

2018 Medicines in Development for Cancer

Bladder Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ABI-009 (nab-rapamycin/mTOR inhibitor)	AADi Bioscience Los Angeles, CA	non-muscle invasive bladder cancer	Phase I/II www.aadibio.com
ALT-801 (tumor antigen-specific T-cell receptor linked to IL-2)	Altor BioScience Miramar, FL NantKwest Culver City, CA	non-muscle invasive bladder cancer	Phase I/II www.altorbioscience.com
ALT-803 (IL-15 superagonist protein complex)	Altor BioScience Miramar, FL NantKwest Culver City, CA	non-muscle invasive bladder cancer (BCG naïve) (Fast Track), non-muscle invasive bladder cancer (BCG unresponsive) (Fast Track)	Phase II www.altorbioscience.com
B-701 (anti-FGFR3 mAb)	BioClin Therapeutics San Ramon, CA	2L locally advanced or metastatic bladder cancer	Phase I/II www.bioclintherapeutics.com
Bavencio® avelumab (anti-PD-L1 inhibitor)	EMD Serono Rockland, MA Pfizer New York, NY	1L urothelial cancer	Phase III www.emdserono.com www.pfizer.com
BC-819 (gene therapy)	BioCanCell Therapeutics Cambridge, MA	non-muscle invasive bladder cancer (Fast Track)	Phase II www.biocancell.com

Bladder Cancer
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Capzola®
apaziquone

Spectrum Pharmaceuticals
Henderson, NV

non-muscle invasive bladder cancer
(Fast Track)

application submitted
www.sppirx.com

Cavatak®
coxsackievirus

Viralytics
Sydney, Australia

bladder cancer (+pembrolizumab)

Phase I
www.viralytics.com

CG0070
(oncolytic immunotherapy)

Cold Genesys
Santa Ana, CA

non-muscle invasive bladder cancer

Phase II
www.coldgenesys.com

Cotellic®
cobimetinib

Genentech
South San Francisco, CA

urothelial cancer (+atezolizumab)

Phase I
www.gene.com

CV-301
(CEA-MUC-1-TRICOM cancer vaccine)

Bavarian Nordic
Morrisville, NC

bladder cancer (+anti-PD-L1)

Phase II
www.bavarian-nordic.com

Cyramza®
ramucirumab

Eli Lilly
Indianapolis, IN

bladder cancer

Phase III
www.lilly.com

enfortumab vedotin (ASG-2ME)
(antibody-drug conjugate)

Astellas
Northbrook, IL
Seattle Genetics
Bothell, WA

urothelial cancer

Phase II
www.astellas.com
www.seattlegenetics.com

Halaven®
eribulin

Eisai
Woodcliff Lake, NJ

bladder cancer

Phase I/II
www.eisai.com

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Imfinzi® durvalumab	MedImmune Gaithersburg, MD	1L bladder cancer (+tremelimumab)	Phase III www.medimmune.com
		1L unresectable stage IV bladder cancer (+olaparib)	Phase II www.medimmune.com
INCB54828 (FGFR1/2/3 inhibitor)	Incyte Wilmington, DE	bladder cancer	Phase II www.incyte.com
INO-5401 (T-cell activating DNA immunotherapy)	Inovio Pharmaceuticals Plymouth Meeting, PA	bladder cancer	Phase II www.inovio.com
MAGE-A10 TCR (T-cell receptor therapy)	Adaptimmune Philadelphia, PA	bladder cancer	Phase I/II www.adaptimmune.com
MV-NIS (oncolytic virus cancer vaccine)	Vyriad Rochester, MN	bladder cancer	Phase I www.vyriad.com
nadofaragene firadenovec (IFNA2B gene therapy)	FKD Therapies Kuopio, Finland	superficial bladder cancer	Phase III
NC-6004 (cisplatin micellar nanoparticle)	NanoCarrier Chiba, Japan	bladder cancer (+gemcitabine)	Phase II www.nanocarrier.co.jp
NEO-PV-01 (personal neo-antigen vaccine)	Neon Therapeutics Cambridge, MA	bladder cancer	Phase I www.neontherapeutics.com

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Opdivo® + Yervoy®
nivolumab + ipilimumab

Bristol-Myers Squibb
Princeton, NJ

urothelial cancer

Phase III
www.bms.com

Rubraca®
rucaparib
(PARP inhibitor)

Clovis Oncology
Boulder, CO

advanced or metastatic bladder cancer

Phase II
www.clovisoncology.com

RX-3117
(DNA and RNA synthesis inhibitor)

Rexahn Pharmaceuticals
Rockville, MD

metastatic bladder cancer

Phase II
www.rexahn.com

sacituzumab govitecan
(anti-TROP-2-SN-38 ADC)

Immunomedics
Morris Plains, NJ

metastatic urothelial cancer

Phase II
www.immunomedics.com

TAR-200
(DNA synthesis inhibitor)

TARIS Biomedical
Lexington, MA

non-muscle invasive bladder cancer,
muscle invasive bladder cancer
(Fast Track)

Phase I
www.tarisbiomedical.com

Tecentriq®
atezolizumab

Genentech
South San Francisco, CA

muscle-invasive bladder cancer,
1L metastatic urothelial cancer
(+/- chemotherapy)

Phase III
www.gene.com

non-muscle invasive bladder cancer

Phase I
www.gene.com

VesiGel™
mitomycin intravesicular
ORPHAN DRUG

UroGen Pharma
New York, NY

bladder cancer (Fast Track)

Phase II
www.urogen.com

Bladder Cancer

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Vesimune™ imiquimod intravesicular ORPHAN DRUG	UroGen Pharma New York, NY	high-grade non-muscle invasive bladder cancer	Phase II www.urogen.com
Vicinium™ recombinant fusion protein	Eleven Biotherapeutics Cambridge, MA	BCG-refractory high-grade non-muscle invasive bladder cancer	Phase III www.elevenbio.com
		BCG-refractory high-grade non-muscle invasive bladder cancer (+durvalumab)	Phase I www.elevenbio.com

Brain Cancer

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2X-111 (liposomal doxorubicin) ORPHAN DRUG	2X Oncology Cambridge, MA	brain metastases from breast cancer, recurrent glioblastoma	Phase I completed www.2xoncology.com
abexinostat (HDAC inhibitor)	Xynomic Pharmaceuticals Cheyenne, WY	brain	Phase I www.xynomicpharma.com
Ad-RTS-hIL12 (DNA-based therapy) ORPHAN DRUG	ZIOPHARM Oncology Boston, MA	glioblastoma	Phase II www.ziopharm.com
		glioblastoma (+nivolumab), glioblastoma (stereotactic treatment), pediatric brain tumors	Phase I www.ziopharm.com

Brain Cancer
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Development Phase

AG-881
(pan-IDH inhibitor)

Agios Pharmaceuticals
Cambridge, MA
Celgene
Summit, NJ

glioma

Phase I
www.celgene.com

aglatimagene besadenovec
(gene therapy)
ORPHAN DRUG

Advantagene
Auburndale, MA

glioma, pediatric glioma

Phase II
www.advantagene.com

pediatric brain tumors

Phase I
www.advantagene.com

AMG 596
(anti-EGFRvIII x anti-CD3
bispecific T-cell engager)

Amgen
Thousand Oaks, CA

glioblastoma

Phase I
www.amgen.com

ANG1005
(peptide-paclitaxel conjugate)
ORPHAN DRUG

AngioChem
Montreal, Canada

brain metastases from breast cancer,
glioblastoma (Fast Track)

Phase II
www.angiochem.com

antineoplaston therapy
ORPHAN DRUG

Burzynski Research Institute
Houston, TX

diffuse intrinsic pontine glioma

Phase II
www.burzynskiresearch.com

APX005M
(CD40 agonistic antibody)

Apexigen
San Carlos, CA

recurrent refractory brain tumors

Phase I
www.apexigen.com

AU101
(HER2-CD28 CAR-T cell therapy)

Aurora BioPharma
Cambridge, MA

recurrent glioblastoma

Phase I/II
www.aurora-biopharma.com

Brain Cancer
Product Name

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Development Phase

AU105
(HER2-CMV CAR-T cell therapy)

Aurora BioPharma
Cambridge, MA

newly-diagnosed glioblastoma

Phase I/II
www.aurora-biopharma.com

Avastin®
bevacizumab

Genentech
South San Francisco, CA

brain metastases

Phase II
www.gene.com

AZD1390
(ATM kinase inhibitor)

AstraZeneca
Wilmington, DE

glioblastoma (+radiation)

Phase I
www.astrazeneca.com

Azixa®
verubulin
ORPHAN DRUG

Cytovia
Englewood Cliffs, NJ

glioblastoma

Phase II
www.immunepharma.com

BAL101553
(tumor checkpoint inhibitor)

Basilea Pharmaceutica
Basel, Switzerland
Adult Brain Tumor Consortium
Baltimore, MD

newly-diagnosed glioblastoma

Phase I
www.basilea.com

bavituximab

Oncologie
Boston, MA

newly-diagnosed glioblastoma

Phase II
www.oncologie.international

BMX-001
(mangano porphyrin antioxidant
mimetic)

BioMimetix
Greenwood Village, CO

glioma

Phase I/II
www.biomimetix.com

BXQ-350
(apoptosis stimulant)
ORPHAN DRUG

Bexion Pharmaceuticals
Covington, KY

glioblastoma

Phase I
www.bexionpharma.com

<u>Brain Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
capmatinib (INC280) (c-Met inhibitor)	Novartis Oncology East Hanover, NJ Incyte Wilmington, DE	glioblastoma (combination therapy)	Phase I completed www.novartis.com
CC-122 (avadomide) (pleiotropic pathway modulator)	Celgene Summit, NJ	glioblastoma	Phase I www.celgene.com
Cerebral EDV™ doxorubicin encapsulated nanocells ORPHAN DRUG	EnGeneIC New York, NY	glioblastoma	Phase I www.engeneic.com
DCC-2618 (PDGFR-alpha kinase switch control inhibitor) ORPHAN DRUG	Deciphera Pharmaceuticals Waltham, MA	glioblastoma, glioma	Phase I www.deciphera.com
DCVax®-L cancer vaccine ORPHAN DRUG	Northwest Biotherapeutics Bethesda, MD	glioblastoma	Phase III www.nwbio.com
depatuxizumab mafodotin (anti-EGFR antibody-drug conjugate) ORPHAN DRUG	AbbVie North Chicago, IL	glioblastoma	Phase III www.abbvie.com
		pediatric brain tumors	Phase I www.abbvie.com

<u>Brain Cancer Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Dicopp™ copper gluconate/disulfiram ORPHAN DRUG	Cantex Pharmaceuticals Weston, FL	recurrent glioblastoma	Phase II www.cantex.com
DM-CHOC-PEN	Dekk-Tec New Orleans, LA	primary brain cancer, brain metastases	Phase II www.dekk-tec.com
DSP-7888 (adegramotide/nelatimotide) ORPHAN DRUG	Sumitomo Dainippon Pharma Osaka, Japan	recurrent glioblastoma (combination therapy)	Phase II www.ds-pharma.com
eflornithine oral (ornithine decarboxylase inhibitor) ORPHAN DRUG	Orbus Therapeutics Palo Alto, CA	anaplastic astrocytoma	Phase III www.orbustherapeutics.com
epacadostat (IDO1 inhibitor)	Incyte Wilmington, DE	glioblastoma	Phase I www.incyte.com
ERC1671 (therapeutic cancer vaccine) ORPHAN DRUG	Epitopoietic Research Pasadena, CA	glioblastoma	Phase II www.erc-immunotherapy.com
fimepinostat (CUDC-907) (HDAC/PI3K inhibitor)	Curis Lexington, MA	brain tumor	Phase I www.curis.com

Brain Cancer
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GBM-Lamp-Vax
(dendritic cell vaccine comprising
CMV antigen pp65 expressed as
fusion protein with LAMP)

Immunomic Therapeutics
Rockville, MD
Duke University
Durham, NC
University of Florida
Gainesville, FL

glioblastoma

Phase II
www.immunomix.com

GDC-0084
(PI3K inhibitor)
ORPHAN DRUG

Kazia Therapeutics
Sydney, Australia

glioblastoma

Phase I
www.kaziatherapeutics.com

Gilotrif®
afatinib

Boehringer Ingelheim Pharmaceuticals
Ridgefield, CT

glioma

Phase II
www.boehringer-ingelheim.com

HER2.taNK
(CAR-T cell therapy)

NantKwest
Culver City, CA

recurrent HER2-positive glioblastoma

Phase I
www.nantkwest.com

ICT-121
(dendritic cell vaccine)

ImmunoCellular Therapeutics
Westlake Village, CA

glioblastoma

Phase I
www.imuc.com

ifabotuzumab
(anti-EphA3 mAb)

Humanigen
Brisbane, CA
Olivia Newton-John Cancer
Research Institute
Heidelberg, Australia

glioblastoma

Phase I
www.humanigen.com

indoximod
(IDO inhibitor)

NewLink Genetics
Ames, IA

pediatric malignant brain tumors
(+temozolomide)

Phase I
www.newlinkgenetics.com

Brain Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
INO-5401 (T-cell activating DNA immunotherapy)	Inovio Pharmaceuticals Plymouth Meeting, PA	glioblastoma	Phase II www.inovio.com
ivosidenib (IDH1 inhibitor)	Agios Pharmaceuticals Cambridge, MA	glioma	Phase I www.agios.com
marizomib (proteasome inhibitor) ORPHAN DRUG	Celgene Summit, NJ	glioblastoma	Phase II www.celgene.com
MB-101 (CAR-T cell therapy)	Mustang Bio New York, NY	glioblastoma	Phase I www.mustangbio.com
MDNA55 (interleukin-4 superkine) ORPHAN DRUG	Medicenna Therapeutics Toronto, Canada	glioblastoma (Fast Track)	Phase II www.medicenna.com
MNX-100 (nifurtimox)	MetronomX Houston, TX	medulloblastoma	Phase II www.metronomx.com
MTX110 (nano-inclusion product)	Midatech Pharma US Raleigh, NC	diffuse interstitial pontine glioma	Phase I www.midatechpharma.com
MV-NIS (oncolytic virus cancer vaccine)	Vyriad Rochester, MN	medulloblastoma	Phase I www.vyriad.com

<u>Brain Cancer Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
napabucasin (STAT3 inhibitor)	Boston Biomedical Cambridge, MA	recurrent or progressed glioblastoma (+temozolomide)	Phase I/II www.bostonbiomedical.com
NEO100 (perillyl alcohol intranasal) ORPHAN DRUG	NEONC Technologies Los Angeles, CA	recurrent malignant glioma	Phase I/II www.neonctech.com
NVX-108 (perflenapent nanoparticles) ORPHAN DRUG	NuvOx Pharma Tucson, AZ	glioblastoma (combination therapy)	Phase II www.nuvoxpharma.com
Odomzo® sonidegib	Novartis Oncology East Hanover, NJ	medulloblastoma	Phase II completed www.novartis.com
OKN007 (disufenton sodium) ORPHAN DRUG	Oblato (GtreeBNT) Oklahoma City, OK	glioblastoma	Phase I www.gtreebnt.com
omburtamab I-124 (B7-H3 inhibitor)	Y-mAbs Therapeutics New York, NY	diffuse intrinsic pontine glioma	Phase I/II www.ymabs.com

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ONC201
(dopamine receptor D2/3 antagonist)
ORPHAN DRUG

Oncoceutics
Philadelphia, PA

recurrent H3-mutation high-grade
glioma, recurrent glioblastoma

Phase II
www.oncoceutics.com

newly-diagnosed diffuse intrinsic
pontine glioma (pediatric),
recurrent H3-mutation
high-grade glioma (pediatric)

Phase I
www.oncoceutics.com

Onzeald™
etirinotecan pegol

Nektar Therapeutics
San Francisco, CA

brain metastases from breast cancer
(Fast Track)

Phase III
www.nektar.com

Opdivo®
nivolumab

Bristol-Myers Squibb
Princeton, NJ

glioblastoma

Phase III
www.bms.com

OT-101
(TGF-beta antisense)
ORPHAN DRUG

Autotelic
Costa Mesa, CA
Oncotelic
Agoura Hills, CA

glioblastoma

Phase II/III
www.oncotelic.com

PAC-1 (VO-100)
(procaspase activating compound-1)

Vanquish Oncology
Campaign, IL

anaplastic astrocytoma,
glioblastoma

Phase I
www.vanquishoncology.com

pamiparib (BGB-290)
(PARP inhibitor)

BeiGene USA
Cambridge, MA

glioblastoma (combination therapy)

Phase I/II
www.beigene.com

PDT with Photofrin®
porfimer sodium

Pinnacle Biologics
Chicago, IL

brain cancer

Phase II
www.pinnaclebiologics.com

Brain Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
PEPIDH1M (dendritic cell vaccine)	Annias Immunotherapeutics Chapel Hill, NC	glioblastoma	Phase I/II www.aniasimmuno.com
Poly-ICLC (biological response modifier) ORPHAN DRUG	Oncovir Washington, DC	glioblastoma	Phase I/II completed www.oncovir.com
Pomalyst® pomalidomide	Celgene Summit, NJ	recurrent or progressive primary brain tumors (ages 1 to < 21 years)	Phase II www.celgene.com
pritumumab (human IgG antibody) ORPHAN DRUG	Nascent Biotech Vero Beach, FL	glioma	Phase II www.nascentbiotech.com
Prophage™ vitespen ORPHAN DRUG	Agenus Lexington, MA	newly-diagnosed glioblastoma	Phase II www.agenusbio.com
PT2385 (HIF-1 alpha inhibitor)	Peloton Therapeutics Dallas, TX	recurrent glioblastoma	Phase II www.pelotontherapeutics.com
relatlimab (anti-LAG3 mAb)	Bristol-Myers Squibb Princeton, NJ	glioblastoma	Phase I www.bms.com
RRx-001 (free radical stimulant)	EpicentRx La Jolla, CA	anaplastic glioma, newly-diagnosed glioblastoma (combination therapy)	Phase I www.epicentrx.com

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selinexor (nuclear export inhibitor)	Karyopharm Therapeutics Newton, MA	glioblastoma	Phase II www.karyopharm.com
SGT-53 (gene therapy)	SynerGene Therapeutics Rockville, MD	recurrent glioblastoma (+temozolomide)	Phase II
SL-701 (brain cancer vaccine) ORPHAN DRUG	Stemline Therapeutics New York, NY	adult glioblastoma	Phase I/II www.stemline.com
SurVaxM BIRC5 protein inhibitor vaccine	MimiVax Buffalo, NY	glioblastoma	Phase II www.mimivax.com
Sym004 (EGFR antagonist mAb)	Symphogen Somerville, NJ	glioblastoma	Phase II www.symphogen.com
Tafinlar® + Mekinist® dabrafenib + trametinib	Novartis Oncology East Hanover, NJ	BRAF V600+ relapsed/refractory high-grade glioma	Phase II www.novartis.com
tasadenoturev (DNA-2401) (oncolytic virus immunotherapy) ORPHAN DRUG	DNatrix Houston, TX	recurrent glioblastoma (Fast Track) (monotherapy and combination)	Phase II www.dnatrix.com
		newly-diagnosed diffuse intrinsic pontine glioma	Phase I www.dnatrix.com

<u>Brain Cancer Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
TB-403 (anti-PIGF mAb)	BioInvent International Lund, Sweden Oncurios Leuven, Belgium	medulloblastoma	Phase I/II www.bioinvent.com
tesevatinib (protein tyrosine kinase inhibitor)	Kadmon Pharmaceuticals New York, NY	brain metastases, leptomeningeal metastases, recurrent glioblastoma	Phase II www.kadmon.com
TG02 (CDK inhibitor)	Tragara Pharmaceuticals Carlsbad, CA	anaplastic astrocytoma, glioblastoma	Phase I/II www.tragarapharma.com
Toca 511 + Toca Fc (vocimagene amiretrorepvec- flucytosine gene therapy) ORPHAN DRUG	Tocagen San Diego, CA	recurrent high-grade glioma (Fast Track)	Phase III www.tocagen.com
TPI-287 (next generation taxane)	Cortice Biosciences New York, NY	recurrent glioblastoma (+bevacizumab)	Phase II www.corticebiosciences.com
		secondary brain metastases (+radiation)	Phase I www.corticebiosciences.com
trans sodium crocetinate (TSC) ORPHAN DRUG	Diffusion Pharmaceuticals Charlottesville, VA	glioblastoma	Phase II www.diffusionpharma.com
		brain metastases	Phase I www.diffusionpharma.com

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TRC-102 (methoxyamine hydrochloride)	TRACON Pharmaceuticals San Diego, CA	glioblastoma	Phase II www.traconpharma.com
TRC-105 (carotuximab)	TRACON Pharmaceuticals San Diego, CA	glioblastoma (combination therapy)	Phase II www.traconpharma.com
TVB-2640 (FASN inhibitor)	3-V Biosciences Menlo Park, CA	astrocytoma	Phase II www.3vbio.com
TVI-Brain-1 cancer vaccine ORPHAN DRUG	TVAX Biomedical Olathe, KS	astrocytoma, glioblastoma, glioma	Phase II completed www.tvaxmedical.com
USL311 (CXCR4 antagonist) ORPHAN DRUG	Upsher-Smith Maple Grove, MN	relapsed/recurrent glioblastoma	Phase I/II www.upsher-smith.com
VAL-083 (dianhydrogalactitol) ORPHAN DRUG	DelMar Pharmaceuticals Menlo Park, CA	refractory glioblastoma (Fast Track)	Phase III www.delmarpharma.com
varlilumab (anti-CD28 mAb)	Celldex Therapeutics Hampton, NJ	glioblastoma	Phase II www.celldex.com
VB-111 (ofranergene obadenovec) ORPHAN DRUG	VBL Therapeutics Modi'in, Israel	glioblastoma (Fast Track)	Phase III www.vblrx.com

Brain Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
VBI-1901 (bivalent cancer vaccine)	VBI Vaccines Cambridge, MA	glioblastoma	Phase I/II www.vbivaccines.com
WP1066 (STAT3 transcription factor inhibitor)	Moleculin Biotech Houston, TX	glioblastoma, melanoma metastases to the brain	Phase I/II www.moleculin.com

Breast Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
2X-121 (PARP/tankyrase inhibitor)	2X Oncology Cambridge, MA	breast cancer	Phase II www.2xoncology.com
abexinostat (HDAC inhibitor)	Xynomic Pharmaceuticals Cheyenne, WY	breast cancer (combination therapy)	Phase II www.xynomicpharma.com
adagloxad simolenin (cancer immunotherapy vaccine)	OBI Pharma Taipei, Taiwan	metastatic breast cancer	Phase II www.obipharma.com
AE37 (HER2.neu) (Li-key hybrid cancer vaccine)	Antigen Express Wellesley, MA	newly-diagnosed breast cancer	Phase II www.antigenexpress.com
AE37/GP2 peptide vaccine (Li-key hybrid cancer vaccine)	Antigen Express Wellesley, MA	breast cancer	Phase II www.antigenexpress.com
afimoxifene (4-OHT) (percutaneous gel formulation)	BHR Pharma Herndon, VA	ductal carcinoma in situ of the breast	Phase II www.bhr-pharma.com

Breast Cancer
Product Name

Sponsor

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Development Phase

alpelisib
(PI3K-alpha inhibitor)

Novartis Oncology
East Hanover, NJ

hormone receptor-positive
HER2-negative advanced breast cancer
(postmenopausal women),
2L breast cancer (+ fulvestrant)

Phase III
www.novartis.com

metastatic or locally-advanced
breast cancer (premenopausal)

Phase I
www.novartis.com

Apristor™
onapristone

Context Therapeutics
Philadelphia, PA

progesterone receptor-positive
metastatic breast cancer

Phase II
www.contexttherapeutics.com

ARX788
(HER2 antibody-drug conjugate)

Ambrx
La Jolla, CA

HER2-positive breast cancer

Phase I
www.ambrx.com

AZD5363 (capivasertib)
(Akt inhibitor)

AstraZeneca
Wilmington, DE

breast cancer

Phase II
www.astrazeneca.com

AZD9496
(estrogen receptor antagonist)

AstraZeneca
Wilmington, DE

estrogen receptor-positive
breast cancer

Phase I
www.astrazeneca.com

balixafortide (POL6326)
(CXCR4 antagonist)

Polyphor
Allschwil, Switzerland

metastatic breast cancer
(combination therapy) (Fast Track)

Phase I
www.polyphor.com

Bavencio®
avelumab
(anti-PD-L1 inhibitor)

EMD Serono
Rockland, MA
Pfizer
New York, NY

triple negative breast cancer (+4-1BB)

Phase II
www.emdserono.com
www.pfizer.com

Breast Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
bemcentinib (BGB324) (AXL kinase inhibitor)	BerGenBio Bergen, Norway	triple negative breast cancer (+pembrolizumab)	Phase II www.bergenbio.com
Bria-IMT™ SV-BR-1 GM cancer vaccine	BriaCell Therapeutics Berkeley, CA	metastatic breast cancer, breast cancer (combination therapy)	Phase I/II www.briacell.com
CB-839 (glutaminase inhibitor)	Calithera Biosciences South San Francisco, CA	triple negative breast cancer (+paclitaxel)	Phase II www.calithera.com
Cotellic® cobimetinib	Genentech South San Francisco, CA	triple negative breast cancer (+atezolizumab +/- taxane)	Phase II www.gene.com
DEBIO 1347 (FGFR 1/2/3 inhibitor)	Debiopharm Lausanne, Switzerland	breast cancer	Phase I/II www.debiopharm.com
DHES0815A	Genentech South San Francisco, CA	breast cancer	Phase I www.gene.com
eFT508 (MKNK1/MKNK2 protein inhibitor)	eFFECTOR Therapeutics San Diego, CA	triple negative breast cancer	Phase II www.effector.com
endoxifen (estrogen receptor antagonist)	Jina Pharmaceuticals Libertyville, IL	breast cancer	Phase II www.jinapharma.com
endoxifen (topical)	Atossa Genetics Seattle, WA	breast cancer prevention in women with mammographic breast density	Phase II www.atossagenetics.com

