Autor	Journal	Title
2015		
Chauvin et al., 2015	JCI	TIGIT and PD-1 impair tumor antigen–specific CD8+ T cells in melanoma patients
Mascanfroni et al., 2015	Nature Med	Metabolic control of type 1 regulatory T cell differentiation by AHR and HIF1-α
Spranger et al., 2015	Nature	Melanoma-intrinsic b-catenin signalling prevents anti-tumour immunity
Kreiter et al., 2015	Nature	Mutant MHC class II epitopes drive therapeutic immune responses to cancer
Surace et al. 2015	Immunity	Complement Is a Central Mediator of Radiotherapy-Induced Tumor-Specific Immunity and Clinical Response
Twyman-Saint Victor et al 2015	Nature	Radiation and dual checkpoint blockade activate non-redundant immune mechanisms in cancer, part I
Twyman-Saint Victor et al 2015	Nature	Radiation and dual checkpoint blockade activate non-redundant immune mechanisms in cancer, part II
Beatty et al., 2011, 2013	Science and CCR	CD40 Agonists Alter Tumor Stroma and Show Efficacy Against Pancreatic Carcinoma in Mice and Humans
Wang et al., 2015	Cancer Cell	IL-36g Transforms the Tumor Microenvironment and Promotes Type 1 Lymphocyte-Mediated Antitumor Immune Responses
Dahan et al., 2015	Cancer Cell	FcgRs Modulate the Anti-tumor Activity of Antibodies Targeting the PD-1/PD-L1 Axis
Salanti et al., 2015	Cancer Cell	Targeting Human Cancer by a Glycosaminoglycan Binding Malaria Protein
Kurtulus et al., 2015	JCI	TIGIT predominantly regulates the immune response via regulatory T cells
Huang et al., 2015	PNAS	Vascular normalizing doses of antiangiogenic treatment reprogram the immunosuppressive tumor microenvironment and enhance immunotherapy
Datta et al., 2015	OncoImmunology	Progressive loss of anti-HER2 CD4+ T-helper type 1 response in breast tumorigenesis and the potential for immune restoration
Zhao et al., 2015	Cancer Cell	Structural Design of Engineered Costimulation Determines Tumor Rejection Kinetics and Persistence of CAR T Cells
Chih-Hao Chang et al., 2015	Cell	Metabolic Competition in the Tumor Microenvironment Is a Driver of Cancer Progression
Liu et al., 2015	Nature Med	CD47 blockade triggers T cell–mediated destruction of immunogenic tumors
Tähtinen et al., 2015	PlosOne	Favorable Alteration of Tumor Microenvironment by Immunomodulatory Cytokines for Efficient T-Cell Therapy in Solid Tumors
2016		
Lan et al., 2015	Scientific Reports	Quantitative histology analysis of the ovarian tumour microenvironment
Lizotte et al., 2015	Nature Nanotech	In situ vaccination with cowpea mosaic virus nanoparticles suppresses metastatic cancer
Zhao et al., 2015	Nature Immunol	Cancer mediates effector T cell dysfunction by targeting microRNAs and EZH2 via glycolysis restriction
Lin et al., 2015	Nature Biotech	COMPASSSS identifies T-cell subsets correlated with clinical outcomes
Woo et al., 2014	Immunity	STING-Dependent Cytosolic DNA Sensing Mediates Innate Immune Recognition of Immunogenic Tumors
Sivan et al., 2015	Science	Commensal Bifidobacterium promotes antitumor immunity and facilitates anti–PD-L1 efficacy

Koyama et al., 2016	Nature Comm	Adaptive resistance to therapeutic PD-1 blockade is associated with upregulation of alternative immune checkkpoints
Mlecnik et al., 2016	Sci Transl Med	The tumor microenvironment and Immunoscore are critical determinants of dissemination to distant metastasis
Zhou et al., 2014	Nature	In vivo discovery of immunotherapy targets in the tumour microenvironment
Doorduijn et al., 2016	JCI	TAP-independent self-peptides enhance T cell recognition of immune-escaped tumors
Gros et al., 2016	Nature Med	Prospective identification of neoantigen-specific lymphocytes in the peripheral blood of melanoma patients
Yang et al., 2016	Nature	Potentiating the antitumour response of CD8$^+$ T cells by modulating cholesterol metabolism
Rajani et al., 2016	Mol Therapy	Combination Therapy With Reovirus and Anti-PD-1 Blockade Controls Tumor Growth Through Innate and Adaptive Immune Responses
Woller et al., 2015	Mol Therapy	Viral Infection of Tumors Overcomes Resistance to PD-1-immunotherapy by Broadening Neoantigenome-directed T-cell Responses
McGranahan et al., 2016	Science	Clonal neoantigens elicit T cell immunoreactivity and sensitivity to immune checkpoint blockade
Liu et al., 2016	Nature Biotech	Inclusion of Strep-tag II in design of antigen receptors for T-cell immunotherapy
Dragin et al., 2016	JCI	Estrogen-mediated downregulation of AIRE influences sexual dimorphism in autoimmune diseases
He et al., 2016	Cancer Res	FAP promotes immunosuppression by cancer-associated fibroblasts in the tumor microenvironment via STAT3-CCL2 signaling
Agudo et al., 2015	Nature Biotech	GFP-specific CD8 T cells enable targeted cell depletion and visualization of T-cell interactions
Siegemund et al., 2016	MAbs	Anoptimized antibody-single-chain TRAIL fusion protein for cancertherapy
Menger et al., 2016	Cancer Res	TALEN-Mediated Inactivation of PD-1 in Tumor-Reactive Lymphocytes Promotes Intratumoral T-cell Persistence and Rejection of Established Tumors
Kranz et al., 2016	Nature	Systemic RNA delivery to dendritic cells exploits antiviral defence for cancer immunotherapy
Metzger et al., 2016	Cancer Res	ICOS Promotes the Function of CD4+ Effector T Cells during Anti-OX40–Mediated Tumor Rejection
Alvarez-Cienfuegos et al., 2016	Scientific Reports	Intramolecular trimerization, a novel strategy for making for making multispecific antibodies
