination with pembrolizumab compared with pembrolizumab monotherapy in participants with untreated, unresectable or metastatic melanoma.	NCT05727904 2022-503140-41-00	Lifileucel (LN-144)	III	Recruiting	Oncology	untreated, unresectable or metastatic melanoma	sCTMP	TILs	No	Autologous	Sahlgrenska University Hospital, Göteborg	2024
J & J	A Phase 2b, Randomized, Double masked, Multicenter, Dose-ranging, Sham-controlled Clinical Trial to Evaluate Intravitreal JNJ-81201887 (AAVCAGsCD59) Compared to Sham Procedure for the Treatment of Geographic Atrophy (GA) Secondary to Age-related Macular Degeneration (AMD).	NCT05811351	JNJ-81201887 AAVCAGs	IIb	Recruiting	Ophthalmology	Geographic atrophy, secondary to age-related macular degeneration	GTMP		Yes, in vivo		St. Erik Eye Hospital, Stockholm	2024
Intellia Therapeutics	MAGNITUDE: A Phase 3 Study of NTLA 2001 in Participants With Transthyretin Amyloidosis With Cardiomyopathy (ATTR CM).	NCT06128629 2023-507220-23-00	NTLA-2001 hu-G000480 + mRNA00042	III	Recruiting	Cardiology	Transthyretin Amyloidosis w. Cardiomyopathy (ATTR-CM)	GTMP		Yes, in vivo		Karolinska University Hospital, Stockholm	2024

Sponsor	Short title, Title	Clinical Trial Database number, EudraCT/EU CT	Drug/substance and vector (if applicable)	Trial Phase	Trial Status	Disease Area	Indication	ATMP class	Cell Type	Gene Therapy	Autologous/Allogeneic	Site(s) in Sweden	Start Year
AviadoBio Ltd	AVB-101. A Phase 1/2 Open-Label, Ascending Dose, Multicenter Study to Evaluate the Safety and Preliminary Efficacy of AVB-101 Administered by Bilateral Intrathalamic Infusion in Subjects With Frontotemporal Dementia With Progranulin Mutations (FTD-GRN).	NCT06064890 2022-002568-62	AVB-101	I/II	In planning/ set-up	Neurology	Frontotemporal dementia with progranulin mutation	GTMP		Yes, in vivo		Skåne University Hospital, Lund	2024
RHEACELL	A pivotal, randomized, placebo-controlled, double-blind, multicenter, international phase III clinical trial to investigate the efficacy and safety of allo-APZ2-CVU on wound healing of therapy-resistant non-healing chronic venous ulcers (CVU).	NCT06489028 2024-512720-11	allo-APZ2-CVU	III	In follow-up	Skin and subcutaneous tissue disorders	Therapy-resistant non-healing chronic venous ulcers (CVU)	sCTMP	Mesenchymal Stromal Cells	No	Allogeneic	Academic primary care center, Uppsala Sahlgrenska University Hospital, Göteborg	2025
Karolinska University Hospital	CISOT	2024-514866-37-01	T-reg	I	Recruiting	Transplantation immunology	Induction of tolerance following liver transplantation	sCTMP	T-reg	No	Allogeneic	Karolinska University Hospital, Stockholm	2025
Anocca	VIDAR-1	2024-513900-32-00	ANOC-001, -002, -003	I/II	Recruiting	Oncology	Inoperable pancreas tumors	GTMP	TCR-T	Yes, ex vivo	Autologous	Karolinska University Hospital, Stockholm	2025
BMS	QUINTESSENTIAL-2, CA088-1007	NCT06615479	BMS-986393, GPRC5D CAR-T	III	Recruiting	Oncology Hematology	RRMM	GTMP	CAR T cells	Yes, ex vivo	Autologous	Karolinska University Hospital, Stockholm	2025
Boeinger Ingelheim	Onkovir IT, BI3923948		Onkovir IT BI 3923948	I (FiH)	In planning/ set-up	Oncology	met. Solid tumors	GTMP		Yes, in vivo		Karolinska University Hospital, Stockholm	2026
Karolinska Institute	Adapt-NK	2025-521962-83-00	Adapt-NK	I (FiH)	In planning/ set-up	Oncology	AML	sCTMP	NK cells	No	Allogeneic	Karolinska University Hospital, Stockholm	2026
St Eriks Eye Hospital	RPE	2024-517546-33-00	RPE	I	In planning/ set-up	Ophtamology		sCTMP	RPE	No	Allogeneic	St. Erik Eye Hospital, Stockholm	2026
Novartis	YTB323J12201, An Open-label, Multi-center, Phase 1/2 Study to Assess Safety, Efficacy and Cellular Kinetics of YTB323 in Participants With Severe, Refractory Systemic Lupus Erythematosus	2023-510150-17-00/AM-6	YTB	II	In planning/ set-up	Reumatology	Systemic Lupus Erythematosus, SLE with active refractory lupus nephritis	GTMP	CAR-T	Yes, ex vivo	Autologous	Karolinska University Hospital, Stockholm	2026
Spur Therapeutics	GALILEO-3: A Phase 3, Open-label, Safety, and Efficacy Trial of FLT201 Gene Therapy in Adults with Gaucher Disease Typ		FLT201	III	In planning/ set-up	Oncology Hematology	Gaucher disease	GTMP		Yes, in vivo		Karolinska University Hospital, Stockholm	2026