Breast Cancer Product Name	Sponsor	Indication	Development Phase
ENMD-2076 (multiple kinase inhibitor)	CASI Pharmaceuticals Rockville, MD	triple negative breast cancer	Phase II www.casipharma.com
enobosarm (SARM)	GTx Memphis, TN	breast cancer	Phase II completed www.gtxinc.com
entinostat (HDAC inhibitor)	Syndax Pharmaceuticals Waltham, MA	advanced hormone receptor-positive HER2-breast cancer (+exemestane)	Phase III www.syndax.com
		triple negative breast cancer (+atezolizumab)	Phase II www.syndax.com
EP-101 (multi-antigen vaccine)	EpiThany Seattle, WA	breast cancer	Phase I www.epithany.com
EP-301 (HER2 ICD vaccine)	EpiThany Seattle, WA	breast cancer	Phase I www.epithany.com
EP-302 (multi-antigen vaccine)	EpiThany Seattle, WA	breast cancer	Phase I www.epithany.com
ETBX-021 (HER2/neu targeted cancer vaccine)	Etubics Seattle, WA NantBioScience Culver City, CA	HER2-expressing breast cancer	Phase I www.etubics.com www.nantworks.com

Breast Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
fulvestrant for injectable suspension	Eagle Pharmaceuticals Woodcliff Lake, NJ	hormone receptor-positive breast cancer	Phase I www.eagleus.com
fulvestrant intraductal microcatheter delivery	Atossa Genetics Seattle, WA	breast cancer (neoadjuvant)	Phase II www.atossagenetics.com
G1T38 (CDK4/6 inhibitor)	G1 Therapeutics Research Triangle Park, NC	estrogen receptor-positive HER2-negative breast cancer	Phase II www.g1therapeutics.com
GDC-0077 (RG6114) (PI3K inhibitor)	Genentech South San Francisco, CA	hormone receptor-positive breast cancer	Phase I www.gene.com
GDC-9545 (RG6171) (SERD)	Genentech South San Francisco, CA	estrogen receptor-positive HER2-negative metastatic breast cancer	Phase I www.gene.com
Gilotrif® afatinib	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	breast cancer	Phase III www.boehringer-ingelheim.com
H3B-6545 (estrogen receptor alpha antagonist)	Eisai Woodcliff Lake, NJ H3 Biomedicine Cambridge, MA	estrogen receptor-positive HER2-negative metastatic breast cancer	Phase I www.h3biomedicine.com
Halaven® eribulin	Eisai Woodcliff Lake, NJ	breast cancer (+pembrolizumab), breast cancer (+PEGPH20)	Phase I/II www.eisai.com

Breast Cancer
Product Name

Sponsor

Indication

Development Phase

Ibrance®
palbociclib

Pfizer
New York, NY

high risk early breast cancer,
HER2-positive breast cancer (adjuvant),
early breast cancer (adjuvant)

Phase III
www.pfizer.com

Imlygic®
talimogene laherparepvec
(oncolytic virus therapy)

Amgen
Thousand Oaks, CA

triple-negative breast cancer
(+atezolizumab)

Phase I
www.amgen.com

Imprime PGG®
immunostimulant PGG glucan

Biothera Pharmaceuticals
Eagan, MN

triple-negative breast cancer
(+pembrolizumab)

Phase II
www.biothera.com

IMT-1012
(immunotherapeutic vaccine)

Immunotope
Doylestown, PA

breast cancer

Phase I completed
www.immunotope.com

ipatasertib
(pan-Akt inhibitor)

Array BioPharma
Boulder, CO
Genentech
South San Francisco, CA

1L triple negative hormone receptor-
positive breast cancer (+chemotherapy)

Phase III
www.arraybiopharma.com
www.gene.com

triple negative breast cancer
(neoadjuvant)

Phase II
www.arraybiopharma.com
www.gene.com

triple negative breast cancer
(+atezolizumab +taxane)

Phase I
www.arraybiopharma.com
www.gene.com

IPI-549
(PI3K-gamma inhibitor)

Infinity Pharmaceuticals
Cambridge, MA

triple negative breast cancer
(+nivolumab)

Phase I
www.infi.com

Breast Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
IRX4204 (RXR agonist)	Io Therapeutics Santa Ana, CA	breast cancer	Phase I www.io-therapeutics.com
Kadcyla® trastuzumab emtansine	Genentech South San Francisco, CA	1L HER2-positive metastatic breast cancer, 3L HER2-positive metastatic breast cancer	Phase III www.gene.com
Kanjinti™ trastuzumab biosimilar (ABP 980)	Allergan Madison, NJ Amgen Thousand Oaks, CA	HER2-positive breast cancer	application submitted www.allergan.com www.amgen.com
Keytruda® pembrolizumab	Merck Kenilworth, NJ	breast cancer	Phase III www.merck.com
Kisqali® ribociclib (CDK4/6 inhibitor)	Novartis Oncology East Hanover, NJ	hormone-receptor positive HER2-negative breast cancer (adjuvant), 1L hormone-receptor positive HER2-negative advanced breast cancer (premenopausal women), 1L/2L hormone-receptor positive HER2-negative advanced breast cancer (postmenopausal women)	Phase III www.novartis.com
Korlym® mifepristone	Corcept Therapeutics Menlo Park, CA	triple negative breast cancer (+eribulin)	Phase I www.corcept.com

<u>Breast Cancer Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ladiratumab vedotin (LIV-1 antibody-drug conjugate)	Seattle Genetics Bothell, WA	HER2-negative breast cancer, triple negative breast cancer (+pembrolizumab), triple negative breast cancer (+atezolizumab)	Phase II www.seattlegenetics.com
		breast cancer	Phase I www.seattlegenetics.com
lasofoxifene (SERM)	Sermonix Pharmaceuticals Columbus, OH	estrogen receptor-positive metastatic breast cancer	Phase II www.sermonixpharma.com
LCL161 (apoptosis protein inhibitor)	Novartis Oncology East Hanover, NJ	breast cancer (+PDR001)	Phase I www.novartis.com
LSZ102 (SERM)	Novartis Oncology East Hanover, NJ	estrogen receptor-positive metastatic breast cancer (monotherapy and combination therapy)	Phase I www.novartis.com
Lynparza® olaparib	AstraZeneca Wilmington, DE	gBRCA-mutated adjuvant breast cancer, gBRCA-mutated metastatic breast cancer	Phase III www.astrazeneca.com
margetuximab (anti-HER2 mAb)	MacroGenics Rockville, MD	HER2-positive breast cancer (Fast Track)	Phase III www.macrogenics.com
MCLA-128 (ERBB2/3 receptor antagonist)	Merus Utrecht, Netherlands	breast cancer	Phase II www.merus.nl

Breast Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
MCS110 (CSF-1 mAb)	Novartis Oncology East Hanover, NJ	triple negative breast cancer	Phase II www.novartis.com
ME-344 (MTORC1/2 protein inhibitor)	MEI Pharma San Diego, CA	HER2-negative breast cancer (+bevacizumab)	Phase I/II www.meipharma.com
MM-121 (seribantumab) (anti-HER3 mAb)	Merrimack Pharmaceuticals Cambridge, MA	metastatic breast cancer	Phase II www.merrimack.com
MSI-1436 (trodesquimine)	DepYmed Farmingdale, NY	HER2-positive breast cancer	Phase I www.depymedinc.com
Nerlynx® neratinib (pan-ErbB inhibitor)	Puma Biotechnology Los Angeles, CA	3L metastatic HER2-positive breast cancer	Phase III www.pumabiotechnology.com
		HER2-positive breast cancer with brain metastases, HER2-positive breast cancer (neoadjuvant therapy), metastatic HER2-positive breast cancer, metastatic ER2-mutant breast cancer	Phase II www.pumabiotechnology.com
Neuvax™ nelipepimut-S	Sellas Life Sciences New York, NY	HER2-positive breast cancer (Fast Track)	Phase II www.sellaslifesciences.com
Onivyde® irinotecan liposome injection	Ipsen Biopharmaceuticals Basking Ridge, NJ	breast cancer	Phase I www.ipсен.com

Breast Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Onzeald™ etirinotecan pegol	Nektar Therapeutics San Francisco, CA	metastatic breast cancer (Fast Track)	Phase III www.nektar.com
Opdivo® nivolumab	Bristol-Myers Squibb Princeton, NJ	triple negative breast cancer	Phase I/II www.bms.com
Oraxol paclitaxel oral	Athenex Buffalo, NY	breast cancer	Phase III www.athenex.com
OTS-167 (MEK inhibitor)	OncoTherapy Science Kanagawa, China	advanced breast cancer, triple-negative breast cancer	Phase I www.oncotherapy.co.jp
PCA062 (p-cadherin modulator)	Novartis Oncology East Hanover, NJ	pCAD-positive triple negative breast cancer	Phase I www.novartis.com
pertuzumab subcutaneous + trastuzumab fixed-dose combination	Genentech South San Francisco, CA	early breast cancer	Phase II www.gene.com
PF-06873600 (CDK inhibitor)	Pfizer New York, NY	metastatic breast cancer	Phase I www.pfizer.com
pozotinib (pan-HER/tyrosine kinase inhibitor)	Spectrum Pharmaceuticals Henderson, NV	HER2-positive breast cancer	Phase II www.sppirx.com

Breast Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
PTX-200 (Akt inhibitor)	Prescient Therapeutics South Melbourne, Australia	HER2-negative breast cancer	Phase II www.ptxtherapeutics.com
		stage IIB-IV breast cancer	Phase I/II www.ptxtherapeutics.com
PU-H71 (HSP90 inhibitor)	Samus Therapeutics Topsfield, MA	metastatic breast cancer	Phase I www.samustherapeutics.com
PVX-410 (multi-peptide cancer vaccine)	OncoPep Boston, MA	metastatic triple negative breast cancer (+pembrolizumab), metastatic triple negative breast cancer (+ durvalumab)	Phase I www.oncopep.com
RAD140 (SARM)	Radius Health Waltham, MA	metastatic breast cancer	Phase I www.radiuspharm.com
rebastinib (TIE2 immunokinase inhibitor)	Deciphera Pharmaceuticals Waltham, MA	breast cancer (+chemotherapy)	Phase I www.deciphera.com
REM-001 (rostoporfin) (photosensitizer)	Adgero Biopharmaceuticals Princeton, NJ	cutaneous metastatic breast cancer	Phase II www.adgerobiopharm.com
RG6264 (pertuzumab/trastuzumab fixed-dose combination)	Roche/Genentech Basel, Switzerland	HER2-positive breast cancer	Phase I www.roche.com

<u>Breast Cancer Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
RX-5902 (supinixin) (P-p68 inhibitor)	Rexahn Pharmaceuticals Rockville, MD	triple negative breast cancer	Phase II www.rexahn.com
sacituzumab govitecan (anti-TROP-2-SN-38 ADC)	Immunomedics Morris Plains, NJ	metastatic triple-negative breast cancer (Fast Track) (Breakthrough Therapy)	Phase III www.immunomedics.com
sapacitabine (nucleoside analogue)	Cyclacel Pharmaceuticals Berkeley Heights, NJ	breast cancer (+seliciclib)	Phase II www.cyclacel.com
sapanisertib (MTOR protein inhibitor)	Takeda Oncology Deerfield, IL	breast cancer	Phase II www.takeda.com
SAR439859 (SERD)	Sanofi Bridgewater, NJ	metastatic breast cancer (+palbociclib)	Phase I www.sanofi.com
SAR566658 (anti-CA6 antibody-drug conjugate)	Sanofi Bridgewater, NJ	triple negative breast cancer	Phase II www.sanofi.com
SC-005 (antibody-drug conjugate)	AbbVie North Chicago, IL	triple negative breast cancer	Phase I www.abbvie.com
seviteronel (INO-464) (CYP17 lyase inhibitor)	Innocrin Pharmaceuticals Durham, NC	triple-negative breast cancer (Fast Track), estrogen receptor- positive breast cancer, male breast cancer	Phase II www.innocrinpharma.com

Breast Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
talazoparib (PARP inhibitor)	Pfizer New York, NY	germline BRCA-mutated metastatic breast cancer	Phase III www.pfizer.com
taselisib (PI3K inhibitor)	Genentech South San Francisco, CA	estrogen receptor-positive HER2-negative breast cancer	Phase III www.gene.com
		HER2-negative metastatic breast cancer (neoadjuvant)	Phase II www.gene.com
tavokinogene tetsaplasmid (interleukin-12 gene therapy)	Oncosec Medical San Diego, CA	triple negative breast cancer	Phase II www.oncosec.com
Tecentriq® atezolizumab	Genentech South San Francisco, CA	1L triple negative breast cancer (+paclitaxel), 1L triple negative breast cancer (+nab-paclitaxel), triple negative breast cancer (+nab-paclitaxel)	Phase III www.gene.com
		HER2-positive breast cancer (+K/HP)	Phase I www.gene.com
tesetaxel (taxane derivative)	Odonate Therapeutics San Diego, CA	HER2-negative hormone receptor- positive metastatic breast cancer	Phase III www.odonate.com
ThermoDox® doxorubicin liposomal	Celsion Lawrenceville, NJ	recurrent chest wall breast cancer	Phase I/II www.celsion.com

Breast Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
TPIV100/110 (T-cell cancer vaccine)	TapImmune Jacksonville, FL	HER2/neu-positive breast cancer	Phase I www.tapimmune.com
TPIV200 (folate receptor-alpha vaccine)	TapImmune Jacksonville, FL	triple negative breast cancer	Phase II www.tapimmune.com
trastuzumab biosimilar	Celltrion Incheon, South Korea	HER2-positive breast cancer	application submitted www.celltrion.com
trastuzumab biosimilar (PF-05280014)	Pfizer New York, NY	metastatic breast cancer	application submitted www.pfizer.com
trastuzumab biosimilar (SB3)	Samsung Bioepis Incheon, South Korea	HER2-positive breast cancer	application submitted www.samsungbioepis.com
trastuzumab deruxtecan (DS-8201) (anti-HER2 antibody-drug conjugate)	Daiichi Sankyo Basking Ridge, NJ	breast cancer (Fast Track)	Phase II www.dsi.com
trastuzumab duocarmazine (anti-HER2 antibody-drug conjugate)	Synthon Pharmaceuticals Durham, NC	pre-treated HER2-positive metastatic breast cancer (Fast Track)	Phase III www.synthon.com
TRC-105 (carotuximab)	TRACON Pharmaceuticals San Diego, CA	breast cancer	Phase I www.traconpharma.com
trilaciclib (CDK4/CDK6 inhibitor)	G1 Therapeutics Research Triangle Park, NC	triple negative breast cancer	Phase II www.g1therapeutics.com

Breast Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
TTC-352 (estrogen receptor alpha agonist)	TTC Oncology Edina, MN	metastatic breast cancer	Phase I
tucatinib (HER2 inhibitor) ORPHAN DRUG	Seattle Genetics Bothell, WA	HER2-positive breast cancer (combination therapy) (Fast Track)	Phase II www.seattlegenetics.com
veliparib (PARP inhibitor) ORPHAN DRUG	AbbVie North Chicago, IL	breast cancer	Phase III www.abbvie.com
Verzenio® abemaciclib	Eli Lilly Indianapolis, IN	breast cancer (adjuvant)	Phase III www.lilly.com
		hormone receptor-positive/HER2- positive metastatic breast cancer	Phase II www.lilly.com
XMT-1522 (anti-HER2 antibody-drug conjugate)	Mersana Therapeutics Cambridge, MA	HER2-expressing breast cancer	Phase I www.mersana.com
Zejula® niraparib	TESARO Waltham, MA	triple negative breast cancer (+pembrolizumab)	Phase II www.tesarobio.com
ZW25 (bispecific antibody)	Zymeworks Vancouver, Canada	HER2-expressing breast cancer	Phase I www.zymeworks.com

Colorectal Cancer
Product Name

Sponsor

Indication

Development Phase

AbGn-107
(antibody-drug conjugate)

AbGenomics
Los Altos, CA

colorectal cancer

Phase I
www.abgenomics.com

ADXS-NEO
(neoepitope-based
immunotherapy vaccine)

Advaxis
Princeton, NJ
Amgen
Thousand Oaks, CA

metastatic colon cancer

Phase I
www.advaxis.com

AlloStim®
cancer vaccine

Immunovative Therapies
Jerusalem, Israel

metastatic colorectal cancer
(+cryoablation)

Phase II
www.immunovative.com

bevacizumab biosimilar
(BI 695502)

Boehringer Ingelheim Pharmaceuticals
Ridgefield, CT

colorectal cancer

Phase III
www.boehringer-ingelheim.com

bevacizumab biosimilar
(TX16)

Tanvex BioPharma
San Diego, CA

metastatic colorectal cancer

Phase I
www.tanvex.com

binimetinib
(MEK inhibitor)

Array BioPharma
Boulder, CO

BRAF-mutant colorectal cancer

Phase III
www.arraybiopharma.com

microsatellite-stable metastatic
colorectal cancer with RAS mutation
(+nivolumab +/-ipilimumab)

Phase I/II
www.arraybiopharma.com

<u>Colorectal Cancer Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
colorectal cancer vaccine	Targeted Diagnostics and Therapeutics Exton, PA Viral Gene Exton, PA	colorectal cancer	Phase I www.viralgeneinc.com
CPI-613 (altered energy metabolism- derived medicine)	Rafael Pharmaceuticals Newark, NJ	relapsed/refractory metastatic colorectal cancer	Phase I www.rafaelpharma.com
CPP-1X/sul (eflornithine + sulindac)	Cancer Prevention Pharmaceuticals Tucson, AZ	colon cancer risk reduction	Phase III www.canprevent.com
eFT508 (MKNK1/MKNK2 protein inhibitor)	eEFFECTOR Therapeutics San Diego, CA	microsatellite stable colorectal cancer (+avelumab)	Phase II www.effector.com
eltanexor oral (KPT-8602) (nuclear export inhibitor)	Karyopharm Therapeutics Newton, MA	colorectal cancer	Phase I/II www.karyopharm.com
encorafenib (BRAF inhibitor)	Array BioPharma Boulder, CO	colorectal cancer	Phase III www.arraybiopharma.com
ensituximab (neoplasm antigen inhibitor)	Precision Biologics Rockville, MD	advanced colorectal cancer	Phase II www.precision-biologics.com
entinostat (HDAC inhibitor)	Syndax Pharmaceuticals Waltham, MA	colorectal cancer (+pembrolizumab)	Phase II www.syndax.com

Colorectal Cancer
Product Name

Sponsor

Indication

Development Phase

entolimod
(TLR5 agonist)

Cleveland BioLabs
Buffalo, N Y

colorectal cancer (neoadjuvant)

Phase I
www.cbiolabs.com

epacadostat
(IDO1 inhibitor)

Incyte
Wilmington, DE

colorectal cancer

Phase I
www.incyte.com

ETBX-011
(CEA targeted cancer vaccine)

Etubics
Seattle, WA
NantKWest
Culver City, CA

colorectal cancer

Phase I/II completed
www.etubics.com
www.nantkwest.com

Hu5F9-G4
(CD47 antigen inhibitor mAb)

Forty Seven
Menlo Park, CA

advanced colorectal cancer
(+cetixumab)

Phase I/II
www.fortyseveninc.com

Imlygic®
talimogene laherparepvec
(oncolytic virus therapy)

Amgen
Thousand Oaks, CA

colorectal cancer with liver metastases
(+atezolizumab)

Phase I
www.amgen.com

Imprime PGG®
immunostimulant PGG glucan

Biothera Pharmaceuticals
Eagan, MN

colorectal cancer
(+atezolizumab +bevacizumab)

Phase I/II
www.biothera.com

ipatasertib
(pan-Akt inhibitor)

Array BioPharma
Boulder, CO
Genentech
South San Francisco, CA

1L colorectal cancer (+abiratorone)

Phase III
www.arraybiopharma.com
www.gene.com

Colorectal Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Keytruda® pembrolizumab	Merck Kenilworth, NJ	colorectal cancer	Phase III www.merck.com
MABp1	XBiotech Austin, TX	advanced colorectal cancer (Fast Track), symptomatic colorectal cancer	Phase III www.xbiotech.com
MGD007 (gpA33 x CD3 bispecific antibody)	MacroGenics Rockville, MD	colorectal cancer	Phase I www.macrogenics.com
napabucasin (STAT3 inhibitor) ORPHAN DRUG	Boston Biomedical Cambridge, MA	colorectal cancer (+FOLFIRI)	Phase III www.bostonbiomedical.com
		colorectal cancer (combination therapy)	Phase II www.bostonbiomedical.com
navicixizumab (anti-DLL4/VEGF bispecific mAb)	OncoMed Pharmaceuticals Redwood City, CA	metastatic colorectal cancer	Phase I www.oncomed.com
ONCOS-102 (oncolytic virus therapy)	Targovax Oslo, Norway	colorectal cancer	Phase I/II www.targovax.com
OncoVax® autologous cancer vaccine	Vaccinogen Baltimore, MD	colorectal cancer (Fast Track)	Phase III www.vaccinogeninc.com
Opdivo® + Yervoy® nivolumab + ipilimumab	Bristol-Myers Squibb Princeton, NJ	colorectal cancer	Phase II www.bms.com

Colorectal Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
pLADD (personalised LADD immunotherapy)	Aduro BioTech Berkeley, CA	microsatellite stable colorectal cancer	Phase I www.aduro.com
PM184 (tubulin polymerisation inhibitor)	PharmaMar Madrid, Spain	advanced colorectal cancer	Phase II www.pharmamar.com
polyclonal antibody stimulator (fusion peptide)	Cancer Advances Durham, NC	colorectal cancer	Phase II www.canceradvancesinc.com
PolyPEPI1018 (immunotherapy cancer vaccine)	Treos Bio London, United Kingdom	colorectal cancer	Phase I www.treosbio.com
SC-006 (antibody-drug conjugate)	AbbVie North Chicago, IL	colorectal cancer	Phase I www.abbvie.com
Sym004 (EGFR antagonist mAb)	Symphogen Somerville, NJ	3L/4L metastatic colorectal cancer	Phase III www.symphogen.com
Tecentriq® atezolizumab	Genentech South San Francisco, CA	2L/3L colorectal cancer (+bevacizumab +cobimetinib)	Phase I www.gene.com
trastuzumab deruxtecan (DS-8201) (anti-HER2 antibody-drug conjugate)	Daiichi Sankyo Basking Ridge, NJ	colorectal cancer	Phase II www.dsi.com
TVB-2640 (FASN inhibitor)	3-V Biosciences Menlo Park, CA	colon cancer	Phase II www.3vbio.com

Colorectal Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
varlilumab (anti-CD28 mAb)	Celldex Therapeutics Hampton, NJ	colorectal cancer (+nivolumab)	Phase II www.celldex.com

Gastric Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
AbGn-107 (antibody-drug conjugate)	AbGenomics Los Altos, CA	gastric cancer	Phase I www.abgenomics.com
andecaliximab (MMP9 inhibitor mAb)	Gilead Sciences Foster City, CA	gastric cancer	Phase III www.gilead.com
APR-246 (tumor suppressor protein p53 stimulant)	Aprea Therapeutics Boston, MA	esophageal cancer	Phase I www.aprea.com
avapritinib (PDGFRa/KIT inhibitor) ORPHAN DRUG	Blueprint Medicines Cambridge, MA	unresectable, treatment-resistant gastrointestinal stromal tumors (GIST) (Fast Track) (Breakthrough Therapy)	Phase I www.blueprintmedicines.com
Bavencio® avelumab (anti-PD-L1 inhibitor)	EMD Serono Rockland, MA Pfizer New York, NY	1L gastric cancer	Phase III www.emdserono.com www.pfizer.com

<u>Gastric Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
bemarituzumab (FGFR2b receptor antagonist) ORPHAN DRUG	Five Prime Therapeutics South San Francisco, CA	gastric/gastroesophageal junction cancer	Phase I www.fiveprime.com
BMS-986205 (IDO1 inhibitor)	Bristol-Myers Squibb Princeton, NJ	advanced gastric cancer (+nivolumab +ipilimumab +relatlimab)	Phase II www.bms.com
cellspan esophageal implant ORPHAN DRUG	Biostage Holliston, MA	esophageal cancer	in clinical trials www.biostage.com
CPP-1X (eflornithine + high dose powder sachet) ORPHAN DRUG	Cancer Prevention Pharmaceuticals Tucson, AZ	gastric cancer	Phase II www.canprevent.cpom
crenolanib (tyrosine kinase inhibitor)	AROG Pharmaceuticals Dallas, TX	GIST (Fast Track)	Phase III www.arogpharmaceuticals.com
DCC-2618 (PDGFR-alpha kinase switch control inhibitor) ORPHAN DRUG	Deciphera Pharmaceuticals Waltham, MA	GIST	Phase III www.deciphera.com
DKN-01 (anti-DKK1 mAb)	Leap Therapeutics Cambridge, MA	esophagogastric cancer (+/-paclitaxel), esophagogastric cancer (+pembrolizumab), gastric cancer (+/-paclitaxel)	Phase I/II www.leaptx.com

Gastric Cancer
Product Name

Sponsor

Indication

Development Phase

IMAB362 (zolbetuximab)
(anti-claudin 18.2 mAb)
ORPHAN DRUG

Astellas
Northbrook, IL

gastric cancer, gastroesophageal
junction adenocarcinoma

Phase III
www.astellas.com

Imfinzi®
durvalumab

MedImmune
Gaithersburg, MD

gastric cancer (+tremelimumab),
esophageal cancer (+tremelimumab)

Phase II
www.medimmune.com

1L esophageal cancer
(+tremelimumab +chemotherapy)

Phase I
www.medimmune.com

Kanjinti™
trastuzumab biosimilar
(ABP 980)

Allergan
Madison, NJ
Amgen
Thousand Oaks, CA

HER2-positive gastric cancer

application submitted
www.allergan.com
www.amgen.com

Keytruda®
pembrolizumab

Merck
Kenilworth, NJ

esophageal cancer

Phase III
www.merck.com

Lonsurf®
tipiracil/trifluridine

Taiho Oncology
Princeton, NJ

gastric cancer

Phase III
www.taihooncology.com

Lynparza®
olaparib

AstraZeneca
Wilmington, DE

gastric cancer (+AZD6738)

Phase II
www.astrazeneca.com

margetuximab
(anti-HER2 mAb)

MacroGenics
Rockville, MD

gastric cancer (+anti-PD-1)

Phase II
www.macrogenics.com

Gastric Cancer
Product Name

Sponsor

Indication

Development Phase

masitinib
(protein tyrosine kinase inhibitor)
ORPHAN DRUG

AB Science
Paris, France

1L GIST

Phase III
www.ab-science.com

napabucasin
(STAT3 inhibitor)
ORPHAN DRUG

Boston Biomedical
Cambridge, MA

gastrointestinal cancer
(+chemotherapy)