Shimizu et al., 2016	Cancer Res	Systemic DC Activation Modulates the Tumor Microenvironment and Shapes the Long-Lived Tumor-Specific Memory Mediated by CD8þ T Cells
Moran et al., 2016	J Immunol	Immunotherapy Expands and Maintains the Function of High-Affinity Tumor-Infiltrating CD8 T Cells In Situ
Cherkassky et al., 2016	JCI	Human CAR T cells with cell-intrinsic PD-1 checkpoint blockade resist tumor-mediated inhibition
Sakemura et al., 2016	Can Imm Res	A Tet-On Inducible System for Controlling CD19-Chimeric Antigen Receptor Expression upon Drug Administration
Lizotte et al., 2016	JCI	Multiparametric profiling of non–small-cell lung cancers reveals distinct immunophenotypes
Im et al., 2016	Nature	Defining CD8+ T cells that provide the proliferative burst after PD-1 therapy

Ebert et al., 2016	Immunity	MAP Kinase Inhibition Promotes T Cell and Antitumor Activity in Combination with PD-L1 Checkpoint Blockade
Jha et al., 2015	Immunity	Network Integration of Parallel Metabolic and Transcriptional Data Reveals Metabolic Modules that Regulate Macrophage Polarization
Thoreau et al., 2015	Oncotarget	Vaccine-induced tumor regression requires a dynamic cooperation between T cells and myeloid cells at the tumor site
Romee et al. 2016	Sci Transl Med	Cytokine-induced memory-like natural killer cells exhibit enhanced responses against myeloid leukemia
Stronen, … Schumacher 2016	Science	Targeting of cancer neoantigens with donor-derived T cell receptor repertoires
Verdegaal, … Schumacher…, 2016	Nature	Neoantigen landscape dynamics during human melanoma–T cell interactions
Baer et al., 2016	Nature	Suppression of microRNA activity amplifies IFNg-induced macrophage activation and promotes anti-tumour immunity
2017		
Bassani-Sternberg et al. 2016	Nature Comm	Direct identification of clinically relevant neoepitopes presented on native human melanoma tissue by mass spectrometry
Shit et al.	Nature Comm	Interdependent IL-7 and IFN-g signalling in T-cell controls tumour eradication by combined a-CTLA-4þa-PD-1 therapy
De Henau et al. 2016	Nature	Overcoming resistance to checkpoint blockade therapy by targeting PI3Kγ in myeloid cells
Moynihan et al. 2016	Nature Med	Eradication of large established tumors in mice by combination immunotherapy that engages innate and adaptive immune responses
Eriksson et al. 2017	Gene Ther	Activation of myeloid and endothelial cells by CD40L gene therapy supports T-cell expansion and migration into the tumor microenvironment
Zamarin et al., 2016	Nature Comm	Intratumoral modulation of the inducible co-stimulator ICOS by recombinant oncolytic virus promotes systemic anti-tumour immunity
Bentzen et al., 2016	Nature Biotech	Large-scale detection of antigen-specific T cells using peptide-MHC-I multimers labeled with DNA barcodes
Pauken et al., 2016	Science	Epigenetic stability of exhausted T cells limits durability of reinvigoration by PD-1 blockade
Williams et al., 2017	J Exp Med	The EGR2 targets LAG-3 and 4-1BB describe and regulate dysfunctional antigen-specific CD8+ T cells in the tumor microenvironment.
Sommermeyer et al., 2016	Leukemia	Chimeric antigen receptor-modified T cells derived from defined CD8+ and CD4+ subsets confer superior antitumor reactivity in vivo
Kagoya et al., 2017	JCI insight	Transient stimulation expands superior antitumor T cells for adoptive therapy
Kamphorst et al., 2017	Science	Rescue of exhausted CD8 T cells by PD-1–targeted therapies is CD28-dependent
Liu et al. 2017	Nature Comm	Rational combination of oncolytic vaccinia virus and PD-L1 blockade works synergistically to enhance therapeutic efficacy
Roybal et al., 2016	Cell	Engineering T Cells with Customized Therapeutic Response Programs Using Synthetic Notch Receptors

Baevis et al., 2017	JCI	Targeting the adenosine 2A receptor enhances chimeric antigen receptor T cell efficacy
Gilam et al., 2016	Nature Comm	Local microRNA delivery targets Palladin and prevents metastatic breast cancer
Platt et al., 2017	JCI	C3d regulates immune checkpoint blockade and enhances antitumor immunity
Katlinski et al., 2017	Cancer Cell	Inactivation of Interferon Receptor Promotes the Establishment of Immune Privileged Tumor Microenvironment
Facciabene et al., 2017	OncoImmunology	Local endothelial complement activation reverses endothelial quiescence, enabling T cell homing , ……
Spranger et al., 2017	Cancer Cell	Tumor-Residing Batf3 Dendritic Cells Are Required for Effector T Cell Trafficking and Adoptive T Cell Therapy
Arlauckas et al., 2017	Sci Transl Med	In vivo imaging reveals a tumor-associated macrophage-mediated resistance pathway in anti-PD-1 therapy
Chamoto et al., 2017	PNAS	Mitochondrial activation chemicals synergize with surface receptor PD-1 blockade for T cell-dependent antitumor activity
Allen et al., 2017	Sci Transl Med	Combined antiangiogenic and anti–PD-L1 therapy stimulates tumor immunity through HEV formation
Reinhardt et al., 2017	Cancer Res	MAPK signaling and inflammation link melanoma phenotype switching to induction of CD73 during immunotherapy
Foster et al., 2017	Mol Therapy	Regulated Expansion and Survival of Chimeric Antigen Receptor-Modified T Cells Using Small Molecule-Dependent Inducible MyD88/CD40
CIMT presentations		
Johansson-Percival et al., 2017	Nature Immunol	De novo induction of intratumoral lymphoid structures and vessel normalization enhances immunotherapy in resistant tumors