Phase I/II
www.bostonbiomedical.com

Opdivo®
nivolumab

Bristol-Myers Squibb
Princeton, NJ

esophageal cancer, gastric cancer,
gastroesophageal junction
adenocarcinoma

Phase III
www.bms.com

Opdivo® + Yervoy®
nivolumab + ipilimumab

Bristol-Myers Squibb
Princeton, NJ

gastric cancer, esophageal cancer

Phase III
www.bms.com

Oraxol
paclitaxel oral

Athenex
Buffalo, NY

gastric cancer (+ramucirumab)

Phase I
www.athenex.com

PCA062
(p-cadherin modulator)

Novartis Oncology
East Hanover, NJ

pCAD-positive esophageal cancer

Phase I
www.novartis.com

pegargiminase
(ADI-PEG-20)

Polaris Pharmaceuticals
San Diego, CA

gastrointestinal cancer (+FOLFOX)

Phase I/II
www.polarispharma.com

PEGPH20
(pegylated recombinant
human hyaluronidase)

Halozyme Therapeutics
San Diego, CA

gastric cancer (+pembrolizumab),
gastric cancer (+atezolizumab)

Phase I
www.halozyme.com

Gastric Cancer
Product Name

Sponsor

Indication

Development Phase

PLX9486
(c-kit inhibitor)

Plexxikon
Berkeley, CA

GIST

Phase I
www.plexxikon.com

polyclonal antibody stimulator
(fusion peptide)
ORPHAN DRUG

Cancer Advances
Durham, NC

gastric cancer

Phase III
www.canceradvancesinc.com

rivoceranib
(VEGFr-2 antagonist)
ORPHAN DRUG

LSK Biopharma
Salt Lake City, UT

advanced or metastatic gastric cancer

Phase III
www.lskbiopharma.com

ropidoxuridine
(radiation sensitizer)

Shuttle Pharmaceuticals
Rockville, MD

gastrointestinal cancer

Phase I
www.shuttlepharma.com

Sutent®
sunitinib

Pfizer
New York, NY

GIST (pediatric)

Phase II completed
www.pfizer.com

Tecentriq®
atezolizumab

Genentech
South San Francisco, CA

gastric cancer
(+bevacizumab +chemotherapy)

Phase I
www.gene.com

tislelizumab (BGB-A317)
(anti-PD-1 mAb)

BeiGene USA
Cambridge, MA
Celgene
Summit, NJ

esophageal squamous cell carcinoma

Phase III
www.beigene.com
www.celgene.com

trastuzumab biosimilar

Celltrion
Incheon, South Korea

HER2-positive gastric cancer

application submitted
www.celltrion.com

Gastric Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
XmAb18087 (SSTR2 x CD3 bispecific mAb)	Xencor Monrovia, CA	GIST	Phase I www.xencor.com
XMT-1522 (anti-HER2 antibody-drug conjugate)	Mersana Therapeutics Cambridge, MA	HER2-expressing gastric cancer	Phase I www.mersana.com
ZW25 (bispecific antibody) ORPHAN DRUG	Zymeworks Vancouver, Canada	HER2-expressing gastric cancer	Phase I www.zymeworks.com

Head and Neck Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ADXS-NEO (neoepitope-based immunotherapy vaccine)	Advaxis Princeton, NJ Amgen Thousand Oaks, CA	metastatic head and neck cancer	Phase I www.advaxis.com
axalimogene filolisbac (AXAL) (cancer immunotherapy vaccine) ORPHAN DRUG	Advaxis Princeton, NJ	metastatic head and neck cancer (+durvalumab)	Phase II www.advaxis.com

Head and Neck Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Bavencio® avelumab (anti-PD-L1 inhibitor)	EMD Serono Rockland, MA Pfizer New York, NY	locally advanced head and neck cancer, locally-advanced squamous cell carcinoma of the head and neck	Phase III www.emdserono.com www.pfizer.com
		squamous cell carcinoma of the head and neck (+OX40 or 4-1BBB)	Phase II www.emdserono.com www.pfizer.com
biropepimut-S (GL-0817) (MAGEA 3 immunomodulator) ORPHAN DRUG	Gliknik Baltimore, MD	squamous cell carcinoma of the oral cavity	Phase II www.gliknik.com
BMX-001 (mangano porphyrin antioxidant mimetic)	BioMimetix Greenwood Village, CO	head and neck cancer	Phase I www.biomimetix.com
CDX-3379 (anti-ErbB3 mAb)	Celldex Therapeutics Hampton, NJ	squamous cell carcinoma of the head and neck	Phase II www.celldex.com
Cotellic® cobimetinib	Genentech South San Francisco, CA	head and neck cancer (+atezolizumab)	Phase I www.gene.com
COTI-2 (p53 gene modulator)	Cotinga Pharmaceuticals London, Canada	head and neck cancer	Phase I www.cotingapharma.com
DPX-E7 (peptide cancer vaccine)	Immunovaccine Halifax, Canada	HPV-related head and neck cancer	Phase I/II www.imvaccine.com

Head and Neck Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
epacadostat (IDO1 inhibitor)	Incyte Wilmington, DE	head and neck cancer	Phase I www.incyte.com
evofosfamide	Molecular Templates Austin, TX	squamous cell carcinoma of the head and neck (+ipilimumab)	Phase I www.mtem.com
ficlatuzumab (HGF/c-Met inhibitor)	AVEO Oncology Cambridge, MA	squamous cell carcinoma of the head and neck	Phase II www.aveooncology.com
Gilotrif® afatinib	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	squamous cell carcinoma of the head and neck	Phase III completed www.boehringer-ingelheim.com
IMA201 (adoptive T-cell therapy)	Immatics US Houston, TX	squamous cell carcinoma of the head and neck	Phase I www.immatics.com

Head and Neck Cancer
Product Name

Sponsor

Indication

Development Phase

Imfinzi®
durvalumab

MedImmune
Gaithersburg, MD

1L squamous cell carcinoma of the head and neck (+tremelimumab),
2L squamous cell carcinoma of the head and neck (+tremelimumab)

Phase III
www.medimmune.com

squamous cell carcinoma of the head and neck (+AZD5069),
squamous cell carcinoma of the head and neck (+AZD9150),
squamous cell carcinoma of the head and neck (+MEDI0457)

Phase II
www.medimmune.com

locally-advanced squamous cell carcinoma of the head and neck (+ RT)

Phase I
www.medimmune.com

Imlygic®
talimogene laherparepvec
(oncolytic virus therapy)

Amgen
Thousand Oaks, CA

squamous cell carcinoma of the head and neck (+pembrolizumab)

Phase I
www.amgen.com

Imprime PGG®
immunostimulant PGG glucan

Biothera Pharmaceuticals
Eagan, MN

head and neck cancer
(+pembrolizumab)

Phase II
www.biothera.com

IPI-549
(PI3K-gamma inhibitor)

Infinity Pharmaceuticals
Cambridge, MA

head and neck cancer (+nivolumab)

Phase I
www.infi.com

IRX-2
(citoplurikin)

IRX Therapeutics
New York, NY

squamous cell carcinoma of the head and neck (Fast Track)

Phase II
www.irxtherapeutics.com

Head and Neck Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
LN-145 (tumor-infiltrating lymphocyte)	Iovance Biotherapeutics San Carlos, CA	squamous cell carcinoma of the head and neck	Phase II www.iovance.com
MAGE-A10 TCR (T-cell receptor therapy)	Adaptimmune Philadelphia, PA	head and neck cancer	Phase I/II www.adaptimmune.com
monalizumab (NKG2A checkpoint receptor antagonist)	Innate Pharma Marseille, France	head and neck cancer (+cetuximab), head and neck cancer (+cetuximab)	Phase II www.innate-pharma.com
Multikine® leukocyte interleukin ORPHAN DRUG	CEL-SCI Vienna, VA	head and neck cancer	Phase III www.cel-sci.com
NC-6004 (cisplatin micellar nanoparticle)	NanoCarrier Chiba, Japan	head and neck cancer (combination therapy)	Phase I www.nanocarrier.com
Opdivo® + Yervoy® nivolumab + ipilimumab	Bristol-Myers Squibb Princeton, NJ	head and neck cancer	Phase III www.bms.com
PCA062 (p-cadherin modulator)	Novartis Oncology East Hanover, NJ	pCAD-positive head and neck cancer	Phase I www.novartis.com
prexasertib (CHK1 inhibitor)	Eli Lilly Indianapolis, IN	head and neck cancer	Phase I www.lilly.com

Head and Neck Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Proxinium™ recombinant fusion protein ORPHAN DRUG	Eleven Biotherapeutics Cambridge, MA	squamous cell carcinoma of the head and neck (Fast Track)	Phase I www.elevenbio.com
RM-1929 (EGFR antagonist)	Aspyrian Therapeutics San Diego, CA	head and neck cancer (Fast Track)	Phase II www.aspyriantherapeutics.com
SD-101 (TLR9 agonist)	Dynavax Technologies Berkeley, CA	squamous cell carcinoma of the head and neck (+pembrolizumab)	Phase I/II www.dynavax.com
SF1126 (PI3K/mTOR inhibitor)	SignalRx Pharmaceuticals San Diego, CA	head and neck cancer	Phase II www.signalrx.com
Tecentriq® atezolizumab	Genentech South San Francisco, CA	squamous cell carcinoma of the head and neck (+/- chemotherapy)	Phase III www.gene.com
tipifarnib (farnesyltransferase inhibitor)	Kura Oncology San Diego, CA	HRAS-mutant head and neck cancer	Phase II www.kuraoncology.com
TT10 (EBVST) (EBV antigen-specific CTL) ORPHAN DRUG	Tessa Therapeutics Singapore	nasopharyngeal cancer (Fast Track)	Phase III www.tessatherapeutics.com
TT12 (armoured HPVST) (HPV-specific T-cell therapy)	Tessa Therapeutics Singapore	oropharyngeal cancer	Phase I www.tessatherapeutics.com

Head and Neck Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
varlilumab (anti-CD28 mAb)	Celldex Therapeutics Hampton, NJ	head and neck cancer (+nivolumab)	Phase II www.celldex.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ABBV-621 (TRAIL receptor agonist)	AbbVie North Chicago, IL	hematologic malignancies	Phase I www.abbvie.com
AEB1102 (pegzilarginase)	Aeglea Biotherapeutics Austin, TX	myelodysplastic syndromes	Phase I www.aegleabio.com
ALRN-6924 (MDM2/MDMX antagonist)	Aileron Therapeutics Cambridge, MA	hematologic malignancies	Phase II www.aileronrx.com
		myelodysplastic syndromes	Phase I www.aileronrx.com
anagrelide controlled-release	Sellas Life Sciences New York, NY	essential thrombocythemia	Phase II www.sellaslifesciences.com
APG-1387 (IAP protein inhibitor)	Ascentage Pharma Rockville, MD	hematologic malignancies	Phase I en.ascentagepharma.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
APR-246 (tumor suppressor protein p53 stimulant)	Apria Therapeutics Boston, MA	myelodysplastic syndromes	Phase I www.apria.com
ARQ 531 (BTK inhibitor)	ArQule Burlington, MA	hematologic malignancies	Phase I www.arqule.com
ASTX727 (DNMT inhibitor)	Astex Pharmaceuticals Pleasanton, CA	myelodysplastic syndromes	Phase III www.astx.com
ATA520 (WT1-specific T-cell therapy)	Atara Biotherapeutics South San Francisco, CA	hematologic malignancies	Phase I www.atarabio.com
AZD4573 (CDK9 inhibitor)	AstraZeneca Wilmington, DE	hematologic malignancies	Phase I www.astrazeneca.com
AZD5991 (MCL-1 protein inhibitor)	AstraZeneca Wilmington, DE	hematologic malignancies	Phase I www.astrazeneca.com
Bavencio® avelumab (anti-PD-L1 inhibitor)	EMD Serono Rockland, MA Pfizer New York, NY	hematologic malignancies	Phase I www.emdserono.com www.pfizer.com
BAY1251152 (PTEFb inhibitor)	Bayer Pharmaceuticals Whippany, NJ	hematologic malignancies	Phase I www.pharma.bayer.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Beleodaq® belinostat	Spectrum Pharmaceuticals Henderson, NV	UGT1A1 wild type gene hematologic malignancies, UGT1A1*28 genotype hematologic malignancies	Phase I www.sppirx.com
bemcentinib (BGB324) (AXL kinase inhibitor)	BerGenBio Bergen, Norway	myelodysplastic syndromes	Phase I/II www.bergenbio.com
BI 836858 (anti-CD33 mAb) ORPHAN DRUG	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	myelodysplastic syndromes	Phase II www.boehringer-ingelheim.com
BL-8040 (CXCR4 chemokine receptor antagonist)	BioLineRx Modi'in, Israel	hypoplastic myelodysplastic syndromes (combination therapy)	Phase II www.biogener.com
BPX-701 (T-cell receptor therapy)	Bellicum Pharmaceuticals Houston, TX	myelodysplastic syndromes	Phase I www.belicum.com
BSK01™ (tumor-associated peptide antigen pulsed dendritic cell vaccine)	Kiromic Houston, TX	relapsed/refractory hematologic malignancies	Phase I/II www.kiromic.com
BXCL702 (enzyme inhibitor)	BioXcel Therapeutics Branford, CT	hematologic malignancies	Phase I www.bioxceltherapeutics.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Calquence® acalabrutinib	Acerta Pharma South San Francisco, CA AstraZeneca Wilmington, DE	B-cell malignancies	Phase III www.astrazeneca.com
		hematologic malignancies (+AZD6738), hematologic malignancies (+vistusertib)	Phase I www.astrazeneca.com
CBLC137 (curaxin)	Incuron Buffalo, NY	hematologic malignancies	Phase I www.incuron.com
CC-486 (oral azacitidine)	Celgene Summit, NJ	lower-risk myelodysplastic syndromes	Phase III www.celgene.com
		myelodysplastic syndromes (post-hypomethylating agent failure)	Phase II www.celgene.com
CC-90002 (anti-CD47 antibody)	Celgene Summit, NJ	myelodysplastic syndromes	Phase I www.celgene.com
cerdulatinib (Syk/JAK inhibitor)	Portola Pharmaceuticals South San Francisco, CA	relapsed/refractory B-cell malignancies	Phase II www.portola.com
CLR-131 (phospholipid-drug conjugate)	Collectar Biosciences Madison, WI	hematologic malignancies	Phase II www.collectar.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
CNDO-109 (natural killer cell stimulant)	Fortress Biotech New York, NY	myelodysplastic syndromes	Phase I www.fortressbiotech.com
CPI-0610 (BET protein inhibitor)	Constellation Pharmaceuticals Cambridge, MA	acute myelodysplastic syndromes, myelofibrosis, myelodysplastic/ myeloproliferative neoplasms	Phase I/II www.constellationpharma.com
CPI-613 (altered energy metabolism- derived medicine)	Rafael Pharmaceuticals Newark, NJ	relapsed/refractory myelodysplastic syndromes	Phase II www.rafaelpharma.com
Cresemba® isavuconazonium	Astellas Northbrook, IL Basilea Pharmaceutica Basel, Switzerland	hematologic malignancies (pediatric)	Phase I www.astellas.com
CX-01 (dociparstat sodium)	Cantex Pharmaceuticals Weston, FL	myelodysplastic syndromes	Phase II www.cantex.com
CYAD-01 (NKG2D CAR-T cell therapy)	Celyad New York, NY	hematologic malignancies	Phase I www.celyad.com
DCC-3014 (CSF1R inhibitor)	Deciphera Pharmaceuticals Waltham, MA	hematologic malignancies	Phase I www.deciphera.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
DS-3032 (MDM2 inhibitor)	Daiichi Sankyo Basking Ridge, NJ	hematologic malignancies	Phase I www.dsi.com
DSP-7888 (adegamotide/nelatimotide)	Sumitomo Dainippon Pharma Osaka, Japan	hematologic malignancies	Phase I www.ds-pharma.com
eltanexor oral (KPT-8602) (nuclear export inhibitor)	Karyopharm Therapeutics Newton, MA	high-risk myelodysplastic syndromes	Phase I/II www.karyopharm.com
entospletinib (Syk inhibitor)	Gilead Sciences Foster City, CA	hematologic malignancies	Phase II www.gilead.com
epacadostat (IDO1 inhibitor)	Incyte Wilmington, DE	B-cell malignancies	Phase I www.incyte.com
ET190 (anti-CD19 CAR-T cell therapy)	Eureka Therapeutics Emeryville, CA	hematologic malignancies	Phase I www.eurekatherapeutics.com
fedratinib (JAK2 inhibitor)	Celgene Summit, NJ Impact Biomedicines San Diego, CA	myelofibrosis	Phase III www.celgene.com
FF-10501-01 (cell differentiation stimulant)	FUJIFILM Pharmaceuticals U.S.A Valhalla, NJ	myelodysplastic syndromes	Phase I/II www.fujifilmusa.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
flotetuzumab (CD123 and CD3 bispecific antibody)	MacroGenics Rockville, MD Servier Paris, France	myelodysplastic syndromes	Phase I www.macrogenics.com
FT-1101 (BET inhibitor)	FORMA Therapeutics Watertown, MA	relapsed/refractory hematologic malignancies	Phase I www.formatherapeutics.com
FT-2102	FORMA Therapeutics Watertown, MA	myelodysplastic syndromes with IDH1-mutation	Phase I www.formatherapeutics.com
Gazyva® obinutuzumab	Genentech South San Francisco, CA	hematologic malignancies (anti-CD20 combination therapy)	Phase I www.gene.com
GSK3174998 (anti-OX40 mAb)	GlaxoSmithKline Research Triangle Park, NC	hematologic malignancies	Phase I www.gsk.com
GSK525762 (molibresib) (BET inhibitor)	GlaxoSmithKline Research Triangle Park, NC	hematologic malignancies	Phase I www.gsk.com
guadecitabine (SGI-110) (DNMT1 inhibitor)	Astex Pharmaceuticals Pleasanton, CA	myelodysplastic syndromes	Phase III www.astx.com
H3B-8800 (SF3B1 protein modulator)	Eisai Woodcliff Lake, NJ H3 Biomedicine Cambridge, MA	myelodysplastic syndromes	Phase I www.eisai.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
HDM201 (p53-HDM2 inhibitor)	Novartis Oncology East Hanover, NJ	hematologic malignancies	Phase I www.novartis.com
Hu5F9-G4 (CD47 antigen inhibitor mAb)	Forty Seven Menlo Park, CA	myelodysplastic syndromes, myelodysplastic syndromes (+azacitidine)	Phase I www.fortyseveninc.com
idasanutlin (RG7388) (MDM2 antagonist)	Roche/Genentech South San Francisco, CA	polycythemia vera	Phase II www.gene.com
IGF-MTX (IGF-methotrexate conjugate)	IGF Oncology St. Paul, MN	myelodysplastic syndromes	Phase I/II www.igfoncology.com
Imbruvica® ibrutinib	Janssen Research & Development Raritan, NJ Pharmacyclics Sunnyvale, CA	hematologic malignancies (+nivolumab)	Phase I/II www.jansen.com www.pharmacyclics.com
Imfinzi® durvalumab	MedImmune Gaithersburg, MD	myelodysplastic syndromes (+azacitidine)	Phase I www.medimmne.com
	Celgene Summit, NJ MedImmune Gaithersburg, MD	myelodysplastic syndromes (post-hypomethylating agent failure)	Phase II www.celgene.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
IMG-7289 (LSD1 inhibitor)	Imago BioSciences San Carlos, CA	myelodysplastic syndromes	Phase II www.imagobio.com
		myelofibrosis	Phase I/II www.imagobio.com
IMGN632 (anti-CD123 antibody-drug conjugate)	ImmunoGen Waltham, MA	hematologic malignancies	Phase I www.immunogen.com
IMMU-114 (anti-HLA-DR)	Immunomedics Morris Plains, NJ	hematologic malignancies	Phase I www.immunomedics.com
INCB54828 (FGFR1/2/3 inhibitor)	Incyte Wilmington, DE	8p11 myeloproliferative syndrome	Phase II www.incyte.com
Jakafi® ruxolitinib ORPHAN DRUG	Incyte Wilmington, DE	essential thrombocythemia	Phase III www.incyte.com
LCL161 (apoptosis protein inhibitor)	Novartis Oncology East Hanover, NJ	post-essential thrombocytosis myelofibrosis, post-polycythemia myelofibrosis, primary myelofibrosis	Phase II www.novartis.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
luspatercept (ACE-536)	Acceleron Pharma Cambridge, MA Celgene Summit, NJ	myelodysplastic syndromes	Phase III www.acceleron.com www.celgene.com
		myelofibrosis	Phase II www.acceleron.com www.celgene.com
M7583 (BTK inhibitor)	EMD Serono Rockland, MA	hematologic malignancies	Phase I www.emdserono.com
MEDI7247 (immunomodulator)	MedImmune Gaithersburg, MD	hematologic malignancies	Phase I www.medimmune.com
MGD013 (anti-PD-1 mAb x LAG-3)	MacroGenics Rockville, MD	hematologic malignancies	Phase I www.macrogenics.com
MK-8628 (BET protein inhibitor)	Merck Kenilworth, NJ	hematologic malignancies	Phase I www.merck.com
momelotinib (JAK 1/2 inhibitor) ORPHAN DRUG	Gilead Sciences Foster City, CA	myelofibrosis, post-polycythemia vera, post-essential thrombocythemia	Phase II www.gilead.com
napabucasin (STAT3 inhibitor)	Boston Biomedical Cambridge, MA	hematologic malignancies (combination therapy)	Phase I www.bostonbiomedical.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
navitoclax (Bcl-1 inhibitor)	AbbVie North Chicago, IL	myelofibrosis	Phase II www.abbvie.com
NiCord® cord blood stem cell therapy ORPHAN DRUG	Gamida-Cell Jerusalem, Israel	high-risk hematologic malignancies	Phase III www.gamida-cell.com
NS-018 (JAK2 inhibitor)	NS Pharma Paramus, NJ	myelofibrosis	Phase I/II www.nspharma.com
OPB-111077 (signal transduction pathway inhibitor)	Otsuka Pharmaceutical Rockville, MD	hematologic malignancies	Phase I www.otsuka.com
OTS-167 (MELK inhibitor)	OncoTherapy Science Kanagawa, China	advanced myelodysplastic syndromes, advanced myeloproliferative neoplastic disorders	Phase I/II www.oncotherapy.co.jp
OXi4503 (combretastatin A1 phosphate)	Mateon Therapeutics South San Francisco, CA	myelodysplastic malignancies (+ cytarabine)	Phase I/II www.mateon.com
pacritinib (JAK2 inhibitor) ORPHAN DRUG	CTI BioPharma Seattle, WA	myelofibrosis (Fast Track)	Phase III www.ctibiopharma.com
pevonedistat (Nedd-activating enzyme inhibitor)	Takeda Oncology Deerfield, IL	high-risk myelodysplastic syndromes	Phase III www.takeda.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
PIM447 (Pan-PIM inhibitor)	Novartis Oncology East Hanover, NJ	myelofibrosis	Phase I www.novartis.com
PLX51107 (BET inhibitor)	Plexxikon Berkeley, CA	hematologic malignancies	Phase I www.plexxikon.com
pracinostat (hydroxamic inhibitor)	MEI Pharma San Diego, CA	myelodysplastic syndromes (+azacitidine)	Phase II www.meipharma.com
PRM-151 (cell differentiation modulator) ORPHAN DRUG	Promedior Lexington, MA	myelofibrosis (Fast Track), essential thrombocythemia, polycythemia vera	Phase II www.promedior.com
PU-H71 (HSP90 inhibitor)	Samus Therapeutics Topsfield, MA	myelofibrosis	Phase I www.samustherapeutics.com
relatlimab (anti-LAG3 mAb)	Bristol-Myers Squibb Princeton, NJ	relapsed/refractory hematologic malignancies	Phase II/III www.bms.com
RG6146 (BET inhibitor)	Roche/Genentech South San Francisco, CA	hematologic malignancies	Phase I www.gene.com
RG7828 (anti-CD20/CD3 mAb)	Genentech South San Francisco, CA	hematologic malignancies (+/-atezolizumab)	Phase I www.gene.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
rigosertib (PI3K/Plk1 inhibitor) ORPHAN DRUG	Onconova Therapeutics Newtown, PA	2L higher-risk myelodysplastic syndromes (intravenous) (Fast Track)	Phase III www.onconova.com
		1L higher-risk myelodysplastic syndromes (oral)	Phase II www.onconova.com
ropeginterferon alfa-2b ORPHAN DRUG	PharmaEssentia Taipei, Taiwan	polycythemia vera	Phase III www.pharmaessentia.com
SL-401 (recombinant fusion protein) ORPHAN DRUG	Stemline Therapeutics New York, NY	blastic plasmacytoid dendritic cell neoplasm (Breakthrough Therapy)	application submitted www.stemline.com
		advanced, high-risk myeloproliferative neoplasms	Phase I/II www.stemline.com
SNX-5422 (Hsp90 inhibitor)	Esanex Indianapolis, IN	hematologic malignancies	Phase I/II www.esanexpharma.com
SRF231 (anti-CD47 mAb)	Surface Oncology Cambridge, MA	hematologic malignancies	Phase I www.surfaceoncology.com
SY-1425 (RAR-alpha agonist)	Syros Pharmaceuticals Cambridge, MA	myelodysplastic syndromes (+ daratumumab)	Phase I www.syros.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Tecentriq® atezolizumab	Genentech South San Francisco, CA	hematologic malignancies (+anti-CD20 combinations), myelodysplastic syndromes (+post-hypomethylating agent)	Phase I www.gene.com
TEW-7197 (TGF-beta antagonist)	MedPacto Suwon, South Korea	myelodysplastic syndromes	Phase I/II www.medpacto.com
tinostamustine (EDO-S101) (histone deacetylase inhibitor)	Mundipharma Cambridge, United Kingdom	relapsed/refractory hematologic malignancies	Phase I www.mundipharma.com
tipifarnib (farnesyltransferase inhibitor)	Kura Oncology San Diego, CA	myelodysplastic syndromes	Phase II www.kuraoncology.com
tosedostat (aminopeptidases inhibitor)	CTI BioPharma Seattle, WA	myelodysplastic syndromes	Phase II www.ctibiopharma.com
TTI-621 (CD47 inhibitors/SIRPA stimulant)	Trillium Therapeutics Mississauga, Canada	hematologic malignancies	Phase I www.trilliumtherapeutics.com
UCART123 (CAR-T cell therapy)	Cellectis New York, NY	blastic plasmacytoid dendritic cell neoplasm	Phase I www.cellectis.com
vecabrutinib (BTK inhibitor)	Sunesis Pharmaceuticals South San Francisco, CA	B-cell hematologic malignancies	Phase I/II www.sunesis.com

Hematologic Malignancies

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Venclexta™ venetoclax ORPHAN DRUG	AbbVie North Chicago, IL Genentech South San Francisco, CA	myelodysplastic syndromes, 1L myelodysplastic syndromes (+azacitidine)	Phase II www.abbvie.com www.gene.com
		relapsed/refractory myelodysplastic syndromes (+azacitidine)	Phase I www.abbvie.com www.gene.com
Vyxeos® daunorubicin and cytarabine	Jazz Pharmaceuticals Dublin, Ireland	myelodysplastic syndromes	Phase II www.jazzpharma.com
WT-2725 (peptide cancer vaccine)	Sunovion Pharmaceuticals Marlborough, MA	hematologic malignancies	Phase I www.sunovion.com
XmAb13676 (CD20 x CD3bispecific mAb)	Xencor Monrovia, CA	B-cell hematologic malignancies	Phase I www.xencor.com
zanubrutinib (BGB-3111) (BTK inhibitor) ORPHAN DRUG	BeiGene Cambridge, MA	Waldenström's macroglobulinemia	Phase III www.beigene.com
		relapsed/refractory B-cell malignancies	Phase I www.beigene.com

Kidney Cancer
Product Name

Sponsor

Indication

Development Phase

abexinostat
(HDAC inhibitor)

Xynomic Pharmaceuticals
Cheyenne, WY

kidney cancer (+pazopanib)

Phase III
www.xynomicpharma.com

AGS-16C3F
(anti-ENPP3 antibody-drug conjugate)

Astellas
Northbrook, IL

renal cell carcinoma

Phase II
www.astellas.com

AM0010
(PEG-IL-10)

ARMO Biosciences
Redwood City, CA

renal cell carcinoma (+PD-1)

Phase I
www.armobio.com

Archexin® (RX-0201)
Akt inhibitor
ORPHAN DRUG

Rexahn Pharmaceuticals
Rockville, MD

metastatic renal cell carcinoma

Phase II
www.rexahn.com

Bavencio®
avelumab
(anti-PD-L1 inhibitor)

EMD Serono
Rockland, MA
Pfizer
New York, NY

1L renal cell carcinoma (+axitinib)
(Breakthrough Therapy)

Phase III
www.emdserono.com
www.pfizer.com

BMS-986205
(IDO1 inhibitor)

Bristol-Myers Squibb
Princeton, NJ

advanced renal cell carcinoma
(+nivolumab +ipilimumab +relatlimab)

Phase II
www.bms.com

Cabometyx™
cabozantinib

Exelixis
South San Francisco, CA

1L renal cell carcinoma (+nivolumab)

Phase III
www.exelixis.com

1L or 2L papillary renal cell carcinoma

Phase II
www.exelixis.com

Kidney Cancer
Product Name

Sponsor

Indication

Development Phase

camptothecin (CRLX101)
ORPHAN DRUG

BlueLink Pharmaceuticals
Ames, IA

metastatic renal cell carcinoma
(Fast Track)

Phase II completed

CB-839
(glutaminase inhibitor)

Calithera Biosciences
South San Francisco, CA

renal cell carcinoma
(+cabozantinib) (Fast Track),
renal cell carcinoma
(+everolimus) (Fast Track)

Phase II
www.calithera.com

CDX-014
(TIM-1 antibody-drug conjugate)

Celldex Therapeutics
Hampton, NJ

renal cell carcinoma

Phase I
www.celldex.com

Cotellic®
cobimetinib

Genentech
South San Francisco, CA

renal cell carcinoma (+atezolizumab)

Phase I
www.gene.com

HBI-8000
(HDAC inhibitor)

HUYA Bioscience
San Diego, CA

renal cell carcinoma

Phase I/II
www.huyabio.com

ilixadencel
(dendritic cell vaccine)

Immunicum
Gothenburg, Sweden

renal cell carcinoma

Phase II
www.immunicum.com

Keytruda®
pembrolizumab

Merck
Kenilworth, NJ

renal cell carcinoma

Phase III
www.merck.com

LAG525
(anti-LAG3 mAb)

Novartis Oncology
East Hanover, NJ

renal cell carcinoma (+PDR-001)

Phase I/II
www.novartis.com

Kidney Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Lenvima® lenvatinib	Eisai Woodcliff Lake, NJ	1L renal cell carcinoma	Phase III www.eisai.com
Opdivo® nivolumab	Bristol-Myers Squibb Princeton, NJ	1L renal cell carcinoma (Fast Track)	application submitted www.bms.com
PT2385 (HIF-1 alpha inhibitor)	Peloton Therapeutics Dallas, TX	von Hippel-Landau disease associated renal cell carcinoma	Phase II www.pelotontherapeutics.com
PT2977 (HIF-2α inhibitor)	Peloton Therapeutics Dallas, TX	von Hippel-Lindau disease associated renal cell carcinoma	Phase II www.pelotontherapeutics.com
rocapuldencel-T (personalised dendritic cell vaccine)	Argos Therapeutics Durham, NC	1L metastatic renal cell carcinoma (Fast Track)	Phase III www.argostherapeutics.com
savolitinib (c-Met inhibitor)	AstraZeneca Wilmington, DE	papillary renal cell carcinoma	Phase III www.astrazeneca.com
Tecentriq® atezolizumab	Genentech South San Francisco, CA	renal cell carcinoma (adjuvant), renal cell carcinoma (+bevacizumab)	Phase III www.gene.com
tivozanib (VEGR antagonist)	AVEO Oncology Cambridge, MA	renal cell carcinoma	Phase III www.aveooncology.com
		renal cell carcinoma (+nivolumab)	Phase II www.aveooncology.com

Kidney Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
TRC-105 (carotuximab)	TRACON Pharmaceuticals San Diego, CA	renal cell carcinoma (Fast Track)	Phase II www.traconpharma.com
varlilumab (anti-CD28 mAb)	Celldex Therapeutics Hampton, NJ	renal cell carcinoma (+nivolumab)	Phase II www.celldex.com
X4P-001-IO (CXCR4 inhibitor)	X4 Pharmaceuticals Cambridge, MA	refractory clear cell renal cell carcinoma	Phase I/II www.x4pharma.com

Leukemia

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ABBV-744 (BRD2/3/4 inhibitor)	AbbVie North Chicago, IL	relapsed/refractory acute myeloid leukemia (AML)	Phase I www.abbvie.com
abexinostat (HDAC inhibitor)	Xynomic Pharmaceuticals Cheyenne, WY	AML (+ibrutinib)	Phase II www.xynomicpharma.com
ABL001 (asciminib) (BCR-ABL inhibitor)	Novartis Oncology East Hanover, NJ	3L chronic myeloid leukemia (CML)	Phase III www.novartis.com
		1L CML	Phase II www.novartis.com

Leukemia

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Actimab-A lintuzumab Ac-225 ORPHAN DRUG	Actinium Pharmaceuticals New York, NY	newly-diagnosed AML in patients over age 60	Phase II www.actiniumpharma.com
ADCT-301 (camidanlumab tesirine) (antibody-drug conjugate)	ADC Therapeutics Murray Hill, NJ	ALL, AML	Phase I www.adctherapeutics.com
ADCT-402 (loncastuximab tesirine)	ADC Therapeutics Murray Hill, NJ	B-cell ALL	Phase I www.adctherapeutics.com
AEB1102 (pegzilarginase)	Aeglea Biotherapeutics Austin, TX	AML	Phase I www.aegleabio.com
AG-881 (pan-IDH inhibitor)	Agios Pharmaceuticals Cambridge, MA Celgene Summit, NJ	AML	Phase I www.celgene.com
AGS62P1 (anti-FLT3 antibody-drug conjugate)	Astellas Northbrook, IL	AML	Phase I www.astellas.com
ALRN-6924 (MDM2/MDMX antagonist) ORPHAN DRUG	Aileron Therapeutics Cambridge, MA	AML	Phase I www.aileronrx.com

Leukemia

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
alvocidib (DSP-2033) (CDK9 inhibitor) ORPHAN DRUG	Tolero Pharmaceuticals Lehi, UT	MCL-1 dependent relapsed/refractory AML	Phase II www.toleropharma.com
		newly-diagnosed AML (combination therapy)	Phase I www.toleropharma.com
AMG 176 (MCL1 protein inhibitor)	Amgen Thousand Oaks, CA	relapsed/refractory AML	Phase I www.amgen.com
AMG 330 (anti-CD33 x anti-CD3 bispecific T-cell engager)	Amgen Thousand Oaks, CA	relapsed/refractory AML	Phase I www.amgen.com
AMG 673 (anti-CD33 x anti-CD3 bispecific T-cell engager)	Amgen Thousand Oaks, CA	relapsed/refractory AML	Phase I www.amgen.com
AMV564 (anti-CD33 x anti-CD3 bispecific T-cell engager) ORPHAN DRUG	Amphivena Therapeutics South San Francisco, CA	relapsed/refractory AML	Phase I www.amphivena.com
annamycin liposomal (type II DNA topoisomerase inhibitor) ORPHAN DRUG	Moleculin Biotech Houston, TX	relapsed/refractory AML	Phase I/II www.moleculin.com

Leukemia

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
anti-CD19 CAR-T cell therapy	Intrexon Germantown, MD ZIOPHARM Oncology Boston, MA	leukemia	Phase I www.intrexon.com www.ziopharm.com
anti-CD33 CAR-T cell therapy	Intrexon Germantown, MD ZIOPHARM Oncology Boston, MA	AML	Phase I www.ziopharm.com
AST-VAC1 (telomerase-based cancer vaccine)	Asterias Biotherapeutics Fremont, CA	AML	Phase II www.asteriasbiotherapeutics.com
ASTX727 (DNMT inhibitor)	Astex Pharmaceuticals Pleasanton, CA	chronic myelomonocytic leukemia (CMML)	Phase III www.astx.com
avapritinib (PDGFR α /KIT inhibitor) ORPHAN DRUG	Blueprint Medicines Cambridge, MA	mast cell leukemia	Phase I www.blueprintmedicines.com
AVB-S6-500 (GAS6-AXL pathway inhibitor)	Aravive Biologics Houston, TX	AML	Phase I www.aravive.com
BAY1436032 (mutant-IDH1 inhibitor)	Bayer Pharmaceuticals Whippany, NJ	IDH1-mutant AML	Phase I www.pharma.bayer.com

Leukemia

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
bemcentinib (BGB324) (AXL kinase inhibitor)	BerGenBio Bergen, Norway	AML	Phase I/II www.bergenbio.com
BI 836826 (anti-CD37 mAb)	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	CLL	Phase I/II www.boehringer-ingelheim.com
BI 836858 (anti-CD33 mAb) ORPHAN DRUG	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	AML	Phase II www.boehringer-ingelheim.com
BNZ-1 (IL-2/IL-9/IL-15 receptor antagonist)	Bioniz Irvine, CA	T-cell leukemia (large granular leukemia, cutaneous T-cell leukemia)	Phase II www.bioniz.com
BPX-501 (rivogenlecleucel)	Bellicum Pharmaceuticals Houston, TX	ALL (pediatric), AML	Phase I/II www.bellicum.com
BPX-701 (T-cell receptor therapy)	Bellicum Pharmaceuticals Houston, TX	AML	Phase I www.bellicum.com
calaspargase pegol (SHP-633) (pegylated L-asparaginase) ORPHAN DRUG	Shire Cambridge, MA	ALL	application submitted www.shire.com
Calquence® acalabrutinib	Acerta Pharma South San Francisco, CA AstraZeneca Wilmington, DE	1L chronic lymphocytic leukemia (CLL), relapsed/refractory high-risk CLL	Phase III www.astrazeneca.com

Leukemia

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
CC-122 (avadomide) (pleiotropic pathway modulator)	Celgene Summit, NJ	CLL	Phase I www.celgene.com
CC-486 (oral azacitidine)	Celgene Summit, NJ	post-induction AML (maintenance)	Phase III www.celgene.com
CC-90002 (anti-CD47 antibody)	Celgene Summit, NJ	AML	Phase I www.celgene.com
CC-90009 (CELMoD)	Celgene Summit, NJ	AML	Phase I www.celgene.com
CIK-CAR.CD19 (CIK-CAR-T cell therapy)	Formula Pharmaceuticals Berwyn, PA	relapsed or refractory ALL	Phase I/II www.formulapharma.com
cirmtuzumab (ROR1 antagonist)	Oncternal Therapeutics San Diego, CA	CLL	Phase I/II www.oncternal.com
CNDO-109 (natural killer cell stimulant) ORPHAN DRUG	Fortress Biotech New York, NY	AML	Phase I www.fortressbiotech.com
cobomarsen (microRNA inhibitor)	miRagen Therapeutics Boulder, CO	CLL, T-cell lymphoma/leukemia	Phase I www.miragen.com

Leukemia

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
CPI-0610 (BET protein inhibitor)	Constellation Pharmaceuticals Cambridge, MA	AML	Phase I/II www.constellationpharma.com
CPI-613 (altered energy metabolism- derived medicine) ORPHAN DRUG	Rafael Pharmaceuticals Newark, NJ	relapsed/refractory AML (combination therapy)	Phase III www.rafaelpharma.com
crenolanib (tyrosine kinase inhibitor) ORPHAN DRUG	AROG Pharmaceuticals Dallas, TX	AML (Fast Track)	Phase II www.arogpharmaceuticals.com
CTL119 (anti-CD19 CAR-T cell therapy)	Novartis Oncology East Hanover, NJ University of Pennsylvania Philadelphia, PA	B-cell prolymphocytic leukemia, precursor cell lymphoblastic leukemia-lymphoma	Phase I www.novartis.com
CX-01 (dociparstat sodium) ORPHAN DRUG	Cantex Pharmaceuticals Weston, FL	AML	Phase II www.cantex.com
DCLL9718S (RG6109)	Genentech South San Francisco, CA	AML	Phase I www.gene.com
DFP-10917 (cell cycle inhibitor)	Delta-Fly Pharma Tokushima, Japan	ALL, AML	Phase I/II www.delta-flypharma.co.jp

Leukemia

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
DS-3201 (EZH1/2 inhibitor)	Daiichi Sankyo Basking Ridge, NJ	ALL, AML	Phase I www.dsi.com
DSP-7888 (adegramotide/nelatimotide)	Sumitomo Dainippon Pharma Osaka, Japan	relapsed/refractory AML	Phase II www.ds-pharma.com
DTRMWXHS 12 (BTK inhibitor)	Zhejiang DTRM Biopharma Hangzhou, China	CLL	Phase I
duvelisib (PI3K delta/PI3K gamma inhibitor) ORPHAN DRUG	Verastem Needham, MA	relapsed/refractory CLL (Fast Track), relapsed/refractory small lymphocytic leukemia	application submitted www.verastem.com
		relapsed/refractory CLL (post-BTK), relapsed/refractory small lymphocytic (post-BTK)	Phase II www.verastem.com
entospletinib (Syk inhibitor)	Gilead Sciences Foster City, CA	AML	Phase II www.gilead.com
epratuzumab (anti-CD22 mAb) ORPHAN DRUG	Immunomedics Morris Plains, NJ	ALL (pediatric)	Phase III www.immunomedics.com
eryaspase (L-asparaginase) ORPHAN DRUG	Erytech Pharma Cambridge, MA	AML	Phase II www.erytech.com

Leukemia
Product Name

Sponsor

Indication

Development Phase

FATE-NK100 (natural killer cell stimulant)	Fate Therapeutics La Jolla, CA	AML	Phase I www.fatetherapeutics.com
FF-10101-01 (FLT3 inhibitor)	FUJIFILM Pharmaceuticals U.S.A. Cambridge, MA	AML	Phase I www.fujifilmusa.com
FF-10501-01 (cell differentiation stimulant)	FUJIFILM Pharmaceuticals U.S.A. Cambridge, MA	AML, CMML	Phase I/II www.fujifilmusa.com
ficlatuzumab (HGF/c-Met inhibitor)	AVEO Oncology Cambridge, MA	AML	Phase I www.aveooncology.com
flotetuzumab (CD123 and CD3 bispecific antibody) ORPHAN DRUG	Macrogenics Rockville, MD Servier Paris, France	AML	Phase I www.macrogenics.com
FT-2102	FORMA Therapeutics Watertown, MA	relapsed/refractory AML with IDH1-mutation	Phase I www.formatherapeutics.com
galinpepimut-S (anti-WT1 peptide cancer vaccine) ORPHAN DRUG	Sellas Life Sciences New York, NY	AML (Fast Track)	Phase II www.sellaslifesciences.com
		CML, AML (+hypomethylating agent)	Phase I www.sellaslifesciences.com

Leukemia

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
gilteritinib (FLT3/AXL inhibitor) ORPHAN DRUG	Astellas Northbrook, IL	relapsed/refractory AML with FLT3-mutation (Fast Track)	application submitted www.astellas.com
		relapsed/refractory AML, AML (post-chemotherapy maintenance), AML (post-HSCT maintenance)	Phase III www.astellas.com
		newly-diagnosed AML (low-intensity chemotherapy)	Phase II/III www.astellas.com
		newly-diagnosed AML (high-intensity chemotherapy)	Phase I www.astellas.com
glasdegib (SMO antagonist) ORPHAN DRUG	Pfizer New York, NY	AML	Phase II www.pfizer.com
GLG-801 (STAT3 inhibitor)	GLG Pharma Jupiter, FL	CLL	Phase I/II www.glgpharma.com
GMI-1271 (uproleselan sodium) ORPHAN DRUG	GlycoMimetics Rockville, MD	AML (Fast Track)	Phase II www.glycomimetics.com
GO-203-2c (MUC1-C inhibitor)	Genus Oncology Boston, MA	AML	Phase II www.genusoncology.com

Leukemia

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
guadecitabine (SGI-110) (DNMT1 inhibitor) ORPHAN DRUG	Astex Pharmaceuticals Pleasanton, CA	AML, CMML	Phase III www.astx.com
H3B-8800 (SF3B1 protein modulator) ORPHAN DRUG	Eisai Woodcliff Lake, NJ H3 Biomedicine Cambridge, MA	AML, CMML	Phase I www.eisai.com
HSV-Tk (nalotimagene carmaleucel) ORPHAN DRUG	MolMed Milan, Italy	high risk acute leukemia	Phase III www.molmed.com
Hu5F9-G4 (CD47 antigen inhibitor mAb)	Forty Seven Menlo Park, CA	AML, AML (+azacitidine)	Phase I www.fortyseveninc.com
iC9/CAR.19/IL15-transduced CB-NK cells	Bellicum Pharmaceuticals Houston, TX M.D. Anderson Cancer Center Houston, TX	ALL, CLL	Phase I/II www.bellicum.com
idasanutlin (RG7388) (MDM2 antagonist)	Roche/Genentech South San Francisco, CA	AML (+chemotherapy)	Phase III www.gene.com
Idhifa® enasidenib	Agios Pharmaceuticals Cambridge, MA Celgene Summit, NJ	newly-diagnosed AML with IDH2-mutation	Phase I www.celgene.com

Leukemia
Product Name

Sponsor

Indication

Development Phase

IGF-MTX (IGF-methotrexate conjugate)	IGF Oncology St. Paul, MN	CMML	Phase I/II www.igfoncology.com
Imbruvica® ibrutinib	Janssen Research & Development Raritan, NJ Pharmacyclics Sunnyvale, CA	1L CLL	Phase III www.janssen.com www.pharmacyclics.com
Imfinzi® durvalumab	Celgene Summit, NJ MedImmune Gaithersburg, MD	AML	Phase II www.celgene.com
IMG-7289 (LSD1 inhibitor)	Imago BioSciences San Carlos, CA	AML	Phase II www.imagobio.com
IMGN779 (anti-CD33 antibody-drug conjugate)	ImmunoGen Waltham, MA	AML	Phase I www.immunogen.com
INCB59872 (LSD1 inhibitor)	Incyte Wilmington, DE	AML	Phase I/II www.incyte.com
indoximod (IDO inhibitor)	NewLink Genetics Ames, IA	newly-diagnosed AML	Phase I www.newlinkgenetics.com
inecalcitol (calcitriol receptor agonist) ORPHAN DRUG	Hybrigenics Paris, France	AML	Phase II www.hybrigenics.com

Leukemia
Product Name

Sponsor

Indication

Development Phase

Iomab-B CD45
(I-131-apamistamab)
ORPHAN DRUG

Actinium Pharmaceuticals
New York, NY

induction and conditioning agent
prior to a bone marrow transplant
for AML in patients over age 56

Phase III
www.actiniumpharma.com

ivosidenib
(IDH1 inhibitor)
ORPHAN DRUG

Agios Pharmaceuticals
Cambridge, MA

AML

application submitted
www.agios.com

JNJ-63709178
(CD123 x CD3 DuoBody® protein)

Janssen Research & Development
Raritan, NJ

relapsed/refractory AML

Phase I
www.janssen.com

KTE-C19 CAR-T cell therapy
(second generation anti-CD19)

Kite Pharma
Santa Monica, CA

ALL (pediatric and adult)

Phase I
www.kitepharma.com

Kymriah™
tisagenlecleucel-T
(anti-CD19 CAT-T cell therapy)

Novartis Oncology
East Hanover, NJ

ALL (pediatric/young adult)

application submitted
www.novartis.com

CLL

Phase III
www.novartis.com

LAM-003
(immunomodulator)

LAM Therapeutics
Guilford, CT

AML

Phase I
www.lamtherapeutics.com

lenzilumab
(anti-GM-CSF mAb)

Humanigen
Brisbane, CA

CMML

Phase I
www.humanigen.com

Leukemia

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
LY3039478 (NOTCH inhibitor)	Eli Lilly Indianapolis, IN	T-cell ALL (combination therapy)	Phase I/II www.lilly.com
MB-102 (CAR-T cell therapy)	Mustang Bio New York, NY	AML	Phase I www.mustangbio.com
ME-401 (PI3K delta inhibitor)	MEI Pharma San Diego, CA	CLL	Phase I www.meipharma.com
mivebresib (ABBV-075) (BET inhibitor)	AbbVie North Chicago, IL	AML	Phase I www.abbvie.com
monalizumab (NKG2A checkpoint receptor antagonist)	Innate Pharma Marseille, France	CLL (combination therapy)	Phase I/II www.innate-pharma.com
MOR-208 (XmAb5574) (B-cell inhibitor mAb) ORPHAN DRUG	MorphoSys Planegg, Germany	B-cell CLL, CLL	Phase II www.morphosys.com
moxetumomab pasudotox (CD22 antigen inhibitor) ORPHAN DRUG	MedImmune Gaithersburg, MD	hairy cell leukemia	application submitted www.medimmune.com
		3L hairy cell leukemia	Phase III www.medimmune.com

Leukemia

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
MT-3724 (engineered toxin bodies [ETB] targeting CD20)	Molecular Templates Austin, TX	B-cell CLL	Phase I www.mtem.com
ONC201 (dopamine receptor D2/3 antagonist)	Oncoceutics Philadelphia, PA	leukemia	Phase I/II www.oncoceutics.com
ONO-7475 (Axl/Mer inhibitor)	Ono Pharmaceutical Osaka, Japan	AML	Phase I www.ono.co.jp
Opdivo® nivolumab	Bristol-Myers Squibb Princeton, NJ	CML	Phase I www.bms.com
otlertuzumab (CD37 protein inhibitor) ORPHAN DRUG	Aptevo Therapeutics Seattle, WA	CLL (combination therapy)	Phase II www.aptevotherapeutics.com
OTS-167 (MELK inhibitor)	OncoTherapy Science Kanagawa, China	ALL, refractory/relapsed AML, advanced CML	Phase I/II www.oncotherapy.co.jp
OXi4503 (combretastatin A1 phosphate) ORPHAN DRUG	Mateon Therapeutics South San Francisco, CA	AML (+cytarabine) (Fast Track)	Phase I/II www.mateon.com
OXS-1550 (bispecific scFv recombinant fusion protein-drug conjugate)	GT Biopharma Washington, DC	relapsed/refractory B-lineage leukemia	Phase I/II www.gtbiopharma.com

Leukemia
Product Name

Sponsor

Indication

Development Phase

PCM-075
(PLK1 inhibitor)
ORPHAN DRUG

TrovaGene
San Diego, CA

AML

Phase II
www.trovagene.com

pegargiminase
(ADI-PEG-20)

Polaris Pharmaceuticals
San Diego, CA

AML (+low-dose cytarabine)

Phase I
www.polarispharma.com

pinometostat
(DOT1L protein inhibitor)
ORPHAN DRUG

Epizyme
Cambridge, MA

MLL-R (rearranged) ALL, MLL-R AML

Phase I
www.epizyme.com

pracinostat
(hydroxamic inhibitor)
ORPHAN DRUG

MEI Pharma
San Diego, CA

AML (+azacitidine)

Phase III
www.meipharma.com

prexigebersen
(antisense cancer therapy)
ORPHAN DRUG

Bio-Path Holdings
Houston, TX

AML, CML

Phase II
www.biopathholdings.com

PTX-200
(Akt inhibitor)

Prescient Therapeutics
South Melbourne, Australia

relapsed/refractory AML

Phase I
www.ptxtherapeutics.com

quizartinib
(FLT3 inhibitor)
ORPHAN DRUG

Daiichi Sankyo
Basking Ridge, NJ

1L/2L AML (Fast Track)

Phase III
www.dsi.com

REGN1979
(anti-CD20/CD3 bispecific mAb)

Regeneron Pharmaceuticals
Tarrytown, NY

CLL

Phase I
www.regeneron.com

Leukemia
Product Name

Sponsor

Indication

Development Phase

rituximab biosimilar (ABP 798)	Allergan Parsippany, NJ Amgen Thousand Oaks, CA	CLL	Phase III www.amgen.com
rituximab biosimilar	Celltrion Incheon, South Korea	CLL	application submitted www.celltrion.com
rituximab biosimilar (GP2013)	Sandoz Princeton, NJ	CLL	application submitted www.sandoz.com
Rydapt® midostaurin	Novartis Oncology East Hanover, NJ	FLT3 wild type AML	Phase III www.novartis.com
sapacitabine (nucleoside analogue) ORPHAN DRUG	Cyclacel Pharmaceuticals Berkeley Heights, NJ	AML	Phase III www.cyclacel.com
SEL24 (PIM/FLT3 inhibitor)	Selvita Krakow, Poland	AML	Phase I/II www.selvita.com
SGN-CD123A (anti-CD123 antibody-drug conjugate)	Seattle Genetics Bothell, WA	relapsed/refractory AML	Phase I www.seattlegenetics.com
SL-401 (recombinant fusion protein) ORPHAN DRUG	Stemline Therapeutics New York, NY	AML	Phase I/II www.stemline.com