Vargas et al., 2017	Immunity	Fc-Optimized Anti-CD25 Depletes Tumor-Infiltrating Regulatory T Cells and Synergizes with PD-1 Blockade to Eradicate Established Tumors
Min et al., 2017	Nature Nanotech	Antigen-capturing nanoparticles improve the abscopal effect and cancer immunotherapy
Stadler et al., 2017	Nature Med	Elimination of large tumors in mice by mRNA-encoded bispecific antibodies
Burr et al., 2017	Nature	CMTM6 maintains the expression of PD-L1 and regulates anti-tumour immunity
Gordon et al., 2017	Nature	PD-1 expression by tumour-associated macrophages inhibits phagocytosis and tumour immunity
Ott et al., 2017	Nature	An immunogenic personal neoantigen vaccine for patients with melanoma
Schmidtnaegel et al., 2017	Sci Transl Med	Dual angiopoietin-2 and VEGFA inhibition elicits antitumor immunity that is enhanced by PD-1 checkpoint blockade
Dushyanthen et al. 2017	Nature Comm	Agonist immunotherapy restores T cell function following MEK inhibition improving efficacy in breast cancer
Singh et al., 2017	Nature Comm	Intratumoral CD40 activation and checkpoint blockade induces T cell-mediated eradication of melanoma in the brain
2018		
Molgora et al., 2017	Nature	IL-1R8 is a checkpoint in NK cells regulating anti-tumour and anti-viral activity
Maciocia et al., 2017	Nature Med	Targeting the T cell receptor β-chain constant region for immunotherapy of T cell malignancies
Smith et al., 2017	Nature Nanotech	In situ programming of leukaemia-specific T cells using synthetic DNA nanocarriers
Zhu et al., 2017	Nature Comm	Albumin/vaccine nanocomplexes that assemble in vivo for combination cancer immunotherapy

Sahin et al., 2017	Nature	Personalized RNA mutanome vaccines mobilize poly-specific therapeutic immunity against cancer
Sagiv-Barfi et al., 2018	Sci Transl Med	Eradication of spontaneous malignancy by local immunotherapy
Adams DL et al., 2017	Clin Cancer Res	Sequential Tracking of PD-L1 Expression and RAD50 Induction in Circulating Tumor and Stromal Cells of Lung Cancer Patients Undergoing Radiotherapy
Chowel D. et al., 2017	Science	Patient HLA class I genotype influences cancer response to checkpoint blockade immunotherapy
Wu et al., in press (2018)	PNAS	Induction of antitumor cytotoxic lymphocytes using engineered human primary blood dendritic cells
Malik et al., 2017	Science Immunol	Resident memory T cells in the skin mediate durable immunity to melanoma
Kooreman et al., 2018	Cell Stem Cell	Autologous iPSC-Based Vaccines Elicit Anti-tumor responses in vivo
Quail DF et al., 2017	Nature Cell Biol	Obesity alters the lung myeloid cell landscape to enhance breast cancer metastasis through IL5 and GM-CSF
Rupp LJ et al., 2017	Nature	CRISPR/Cas9-mediated PD-1 disruption enhances anti-tumor efficacy of human chimeric antigen receptor T cells
de Andrade LF et al., 2018	Science	Antibody-mediated inhibition of MICA and MICB shedding promotes NK cell–driven tumor immunity
Ravi R et al., 2018	Nature	Bifunctional immune checkpoint-targeted antibody-ligand traps that simultaneously disable TGFβ enhance the efficacy of cancer immunotherapy
Giavridis T et al., 2018	Nature Med	CAR T cell–induced cytokine release syndrome is mediated by macrophages and abated by IL-1 blockade
Hoves S et al., 2018	JEM	Rapid activation of tumor-associated macrophages boosts preexisting tumor immunity
Azizi E et al., 2018	Cell	Single-Cell Map of Diverse Immune Phenotypes in the Breast Tumor Microenvironment
Roth TI et al., 2018	Nature	Reprogramming human T cell function and specificity with non-viral genome targeting
Chen G et al., 2018	Nature	Exosomal PD-L1 contributes to immunosuppression and is associated with anti-PD-1 response
Hartley GP et al., 2018	Can Imm Res	Programmed Cell Death Ligand 1 (PD-L1) Signaling Regulates Macrophage Proliferation and Activation
Chowdhury PS et al., 2018	Can Imm Res	PPAR-induced fatty acid oxidation in T cells increases the number of tumorreactive CD8+ T cells and facilitates anti–PD-1 therapy
Hsu J et al., 2018	JCO	Contribution of NK cells to immunotherapy mediated by PD-1/PD-L1 blockade
Rech AJ et al., 2018	Cancer Res	Radiotherapy and CD40 activation separately augment immunity to checkpoint blockade in cancer
Tang L et al., 2018	Nature Biotech	Enhancing T cell therapy through TCR-signaling-responsive nanoparticle drug delivery
Hernandez S et al, 2018	Cell Reports	The kinase activity of Hematopoietic progenitor kinase 1 is essential for the regulation of T cell function
Sayeda YK et al., 2018	Frontiers Immunol	Radiation and Local Anti-CD40 Generate an Effective in situ Vaccine in Preclinical Models of Pancreatic Cancer
Simoni Y et al., 2018	Nature	Bystander CD8+ T cells are abundant and phenotypically distinct in human tumour infiltrates

Elia et al., 2018	Clin Cancer Res	Targeting Tumor Vasculature with TNF Leads Effector T Cells to the Tumor and Enhances Therapeutic Efficacy of Immune Checkpoint Blockers in Combination with Adoptive Cell Therapy
Zhang et al., 2018	Nature Biotech	High-throughput determination of the antigen specificities of T cell receptors in single cells
Diamond et al., 2018	Can Imm Res	Exosomes Shuttle TREX1-Sensitive IFN-Stimulatory dsDNA from Irradiated Cancer Cells to DCs
Buchan et al., 2018	Immunity	Antibodies to Costimulatory Receptor 4-1BB Enhance Anti-tumor Immunity via T Regulatory Cell Depletion and Promotion of CD8 T Cell Effector Function
Zhang et al., 2018	Can Imm Res	Macrophages and CD8+ T cells mediate the antitumor efficacy of combined CD40 ligation and imatinib therapy in gastrointestinal stromal tumors