Leukemia
Product Name

Sponsor

Indication

Development Phase

SNX-5422
(Hsp90 inhibitor)

Esanex
Indianapolis, IN

CLL (+ibrutinib)

Phase I
www.esanexpharma.com

Sprycel®
dasatinib

Bristol-Myers Squibb
Princeton, NJ

CML (+nivolumab)

Phase I
www.bms.com

SUN-K0706
(tyrosine kinase inhibitor)

Sun Pharma Advanced Research
Mumbai, India

CML

Phase I
www.sparc.life

SY-1425
(RAR-alpha agonist)
ORPHAN DRUG

Syros Pharmaceuticals
Cambridge, MA

1L AML (+ azacitidine), relapsed/
refractory AML (+ daratumumab)

Phase I
www.syros.com

Tecentriq®
atezolizumab

Genentech
South San Francisco, CA

AML (+guadecitabine)

Phase I
www.gene.com

tipifarnib
(farnesyltransferase inhibitor)

Kura Oncology
San Diego, CA

CMML

Phase II
www.kuraoncology.com

tosedostat
(aminopeptidases inhibitor)
ORPHAN DRUG

CTI BioPharma
Seattle, WA

AML

Phase II
www.ctibiopharma.com

TPA
(tetradecanoylphorbol acetate)

Rich Pharmaceuticals
Beverly Hills, CA

AML

Phase II
www.richpharmaceuticals.com

Leukemia

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ublituximab (TG-1101) (anti-CD20 mAb) ORPHAN DRUG	TG Therapeutics New York, NY	high-risk CLL	Phase III www.tgtherapeutics.com
ublituximab + umbralisib (anti-CD20 mAb.PI3K inhibitor)	TG Therapeutics New York, NY	CLL	Phase III www.tgtherapeutics.com
UCART123 (CAR-T cell therapy)	Cellectis New York, NY	AML	Phase I www.cellectis.com
UCART19 (CAR-T cell therapy)	Allogene Therapeutics South San Francisco, CA Servier Paris, France	B-cell ALL	Phase I www.allogene.com
ulocuplumab (anti-CXCR4 mAb)	Bristol-Myers Squibb Princeton, NJ	newly-diagnosed AML	Phase I/II www.bms.com
umbralisib (TGR-1202) (PI3K inhibitor) ORPHAN DRUG	TG Therapeutics New York, NY	relapsed/refractory CLL	Phase II www.tgtherapeutics.com

Leukemia
Product Name

Sponsor

Indication

Development Phase

Venclexta™
venetoclax
ORPHAN DRUG

AbbVie
North Chicago, IL
Genentech
South San Francisco, CA

1L CLL

application submitted
www.abbvie.com
www.gene.com

AML, relapsed/refractory CLL

Phase III
www.abbvie.com
www.gene.com

AML (+ cobimetinib/idasanutlin)

Phase I
www.abbvie.com
www.gene.com

vosaroxin
(quinolone derivative)
ORPHAN DRUG

Sunesis Pharmaceuticals
South San Francisco, CA

AML (Fast Track)

Phase II
www.sunesis.com

XmAb14045
(CD123 x CD3 bispecific mAb)

Xencor
Monrovia, CA

AML

Phase I
www.xencor.com

zanubrutinib (BGB-3111)
(BTK inhibitor)
ORPHAN DRUG

BeiGene
Cambridge, MA

1L CLL

Phase III
www.beigene.com

Zydelig®
idelalisib

Gilead Sciences
Foster City, CA

relapsed/refractory CLL

Phase III
www.gilead.com

Liver Cancer
Product Name

Sponsor

Indication

Development Phase

ABC294640 (Yeliva®)
(sphingosine kinase-2 inhibitor)
ORPHAN DRUG

RedHill Biopharma
Raleigh, NC

advanced hepatocellular carcinoma,
cholangiocarcinoma

Phase II
www.redhillbio.com

Ad-p53
(gene therapy)

MultiVir
Houston, TX

liver metastases

Phase I
www.multivir.com

AFP TCR
(alpha fetoprotein targeted
T-cell therapy)

Adaptimmune
Philadelphia, PA

hepatocellular carcinoma

Phase I
www.adaptimmune.com

amcasertib (BBI503)
(cancer cel [stemness] inhibitor)

Boston Biomedical
Cambridge, MA

hepatocellular carcinoma
(combination therapy)

Phase I/II
www.bostonbiomedical.com

anti-CEA CAR-T cell therapy

Sorrento Therapeutics
San Diego, CA

metastatic liver cancer

Phase I
www.sorrentotherapeutics.com

BLU-554
(FGFR4 kinase inhibitor)
ORPHAN DRUG

Blueprint Medicines
Cambridge, MA

advanced hepatocellular carcinoma

Phase I
www.blueprintmedicines.com

BMS-986183

Bristol-Myers Squibb
Princeton, NJ

hepatocellular carcinoma

Phase I/II
www.bms.com

Liver Cancer
Product Name

Sponsor

Indication

Development Phase

Cabometyx™
cabozantinib
ORPHAN DRUG

Exelixis
South San Francisco, CA

2L and later-line advanced
hepatocellular carcinoma

application submitted
www.exelixis.com

1L and previously treated advanced
hepatocellular carcinoma
(+nivolumab +/-ipilimumab)

Phase I/II
www.exelixis.com

capmatinib (INC280)
(c-Met inhibitor)

Novartis Oncology
East Hanover, NJ
Incyte
Wilmington, DE

hepatocellular carcinoma

Phase I/II
www.novartis.com

Cavatak®
coxsackievirus

Viralytics
Sydney, Australia

uveal melanoma metastatic
to the liver (+ipilimumab)

Phase I
www.viralytics.com

CC-122 (avadomide)
(pleiotropic pathway modulator)

Celgene
Summit, NJ

hepatocellular carcinoma

Phase I
www.celgene.com

codrituzumab (RG7686)
(glypican 3 inhibitor)

Roche/Genentech
South San Francisco, CA

hepatocellular carcinoma

Phase II
www.roche.com

Cyramza®
ramucirumab
ORPHAN DRUG

Eli Lilly
Indianapolis, IN

hepatocellular carcinoma

Phase III
www.lilly.com

Liver Cancer
Product Name

Sponsor

Indication

Development Phase

derazantinib (ARQ 087)
(FGFR antagonist)
ORPHAN DRUG

ArQule
Burlington, MA
Basilea Pharmaceutica
Basel, Switzerland

intrahepatic cholangiocarcinoma

Phase III
www.arqule.com

DKN-01
(anti-DKK1 mAb)

Leap Therapeutics
Cambridge, MA

biliary tract cancer
(combination therapy)

Phase I/II
www.leaptx.com

eFT508
(MKNK1/MKNK2 protein inhibitor)

eFFECTOR Therapeutics
San Diego, CA

hepatocellular carcinoma

Phase II
www.effector.com

ENMD-2076
(multiple kinase inhibitor)
ORPHAN DRUG

CASI Pharmaceuticals
Rockville, MD

fibrolamellar liver cancer

Phase II
www.casipharma.com

FGF401
(FGFR4 antagonist)

Novartis Oncology
East Hanover, NJ

hepatocellular carcinoma

Phase I/II
www.novartis.com

galunisertib
(TGF-beta 1 inhibitor)

Eli Lilly
Indianapolis, IN

recurrent/refractory hepatocellular
carcinoma (+nivolumab)

Phase I/II
www.lilly.com

H3B-6527
(FGFR4 inhibitor)
ORPHAN DRUG

Eisai
Woodcliff Lake, NJ
H3 Biomedicine
Cambridge, MA

advanced hepatocellular carcinoma

Phase I
www.h3biomedicine.com

Liver Cancer
Product Name

Sponsor

Indication

Development Phase

Imfinzi®
durvalumab

MedImmune
Gaithersburg, MD

1L hepatocellular carcinoma
(+tremelimumab)

Phase III
www.medimmune.com

biliary tract cancer (+tremelimumab)

Phase II
www.medimmune.com

Imlygic®
talimogene laherparepvec
(oncolytic virus therapy)

Amgen
Thousand Oaks, CA

hepatocellular carcinoma
(+pembrolizumab)

Phase I
www.amgen.com

INCB54828
(FGFR1/2/3 inhibitor)

Incyte
Wilmington, DE

cholangiocarcinoma

Phase II
www.incyte.com

INCB62079
(FGFR4 inhibitor)

Incyte
Wilmington, DE

liver cancer

Phase I/II
www.incyte.com

infigratinib (BGJ398)
(FGFR inhibitor)

QED Therapeutics
Palo Alto, CA

chemo-refractory cholangiocarcinoma
with FGFR-fusions

Phase II
www.qedtx.com

ivosidenib
(IDH1 inhibitor)
ORPHAN DRUG

Agios Pharmaceuticals
Cambridge, MA

cholangiocarcinoma (Fast Track)

Phase III
www.agios.com

Keytruda®
pembrolizumab

Merck
Kenilworth, NJ

hepatocellular carcinoma

Phase III
www.merck.com

Liver Cancer
Product Name

Sponsor

Indication

Development Phase

Lenvima® lenvatinib ORPHAN DRUG	Eisai Woodcliff Lake, NJ	hepatocellular carcinoma	application submitted www.eisai.com
		hepatocellular (+pembrolizumab)	Phase I www.eisai.com
melphalan drug delivery system ORPHAN DRUG	Delcath Systems New York, NY	hepatic-dominant ocular melanoma (liver metastases) (Fast Track), intrahepatic cholangiocarcinoma	Phase III www.delcath.com
merestinib (type II multikinase inhibitor)	Eli Lilly Indianapolis, IN	biliary tract cancer	Phase II www.lilly.com
namodenoson (CF102) (A3AR agonist) ORPHAN DRUG	Can-Fite BioPharma Petah-Tikva, Israel	hepatocellular carcinoma (Fast Track)	Phase II www.canfite.com
napabucasin (STAT3 inhibitor)	Boston Biomedical Cambridge, MA	hepatocellular carcinoma (+sorafenib)	Phase I/II www.bostonbiomedical.com
NC-6004 (cisplatin micellar nanoparticle) ORPHAN DRUG	NanoCarrier Chiba, Japan	biliary tract liver (+gemcitabine)	Phase II www.nanocarrier.co.jp
pegargiminase (ADI-PEG-20) ORPHAN DRUG	Polaris Pharmaceuticals San Diego, CA	hepatocellular carcinoma (+FOLFOX)	Phase I/II www.polarispharma.com

Liver Cancer
Product Name

Sponsor

Indication

Development Phase

pexastimogene devacirepvec (Pexa-Vec)
(genetically-engineered
oncolytic vaccinia poxvirus)
ORPHAN DRUG

SillaJen Biotherapeutics
Busan, South Korea

hepatocellular carcinoma

Phase III
www.sillajen.com

PV-10
(rose bengal sodium)
ORPHAN DRUG

Provectus Biopharmaceuticals
Knoxville, TN

cancer metastatic to the liver

Phase I
www.provectusbio.com

SF1126
(PI3K/mTOR inhibitor)

SignalRx Pharmaceuticals
San Diego, CA

hepatocellular carcinoma

Phase I
www.signalrx.com

silmitasertib (CX-4945)
(casein kinase II inhibitor)
ORPHAN DRUG

Senhwa Biosciences
New Taipei City, Taiwan

cholangiocarcinoma
(combination therapy)

Phase I/II
www.senhwabiosciences.com

Tecentriq®
atezolizumab

Genentech
South San Francisco, CA

1L hepatocellular carcinoma
(+bevacizumab)

Phase III
www.gene.com

hepatocellular carcinoma
(+bevacizumab +chemotherapy)

Phase I
www.gene.com

tepotinib
(c-Met kinase inhibitor)

EMD Serono
Rockland, MA

hepatocellular carcinoma

Phase II
www.emdserono.com

Liver Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ThermoDox® doxorubicin liposomal ORPHAN DRUG	Celsion Lawrenceville, NJ	hepatocellular carcinoma (Fast Track)	Phase III www.celsion.com
tirapazamine (TPZ) (type II DNA topoisomerase inhibitor)	Teclison Taipei, Taiwan	hepatocellular carcinoma	Phase II www.teclison.com
tislelizumab (BGB-A317) (anti-PD-1 mAb)	BeiGene USA Cambridge, MA Celgene Summit, NJ	hepatocellular carcinoma	Phase III www.beigene.com www.celgene.com
TRC-105 (carotuximab)	TRACON Pharmaceuticals San Diego, CA	hepatocellular carcinoma	Phase II www.traconpharma.com
varlitinib (pan-HER inhibitor) ORPHAN DRUG	ASLAN Pharmaceuticals Singapore	metastatic biliary tract cancer	Phase II/III www.aslanpharma.com
VT-122 (propranolol/etodolac combination)	Vicus Therapeutics Morristown, NJ	hepatocellular carcinoma	Phase II www.vicusrx.com

Lung Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
AC0010 (EGFR inhibitor)	ACEA Biosciences San Diego, CA	mutant-EGFR non-small cell lung cancer (NSCLC)	Phase I www.aceabio.com

<u>Lung Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ADXS-NEO (neoepitope-based immunotherapy vaccine)	Advaxis Princeton, NJ Amgen Thousand Oaks, CA	metastatic NSCLC	Phase I www.advaxis.com
AEB1102 (pegzilarginase)	Aeglea Biotherapeutics Austin, TX	SCLC (+pembrolizumab)	Phase I/II www.aegleabio.com
AGEN1884 (CTLA-4 antagonist)	Agenus Lexington, MA	NSCLC (+pembrolizumab)	Phase II www.agenus.com
aglatimagene besadenovec (gene therapy)	Advantagene Auburndale, MA	NSCLC (combination therapy)	Phase I www.advantagene.com
aldoxorubicin ORPHAN DRUG	CytRx Los Angeles, CA NantKwest Culver City, CA	2L small cell lung cancer (SCLC)	Phase II www.cytrx.com
ALT-803 (IL-15 superagonist protein complex)	Altor BioScience Miramar, FL NantKwest Culver City, CA	NSCLC (combination therapy)	Phase II www.altorbioscience.com
Alunbrig® brigatinib ORPHAN DRUG	Takeda Northbrook, IL	1L ALK-positive NSCLC	Phase III www.takeda.com

<u>Lung Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
AM0010 (PEG-IL-10)	ARMO Biosciences Redwood City, CA	NSCLC (+PD-1)	Phase I www.armobio.com
amatuximab (MORAb-009) (IgG1 mAb) ORPHAN DRUG	Eisai Woodcliff Lake, NJ	mesothelioma	Phase II www.eisai.com
AMG 757 bispecific T-cell engager)	Amgen Thousand Oaks, CA	SCLC	Phase I www.amgen.com
anetumab ravtansine (antibody-drug conjugate) ORPHAN DRUG	Bayer Pharmaceuticals Whippany, NJ	2L malignant pleural mesothelioma	Phase II www.pharma.bayer.com
antroquinonol ORPHAN DRUG	Golden Biotechnology New Taipei City, Taiwan	NSCLC	Phase II www.goldenbiotech.com
APG-1252 (Bcl-2/Bcl-xl inhibitor)	Ascentage Pharma Rockville, MD	SCLC	Phase I en.ascentagepharma.com
APX005M (CD40 agonistic antibody)	Apexigen San Carlos, CA	NSCLC (+nivolumab)	Phase I/II www.apexigen.com

<u>Lung Cancer Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Bavencio® avelumab (anti-PD-L1 inhibitor)	EMD Serono Rockland, MA Pfizer New York, NY	1L NSCLC, 2L NSCLC	Phase III www.emdserono.com www.pfizer.com
		NSCLC (+4-1BB), SCLC (+4-1BB)	Phase II www.emdserono.com www.pfizer.com
bemcentinib (BGB324) (AXL kinase inhibitor)	BerGenBio Bergen, Norway	NSCLC (+pembrolizumab)	Phase II www.bergenbio.com
		NSCLC	Phase I/II www.bergenbio.com
bevacizumab biosimilar (BI 695502)	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	NSCLC	Phase III www.boehringer-ingelheim.com
bevacizumab biosimilar (PF-06439536)	Pfizer New York, NY	NSCLC	Phase III www.pfizer.com
BI 1361849 (CV-9202) (RNA cancer vaccine)	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	NSCLC	Phase II www.boehringer-ingelheim.com
BIO-11006 (MARCKS inhibitor)	BioMarck Pharmaceuticals Durham, NC	NSCLC	Phase II www.biomarck.com

<u>Lung Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
BLU-667 (RET inhibitor)	Blueprint Medicines Cambridge, MA	NSCLC	Phase I www.blueprintmedicines.com
BMS-986012 (anti-fucosyl-GM1 mAb)	Bristol-Myers Squibb Princeton, NJ	SCLC	Phase I/II www.bms.com
BMS-986205 (IDO1 inhibitor)	Bristol-Myers Squibb Princeton, NJ	advanced NSCLC (immunotherapy combinations)	Phase II www.bms.com
Cabometyx™ cabozantinib	Exelixis South San Francisco, CA	EGFR wild type NSCLC	Phase II www.exelixis.com
		NSCLC (+atezolizumab)	Phase I www.exelixis.com
camptothecin (CRLX101) ORPHAN DRUG	BlueLink Pharmaceuticals Ames, IA	NSCLC	Phase II completed
canakinumab	Novartis Oncology East Hanover, NJ	1L NSCLC, 2L NSCLC, NSCLC (adjuvant)	Phase III www.novartis.com
capmatinib (INC280) (c-Met inhibitor)	Novartis Oncology East Hanover, NJ Incyte Wilmington, DE	NSCLC	Phase III www.novartis.com
		EGFR-mutated NSCLC	Phase II www.novartis.com

<u>Lung Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Cavatak® coxsackievirus	Viralytics Sydney, Australia	NSCLC (+pembrolizumab)	Phase I www.viralytics.com
CD40LGVAX	Cellular Biomedicine Cupertino, CA	advanced NSCLC	Phase II www.cellbiomedgroup.com
cemiplimab (anti-PD-1 mAb)	Regeneron Pharmaceuticals Tarrytown, NY Sanofi Bridgewater, NJ	1L NSCLC	Phase III www.sanofi.com
CK-101 (EGFR inhibitor) ORPHAN DRUG	Checkpoint Therapeutics New York, NY	NSCLC	Phase I/II www.checkpointtx.com
CMP-001 (TLR9 agonist cancer vaccine)	Checkmate Pharmaceuticals Cambridge, MA	NSCLC (+atezolizumab)	Phase I www.checkmatepharma.com
CV-301 (CEA-MUC-1-TRICOM cancer vaccine)	Bavarian Nordic Morrisville, NC	NSCLC (+ anti-PD-1)	Phase II www.bavarian-nordic.com
Cyramza® ramucirumab	Eli Lilly Indianapolis, IN	NSCLC	Phase III www.lilly.com
dacomitinib (pan-HER inhibitor) ORPHAN DRUG	Pfizer New York, NY	1L EGFR-activating mutant NSCLC	application submitted www.pfizer.com

<u>Lung Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
defactinib (FAK inhibitor) ORPHAN DRUG	Verastem Needham, MA	NSCLC (+pembrolizumab)	Phase II www.verastem.com
		mesothelioma (+pembrolizumab)	Phase I www.verastem.com
DKN-01 (anti-DKK1 mAb)	Leap Therapeutics Cambridge, MA	NSCLC	Phase I www.leaptx.com
DPV-001 (autophagosome-enriched vaccine)	UbiVac Portland, OR	NSCLC (adjuvant therapy)	Phase II www.ubivac.com
DS-1062 (anti-TROP2 antibody-drug conjugate)	Daiichi Sankyo Basking Ridge, NJ	NSCLC	Phase I www.dsi.com
DS-1205 (AXL inhibitor)	Daiichi Sankyo Parsippany, NJ	EGFR-mutant NSCLC	Phase I www.dsi.com
DV281 (TLT9 agonist)	Dynavax Berkeley, CA	NSCLC	Phase I www.dynavax.com
ensartinib (ALK inhibitor)	Xcovery Palm Beach Gardens, FL	ALK-positive NSCLC	Phase III www.xcovery.com
entinostat (HDAC inhibitor)	Syndax Pharmaceuticals Waltham, MA	NSCLC (+pembrolizumab)	Phase II www.syndax.com

<u>Lung Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
entrectinib (panTRK/ROS1 inhibitor) ORPHAN DRUG	Ignyta San Diego, CA	ROS1-positive NSCLC	Phase II www.ignta.com
epacadostat (IDO1 inhibitor)	Incyte Wilmington, DE	NSCLC (+pembrolizumab)	Phase III www.incyte.com
		lung cancer	Phase I www.incyte.com
G1T38 (CDK4/6 inhibitor)	G1 Therapeutics Research Triangle Park, NC	EGFR metastatic NSCLC	Phase II www.g1therapeutics.com
galinpepimut-S (anti-WT1 peptide cancer vaccine) ORPHAN DRUG	Sellas Life Sciences New York, NY	malignant pleural mesothelioma (Fast Track)	Phase II www.sellaslifesciences.com
galunisertib (TGF-beta 1 inhibitor)	Eli Lilly Indianapolis, IN	recurrent/refractory NSCLC (+nivolumab)	Phase I/II www.lilly.com
Gilotrif® afatinib	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	squamous cell of the lung (+pembrolizumab)	Phase II www.boehringer-ingelheim.com
glesatinib (MGCD265) (multi-kinase inhibitor)	Mirati Therapeutics San Diego, CA	NSCLC	Phase II www.mirati.com

<u>Lung Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
GRN-1201 (cancer peptide vaccine)	BrightPath Biotherapeutics Tokyo, Japan	NSCLC (+checkpoint inhibitor)	Phase II www.nrightpathbio.com
GSK3377794 (NY-ESO-autologous engineered T-cell receptor therapy)	GlaxoSmithKline Research Triangle Park, NC	NSCLC	Phase II www.gsk.com
HBI-8000 (HDAC inhibitor)	HUYA Bioscience San Diego, CA	NSCLC	Phase I/II www.huyabio.com
HS-10296	Jiangsu Hansoh Pharmaceutical Jiangsi, China	NSCLC	Phase I/II www.hansoh.cn
IMA201 (adoptive T-cell therapy)	Immatics US Houston, TX	squamous cell NSCLC	Phase I www.immatics.com
Imfinzi® durvalumab	MedImmune Gaithersburg, MD	1L NSCLC (+tremelimumab), 1L NSCLC (+tremelimumab +chemo), stage III NSCLC (monotherapy), 1L SCLC (+tremelimumab +SoC)	Phase III www.medimmune.com
		NSCLC (+RT), SCLC (+RT), 1L SCLC (+tremelimumab +chemo) NSCLC (+gefitinib)	Phase I www.medimmune.com
Imprime PGG® immunostimulant PGG glucan	Biothera Pharmaceuticals Eagan, MN	NSCLC (+pembrolizumab)	Phase I/II www.biothera.com

<u>Lung Cancer Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
INCB59872 (LSD1 inhibitor)	Incyte Wilmington, DE	SCLC	Phase I/II www.incyte.com
IPI-549 (PI3K-gamma inhibitor)	Infinity Pharmaceuticals Cambridge, MA	mesothelioma (+nivolumab), NSCLC (+nivolumab)	Phase I www.infi.com
IRX4204 (RXR agonist)	Io Therapeutics Santa Ana, CA	NSCLC	Phase II www.io-therapeutics.com
itacitinib (JAK1 inhibitor)	Incyte Wilmington, DE	NSCLC (+ osimertinib)	Phase II www.incyte.com
JNJ-61186372 (EGFR/c-Met DuoBody® protein)	Janssen Research & Development Raritan, NJ	NSCLC	Phase I www.janssen.com
JNJ-64041757 (ADU-214) (<i>Listeria monocytogenes</i> immunotherapy vaccine)	Aduro Biotech Berkeley, CA Janssen Research & Development Raritan, NJ	adenocarcinoma of the lung	Phase I/II www.adoro.com www.janssen.com
Keytruda® pembrolizumab	Merck Kenilworth, NJ	SCLC	Phase III www.merck.com
Kyprolis® carfilzomib	Amgen Thousand Oaks, CA	SCLC	Phase I/II www.amgen.com

<u>Lung Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
LAG525 (anti-LAG3 mAb)	Novartis Oncology East Hanover, NJ	NSCLC (+PDR001)	Phase I/II www.novartis.com
L-DOS47 (tumor defense breaker)	Helix BioPharma Toronto, Canada	recurrent or metastatic squamous NSCLC	Phase II www.helixbiopharma.com
Lenvima® lenvatinib	Eisai Woodcliff Lake, NJ	NSCLC (RET translocations)	Phase II www.eisai.com
LMB-100 (recombinant immunotoxin)	Selecta Biosciences Watertown, MA	mesothelioma	Phase I www.selectabio.com
LN-145 (tumor-infiltrating lymphocyte)	Iovance Biotherapeutics San Carlos, CA	NSCLC (+/-durvalumab)	Phase II www.iovance.com
lorlatinib (PF-06463922) (ALK inhibitor) ORPHAN DRUG	Pfizer New York, NY	1L ALK NSCLC	Phase III www.pfizer.com
		2L ALK NSCLC (Breakthrough Therapy)	Phase II www.pfizer.com
lurbinectedin (PM1183) (RNA polymerase II inhibitor)	PharmaMar Madrid, Spain	2L SCLC	Phase III www.pharmamar.com
LXH254 (Raf kinase inhibitor)	Novartis Oncology East Hanover, NJ	NSCLC (+LTT462), NSCLC (+trametinib)	Phase I www.novartis.com

<u>Lung Cancer Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
LYC-55716 (ROR-gamma agonist)	Lycera Ann Arbor, MI	NSCLC	Phase I www.lycera.com
MABp1	XBiotech Austin, TX	NSCLC	Phase II www.xbiotech.com
MAGE-A10 TCR (T-cell receptor therapy)	Adaptimmune Philadelphia, PA	NSCLC	Phase I/II www.adaptimmune.com
MM-121 (seribantumab) (anti-HER3 mAb) ORPHAN DRUG	Merrimack Pharmaceuticals Cambridge, MA	NSCLC (Fast Track)	Phase II www.merrimack.com
mocetinostat (HDAC inhibitor)	Mirati Therapeutics San Diego, CA	NSCLC (+durvalumab), NSCLC (+pembrolizumab +guadecitabine)	Phase II www.mirati.com
MORAb-009	Eisai Woodcliff Lake, NJ	mesothelioma	Phase II www.eisai.com
MP0250 (angiogenesis / VEGF-A / HGF inhibitor)	Molecular Partners Zurich, Switzerland	EGFR-mutated NSCLC (+osimertinib)	Phase I/II www.molecularpartners.com
MV-NIS (oncolytic viruse cancer vaccine)	Vyriad Rochester, MN	NSCLC (+atezolizumab)	Phase I www.vyriad.com

Lung Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
nazartinib (EGF816) (EGFR mutation modulator)	Novartis Oncology East Hanover, NJ	NSCLC	Phase III www.novartis.com
NC-6004 (cisplatin micellar nanoparticle)	NanoCarrier Chiba, Japan	NSCLC (+ gemcitabine)	Phase II www.nanocarrier.co.jp
NEO-PV-01 (personal neoantigen vaccine)	Neon Therapeutics Cambridge, MA	NSCLC	Phase I www.neontherapeutics.com
NGR-hTNF (recombinant fusion protein) ORPHAN DRUG	MolMed Milan, Italy	malignant pleural mesothelioma	Phase III completed www.molmed.com
Ofev® nintedanib ORPHAN DRUG	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	mesothelioma	Phase III www.boehringer-ingelheim.com
Oncoprex™ gene therapy	Genprex Austin, TX	NSCLC (+ erlotinib)	Phase II www.genprex.com
Onivyde® irinotecan liposome injection	Ipsen Biopharmaceuticals Basking Ridge, NJ	2L SCLC	Phase II www.ipson.com
Opdivo® nivolumab	Bristol-Myers Squibb Princeton, NJ	1L NSCLC (Fast Track), SCLC, malignant pleural mesothelioma	Phase III www.bms.com

Lung Cancer
Product Name

Sponsor

Indication

Development Phase

Opdivo® + Yervoy®
nivolumab + ipilimumab

Bristol-Myers Squibb
Princeton, NJ

NSCLC, SCLC, malignant pleural
mesothelioma

Phase III
www.bms.com

OSE-2101
(neo-epitopes cancer vaccine)
ORPHAN DRUG

OSE Immunotherapeutics
Nantes, France

NSCLC

Phase III
www.ose-immuno.com

PBF-1129
(adenosine A2B receptor antagonist)

Palobiofarma
Barcelona, Spain

NSCLC

Phase I
www.palobiofarma.com

PBF509
(adenosine A2A receptor antagonist)

Novartis Oncology
East Hanover, NJ
Palobiofarma
Barcelona, Spain

NSCLC (+PDR001)

Phase I/II
www.novartis.com

PDT with Photofrin®
porfimer sodium

Pinnacle Biologics
Chicago, IL

NSCLC

Phase I
www.pinnaclebiologics.com

pegargiminase
(ADI-PEG-20)
ORPHAN DRUG

Polaris Pharmaceuticals
San Diego, CA

mesothelioma (+pemetrexed +cisplatin)

Phase II/III
www.polarispharma.com

PEGPH20
(pegylated recombinant
human hyaluronidase)

Halozyne Therapeutics
San Diego, CA

NSCLC (+pembrolizumab)
cholangiocarcinoma (+atezolizumab)

Phase I
www.halozyne.com

pemetrexed

Apotex
Weston, FL

mesothelioma, NSCLC

application submitted
www.apotex.com

Lung Cancer
Product Name

Sponsor

Indication

Development Phase

Pemfexy™
pemetrexed injection

Eagle Pharmaceuticals
Woodcliff Lake, NJ

mesothelioma (+cisplatin), NSCLC

application submitted
www.eagleus.com

PEN-221
(somatostatin receptor 2 modulator)

Tarveda Therapeutics
Watertown, MA

SCLC

Phase I/II
www.tarveda.com

plinabulin
(guanine nucleotide exchange
factor stimulant)

BeyondSpring Pharmaceuticals
New York, NY

2L/3L NSCLC (+docetaxel)

Phase III
www.beyondspringpharma.com

pozotinib
(pan-HER/tyrosine kinase inhibitor)

Spectrum Pharmaceuticals
Henderson, NV

NSCLC

Phase II
www.sppirx.com

prexasertib
(CHK1 inhibitor)

Eli Lilly
Indianapolis, IN

SCLC

Phase II
www.lilly.com

PT 107
(allogeneic B7.1/HLA-A1
cancer vaccine)

Pique Therapeutics
Durham, NC

NSCLC

Phase II
www.piquetherapeutics.com

Rova-T
(rovalpituzumab tesirine)
ORPHAN DRUG

AbbVie
North Chicago, IL

1L SCLC, 2L SCLC

Phase III
www.abbvie.com

3L SCLC

Phase II
www.abbvie.com

Lung Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
RRx-001 (free radical stimulant)	EpicentRx La Jolla, CA	NSCLC, SCLC	Phase II www.epicentrx.com
sacituzumab govitecan (anti-TROP-2-SN-38 ADC)	Immunomedics Morris Plains, NJ	metastatic lung cancer	Phase II www.immunomedics.com
SC-002 (antibody-drug conjugate)	AbbVie North Chicago, IL	SCLC	Phase I www.abbvie.com
SEL-403 (recombinant immunotoxin + SVP-rapamycin)	Selecta Biosciences Watertown, MA	mesothelioma	Phase I www.selectabio.com
sitravatinib (MGCD516) (multi kinase inhibitor)	Mirati Therapeutics San Diego, CA	NSCLC (+nivolumab)	Phase II www.mirati.com
SNX-5422 (Hsp90 inhibitor)	Esanex Indianapolis, IN	NSCLC	Phase I www.esanexpharma.com
Tagrisso® osimertinib	AstraZeneca Wilmington, DE	1L advanced EGFR-mutated NSCLC, EGFR-mutated NSCLC (adjuvant)	Phase III www.astrazeneca.com
		CNS metastases in advanced EGFR-mutant NSCLC, advanced EGFR-mutated NSCLC (+selumetinib or savolitinib)	Phase II www.astrazeneca.com

<u>Lung Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
TAK-788 (AP32788) (EGFR/HER2 inhibitor)	Takeda Oncology Cambridge, MA	NSCLC	Phase I www.takeda.com
TAS-114 (dUTPase inhibitor)	Taiho Oncology Princeton, NJ	NSCLC	Phase II www.taihooncology.com
Tavocept® dimesna	BioNumerik Pharmaceuticals San Antonio, TX	primary adenocarcinoma of the lung	Phase III completed www.bionumerik.com
tazemetostat (EZH2 enzyme inhibitor) ORPHAN DRUG	Epizyme Cambridge, MA	relapsed/refractory mesothelioma	Phase II www.epizyme.com
		NSCLC (+atezolizumab)	Phase I www.epizyme.com

Lung Cancer
Product Name

Sponsor

Indication

Development Phase

Tecentriq®
atezolizumab

Genentech
South San Francisco, CA

ALK-positive NSCLC, NSCLC (adjuvant),
1L non-squamous NSCLC
(+nab-paclitaxel), 1L non-squamous
NSCLC (+bevacizumab +chemotherapy),
1L non-squamous NSCLC (+pemetrexed),
1L squamous NSCLC (+nab-paclitaxel),
1L squamous/non-squamous SCLC (+Dx),
1L extensive stage SCLC (+chemotherapy),

Phase III
www.gene.com

metastatic NSCLC

Phase II
www.gene.com

NSCLC (+erlotinib +alectinib)

Phase I
www.gene.com

tepotinib
(c-Met kinase inhibitor)

EMD Serono
Rockland, MA

NSCLC

Phase II
www.emdserono.com

tesevatinib
(protein tyrosine kinase inhibitor)

Kadmon Pharmaceuticals
New York, NY

NSCLC

Phase II
www.kadmon.com

TG-4010
(MVA-MUC1-IL2 cancer vaccine)

Transgene
Cambridge, MA

NSCLC (+nivolumab)

Phase II
www.transgene.fr

tislelizumab (BGB-A317)
(anti-PD-1 mAb)

BeiGene USA
Cambridge, MA
Celgene
Summit, NJ

NSCLC

Phase III
www.beigene.com
www.celgene.com

<u>Lung Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
trastuzumab deruxtecan (DS-8201) (anti-HER2 antibody-drug conjugate)	Daiichi Sankyo Basking Ridge, NJ	NSCLC	Phase I www.dsi.com
TRC-102 (methoxyamine hydrochloride)	TRACON Pharmaceuticals San Diego, CA	mesothelioma	Phase II www.traconpharma.com
		NSCLC	Phase I www.traconpharma.com
TRC-105 (carotuximab)	TRACON Pharmaceuticals San Diego, CA	lung cancer	Phase I www.traconpharma.com
trilaciclib (CDK4/CDK6 inhibitor)	G1 Therapeutics Research Triangle Park, NC	1L SCLC (combination therapy), 2L/3L SCLC (combination therapy)	Phase II www.g1therapeutics.com
U3-1402 (anti-HER3 antibody-drug conjugate)	Daiichi Sankyo Basking Ridge, NJ	NSCLC	Phase I www.dsi.com
Unituxin® dinutuximab	United Therapeutics Silver Spring, MD	SCLC	Phase II/III www.unither.com
veliparib (PARP inhibitor) ORPHAN DRUG	AbbVie North Chicago, IL	NSCLC	Phase III www.abbvie.com
viagenpumatucl-L (HS-110) (HSP cancer vaccine)	Heat Biologics Durham, NC	NSCLC	Phase II www.heatbio.com

Lung Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
VX15 (SEMA4D mAb)	Vaccinex Rochester, NY	NSCLC	Phase I/II www.vaccinex.com
XMT-1522 (anti-HER2 antibody-drug conjugate)	Mersana Therapeutics Cambridge, MA	HER2-expressing NSCLC	Phase I www.mersana.com
Zejula® niraparib ORPHAN DRUG	TESARO Waltham, MA	advanced NSCLC (+/- anti-PD-1), squamous cell carcinoma of the lung (+/- anti-PD-1)	Phase II www.tesarobio.com

Lymphoma

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
abexinostat (HDAC inhibitor)	Xynomic Pharmaceuticals Cheyenne, WY	follicular lymphoma	Phase III www.xynomicpharma.com
		peripheral T-cell lymphoma, diffuse large B-cell lymphoma (DLBCL) (+ibrutinib)	Phase II www.xynomicpharma.com
ACTR087 (antibody-coupled T-cell receptor immunotherapy)	Unum Therapeutics Cambridge, MA	non-Hodgkin lymphoma (NHL) (+rituximab)	Phase I www.unumrx.com
ACTR707 (ACTR immunotherapy)	Unum Therapeutics Cambridge, MA	NHL (+rituximab)	Phase I www.unumrx.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

Adcetris® brentuximab vedotin ORPHAN DRUG	Seattle Genetics Bothell, WA Takeda Oncology Northbrook, IL	1L CD30-expressing mature T-cell lymphoma, relapsed NHL (+nivolumab), mature T-cell lymphoma (Fast Track)	Phase III www.seattlegenetics.com
		1L Hodgkin lymphoma (60 years and older), 2L Hodgkin lymphoma, relapsed NHL (+nivolumab)	Phase II www.seattlegenetics.com
ADCT-301 (camidanlumab tesirine) (antibody-drug conjugate)	ADC Therapeutics Murray Hill, NJ	Hodgkin lymphoma, NHL	Phase I www.adctherapeutics.com
ADCT-402 (loncastuximab tesirine)	ADC Therapeutics Murray Hill, NJ	B-cell NHL	Phase I www.adctherapeutics.com
AFM11 (CD19/CD3 antigen modulator)	Affimed Therapeutics Heidelberg, Germany	NHL	Phase I www.affimed.com
AFM13 (CD30/CD16A antigen modulator) ORPHAN DRUG	Affimed Therapeutics Heidelberg, Germany	CD30-positive lymphoma including T-cell lymphoma	Phase I/II www.affimed.com
		Hodgkin lymphoma	Phase I www.affimed.com
AG-270 (MAT2A inhibitor)	Agios Pharmaceuticals Cambridge, MA	lymphoma	Phase I www.agios.com

Lymphoma <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
AGS67E (anti-CD37 antibody-drug conjugate)	Astellas Northbrook, IL	lymphoid malignancies	Phase I www.astellas.com
ALT-803 (IL-15 superagonist protein complex)	Altor BioScience Miramar, FL NantKWest Culver City, CA	relapsed/refractory indolent NHL	Phase I/II www.altorbioscience.com
ALX148 (CD47 checkpoint inhibitor)	Alexo Therapeutics South San Francisco, CA	NHL	Phase I www.alexotherapeutics.com
anti-CD19 CAR-T cell therapy	Intrexon Germantown, MD ZIOPHARM Oncology Boston, MA	lymphoma	Phase I www.intrexon.com www.ziopharm.com
APG-115 (MDM2-P53 inhibitor)	Ascentage Pharma Rockville, MD	lymphoma	Phase I en.ascentagepharma.com
apilimod dimesylate (LAM-002) (PIKfyve kinase inhibitor)	LAM Therapeutics Guilford, CT	NHL	Phase II www.lamtherapeutics.com
Aplidin plitidepsin	PharmaMar Madrid, Spain	relapsed/refractory angioimmuno- blastic T-cell lymphoma	Phase II www.pharmamar.com
Arzerra® ofatumumab	Novartis Oncology East Hanover, NJ	refractory indolent NHL	Phase III www.novartis.com

Lymphoma <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ASN002 (JAK/Syk inhibitor)	Asana BioSciences Lawrenceville, NJ	relapsed/refractory lymphoma	Phase I/II www.asanabiosciences.com
ASTX660 (IAP inhibitor)	Astex Pharmaceuticals Pleasanton, CA	lymphoma	Phase II www.astx.com
AvidinOx (177Lu-ST2210)	Alfasigma Bologna, Italy	inoperable lymphomas	Phase I www.alfasigma.com
axicabtagene ciloleucel (CAR-T cell therapy) ORPHAN DRUG	Kite Pharma Santa Monica, CA	DLBCL, primary mediastinal B-cell lymphoma, transformed follicular lymphoma, indolent NHL	Phase II www.kitepharma.com
		DLBCL (+PD-L1)	Phase I www.kitepharma.com
baltaleucel-T (CMD-003) (T-lymphocyte cell therapy) ORPHAN DRUG	Cell Medica Houston, TX	extranodal natural killer T-cell lymphoma, DLBCL, Hodgkin lymphoma, post-transplant lymphoproliferative disease (Fast Track)	Phase II www.cellmedica.com
BAY1862864 (CD22-thorium conjugate)	Bayer Pharmaceuticals Whippany, NJ	NHL	Phase I www.pharma.bayer.com
BAY1895344 (ATR protein inhibitor)	Bayer Pharmaceuticals Whippany, NJ	lymphoma	Phase I www.pharma.bayer.com

Lymphoma <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
BCL201 (Bcl-2 inhibitor)	Novartis Oncology East Hanover, NJ	follicular lymphoma (+idelalisib), mantle cell lymphoma (+idelalisib)	Phase I www.novartis.com
Beleodaq® belinostat	Spectrum Pharmaceuticals Henderson, NV	1L peripheral T-cell lymphoma	Phase I www.sppirx.com
Betalutin® lilotomab satetraxetan ORPHAN DRUG	Nordic Nanovector Oslo, Norway	DLBCL	Phase I www.nordicnanovector.com
BI 836826 (anti-CD37 mAb)	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	DLBCL	Phase II www.boehringer-ingelheim.com
		NHL	Phase I www.boehringer-ingelheim.com
Blincyto® blinatumomab	Amgen Thousand Oaks, CA	relapsed/refractory DLBCL (adults)	Phase II/III www.amgen.com
CA-170 (PD-L1 checkpoint inhibitor)	Curis Lexington, MA	lymphoma	Phase I www.curis.com
CA-4948 (IRAK4 kinase inhibitor)	Curis Lexington, MA	MYD88-altered lymphoma	Phase I www.curis.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

Calquence®
acalabrutinib

Acerta Pharma
South San Francisco, CA
AstraZeneca
Wilmington, DE

1L mantle cell lymphoma

Phase III
www.astrazeneca.com

CC-122 (avadomide)
(pleiotropic pathway modulator)

Celgene
Summit, NJ

DLBCL, relapsed/refractory indolent
lymphoma

Phase I
www.celgene.com

CC-486
(oral azacitidine)

Celgene
Summit, NJ

DLBCL

Phase I
www.celgene.com

CC-90002
(anti-CD47 antibody)

Celgene
Summit, NJ

NHL

Phase I
www.celgene.com

CC-90010
(BET inhibitor)

Celgene
Summit, NJ

NHL

Phase I
www.celgene.com

CC-90011
(LSD1 inhibitor)

Celgene
Summit, NJ

NHL

Phase I
www.celgene.com

CD11301
(topical gel)

Galderma
Fort Worth, TX

cutaneous T-cell lymphoma

Phase II
www.galdermausa.com

cirmtuzumab
(ROR1 antagonist)

Oncternal Therapeutics
San Diego, CA

mantel cell lymphoma,
small lymphocytic lymphoma

Phase I/II
www.oncternal.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

cobomarsen
(microRNA inhibitor)
ORPHAN DRUG

miRagen Therapeutics
Boulder, CO

cutaneous T-cell lymphoma, DLBCL

Phase I
www.miragen.com

coltuximab ravtansine
(CD19-targeting antibody drug
conjugate)

ImmunoGen
Waltham, MA

DLBCL

Phase II
www.immunogen.com

copanlisib
(PI3K inhibitor)
ORPHAN DRUG

Bayer Pharmaceuticals
Whippany, NJ

NHL

Phase III
www.pharma.bayer.com

CPI-613
(altered energy metabolism-
derived medicine)
ORPHAN DRUG

Rafael Pharmaceuticals
Newark, NJ

high-grade B-cell lymphoma,
relapsed/refractory Burkitt's
lymphoma

Phase II
www.rafaelpharma.com

relapsed/refractory T-cell lymphoma
(combination therapy)

Phase I
www.rafaelpharma.com

CPI-1205
(EZH2 enzyme inhibitor)

Constellation Pharmaceuticals
Cambridge, MA

B-cell lymphoma

Phase I
www.constellationpharma.com

CX-072
(PD-L1 targeting probody)

CytomX Therapeutics
South San Francisco, CA

lymphoma

Phase I/II
www.cytomix.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

CYC065 (CDK2/CDK9 inhibitor)	Cyclacel Pharmaceuticals Berkeley Heights, NJ	lymphoma	Phase I www.cyclacel.com
CZ48 (DNA topoisomerase I inhibitor)	Cao Pharmaceuticals Webster, TX NMT Pharmaceuticals Webster, TX	lymphoma	Phase I www.caopharmaceuticals.com
darinaparsin (SP-02) ORPHAN DRUG	Solasia Pharma Tokyo, Japan	peripheral T-cell lymphoma	Phase II www.solasia.co.jp
DCDS0780A (anti-CD79b Thiomab™-drug conjugate)	Roche/Genentech South San Francisco, CA	NHL	Phase I www.rocche.com
DEBIO 1562 (MGN529) (anti-CD37 antibody-drug conjugate) ORPHAN DRUG	Debiopharm Lausanne, Switzerland ImmunoGen Waltham, MA	B-cell NHL, DLBCL	Phase II www.immunogen.com
denintuzumab mafodotin (anti-CD19 antibody-drug conjugate)	Seattle Genetics Bothell, WA	DLBCL	Phase II www.seattlegenetics.com
DI-Leu16-IL2 (immunocytokine fusion protein)	Alopexx Oncology Concord, MA	NHL	Phase II www.alopexx.com
DTRMWXHS 12 (BTK inhibitor)	Zhejiang DTRM Biopharma Hangzhou, China	B-cell lymphoma	Phase I

Lymphoma <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
duvelisib (PI3K delta/PI3K gamma inhibitor)	Verastem Needham, MA	refractory indolent NHL, relapsed/refractory peripheral T-cell lymphoma	Phase II www.verastem.com
eFT508 (MKNK1/MKNK2 protein inhibitor)	eFFECTOR Therapeutics San Diego, CA	lymphoma	Phase I/II www.effector.com
enzastaurin (DB 102) (PKC- β and PI3K/AKT inhibitor) ORPHAN DRUG	Denovo Biopharma San Diego, CA	1L DLBCL	Phase III www.denovobiopharma.com
epacadostat (IDO1 inhibitor)	Incyte Wilmington, DE	lymphoma	Phase I www.incyte.com
fenretinide intravenous	CerRx Lubbock, TX	lymphoma (adults)	Phase II www.cerrx.com
FF-10502-01 (DNA synthesis inhibitor)	FUJIFILM Pharmaceuticals U.S.A Valhalla, NJ	lymphoma	Phase I www.fujifilmusa.com
fimepinostat (CUDC-907) (HDAC/PI3K inhibitor) ORPHAN DRUG	Curis Lexington, MA	MYC-altered DLBCL	Phase II www.curis.com
Foloty® pralatrexate ORPHAN DRUG	Spectrum Pharmaceuticals Henderson, NV	1L peripheral T-cell lymphoma	Phase II www.sppirx.com

Lymphoma <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
G100 (TLR4 antagonist) ORPHAN DRUG	Immune Design Seattle, WA	NHL (+pembrolizumab)	Phase II www.immunedesign.com
GSK3326595 (PRMT5 inhibitor)	GlaxoSmithKline Research Triangle Park, NC	NHL	Phase I www.gsk.com
GWN323 (anti-C+GITR mAb)	Novartis Oncology East Hanover, NJ	lymphoma (+PDR001)	Phase I www.novartis.com
Hu5F9-G4 (CD47 antigen inhibitor mAb)	Forty Seven Menlo Park, CA	relapsed/refractory B-cell NHL (+rituximab)	Phase I/II www.fortyseveninc.com
iC9/CAR.19/IL15-transduced CB-NK cells	Bellicum Pharmaceuticals Houston, TX M.D. Anderson Cancer Center Houston, TX	B-lymphoid malignancies, NHL	Phase I/II www.bellicum.com
IGN002 (anti-CD20/interferon-alpha)	ImmunGene Camarillo, CA	relapsed/refractory NHL	Phase I
Imbruvica® ibrutinib	Janssen Research & Development Raritan, NJ Pharmacyclics Sunnyvale, CA	DLBCL, follicular lymphoma, relapsed/refractory mature B-cell NHL (pediatric), treatment- naïve mantle cell lymphoma (combination therapy), indolent NHL (combination therapy)	Phase III www.janssen.com www.pharmacyclics.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

Imfinzi® durvalumab	MedImmune Gaithersburg, MD	DLBCL (monotherapy), DLBCL (+ tremelimumab or AZD9150)	Phase I www.medimmune.com
INCB50465 (PI3K-delta inhibitor)	Incyte Wilmington, DE	DLBCL, follicular lymphoma, mantle cell lymphoma, marginal zone lymphoma	Phase II www.incyte.com
IPH4102 (KIR3DL2 receptor antagonist) ORPHAN DRUG	Innate Pharma Marseille, France	cutaneous T-cell lymphoma	Phase I www.innate-pharma.com
Istodax® romidepsin	Celgene Summit, NJ	1L peripheral T-cell lymphoma	Phase III www.celgene.com
JCAR014 (CD19 CAR-T cell therapy)	Juno Therapeutics Seattle, WA	relapsed/refractory B-cell NHL (+ durvalumab)	Phase I www.junotherapeutics.com
KA2237 (PI3K selective inhibitor)	Karus Therapeutics Oxfordshire, United Kingdom	B-cell lymphoma	Phase I www.karustherapeutics.com
Keytruda® pembrolizumab	Merck Kenilworth, NJ	relapsed/refractory primary mediastinal B-cell lymphoma	application submitted www.merck.com
KPT-9274 (PAK4/NAMPT oral inhibitor)	Karyopharm Therapeutics Newton, MA	NHL	Phase I www.karyopharm.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

KTE-C19 CAR-T cell therapy (second generation anti-CD19) ORPHAN DRUG	Kite Pharma Santa Monica, CA	mantle cell lymphoma	Phase II www.kitepharma.com
Kymriah™ tisagenlecleucel-T (anti-CD19 CAT-T cell therapy)	Novartis Oncology East Hanover, NJ	relapsed/refractory DLBCL	application submitted www.novartis.com
		relapsed/refractory DLBCL (+pembrolizumab)	Phase III www.novartis.com
		relapsed/refractory DLBCL in 1st relapse, relapsed/refractory follicular lymphoma	Phase II www.novartis.com
LAM-002 (PIKfyve kinase inhibitor)	LAM Therapeutics Guilford, CT	relapsed/refractory B-cell NHL	Phase I www.lamtherapeutics.com
LAM-003 (immunomodulator)	LAM Therapeutics Guilford, CT	NHL	Phase I www.lamtherapeutics.com
lisocabtagene maraleucel (JCAR017) (CD19 CAR-T cell therapy) ORPHAN DRUG	Juno Therapeutics Seattle, WA	relapsed/refractory aggressive large B-cell NHL	Phase I www.junotherapeutics.com
LY3039478 (NOTCH inhibitor)	Eli Lilly Indianapolis, IN	T-cell ALL	Phase I/II www.lilly.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

MAK683 (EED inhibitor)	Novartis Oncology East Hanover, NJ	DLBCL	Phase I/II www.novartis.com
MB-106 (CAR-T cell therapy)	Mustang Bio New York, NY	relapsed/refractory B-cell NHL	Phase I www.mustangbio.com
ME-401 (PI3K delta inhibitor)	MEI Pharma San Diego, CA	DLBCL (+rituximab), follicular lymphoma, indolent lymphoma (+rituximab)	Phase I www.meipharma.com
mitoxantrone liposomal	CSPC ZhongQi Pharmaceutical Shijiazhuang, China	NHL	Phase I/II www.cspc.com.hk
MK-1454 (STING agonist)	Merck Kenilworth, NJ	lymphoma	Phase I www.merck.com
MK-2118	Merck Kenilworth, NJ	lymphoma (+/-pembrolizumab)	Phase I www.merck.com
mogamulizumab (CCR4 receptor antagonist) ORPHAN DRUG	Kyowa Hakko Kirin Princeton, NJ	cutaneous T-cell lymphoma	application submitted www.kyowa-kirin.com
		adult T-cell leukemia/lymphoma	Phase II www.kyowa-kirin.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