2019		
Lakins et al., 2018	Nature Comm	Cancer-associated fibroblasts induce antigenspecific deletion of CD8+ T Cells to protect tumour cells
Kalaora et al., 2018	Cancer Discovery	Combined Analysis of Antigen Presentation and T-cell Recognition Reveals Restricted Immune Responses in Melanoma
Feucht et al., 2019	Nature Med	Calibration of CAR activation potential directs alternative T cell fates and therapeutic potency
Samaha et al., 2018	Nature	A homing system targets therapeutic T cells to brain cancer
Rosato et al, 2019	Nature Comm	Virus-specific memory T cells populate tumors and can be repurposed for tumor immunotherapy
Chon et al., 2018	Clin Cancer Res	Tumor Microenvironment Remodeling by Intratumoral Oncolytic Vaccinia Virus Enhances the Efficacy of Immune-Checkpoint Blockade
Zhang F et al., 2019	Immunity	Specific Decrease in B-Cell-Derived Extracellular Vesicles Enhances Post-Chemotherapeutic CD8+ T Cell Responses
Pai et al., 2019	Immunity	Clonal Deletion of Tumor-Specific T Cells by Interferon-g Confers Therapeutic Resistance to Combination Immune Checkpoint Blockade
Park et al., 2019	Nature	Tissue-resident memory CD8+ T cells promote melanoma–immune equilibrium in skin
Freedman et al., 2018	Cancer Res	An Oncolytic Virus Expressing a T-cell Engager Simultaneously Targets Cancer and Immunosuppressive Stromal Cells
Garris et al., 2019	Immunity	Successful anti-PD-1 cancer immunotherapy requires T cell-Dendritic Cell crosstalk involving the cytokines IFN-g and IL-12
Miller et al., 2019	Nature Immunol	Subsets of exhausted CD8+ T cells differentially mediate tumor control and respond to checkpoint blockade
Barry et al., 2018	Nature Med	A natural killer–dendritic cell axis defines checkpoint therapy–responsive tumor microenvironments
Baeuerle et al., 2019	Nature Comm	Synthetic TRuC receptors engaging the complete T cell receptor for potent anti-tumor response
Vodnala et al., 2019	Science	T cell stemness and dysfunction in tumors are triggered by a common mechanism
Sawant et al., 2019	Nature Immunol	Adaptive plasticity of IL-10+ and IL-35+ Treg cells cooperatively promotes tumor T cell exhaustion
Khan et al., 2019	Nature	1) TOX transcriptionally and epigenetically programs CD8+ T cell exhaustion
Alfei et al., 2019	Nature	2) TOX reinforces the phenotype and longevity of exhausted T cells in chronic viral infection
Scott et al., 2019	Nature	3) TOX is a critical regulator of tumour-specific T cell differentiation

Marciscano et al., 2018	Clin Cancer Res	Elective Nodal Irradiation Attenuates the Combinatorial Efficacy of Stereotactic Radiation Therapy and Immunotherapy
Niemann et al., 2019	Nature Comm	Molecular retargeting of antibodies converts immune defense against oncolytic viruses into cancer immunotherapy
Abelin et al., 2019	Immunity	Defining HLA-II Ligand Processing and Binding Rules withMassSpectrometry Enhances Cancer Epitope Prediction
Panni et al., 2019	Sci Transl Med	Agonism of CD11b reprograms innate immunity to sensitize pancreatic cancer to immunotherapies
Zemek et al., 2019	Sci Transl Med	Sensitization to immune checkpoint blockade through activation of a STAT1/NK axis in the tumor microenvironment
Wang et al., 2019	Nature Med	Siglec-15 as an immune suppressor and potential target for normalization cancer immunotherapy
Rivadeneira et al., 2019	Immunity	Oncolytic Viruses Engineered to Enforce Leptin Expression Reprogram Tumor-Infiltrating T Cell Metabolism and Promote Tumor Clearance
Wang et al., 2019	Nature Immunol	Multiplexed activation of endogenous genes by CRISPRa elicits potent antitumor immunity
Jacquelot et al., 2019	Nature	Sustained Type I interferon signaling as a mechanism of resistance to PD-1 blockade
Zhang et al., 2019	Nature Comm	Genetic programming of macrophages to perform anti-tumor functions using targeted mRNA nanocarriers
Brownlie et al., 2019	Nature Comm	Resistance to TGFβ suppression and improved antitumor responses in CD8+ T cells lacking PTPN22
Metzger et al., 2019	J ImmoOTher cancer	Immunostimulatory RNA leads to functional reprogramming of myeloid-derived suppressor cells in pancreatic cancer
Ye at al., 2019	Can Imm Res	A Bispecific Molecule Targeting CD40 and Tumor Antigen Mesothelin Enhances Tumor-Specific Immunity
2020		
Mills et al., 2019	Cell Reports	Stereotactic Body Radiation and Interleukin-12 Combination Therapy Eradicates Pancreatic Tumors by Repolarizing the Immune Microenvironment
Li et al., 2020	Can Imm Res	Tumor cell–intrinsic USP22 suppresses antitumor immunity in pancreatic cancer
van den Eynden et al., 2019	Nature Genetics	Lack of detectable neoantigen depletion signals in the untreated cancer genome
Gauthier et al., 2019	Cell	Multifunctional Natural Killer Cell Engagers Targeting NKp46 Trigger Protective Tumor Immunity
Crowther et al., 2020	Nature Immunol	Genome-wide CRISPR–Cas9 screening reveals ubiquitous T cell cancer targeting via the monomorphic MHC class I-related protein MR1
Zhang et al., 2020	Mol Therapy	oHSV2 Can Target Murine Colon Carcinoma by Altering the Immune Status of the Tumor Microenvironment and Inducing Antitumor Immunity
Stromnes et al., 2019	Can Imm Res	Differential Effects of Depleting versus Programming Tumor-Associated Macrophages on Engineered T Cells in Pancreatic Ductal Adenocarcinoma