MOR-208 (XmAb5574) (B-cell inhibitor mAb) ORPHAN DRUG	MorphoSys Planegg, Germany	relapsed/refractory DLBCL (Fast Track)	Phase II/III www.morphosys.com
		NHL, small lymphocytic lymphoma	Phase II www.morphosys.com
mRNA-2416 (OX40L protein modulator)	Moderna Therapeutics Cambridge, MA	lymphoma	Phase I www.modernatx.com
MT-3724 (engineered toxin bodies [ETB] targeting CD20)	Molecular Templates Austin, TX	relapsed B-cell NHL	Phase I www.mtem.com
NAM-NK cells + IL-2 (natural killer cells)	Gamida Cell Jerusalem, Israel	NHL	Phase I www.gamida-cell.com
NBT-011 (ABI-011) (angiogenesis inhibitor)	NantBioScience Culver City, CA	lymphoma	Phase I www.nantworks.com
NIR178 (adenosine receptor antagonist)	Novartis Oncology East Hanover, NJ	NHL (+ PDR001)	Phase II www.novartis.com
NM-IL-12 (recombinant interleukin-12)	Neumedicines Pasadena, CA	cutaneous T-cell lymphoma (radio-immunotherapy), DLBCL (chemo-immunotherapy)	Phase II www.neumedicines.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

ONC201 (dopamine receptor D2/3 antagonist)	Oncoceutics Philadelphia, PA	lymphoma	Phase I/II www.oncoceutics.com
Oncoquest™-L non-Hodgkin lymphoma vaccine	XEME Biopharma Lombard, IL	follicular lymphoma	Phase I www.xemebiopharma.com
Opdivo® nivolumab	Bristol-Myers Squibb Princeton, NJ	CNS lymphoma, DLBCL primary testicular lymphoma, follicular lymphoma	Phase II www.bms.com
otlertuzumab (CD37 protein inhibitor)	Aptevo Therapeutics Seattle, WA	peripheral T-cell lymphoma	Phase II www.aptevotherapeutics.com
OXS-1550 (bispecific scFv recombinant fusion protein-drug conjugate)	GT Biopharma Washington, DC	relapsed/refractory B-lineage lymphoma	Phase I/II www.gtbiopharma.com
Pixuvri® pixantrone	CTI BioPharma Seattle, WA	2L aggressive NHL (+rituximab) (Fast Track)	Phase III www.ctibiopharma.com
polatuzumab vedotin (anti-CD79b antibody-drug conjugate)	Genentech South San Francisco, CA	1L DLBCL	Phase III www.gene.com
		relapsed/refractory DLBCL, follicular lymphoma	Phase II www.gene.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

REGN1979 (anti-CD20/CD3 bispecific mAb)	Regeneron Pharmaceuticals Tarrytown, NY	NHL	Phase I www.regeneron.com
remetinostat (HDAC inhibitor) ORPHAN DRUG	Medivir Huddinge, Sweden	cutaneous T-cell lymphoma	Phase II www.medivir.se
Resimmune® anti-CD3 immunotoxin	Angimmune Rockville, MD	cutaneous T-cell lymphoma	Phase I/II www.angimmune.com
Revlimid® lenalidomide	Celgene Summit, NJ	1L DLBCL (ABC subtype), 1L follicular lymphoma, relapsed/refractory indolent lymphoma	Phase III www.celgene.com
RGX-104 (LXR agonist)	Rgenix New York, NY	lymphoma	Phase I www.rgenix.com
rituximab biosimilar (ABP 798)	Allergan Parsippany, NJ Amgen Thousand Oaks, CA	NHL	Phase III www.amgen.com
rituximab biosimilar	Celltrion Incheon, South Korea	NHL	application submitted www.celltrion.com
rituximab biosimilar (GP2013)	Sandoz Princeton, NJ	DLBCL, follicular lymphoma	application submitted www.sandoz.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

rituximab biosimilar
(PF-052805860)

Pfizer
New York, NY

follicular lymphoma

Phase III
www.pfizer.com

rituximab biosimilar
(SAIT101)

Archigen Biotech
Cambridge, United Kingdom

follicular lymphoma

Phase III
www.archigenbio.com

RO7082859
(T-cell bispecific antibody)

Roche/Genentech
South San Francisco, CA

NHL

Phase I
www.roche.com

RP4010
(ORAI1 protein inhibitor)

Rhizen Pharmaceuticals
La Chaux-de-Fonds, Switzerland

NHL

Phase I
www.rhizen.com

SEA-CD40
(anti-CD40 mAb)

Seattle Genetics
Bothell, WA

lymphoma (+/-checkpoint inhibitor)

Phase I
www.seattlegenetics.com

selinexor
(nuclear export inhibitor)
ORPHAN DRUG

Karyopharm Therapeutics
Newton, MA

DLBCL

Phase II
www.karyopharm.com

SGN-CD19B
(anti-CD19 antibody-drug conjugate)

Seattle Genetics
Bothell, WA

relapsed/refractory aggressive
B-cell NHL

Phase I
www.seattlegenetics.com

SGX-301 ointment
(hypericin photodynamic therapy)
ORPHAN DRUG

Soligenix
Princeton, NJ

cutaneous T-cell lymphoma (Fast Track)

Phase III
www.soligenix.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

STRO-001 (anti-CD74 antibody-drug conjugate)	Sutro Biopharma South San Francisco, CA	B-cell lymphoma	Phase I www.sutrobio.com
Sym021 (anti-PD-1 mAb)	Symphogen Somerville, NJ	lymphoma	Phase I www.symphogen.com
TAK-659 (SYK/FLT3 inhibitor)	Takeda Oncology Deerfield, IL	DLBCL	Phase II www.takeda.com
tazemetostat (EZH2 enzyme inhibitor)	Epizyme Cambridge, MA	B-cell lymphoma, relapsed/refractory DLBCL (+prednisolone)	Phase I/II www.epizyme.com
		1L DLBCL (+R-CHOP), relapsed/refractory DLBCL (+atezolizumab)	Phase I www.epizyme.com
Tecentriq® atezolizumab	Genentech South San Francisco, CA	relapsed/refractory DLBCL (+obinutuzumab/tazemetostat) follicular lymphoma (+obinutuzumab/tazemetostat)	Phase I www.gene.com
tenalisib (RP6530) (PI3K-delta/gamma inhibitor) ORPHAN DRUG	Rhizen Pharmaceuticals La Chaux-de-Fonds, Switzerland	cutaneous T-cell lymphoma (Fast Track), peripheral T-cell lymphoma (Fast Track)	Phase I www.rhizen.com
tipifarnib (farnesyltransferase inhibitor)	Kura Oncology San Diego, CA	peripheral T-cell lymphoma	Phase II www.kuraoncology.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

Toca 511 + Toca Fc
(vocimagene amiretrorepvec-
flucytosine gene therapy)

Tocagen
San Diego, CA

lymphoma

Phase I
www.tocagen.com

TPA
(tetradecanoylphorbol acetate)

Rich Pharmaceuticals
Beverly Hills, CA

Hodgkin lymphoma

Phase II
www.richpharmaceuticals.com

tractinostat
(HDAC inhibitor)

Viracta Therapeutics
Cardiff, CA

EBV-positive lymphoma
(+valganciclovir)

Phase I/II
www.viracta.com

TTI-621
(CD47 inhibitors/SIRPA stimulant)
ORPHAN DRUG

Trillium Therapeutics
Mississauga, Canada

mycosis fungoides
(cutaneous T-cell lymphoma)

Phase I
www.trilliumtherapeutics.com

ublituximab + umbralisib
(anti-CD20 mAb/PI3K inhibitor)

TG Therapeutics
New York, NY

NHL

Phase II/III
www.tgtherapeutics.com

umbralisib (TGR-1202)
(PI3K inhibitor)

TG Therapeutics
New York, NY

non-follicular NHL

Phase II
www.tgtherapeutics.com

urelumab
(anti-CD137 mAb)

Bristol-Myers Squibb
Princeton, NJ

B-cell NHL

Phase I/II
www.bms.com

Venclexta™
venetoclax
ORPHAN DRUG

AbbVie
North Chicago, IL
Genentech
South San Francisco, CA

DLBCL (+rituximab), follicular lymphoma,
relapsed/refractory follicular lymphoma
(+rituximab)

Phase II
www.abbvie.com
www.gene.com

Lymphoma
Product Name

Sponsor

Indication

Development Phase

zanubrutinib (BGB-3111)
(BTK inhibitor)

BeiGene
Cambridge, MA

1L small lymphocytic lymphoma

Phase III
www.beigene.com

relapsed/refractory follicular lymphoma
(+ obinutuzumab)

Phase II
www.beigene.com

B-cell lymphoid malignancies

Phase I
www.beigene.com

Multiple Myeloma
Product Name

Sponsor

Indication

Development Phase

ABC294640 (Yeliva®)
(sphingosine kinase-2 inhibitor)

RedHill Biopharma
Raleigh, NC

multiple myeloma

Phase I/II
www.redhillbio.com

ACTR-BCMA
(ACTR087 + SEA-BCMA)

Unum Therapeutics
Cambridge, MA
Seattle Genetics
Bothell, WA

multiple myeloma

Phase I
www.unumrx.com
www.seattlegenetics.com

ALT-803
(IL-15 superagonist protein
complex)

Altor BioScience
Miramar, FL

relapsed/refractory multiple myeloma

Phase I
www.altorbioscience.com

AMG 176
(MCL1 protein inhibitor)

Amgen
Thousand Oaks, CA

relapsed/refractory multiple myeloma

Phase I
www.amgen.com

<u>Multiple Myeloma</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
AMG 224 (antibody-drug conjugate)	Amgen Thousand Oaks, CA	relapsed/refractory multiple myeloma	Phase I www.amgen.com
AMG 420 (anti-BCMA x anti-CD3 bispecific T-cell engager)	Amgen Thousand Oaks, CA	multiple myeloma	Phase I www.amgen.com
AMG 701 (anti-BCMA x anti-CD3 bispecific T-cell engager)	Amgen Thousand Oaks, CA	multiple myeloma	Phase I www.amgen.com
anti-CD38 CAR-T cell therapy	Sorrento Therapeutics San Diego, CA	relapsed/refractory multiple myeloma	Phase I www.sorrentotherapeutics.com
BAY2402234 (DHODH inhibitor)	Bayer Pharmaceuticals Whippany, NJ	myeloid leukemia	Phase I www.pharma.bayer.com
bb2121 (anti-BCMA CAR-T cell therapy) ORPHAN DRUG	bluebird bio Cambridge, MA Celgene Summit, NJ	relapsed/refractory multiple myeloma	Phase II www.bluebirdbio.com www.celgene.com
bb21217 (anti-BCMA CAR-T cell therapy) ORPHAN DRUG	bluebird bio Cambridge, MA Celgene Summit, NJ	multiple myeloma	Phase I www.bluebirdbio.com www.celgene.com

Multiple Myeloma

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
BFCR4350A (RG6160)	Genentech South San Francisco, CA	relapsed/refractory multiple myeloma	Phase I www.gene.com
BION-1301 (anti-APRIL mAb)	Aduro BioTech Berkeley, CA	multiple myeloma	Phase I/II www.aduro.com
BL-8040 (CXCR4 chemokine receptor antagonist)	BioLineRx Modi'in, Israel	multiple myeloma (combination therapy)	Phase III www.biogenerx.com
bortezomib intravenous	Allergan Parsippany, NJ	multiple myeloma	application submitted www.allergan.com
CB-5083 (p97 inhibitor) ORPHAN DRUG	Cleave Biosciences Burlingame, CA	multiple myeloma	Phase I www.cleavebio.com
CC-122 (avadomide) (pleiotropic pathway modulator)	Celgene Summit, NJ	multiple myeloma	Phase I www.celgene.com
CC-220 (CRBN protein inhibitor)	Celgene Summit, NJ	relapsed/refractory multiple myeloma	Phase I www.celgene.com
CC-92480 (CELMoD)	Celgene Summit, NJ	relapsed/refractory multiple myeloma	Phase I www.celgene.com

Multiple Myeloma

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
CC-93269 (T-cell bispecific antibody)	Celgene Summit, NJ	relapsed/refractory multiple myeloma	Phase I www.celgene.com
CDX-301 (recombinant Flt-3 ligand)	Celldex Therapeutics Hampton, NJ	multiple myeloma	Phase I www.celldex.com
citarinostat (ACY-241) (HDAC6 protein inhibitor)	Celgene Summit, NJ	relapsed/refractory multiple myeloma	Phase I www.celgene.com
CJM112 (IL17A protein inhibitor)	Novartis Oncology East Hanover, NJ	multiple myeloma	Phase I www.novartis.com
CLR-131 (phospholipid-drug conjugate) ORPHAN DRUG	Cellectar Biosciences Madison, WI	multiple myeloma	Phase II www.cellectar.com
CWP 232291 (Wnt signalling pathway inhibitor)	JW Pharmaceutical Seoul, South Korea	relapsed/refractory multiple myeloma	Phase I www.jw-pharma.co.kr

Multiple Myeloma

Product Name	Sponsor	Indication	Development Phase
Darzalex® daratumumab	Janssen Research & Development Raritan, NJ	1L multiple myeloma (transplant ineligible)	application submitted www.janssen.com
		1st-line multiple myeloma (transplant eligible), relapsed/refractory multiple myeloma, smoldering multiple myeloma	Phase III www.janssen.com
		multiple myeloma (subcutaneous formulation)	Phase III www.janssen.com
Empliciti® elotuzumab	AbbVie North Chicago, IL Bristol-Myers Squibb Princeton, NJ	1L multiple myeloma	Phase III www.abbvie.com www.bms.com
galinpepimut-S (anti-WT1 peptide cancer vaccine)	Sellas Life Sciences New York, NY	multiple myeloma	Phase II www.sellaslifesciences.com
GBR 1342 (CD38/CD3 bispecific antibody)	Glenmark Pharmaceuticals Mumbai, India	multiple myeloma	Phase I www.glenmarkpharma.com
GMI-1271 (uproleselan sodium)	GlycoMimetics Rockville, MD	multiple myeloma	Phase I www.tgtherapeutics.com
GSK2857916 (antibody-drug conjugate) ORPHAN DRUG	GlaxoSmithKline Research Triangle Park, NC	multiple myeloma	Phase II www.gsk.com

Multiple Myeloma

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
GSK3377794 (NY-ESO-autologous engineered T-cell receptor therapy)	GlaxoSmithKline Research Triangle Park, NC	multiple myeloma	Phase II www.gsk.com
indatuximab ravtansine (BT-062) (anti-CD138/DM4 immunoconjugate) ORPHAN DRUG	Biotest Dreieich, Germany ImmunoGen Waltham, MA	multiple myeloma	Phase II www.biotest.com www.immunogen.com
isatuximab (anti-CD38 mAb) ORPHAN DRUG	Sanofi Bridgewater, NJ	relapsing/refractory multiple myeloma, 1L newly-diagnosed multiple myeloma	Phase III www.sanofi.com
		newly-diagnosed multiple myeloma (+ combination therapy), relapsed/ refractory multiple myeloma (+ cemiplimab)	Phase I www.sanofi.com
JCARH125 (anti-BCMA CAR-T cell therapy)	Juno Therapeutics Seattle, WA	multiple myeloma	Phase I www.junotherapeutics.com
JNJ-63723283 (anti-PD-1 mAb)	Janssen Research & Development Raritan, NJ	multiple myeloma (+daratumumab)	Phase I www.janssen.com
JNJ-64007957 (BCMA CD3 DuoBody® antibody)	Janssen Research & Development Raritan, NJ	relapsed/refractory multiple myeloma	Phase I www.janssen.com

Multiple Myeloma

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
JNJ-64407564 (bispecific antibody)	Janssen Research & Development Raritan, NJ	relapsed/refractory multiple myeloma	Phase I www.janssen.com
KITE-585 (anti-BCMA CAR-T cell therapy)	Kite Pharma Santa Monica, CA	multiple myeloma	Phase I www.kitepharma.com
LCL161 (apoptosis protein inhibitor)	Novartis Oncology East Hanover, NJ	relapsed/refractory multiple myeloma	Phase II www.novartis.com
mivebresib (ABBV-075) (BET inhibitor)	AbbVie North Chicago, IL	multiple myeloma	Phase I www.abbvie.com
MTV273 (BCMA-targeted CAR-T cell therapy)	Novartis Oncology East Hanover, NJ	multiple myeloma	Phase I www.novartis.com
NAM-NK cells + IL-2 (nicotinamide expanded haploidentical or mismatched related donor natural killer cells)	Gamida Cell Jerusalem, Israel	multiple myeloma	Phase I www.gamida-cell.com
Ninlaro® ixazomib	Takeda Oncology Deerfield, IL	1L multiple myeloma, multiple myeloma (maintenance), relapsed/refractory multiple myeloma (doublet regimen)	Phase III www.takeda.com
ONC201 (dopamine receptor D2/3 antagonist)	Oncocotics Philadelphia, PA	multiple myeloma	Phase II www.oncocotics.com

Multiple Myeloma

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Opdivo® nivolumab	Bristol-Myers Squibb Princeton, NJ	multiple myeloma	Phase III www.bms.com
oprozomib (oral proteasome inhibitor) ORPHAN DRUG	Amgen Thousand Oaks, CA	relapsed/refractory multiple myeloma	Phase I www.amgen.com
P-BCMA-101 (CAR-T cell therapy)	Poseida Therapeutics San Diego, CA	multiple myeloma	Phase I www.poseida.com
PF-06863135 (bispecific protein)	Pfizer New York, NY	multiple myeloma	Phase I www.pfizer.com
PNK-007 (natural killer cell therapy)	Celularity Warren, NJ	multiple myeloma	Phase I www.celularity.com
PT-112 phosphaplatin ORPHAN DRUG	Phosplatin Therapeutics New York, NY	relapsed/refractory multiple myeloma	Phase I www.phosplatin.com
PVX-410 (multi-peptide cancer vaccine) ORPHAN DRUG	OncoPep Boston, MA	smoldering multiple myeloma, smoldering multiple myeloma (+durvalumab)	Phase I www.oncopep.com

Multiple Myeloma

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
selinexor (nuclear export inhibitor) ORPHAN DRUG	Karyopharm Therapeutics Newton, MA	multiple myeloma (+bortezomib) (Fast Track)	Phase III www.karyopharm.com
		multiple myeloma (+dexamethasone) (Fast Track), multiple myeloma (+backbone therapies) (Fast Track)	Phase II www.karyopharm.com
SGN-CD48A (antiCD48 antibody-drug conjugate)	Seattle Genetics Bothell, WA	relapsed/refractory multiple myeloma	Phase I www.seattlegenetics.com
SGN-CD352A (anti-CD351 antibody-drug conjugate)	Seattle Genetics Bothell, WA	relapsed/refractory multiple myeloma	Phase I www.seattlegenetics.com
SL-401 (recombinant fusion protein)	Stemline Therapeutics New York, NY	relapsed/refractory multiple myeloma (+pomalidomide)	Phase I/II www.stemline.com
STRO-001 (anti-CD74 antibody-drug conjugate)	Sutro Biopharma South San Francisco, CA	multiple myeloma	Phase I www.sutrobio.com
Sylvant ® siltuximab	Janssen Research & Development Raritan, NJ	high-risk smoldering multiple myeloma	Phase II www.janssen.com
TAK-573 (anti-CD38 attenukine)	Takeda Oncology Deerfield, IL	refractory multiple myeloma	Phase I www.takeda.com
Tecentriq ® atezolizumab	Genentech South San Francisco, CA	multiple myeloma (+/-lenalidomide +/-daratumumab)	Phase I www.gene.com

Multiple Myeloma

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Venclexta™ venetoclax ORPHAN DRUG	AbbVie North Chicago, IL Genentech South San Francisco, CA	multiple myeloma	Phase III www.abbvie.com www.gene.com
Ygalo® peptidase-potentiated alkylator ORPHAN DRUG	Oncopeptides Stockholm, Sweden	multiple myeloma	Phase II www.oncopeptides.com

Ovarian Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
AL3818 (tyrosine kinase inhibitor)	Advenchen Laboratories Moorpark, CA	ovarian cancer	Phase I/II www.advenchen.com
amcasertib (BBI503) (cancer cel [stemness] inhibitor)	Boston Biomedical Cambridge, MA	ovarian cancer	Phase II www.bostonbiomedical.com
anetumab ravtansine (antibody-drug conjugate)	Bayer Pharmaceuticals Whippany, NJ	recurrent mesothelin-expressing platinum-resistant ovarian cancer	Phase I www.pharma.bayer.com
APR-246 (tumor suppressor protein p53 stimulant)	Apra Therapeutics Boston, MA	platinum-sensitive high grade serous ovarian cancer	Phase II www.aprea.com
		platinum-resistant high grade serous ovarian cancer	Phase I www.aprea.com

Ovarian Cancer
Product Name

Sponsor

Indication

Development Phase

Avastin®
bevacizumab
ORPHAN DRUG

Genentech
South San Francisco, CA

relapsed platinum-sensitive
ovarian cancer

application submitted
www.gene.com

AZD1775 (adavosertib)
(WEE1 kinase inhibitor)

AstraZeneca
Wilmington, DE

ovarian cancer (+chemotherapy)

Phase II
www.astrazeneca.com

Bavencio®
avelumab
(anti-PD-L1 inhibitor)

EMD Serono
Rockland, MA
Pfizer
New York, NY

1L ovarian, platinum-resistant/refractory
ovarian cancer

Phase III
www.emdserono.com
www.pfizer.com

camptothecin (CRLX101)
ORPHAN DRUG

BlueLink Pharmaceuticals
Ames, IA

ovarian cancer (Fast Track)

Phase II

cantrixil
(SMETI inhibitor)
ORPHAN DRUG

Kazia Therapeutics
Sydney, Australia

ovarian cancer

Phase I
www.kaziatherapeutics.com

CDX-014
(TIM-1 antibody-drug conjugate)

Celldex Therapeutics
Hampton, NJ

ovarian cancer

Phase I
www.celldex.com

CDX-1401
(NY-ESO-1)

Celldex Therapeutics
Hampton, NJ

ovarian cancer
(combination therapy)

Phase II
www.celldex.com

COTI-2
(p53 gene modulator)
ORPHAN DRUG

Cotinga Pharmaceuticals
London, Canada

ovarian cancer

Phase I
www.cotingapharma.com

<u>Ovarian Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
DCVax®-L cancer vaccine	Northwest Biotherapeutics Bethesda, MD	ovarian cancer	Phase I completed www.nwbio.com
defactinib (FAK inhibitor) ORPHAN DRUG	Verastem Needham, MA	ovarian cancer (+avelumab)	Phase II www.verastem.com
DKN-01 (anti-DKK1 mAb)	Leap Therapeutics Cambridge, MA	endometrioid ovarian cancer (combination therapy)	Phase II www.leaptx.com
DPX-Survivac (cancer vaccine) ORPHAN DRUG	Immunovaccine Halifax, Canada	advanced ovarian cancer (Fast Track)	Phase I www.imvaccine.com
entinostat (HDAC inhibitor)	Syndax Pharmaceuticals Waltham, MA	ovarian cancer (+avelumab)	Phase II www.syndax.com
EP-100 (precision targeted membrane- disrupting peptide)	Esperance Pharmaceuticals Houston, TX	ovarian cancer	Phase II www.esperancepharma.com
EP-201 (IGFBP-2 vaccine)	EpiThany Seattle, WA	ovarian cancer	Phase I www.epithany.com
epacadostat (IDO1 inhibitor)	Incyte Wilmington, DE	ovarian cancer	Phase I www.incyte.com

Ovarian Cancer
Product Name

Sponsor

Indication

Development Phase

farletuzumab (MORAb-003)
(IgG1 mAb)
ORPHAN DRUG

Eisai
Woodcliff Lake, NJ

platinum-sensitive ovarian cancer

Phase II
www.eisai.com

FATE-NK100
(natural killer cell stimulant)

Fate Therapeutics
La Jolla, CA

ovarian cancer

Phase I
www.fatetherapeutics.com

GALE-301
(E39 peptide vaccine)
ORPHAN DRUG

Sellas Life Sciences
New York, NY

ovarian cancer

Phase I/II
www.sellalifesciences.com

GALE-302
(E39 peptide vaccine)
ORPHAN DRUG

Sellas Life Sciences
New York, NY

ovarian cancer

Phase I/II
www.sellalifesciences.com

galinpepimut-S
(anti-WT1 peptide cancer vaccine)

Sellas Life Sciences
New York, NY

ovarian cancer (+nivolumab)

Phase I/II
www.sellalifesciences.com

GEN-1
(IL-2 plasmid vector nanoparticles)
ORPHAN DRUG

Celsion
Lawrenceville, NJ

ovarian cancer

Phase I/II
www.celsion.com

GSK3377794
(NY-ESO-autologous engineered
T-cell receptor therapy)

GlaxoSmithKline
Research Triangle Park, NC

ovarian cancer

Phase II
www.gsk.com

IMT-1012
(immunotherapeutic vaccine)

Immunotope
Doylestown, PA

ovarian cancer

Phase I completed
www.immunotope.com

Ovarian Cancer
Product Name

Sponsor

Indication

Development Phase

karenitecin
(DNA topoisomerase inhibitor)

BioNumerik Pharmaceuticals
San Antonio, TX

advanced ovarian cancer

Phase III completed
www.bionumerick.com

Kevetrin™
p53 protein stimulant
ORPHAN DRUG

Innovation Pharmaceuticals
Beverly, MA

ovarian cancer

Phase II
www.ipharminc.com

Keytruda®
pembrolizumab

Merck
Kenilworth, NJ

ovarian cancer

Phase II
www.merck.com

Lynparza®
olaparib

AstraZeneca
Wilmington, DE

1L BRCA-mutated ovarian cancer,
2L or greater BRCA-mutation
platinum-sensitive recurrent
ovarian cancer (maintenance),
gBRCA-mutated platinum-sensitive
recurrent ovarian cancer

Phase III
www.astrazeneca.com

recurrent platinum-resistant ovarian
cancer (+cediranib)

Phase II
www.astrazeneca.com

masitinib
(protein tyrosine kinase inhibitor)

AB Science
Paris, France

relapsed metastatic ovarian cancer

Phase III
www.ab-science.com

mirvetuximab soravtansine
(folate receptor 1 antagonist)
ORPHAN DRUG

ImmunoGen
Waltham, MA

FOLR1-positive ovarian cancer

Phase III
www.immunogen.com

Ovarian Cancer
Product Name

Sponsor

Indication

Development Phase

NanoPac®
paclitaxel nanoformulation
ORPHAN DRUG

NanOlogy
Fort Worth, TX

ovarian cancer

Phase II
www.nanology.us

navicixizumab
(anti-DLL4/VEGF bispecific mAb)

OncoMed Pharmaceuticals
Redwood City, CA

ovarian cancer

Phase I
www.oncomed.com

NUC-1031
(DNA synthesis inhibitor)