Yu et al., 2020	Nature Comm	CD73 on cancer-associated fibroblasts enhanced by the A2B-mediated feedforward circuit enforces an immune checkpoint
Arina et al., 2019	Nature Comm	Tumor-reprogrammed resident T cells resist radiation to control tumors
Wang et al., 2020	Nature Comm	An engineered oncolytic virus expressing PD-L1 inhibitors activates tumor neoantigen-specific T cell responses
Mayoux et al., 2020	Sci Transl Med	Dendritic cells dictate responses to PD-L1 blockade cancer immunotherapy

Jaynes et al., 2020	Sci Transl Med	Mannose receptor (CD206) activation in tumor-associated macrophages enhances adaptive and innate antitumor immune responses
Strauss et al., 2020	Science Immunol	Targeted deletion of PD-1 in myeloid cells induces antitumor immunity
Yamamoto et al., 2020	Nature	Autophagy promotes immune evasion of pancreatic cancer by degrading MHC-I
Leone et al., 2019	Science	Glutamine blockade induces divergent metabolic programs to overcome tumor immune evasion
Urban et al., 2020	Nature Immunol	Peripherally induced brain tissue–resident memory CD8+ T cells mediate protection against CNS infection
Shi et al., 2019	Mol Therapy	Genetically Engineered Cell-Derived Nanoparticles for Targeted Breast Cancer Immunotherapy
Spindler et al., 2020	Nature Biotech	Massively parallel interrogation and mining of natively paired human TCRαβ repertoires
Evgin et al., 2020	Nature Comm	Oncolytic virus-derived type I interferon restricts CAR T cell therapy
Hsu et al., 2020	Nature Comm	Structural characterization of a novel human adeno-associated virus capsid with neurotropic properties
Huff et al., 2020	Mol Therapy	Vesicular Stomatitis Virus Encoding a Destabilized Tumor Antigen Improves Activation of Anti-tumor T Cell Responses
Salzer et al., 2020	Nature Comm	Engineering AvidCARs for combinatorial antigen recognition and reversible control of CAR function
Acharaya et al., 2020	Immunity	Endogenous glucocorticoid signaling regulates CD8+ T cell differentiation and development of dysfunction in the tumor microenvironment
Yamazaki et al., 2020	Nature Immunol	Mitochondrial DNA drives abscopal responses to radiation that are inhibited by autophagy
Park et al., 2020	Sci Transl Med	Effective combination immunotherapy using oncolytic viruses to deliver CAR targets to solid tumors
Diskin et al., 2020	Nature Immunol	PD-L1 engagement on T cells promotes self-tolerance and suppression of neighboring macrophages and effector T cells in cancer
Lakins et al., 2020	Clin Cancer Res	FS222, a CD137/PD-L1 tetravalent bispecific antibody, exhibits low toxicity and antitumor activity in colorectal cancer models
Baharom et al., 2020	Nature Immunol	Intravenous nanoparticle vaccination generates stem-like TCF1+ neoantigen-specific CD8+ T cells
Such et al., 2020	JCI	Targeting the innate immunoreceptor RIG-I overcomes melanoma-intrinsic resistance to T cell immunotherapy
Klemm et al., 2020	Cell	Interrogation of the Microenvironmental Landscape in Brain Tumors Reveals Disease-Specific Alterations of Immune Cells
Cichocki et al., 2020	Sci Transl Med	iPSC-derived NK cells maintain high cytotoxicity and enhance in vivo tumor control in concert with T cells and anti–PD-1 therapy
Au et al., 2020	Science Advances	Trispecific natural killer cell nanoengagers for targeted chemoimmunotherapy
Polack et al., 2020	NEJM	Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine
2021		
Yu et al., 2020	Nature Med	Liver metastasis restrains immunotherapy efficacy via macrophage-mediated T cell elimination
Cai et al., 2020	Mol Oncol	Tumors driven by RAS signaling harbor a natural vulnerability to oncolytic virus M1
You et al, 2020	J ImmunoTher cancer	Enhanced antitumor immunity by a novel small molecule HPK1 inhibitor
Wang et al., 2020	PlosOne	Pharmacological inhibition of hematopoietic progenitor kinase 1 positively regulates T-cell function

Mosaheb et al., 2020	Nature Comm	Genetically stable poliovirus vectors activate dendritic cells and prime anti-tumor CD8 T cell immunity
Krishna et al., 2020	Science	Stem-like CD8 T cells mediate response of adoptive cell immunotherapy against human cancer
Samstein et al., 2020	Nature Cancer	Mutations in BRCA1 and BRCA2 differentially affect the tumor microenvironment and response to checkpoint blockade immunotherapy
Xu et al., 2020	JEM	STING agonist promotes CAR T cell trafficking and persistence in breast cancer
Wu et al., 2020	Nature	Peripheral T cell expansion predicts tumour infiltration and clinical response
Yang et al., 2021	Nature Comm	Galectin-9 interacts with PD-1 and TIM-3 to regulate T cell death and is a target for cancer immunotherapy
Solomon et al., 2020	Nature Cancer	CD25-Treg-depleting antibodies preserving IL-2 signaling on effector T cells enhance effector activation and antitumor immunity
Liu et al., 2020	Cell	Detecting Tumor Antigen-Specific T Cells via Interaction-Dependent Fucosyl-Biotinylation
Fu et al., 2021	Can Imm Res	DGKA Mediates Resistance to PD-1 Blockade
Platten et al., 2021	Nature	A vaccine targeting mutant IDH1 in newly diagnosed glioma
Shield V et al., 2021	Science Advances	Cellular backpacks for macrophage immunotherapy
Kaczanowska et al., 2021	Cell	Genetically engineered myeloid cells rebalance the core immune suppression program in metastasis
Hu et al., 2021	Nature Med	Personal neoantigen vaccines induce persistent memory T cell responses and epitope spreading in patients with melanoma
Holland et al., 2020	JCI	Specificity of bispecific T cell receptors and antibodies targeting peptide-HLA
Cafri et al., 2020	JCI	mRNA vaccine-induced neoantigen-specific T cell immunity in patients with gastrointestinal cancer
Chen et al., 2021	Cancer Cell	Type I collagen deletion in αSMA+ myofibroblasts augments immune suppression and accelerates progression of pancreatic cancer
Kottke et al., 2021	Nature Comm	Oncolytic virotherapy induced CSDE1 neo-antigenesis restricts VSV replication but can be targeted by immunotherapy
Wie et al., 2021	Nature Comm	Boosting anti-PD-1 therapy with metformin-loaded macrophage-derived microparticles
Eschweiler et al., 2021	Nature Immunol	Intratumoral follicular regulatory T cells curtail anti-PD-1 treatment efficacy
Schneider et al., 2021	Sci Transl Med	Trispecific CD19-CD20-CD22–targeting duoCAR-T cells eliminate antigen-heterogeneous B cell tumors in preclinical models
Wang et al., 2020	CII	Tumor-selective blockade of CD47 signaling with a CD47/PD-L1 bispecific antibody for enhanced anti-tumor activity and limited toxicity
Nagarsheth et al., 2021	Nature Med	TCR-engineered T cells targeting E7 for patients with metastatic HPV-associated epithelial cancers
Reinhardt et al., 2020	Science	An RNA vaccine drives expansion and efficacy of claudin-CAR-T cells against solid tumors

Hamdan et al., 2021	J ImmunoTher cancer	Novel oncolytic adenovirus expressing enhanced cross-hybrid IgGA Fc PD-L1 inhibitor activates multiple immune effector populations leading to enhanced tumor killing in vitro, in vivo and with patient-derived tumor organoids
Johnson et al., 2021	Cell	The immunostimulatory RNA RN7SL1 enables CAR-T cells to enhance autonomous and endogenous immune function
Oliveira et al, 2021	Nature	Phenotype, specificity and avidity of antitumour CD8+ T cells in melanoma
Roy at el., 2021	Nature Comm	Adjuvant oncolytic virotherapy for personalized anti-cancer vaccination
Rath et al., 2020	Science Advances	Single-cell transcriptomics identifies multiple pathways underlying antitumor function of TCR- and CD8αβ-engineered human CD4+ T cells
Zhao et al., 2021	Science Advances	Switchable Immune modulator for tumor-specific activation of anticancer immunity
Zhai et al, 2021	Nature	Vesicular Stomatitis Virus Encoding a Destabilized Tumor Antigen Improves Activation of Anti-tumor T Cell Responses
Choi et al., 2021	Cell Rep Methods	Systematic discovery and validation of T cell targets directed against oncogenic KRAS mutations
Yarmarkovich et al., 2021	Nature	Cross-HLA targeting of intracellular oncoproteins with peptide-centric CARs
Guo et al., 2021	Nature	Metabolic reprogramming of terminally exhausted CD8+ T cells by IL-10 enhances anti-tumor immunity
Zuo et al., 2021	Nature Immunol	Robust SARS-CoV-2-specific T cell immunity is maintained at 6 months following primary infection
2022		
Duong et al., 2021	Immunology	Type I interferon activates MHC class I-dressed CD11b+conventional dendritic cells to promote protective anti-tumor CD8+T cell immunity
Daher et al., 2021	Blood	Targeting a cytokine checkpoint enhances the fitness of armored cord blood CAR-NK cells
Amor et al., 2020	Nature	Senolytic CAR T cells reverse senescence-associated pathologies
Guo et al., 2021	Nature	Tumor-conditional IL-15 pro-cytokine reactivates anti-tumor immunity with limited toxicity
Lowery et al., 2022	Science	Molecular signatures of antitumor neoantigen-reactive T cells from metastatic human cancers
Liu et al., 2021	Nature	Intrapleural nano-immunotherapy promotes innate and adaptive immune responses to enhance anti-PD-L1 therapy for malignant pleural effusion
Zhang et al., 2022	Nature	Mesenchymal stromal cells equipped by IFNα empower T cells with potent anti-tumor immunity
Bae et al., 2022	Nature	Targeting LAG3/GAL-3 to overcome immunosuppression and enhance anti-tumor immune responses in multiple myeloma
Caushi et al., 2021	Nature	Transcriptional programs of neoantigen-specific TIL in anti-PD-1-treated lung cancers
Muik et al., 2022	OncoImmunology	An Fc-inert PD-L1×4-1BB bispecific antibodymediates potent anti-tumor immunity in mice bycombining checkpoint inhibition and conditional4-1BB co-stimulation
Muik et al., 2022	Cancer Discovery	Preclinical characterization and phase I trial results of a bispecific antibody targeting PD-L1 and 4-1BB (GEN1046) in patients with advanced refractory solid tumors
Seung et al., 2022	Nature	A trispecific antibody targeting HER2 and T cells inhibits breast cancer growth via CD4 cells
Cohen et al., 2022	Nature Cancer	The interaction of CD4+ helper T cells with dendritic cells shapes the tumor microenvironment and immune checkpoint blockade response
Sun et al., 2021	Sci Transl Med	Blockade of the CD93 pathway normalizes tumor vasculature to facilitate drug delivery and immunotherapy

Liu et al., 2021	Nature Biomed Eng	Rejuvenation of tumour-specific T cells through bispecific antibodies targeting PD-L1 on dendritic cells
Ali et al., 2022	Nature Biotech	T cells targeted to TdT kill leukemic lymphoblasts while sparing normal lymphocytes
Oliveira et al., 2022	Nature	Landscape of helper and regulatory antitumour CD4 T cells in melanoma
Dumas et al., 2020	EMBO J	Microglia promote glioblastoma via mTOR-mediated immunosuppression of the tumour microenvironment
Evgin et al., 2022	Sci Transl Med	Oncolytic virus–mediated expansion of dual-specific CAR T cells improves efficacy against solid tumors in mice
Jones DS 2nd et al., 2022	Science Advances	Cell surface–tethered IL-12 repolarizes the tumor immune microenvironment to enhance the efficacy of adoptive T cell therapy
Song et al., 2021	Nature Comm	Tumor evolution selectively inactivates the core microRNA machinery for immune evasion
Vasic et al., 2022	Science	Allogeneic double-negative CAR-T cells inhibit tumor growth without off-tumor toxicities
Mazor et al., 2022	Cell	Tumor-reactive antibodies evolve from non-binding and autoreactive precursors
Hsieh et al., 2022	Science Immunol	ATR-mediated CD47 and PD-L1 up-regulation restricts radiotherapy-induced immune priming and abscopal responses in colorectal cancer
Reticker-Flynn et al., 2022	Cell	Lymph node colonization induces tumor-immune tolerance to promote distant metastasis
Lan et al., 2021	Cancer Cell	Simultaneous targeting of TGF-β/PD-L1 synergizes with radiotherapy by reprogramming the tumor microenvironment to overcome immune evasion
Borriello et al., 2022	Nature Comm	Primary tumor associated macrophages activate programs of invasion and dormancy in disseminating tumor cells
Gros et al., 2022	Cell Reports	Endocytic membrane repair by ESCRT-III controls antigen export to the cytosol during antigen cross-presentation
Mueller KP et al., 2022	JITC	Production and characterization of virus-free, CRISPR-CAR T cells capable of inducing solid tumor regression
Chalise et al., 2022	Molecular Therapy - C	Efficacy of cancer-specific anti-podoplanin CAR-T cells and oncolytic herpes virus G47Δ combination therapy against glioblastoma
Fu et al., 2022	Nature Biomed Eng	Synthetic libraries of immune cells displaying a diverse repertoire of chimaeric antigen receptors as a potent cancer immunotherapy
Liu et al., 2022	Immunity	Spatial maps of T cell receptors and transcriptomes reveal distinct immune niches and interactions in the adaptive immune response
Guy et al., 2022	Nature Immunol	LAG3 associates with TCR–CD3 complexes and suppresses signaling by driving co-receptor–Lck dissociation
Poole et al. 2022	Nature Comm	Therapeutic high affinity T cell receptor targeting a KRASG12D cancer neoantigen
Gebert et al., 2021	Gastroenterology	Recurrent Frameshift Neoantigen Vaccine Elicits Protective Immunity With Reduced Tumor Burden and Improved Overall Survival in a Lynch Syndrome Mouse Model
Coruli et al., 2021	Frontiers Immunol	Multi-Epitope-Based Vaccines for Colon Cancer Treatment and Prevention
Chen et al., 2022	Nature Comm	Spatiotemporal control of engineered bacteria to express interferon-γ by focused ultrasound for tumor immunotherapy
Kuninty et al., 2022	Nature Comm	Cancer immune therapy using engineered 'tail-flipping' nanoliposomes targeting alternatively activated macrophage
Axelrod et al., 2022	Nature	T cells specific for α-myosin drive immunotherapy-related myocarditis

Won et al., 2022	Cell Reports	Cardiac myosin-specific autoimmune T cells contribute to immune-checkpoint-inhibitor-associated myocarditis
Dähling et al., 2022	Immunity	Type 1 conventional dendritic cells maintain and guide the differentiation of precursors of exhausted T cells in distinct cellular niches
Majzner et al., 2022	Nature	GD2-CAR T cell therapy for H3K27M-mutated diffuse midline gliomas
2023		
Tian et al., 2022	Nature Cancer	Specific targeting of glioblastoma with an oncolytic virus expressing a cetuximab-CCL5 fusion protein via innate and adaptive immunity
Revenko et al., 2021	JITC	Direct targeting of FOXP3 in Tregs with AZD8701, a novel antisense oligonucleotide to relieve immunosuppression in cancer
Nishiga et al., 2022	Nature Cancer	Radiotherapy in combination with CD47 blockade elicits a macrophage-mediated abscopal effect
Bonte et al., 2022	Cell Reports	Single-cell RNA-seq-based proteogenomics identifies glioblastoma-specific transposable elements encoding HLA-I-presented peptides
Baharom et al., 2022	Cell	Systemic vaccination induces CD8+ T cells and remodels the tumor microenvironment
Gulhati et al., 2022	Nature Cancer	Targeting T cell checkpoints 41BB and LAG3 and myeloid cell CXCR1/CXCR2 results in antitumor immunity and durable response in pancreatic cancer
He et al., 2023	Science	CD5 expression by dendritic cells directs T cell immunity and sustains immunotherapy responses
Gagero et al., 2022	Science Immunol	IL-2 is inactivated by the acidic pH environment of tumors enabling engineering of a pH-selective mutein
Chen et al., 2023	Nature	Tuning charge density of chimeric antigen receptor optimizes tonic signaling and CAR-T cell fitness
Prokhnevska et al., 2023	Immunity	CD8+ T cell activation in cancer comprises an initial activation phase in lymph nodes followed by effector differentiation within the tumor
Ma et al., 2023	Nature Immunol	YTHDF2 orchestrates tumor-associated macrophage reprogramming and controls antitumor immunity through CD8+ T cells
Linde et al., 2023	Cancer Cell	Neutrophil-activating therapy for the treatment of cancer
Report from the CIMT meeting		
Kersten et al., 2022	Cancer Cell	Spatiotemporal co-dependency between macrophages and exhausted CD8+ T cells in cancer
Meyran et al., 2023	Sci Transl Med	T$_{STEM}$-like CAR-T cells exhibit improved persistence and tumor control compared with conventional CAR-T cells in preclinical models
Svensson-Arvelund et al., 2022	Nature Comm	Expanding cross-presenting dendritic cells enhances oncolytic virotherapy and is critical for long-term anti-tumor immunity
Rojas et al. 2023	Nature	Personalized RNA neoantigen vaccines stimulate T cells in pancreatic cancer
Kruse et al., 2023	Nature	CD4+ T cell-induced inflammatory cell death controls immune-evasive tumors
Dong et al., 2022	PNAS	Memory-like NK cells armed with a neoepitope-specific CAR exhibit potent activity against NPM1 mutated acute myeloid leukemia
Okada et al., 2023	Molecular Therapy	Detection of mutant antigen-specific T cell receptors against multiple myeloma for T cell engineering
Liu et al., 2023	Nature Comm	ARIH1 activates STING-mediated T-cell activation and sensitizes tumors to immune checkpoint blockade

Schatton et al., 2022	Cancer Res	Inhibition of Melanoma Cell–Intrinsic Tim-3 Stimulates MAPK-Dependent Tumorigenesis
Casirati et al., 2023	Nature	Epitope editing enables targeted immunotherapy of acute myeloid leukaemia
El Sayes et al., 2022	Mol Therapy Oncolytic	IFNAR blockade synergizes with oncolytic VSV to prevent virus-mediated PD-L1 expression and promote antitumor T cell activity
Li et al., 2022	Cell Reports Medicine	AXL targeting restores PD-1 blockade sensitivity of STK11/LKB1 mutant NSCLC through expansion of TCF1+ CD8 T cells
Wennerberg et al., 2022	Science Transl Med	Chimeric antigen receptor T cell-based targeting of CD317 as a novel immunotherapeutic strategy against glioblastoma
Kerzel et al., 2023	Cancer Cell	In vivo macrophage engineering reshapes the tumor microenvironment leading to eradication of liver metastases
Favaloro et al., 2023	Hematologica	Single cell analysis of the CD8+ T-cell compartment in multiple myeloma reveals disease specific changes are chiefly restricted to a CD69– subset suggesting potent cytotoxic effectors exist within the tumor bed
Hänsch et al., 2023	Neuro-Oncology	Chimeric antigen receptor T cell-based targeting of CD317 as a novel immunotherapeutic strategy against glioblastoma
Stupia et al., 2023	Clin Cancer Res	HLA Class II Loss and JAK1/2 Deficiency Coevolve in Melanoma Leading to CD4 T-cell and IFNγ Cross-Resistance
Miao et al., 2023	J Exp & Clin Can Res	Elevated transcription and glycosylation of B3GNT5 promotes breast cancer aggressiveness
Jongsma et al., 2021	Immunity	The SPPL3-Defined Glycosphingolipid repertoire orchestrates HLA Class I-mediated immune responses
Wellhausen et al., 2023	Sci Transl Med	Epitope base editing CD45 in hematopoietic cells enables universal blood cancer immune therapy
2024		
Zhao et al., 2024	Nature Biotech	IL-10-expressing CAR T cells resist dysfunction and mediate durable clearance of solid tumors and metastases
Li et al., 2023	Science Advances	EpCAM-targetingCAR-Tcellimmunotherapyissafeandefficacious for epithelialtumors
Moreno Araya et al., 2023	Immunity	CXCR3 expression in regulatory T cells drives interactions with type I dendritic cells in tumors to restrict CD8+ T cell antitumor immunity
Lei et al., 2023	Nature Immunol	A second-generation M1-polarized CAR macrophage with antitumor efficacy
Meiser et al., 2023	Cancer Cell	A distinct stimulatory cDC1 subpopulation amplifies CD8+ T cell responses in tumors for protective anti-cancer immunity
Zhao et al., 2024	Nature Comm	Bacterial protoplast-derived nanovesicles carrying CRISPR-Cas9 tools re-educate tumor-associated macrophages for enhanced cancer immunotherapy
Garcia et al., 2024	Nature	Naturally occurring T cell mutations enhance engineered T cell therapies
Chen et al., 2024	Nature Biotech	An oncolytic virus-T cell chimera for cancer immunotherapy
Lupo et al., 2024	Nature Comm	synNotch-programmed iPSC-derived NK cells usurp TIGIT and CD73 activities for glioblastoma therapy
Beck et al., 2024	Cancer Cell	Long-lasting mRNA-encoded interleukin-2 restores CD8+ T cell neoantigen immunity in MHC class I-deficient cancers
Shapir Itai et al., 2024	Cell	Bispecific dendritic-T cell engager potentiates anti-tumor immunity
Tang et al., 2024	Cancer Lett	Intratumoral injection of interferon gamma promotes the efficacy of anti-PD1 treatment in colorectal cancer
Zhou et al., 2023	Nature	Single-cell CRISPR screens in vivo map T cell fate regulomes in cancer
Fidelle et al., 2023	Science	A microbiota-modulated checkpoint directs immunosuppressive intestinal T cells into cancers

Ferrari et al., 2023	Cancer Cell	Sensitizing cancer cells to immune checkpoint inhibitors by microbiota-mediated upregulation of HLA class I
Marin et al., 2024	Nature Med	Safety, efficacy and determinants of response of allogeneic CD19-specific CAR-NK cells in CD19+ B cell tumors: a phase 1/2 trial
Wang et al., 2024	Cell	Circadian tumor infiltration and function of CD8+ T cells dictate immunotherapy efficacy
Chan et al., 2024	Nature	FOXO1 enhances CAR T cell stemness, metabolic fitness and efficacy
Lim et al., 2024	Cell Reports Medicine	CXCL9/10-engineered dendritic cells promote T cell activation and enhance immune checkpoint blockade for lung cancer
Espinosa-Carrasco et al., 2024	Cancer Cell	Intratumoral immune triads are required for immunotherapy-mediated elimination of solid tumors.
Choi et al., 2024	NEJM	Intraventricular CARv3-TEAM-E T Cells in Recurrent Glioblastoma
Akai et al., 2024	Brit J Cancer	Fibroblast activation protein-targeted near-infrared photoimmunotherapy depletes immunosuppressive cancer-associated fibroblasts and remodels local tumor immunity
Barras et al., 2024	Sci Immunol	Response to tumor-infiltrating lymphocyte adoptive therapy is associated with preexisting CD8+ T-myeloid cell networks in melanoma