NuCana
Newton, MA

platinum-resistant ovarian cancer

Phase II
www.nucana.com

ONCOS-102
(oncolytic virus therapy)
ORPHAN DRUG

Targovax
Oslo, Norway

platinum-resistant ovarian cancer

Phase I/II
www.targovax.com

Opdivo®
nivolumab

Bristol-Myers Squibb
Princeton, NJ

ovarian cancer

Phase I/II
www.bms.com

Opdivo® + Yervoy®
nivolumab + ipilimumab

Bristol-Myers Squibb
Princeton, NJ

ovarian cancer

Phase I/II
www.bms.com

oregovomab
(MUC16 protein mAb)
ORPHAN DRUG

OncoQuest
Edmonton, Canada

ovarian cancer (+chemotherapy)

Phase II
www.oncoquestinc.com

ovarian cancer (+poly ICLC)

Phase I
www.oncoquestinc.com

<u>Ovarian Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ovapuldencel-T (dendritic cell cancer vaccine)	AiVita Biomedical Irvine, CA	advanced ovarian cancer	Phase II www.aivitabiomedical.com
prexasertib (CHK1 inhibitor)	Eli Lilly Indianapolis, IN	platinum-resistant or refractory ovarian cancer	Phase II www.lilly.com
Prolanta™ prolactin receptor antagonist ORPHAN DRUG	Oncolix Houston, TX	ovarian cancer	Phase I www.oncolixbio.com
PTC596 (tumor stem cell targeting)	PTC Therapeutics South Plainfield, NJ	ovarian cancer	Phase I www.ptcbio.com
PTX-200 (Akt inhibitor)	Prescient Therapeutics South Melbourne, Australia	relapsed/refractory ovarian cancer	Phase I www.ptxtherapeutics.com
RG7882 (anti-MUC16 THIOMAB drug conjugate)	Genentech South San Francisco, CA	ovarian cancer	Phase I www.gene.com
RRx-001 (free radical stimulant)	EpicentRx La Jolla, CA	ovarian epithelial cancer	Phase II www.epicentrx.com
Rubraca® rucaparib (PARP inhibitor)	Clovis Oncology Boulder, CO	ovarian cancer (+nivolumab)	Phase III www.clovisoncology.com

Ovarian Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
sapacitabine (nucleoside analogue)	Cyclacel Pharmaceuticals Berkeley Heights, NJ	ovarian cancer (+seliciclib)	Phase II www.cyclacel.com
SC-003 (antibody-drug conjugate)	AbbVie North Chicago, IL	ovarian cancer	Phase I www.abbvie.com
SPL-108 (anti-CD44)	Splash Pharmaceuticals San Diego, CA	ovarian epithelial cancer	Phase II www.splashpharma.com
		platinum-resistant ovarian cancer	Phase I www.splashpharma.com
taladegib (hedgehog pathway/SMO inhibitor)	Ignyta San Diego, CA	ovarian cancer (combination therapy)	Phase I www.ignyta.com
Tecentriq® atezolizumab	Genentech South San Francisco, CA	1L ovarian cancer (+bevacizumab +chemotherapy)	Phase III www.gene.com
		ovarian cancer (+rucaparib)	Phase I www.gene.com
TPIV200 (folate receptor-alpha vaccine) ORPHAN DRUG	TapImmune Jacksonville, FL	platinum-sensitive ovarian cancer (Fast Track)	Phase II www.tapimmune.com

Ovarian Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
varlilumab (anti-CD28 mAb)	Celldex Therapeutics Hampton, NJ	ovarian cancer (+nivolumab)	Phase II www.celldex.com
VB-111 (ofranergene obadenovec) ORPHAN DRUG	VBL Therapeutics Modi'in, Israel	recurrent platinum-resistant ovarian cancer	Phase III www.vblrx.com
veliparib (PARP inhibitor)	AbbVie North Chicago, IL	ovarian cancer	Phase III www.abbvie.com
Vigil™ autologous tumor cell vaccine	Gradalis Carrolton, TX	ovarian cancer	Phase II www.gradalisinc.com
Yondelis® trabectedin ORPHAN DRUG	Janssen Research & Development Raritan, NJ	relapsed ovarian cancer	Phase III www.janssen.com
Zejula® niraparib ORPHAN DRUG	TESARO Waltham, MA	advanced ovarian cancer following response on 1L platinum-based chemotherapy	Phase III www.tesarobio.com
		1L ovarian cancer (+bevacizumab), ovarian cancer (+bevacizumab), ovarian cancer (+pembrolizumab), ovarian cancer (monotherapy)	Phase II www.tesarobio.com

Ovarian Cancer
Product Name

Sponsor

Indication

Development Phase

ZW25
(bispecific antibody)
ORPHAN DRUG

Zymeworks
Vancouver, Canada

HER2-expressing ovarian cancer

Phase I
www.zymeworks.com

Pancreatic Cancer
Product Name

Sponsor

Indication

Development Phase

AbGn-107
(antibody-drug conjugate)

AbGenomics
Los Altos, CA

pancreatic cancer

Phase I
www.abgenomics.com

Abraxane®
paclitaxel protein-bound particles
for injectable suspension
(albumin-bound)

Celgene
Summit, NJ

pancreatic cancer (adjuvant therapy)

Phase III
www.celgene.com

aglatimagene besadenovec
(gene therapy)

Advantagene
Auburndale, MA

pancreatic cancer

Phase I/II
www.advantagene.com

AM0010
(PEG-IL-10)
ORPHAN DRUG

ARMO Biosciences
Redwood City, CA

pancreatic ductal adenocarcinoma
(Fast Track)

Phase III
www.armobio.com

antroquinonol
(rare medicinal fungus)
ORPHAN DRUG

Golden Biotechnology
New Taipei City, Taiwan

pancreatic cancer

Phase I/II
www.goldenbiotech.com

Pancreatic Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
AR20.5 (anti-MUC1 mAb)	OncoQuest Edmonton, Canada	pancreatic cancer	Phase I/II www.oncoquestinc.com
ARQ 761 (NQO1 inhibitor)	ArQule Burlington, MA	pancreatic cancer	Phase II www.arqule.com
BL-8040 (CXCR4 chemokine receptor antagonist)	BioLineRx Modi'in, Israel	metastatic pancreatic cancer (+pembrolizumab)	Phase II www.biolinerx.com
BPM31510 (cancer cell metabolism restorer) ORPHAN DRUG	Berg Framingham, MA	advanced pancreatic cancer (+/- gemcitabine)	Phase II www.berghealth.com
BPX-601 (anti-PSCA CAR-T cell therapy)	Bellicum Pharmaceuticals Houston, TX	non-resectable pancreatic cancer	Phase I www.bellicum.com
BVD-523 (ERK inhibitor)	BioMed Valley Discoveries Kanas City, MO	metastatic pancreatic cancer (+nab-paclitaxel +gemcitabine)	Phase I www.biomed-valley.com
cabiralizumab (anti-CSF1R)	Five Prime Therapeutics South San Francisco, CA Bristol-Myers Squibb Princeton, NJ	pancreatic cancer (+nivolumab)	Phase II www.fiveprime.com
Cabometyx™ cabozantinib	Exelixis South San Francisco, CA	pancreatic neuroendocrine tumors	Phase II www.exelixis.com

Pancreatic Cancer
Product Name

Sponsor

Indication

Development Phase

CCX872
(CCR2 receptor antagonist)

ChemoCentryx
Mountain View, CA

advanced pancreatic cancer

Phase II
www.chemocentryx.com

CPI-613
(altered energy metabolism-
derived medicine)
ORPHAN DRUG

Rafael Pharmaceuticals
Newark, NJ

1L metastatic pancreatic cancer
(+modified FOLFIRINOX)

Phase III
www.rafaelpharma.com

1L locally advanced pancreatic cancer
(+modified FOLFIRINOX)

Phase II
www.rafaelpharma.com

1L advanced or metastatic
pancreatic cancer
(+gemcitabine +nab-paclitaxel)

Phase I
www.rafaelpharma.com

defactinib
(FAK inhibitor)
ORPHAN DRUG

Verastem
Needham, MA

pancreatic cancer (+pembrolizumab),
relapsed pancreatic cancer
(+pembrolizumab +gemcitabine)

Phase I
www.verastem.com

encapsulated live cells
converting ifosfamide
(genetically engineered live human cells)
ORPHAN DRUG

PharmaCyte Biotech
Laguna Hills, CA

pancreatic cancer

Phase II
www.pharmacyte.com

ensituximab
(neoplasm antigen inhibitor)
ORPHAN DRUG

Precision Biologics
Rockville, MD

advanced pancreatic cancer

Phase II
www.precision-biologics.com

evofosfamide
ORPHAN DRUG

Molecular Templates
Austin, TX

pancreatic cancer (+ipilimumab)

Phase I
www.mtem.com

Pancreatic Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ficlatuzumab (HGF/c-Met inhibitor)	AVEO Oncology Cambridge, MA	pancreatic cancer	Phase II www.aveooncology.com
galunisertib (TGF-beta 1 inhibitor)	Eli Lilly Indianapolis, IN	metastatic pancreatic cancer (+ durvalumab)	Phase I www.lilly.com
GC4419 (superoxide dismutase modulator)	Galera Therapeutics Malvern, PA	pancreatic cancer (+ stereotactic body radiation therapy)	Phase I/II www.galeratx.com
glufosfamide (DNA synthesis inhibitor) ORHAN DRUG	Eleison Pharmaceuticals Princeton, NJ	2L metastatic pancreatic cancer (Fast Track)	Phase III www.eleision-pharma.com
Imbruvica® ibrutinib	Janssen Research & Development Raritan, NJ PharmacyClics Sunnyvale, CA	pancreatic cancer	Phase III www.janssen.com www.pharmacyclics.com
Imfinzi® durvalumab	MedImmune Gaithersburg, MD	pancreatic ductal adenocarcinoma (+AZD5069)	Phase II www.medimmune.com
		1L pancreatic ductal adenocarcinoma (+tremelimumab +chemotherapy)	Phase I www.medimmune.com
indoximod (IDO inhibitor)	NewLink Genetics Ames, IA	metastatic pancreatic cancer (combination therapy)	Phase II www.newlinkgenetics.com

Pancreatic Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
IRX4204 (RXR agonist)	Io Therapeutics Santa Ana, CA	pancreatic cancer	Phase I www.io-therapeutics.com
istiratumab (MM-141) (PI3K/AKT/mTOR inhibitor) ORPHAN DRUG	Merrimack Pharmaceuticals Cambridge, MA	pancreatic cancer	Phase II www.merrimack.com
LMB-100 (recombinant immunotoxin)	Selecta Biosciences Watertown, MA	pancreatic cancer	Phase I/II www.selectabio.com
LOAd703 (oncolytic virus therapy) ORPHAN DRUG	Lokon Pharma Uppsala, Sweden	pancreatic cancer	Phase I/II www.lokonpharma.com
Lynparza® olaparib	AstraZeneca Wilmington, DE	pancreatic cancer	Phase III www.astrazeneca.com
	Merck Kenilworth, NJ	pancreatic cancer (combination therapy)	Phase III www.merck.com
masitinib (protein tyrosine kinase inhibitor) ORPHAN DRUG	AB Science Paris, France	pancreatic cancer	Phase III www.ab-science.com
MENK (IRT-101) (opioid growth factor)	Cytocom Orlando, FL	advanced pancreatic cancer	Phase II www.cytocom.com

<u>Pancreatic Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
MVT-1075 (177Lu mAB 5B1/radio- immunotherapy)	MabVax Therapeutics San Diego, CA	pancreatic cancer	Phase I www.mabvax.com
MVT-5873 (5B1 mAb)	MabVax Therapeutics San Diego, CA	pancreatic cancer, metastatic prostate (+chemotherapy)	Phase I www.mabvax.com
NanoPac® paclitaxel nanoformulation	NanOlogy Fort Worth, TX	pancreatic cancer	Phase II www.nanology.us
NANT pancreatic cancer vaccine (activated natural killer cells - haNK for infusion)	NantKwest Culver City, CA	pancreatic cancer (combination therapy)	Phase I/II www.nantkwest.com
napabucasin (STAT3 inhibitor) ORPHAN DRUG	Boston Biomedical Cambridge, MA	pancreatic cancer (+nab-paclitaxel +gemcitabine)	Phase III www.bostonbiomedical.com
		pancreatic cancer (+chemotherapy)	Phase I www.bostonbiomedical.com
Onivyde® irinotecan liposome injection	Ipsen Biopharmaceuticals Basking Ridge, NJ	1L pancreatic ductal adenocarcinoma	Phase II www.ipсен.com
Opdivo® nivolumab	Bristol-Myers Squibb Princeton, NJ	pancreatic cancer	Phase I/II www.bms.com

Pancreatic Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
OT-101 (TGF-beta antisense) ORPHAN DRUG	Autotelic Costa Mesa, CA Oncotelic Agoura Hills, CA	pancreatic cancer	Phase II/III www.oncotelic.com
pamrevlumab (anti-CTGF antibody) ORPHAN DRUG	FibroGen San Francisco, CA	pancreatic cancer (Fast Track)	Phase II www.fibrogen.com
PBI-05204 (<i>Nerium oleander</i> herbal extract)	Phoenix Biotechnology San Antonio, TX	pancreatic cancer	Phase II www.phoenixbiotechnology.com
PEGPH20 (pegylated recombinant human hyaluronidase) ORPHAN DRUG	Halozyme Therapeutics San Diego, CA	pancreatic cancer (Fast Track) (+nab-paclitaxel +gemcitabine)	Phase III www.halozyme.com
		pancreatic cancer (+atezolizumab)	Phase I www.halozyme.com
polyclonal antibody stimulator (fusion peptide) ORPHAN DRUG	Cancer Advances Durham, NC	pancreatic cancer	Phase III www.canceradvancesinc.com

Pancreatic Cancer
Product Name

Sponsor

Indication

Development Phase

Reolysin®
pelareorep
ORPHAN DRUG

Oncolytics Biotech
Calgary, Canada

pancreatic cancer (+gemcitabine),
metastatic pancreatic cancer
(+paclitaxel +carboplatin)

Phase II
www.oncolyticsbiotech.com

advanced or metastatic pancreatic
cancer (+pembrolizumab)

Phase I
www.oncolyticsbiotech.com

RX-3117
(DNA and RNA synthesis inhibitor)
ORPHAN DRUG

Rexahn Pharmaceuticals
Rockville, MD

3L metastatic pancreatic cancer,
1L metastatic pancreatic cancer
(+palbociclib)

Phase II
www.rexahn.com

sapacitabine
(nucleoside analogue)

Cyclacel Pharmaceuticals
Berkeley Heights, NJ

pancreatic cancer (+seliciclib)

Phase II
www.cyclacel.com

SBP-101
(polyamine analogue)
ORPHAN DRUG

Sun BioPharma
Waconia, MN

pancreatic ductal adenocarcinoma

Phase I
www.sunbiopharma.com

SEL-403
(recombinant immunotoxin +
SVP-rapamycin)

Selecta Biosciences
Watertown, MA

pancreatic cancer

Phase I
www.selectabio.com

SGT-53
(gene therapy)

SynerGene Therapeutics
Rockville, MD

metastatic pancreatic cancer
(+gemcitabine +nab-paclitaxel)

Phase II

Pancreatic Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
siG12D-LODER (antisense K-ras RNA gene therapy)	Silenseed Modi'in, Israel	pancreatic cancer	Phase II www.silenseed.com
SM-88 (free radical stimulant)	Tyme Technologies New York, NY	metastatic pancreatic cancer	Phase II www.tymeinc.com
Tecentriq® atezolizumab	Genentech South San Francisco, CA	pancreatic cancer (+bevacizumab +chemotherapy)	Phase I www.gene.com

Prostate Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ABBV-744 (BRD2/3/4 inhibitor)	AbbVie North Chicago, IL	advanced prostate cancer	Phase I www.abbvie.com
ADX-PSA (cancer immunotherapy vaccine)	Advaxis Princeton, NJ	metastatic castration-resistant prostate cancer, metastatic castration-resistant prostate cancer (+pembrolizumab)	Phase I/II www.advaxis.com
AE37 (HER2.neu) (Li-key hybrid cancer vaccine)	Antigen Express Wellesley, MA	metastatic prostate cancer	Phase I www.antigenexpress.com

<u>Prostate Cancer Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
aglatimagene besadenovec (gene therapy)	Advantagene Auburndale, MA	intermediate and high-risk prostate cancer (Fast Track)	Phase III www.advantagene.com
		prostate cancer (proactive surveillance)	Phase II/III www.advantagene.com
APVO414 (bispecific immunotherapeutic)	Aptevo Therapeutics Seattle, WA	metastatic castration-resistant prostate cancer	Phase I www.aptevotherapeutics.com
cabazitaxel injection	Accord Healthcare Durham, NC	hormone-refractory metastatic prostate cancer (+prednisone)	application submitted www.accordhealthcare.us
cabazitaxel injection	Allergan Parsippany, NJ	hormone-refractory metastatic prostate cancer	application submitted www.allergan.com
CORT125281 (glucocorticoid receptor antagonist)	Corcept Therapeutics Menlo Park, CA	metastatic castration-resistant prostate cancer	Phase I www.corcept.com
CPI-1205 (EZH2 enzyme inhibitor)	Constellation Pharmaceuticals Cambridge, MA	metastatic castration-resistant prostate cancer	Phase I/II www.constellationpharma.com
darolutamide (androgen receptor antagonist)	Bayer Pharmaceuticals Whippany, NJ	non-metastatic castration-resistant prostate cancer, metastatic hormone-sensitive prostate cancer	Phase III www.pharma.bayer.com

Prostate Cancer
Product Name

Sponsor

Indication

Development Phase

DCVax®-Prostate cancer vaccine	Northwest Biotherapeutics Bethesda, MD	prostate cancer	Phase II completed www.nwbio.com
Dicopp™ copper gluconate/disulfiram	Cantex Pharmaceuticals Weston, FL	metastatic castration-resistant prostate cancer	Phase I www.cantex.com
DPV-001 (autophagosome-enriched vaccine)	UbiVac Portland, OR	prostate cancer	Phase I www.ubivac.com
eltanexor oral (KPT-8602) (nuclear export inhibitor)	Karyopharm Therapeutics Newton, MA	metastatic castration-resistant prostate cancer	Phase I/II www.karyopharm.com
enoblituzumab (anti-B7-H3 IgG1/κ mAb)	MacroGenics Rockville, MD	prostate cancer (neoadjuvant)	Phase I www.macrogenics.com
Erleada® apalutamide	Janssen Research & Development Raritan, NJ	metastatic hormone-sensitive prostate cancer, localized prostate cancer	Phase III www.janssen.com
evofosfamide	Molecular Templates Austin, TX	prostate cancer (+ipilimumab)	Phase I www.mtem.com
fexapotide	Nymox Pharmaceutical Hasbrouck Heights, NJ	low-risk localized (T1c) prostate cancer	Phase II completed www.nymox.com
FP-001 (leuprorelin depot)	Foresee Pharmaceuticals Newark, DE	prostate cancer	Phase III www.foreseepharma.com

Prostate Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
GSK2636771 (PI3K beta inhibitor)	GlaxoSmithKline Research Triangle Park, NC	castration-resistant prostate cancer	Phase I www.gsk.com
GT0918 (proxalutamide)	Suzhou Kintor Pharmaceuticals Suzhou, China	metastatic castration-resistant prostate cancer	Phase I/II
indoximod (IDO inhibitor)	NewLink Genetics Ames, IA	metastatic castration-resistant prostate cancer (+sipuleucel-T)	Phase II www.newlinkgenetics.com
INO-5150 (PSA/PMSA DNA cancer vaccine)	Inovio Pharmaceuticals Plymouth Meeting, PA	prostate cancer	Phase I www.inovio.com
IONIS-AR-2.5RX (AZD5312) (oligonucleotide antisense drug)	Ionis Pharmaceuticals Carlsbad, CA	prostate cancer	Phase II www.ionispharma.com
IRX4204 (RXR agonist)	Io Therapeutics Santa Ana, CA	prostate cancer	Phase II www.io-therapeutics.com
JNJ 63723283 (anti-PD-1 mAb)	Janssen Research & Development Raritan, NJ	castration-resistant prostate cancer (+niraparib)	Phase I/II www.janssen.com
JNJ-64041809 (ADU-741) (live attenuated double-deleted Listeria immunotherapy)	Aduro Biotech Berkeley, CA Janssen Research & Development Raritan, NJ	castration-resistant prostate cancer	Phase I www.aduro.com www.janssen.com

Prostate Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Keytruda® pembrolizumab	Merck Kenilworth, NJ	prostate cancer	Phase II www.merck.com
LY01005 (goserelin extended release)	Luye Pharma Shanghai, China	prostate cancer	Phase I www.luye-pharm.com
LY3023414 (PI3K/mTOR inhibitor)	Eli Lilly Indianapolis, IN	prostate cancer (combination therapy)	Phase II www.lilly.com
Lynparza® olaparib	AstraZeneca Wilmington, DE	prostate cancer	Phase III www.astrazeneca.com
	Merck Kenilworth, NJ	prostate cancer (combination therapy)	Phase III www.merck.com
MEDI3726 (antibody-drug conjugate)	MedImmune Gaithersburg, MD	prostate cancer	Phase I www.medimmune.com
MIP-1095 I-131 (small molecule thernostic)	Progenics Pharmaceuticals New York, NY	prostate cancer	Phase I www.progenics.com
MVI-118 (plasmid DNA cancer vaccine)	Madison Vaccines Madison, WI	metastatic prostate cancer	Phase I www.madisonvaccinesinc.com

Prostate Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
MVI-816 (plasmid DNA cancer vaccine)	Madison Vaccines Madison, WI	biochemically recurrent prostate cancer	Phase II www.madisonvaccinesinc.com
		metastatic castration-resistant prostate cancer (+pembrolizumab)	Phase I www.madisonvaccinesinc.com
NanoPac® paclitaxel nanoformulation	NanOlogy Fort Worth, TX	prostate cancer	Phase II www.nanology.us
NBTXR3 (radio-enhancer nanoparticle)	Nanobiotix Paris, France	prostate cancer	Phase I/II www.nanobiotix.com
Opdivo® nivolumab	Bristol-Myers Squibb Princeton, NJ	prostate cancer	Phase II www.bms.com
padeliporfin di-potassium (vascular disrupting agent)	Steba Biotech Luxembourg City, Luxembourg	localized prostate cancer	Phase II www.stebabiotech.com
PAN-301-1 (HAAH-directed nanoparticle vaccine)	Panacea Pharmaceuticals Gaithersburg, MD	prostate cancer	Phase I www.panaceapharma.com
PCM-075 (PLK1 inhibitor)	TrovaGene San Diego, CA	castration-resistant prostate cancer	Phase II www.trovagene.com
PCUR-101	Pellficure Pharmaceuticals San Diego, CA	metastatic castration-resistant prostate cancer	Phase I

Prostate Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
PF-06753512 (vaccine-based immunotherapy)	Pfizer New York, NY	prostate cancer (combination therapy)	Phase I www.pfizer.com
Proscavax PSA/IL-12/GM-CSF vaccine	OncBioMune Pharmaceuticals Baton Rouge, LA	prostate cancer	Phase I www.oncobiomune.com
Prostvac rilimogene galvacirepvec- rilimogene glafovec	Bavarian Nordic Morrisville, NC Bristol-Myers Squibb Princeton, NJ	prostate cancer (combination therapy)	Phase II www.bavarian-nordic.com www.bms.com
Provenge® sipuleucel-T	Dendreon Seal Beach, CA	metastatic castrate-resistant prostate cancer (combination therapy)	Phase II completed www.dendreon.com
PSA/IL-2/GM-CSF vaccine	OncBioMune Pharmaceuticals Baton Rouge, LA	prostate cancer	Phase I www.oncobiomune.com
PSMA-617 (radioligand therapy)	Endocyte West Lafayette, IN Radio Medix Houston, TX	metastatic castration-resistant prostate cancer	Phase II www.endocyte.com
REIC gene therapy	Momotaro-Gene Okayama, Japan	localized prostate cancer	Phase I/II www.mt-gene.com
relugolix (GnRH receptor antagonist)	Myovant Sciences Brisbane, CA	advanced prostate cancer	Phase III www.myovant.com

Prostate Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Rubraca® rucaparib (PARP inhibitor)	Clovis Oncology Boulder, CO	metastatic castration-resistant prostate cancer (combination therapy)	Phase III www.clovisoncology.com
		metastatic castration-resistant prostate cancer	Phase II www.clovisoncology.com
sacituzumab govitecan (anti-TROP-2-SN-38 ADC)	Immunomedics Morris Plains, NJ	metastatic prostate cancer	Phase II www.immunomedics.com
seviteronel (INO-464) (CYP17 lyase inhibitor)	Innocrin Pharmaceuticals Durham, NC	castration-resistant prostate cancer (Fast Track)	Phase II www.innocrinpharma.com
SM-88 (free radical stimulant)	Tyme Technologies New York, NY	recurrent non-metastatic prostate cancer	Phase II www.tymeinc.com
stapuldencel-T (DCVAC/Pca) (autologous immunotherapy)	SOTIO Prague, Czech Republic	metastatic castration-resistant prostate cancer	Phase III www.sotio.com
talazoparib (PARP inhibitor)	Pfizer New York, NY	1L metastatic castration-resistant prostate cancer	Phase III www.pfizer.com
		2L metastatic castration-resistant prostate cancer	Phase II www.pfizer.com
TAS3681 (androgen receptor antagonist)	Taiho Oncology Princeton, NJ	metastatic castration-resistant prostate cancer	Phase I www.taihooncology.com

Prostate Cancer
Product Name

Sponsor

Indication

Development Phase

Tecentriq®
atezolizumab

Genentech
South San Francisco, CA

castration-resistant prostate cancer
(+enzalutamide)

Phase III
www.gene.com

metastatic castration-resistant
prostate cancer (+radium 223)

Phase I
www.gene.com

toposalysin (PRX302)
(cell membrane modulator)

Sophris Bio
La Jolla, CA

localized prostate cancer

Phase II
www.sophrisbio.com

TRC-253
(androgen receptor antagonist)

Janssen Research & Development
Raritan, NJ
TRACON Pharmaceuticals
San Diego, CA

prostate cancer

Phase I
www.traconpharma.com

Xtandi®
enzalutamide

Astellas
Northbrook, IL
Pfizer
New York, NY

non-metastatic castration-resistant
prostate cancer

application submitted
www.astellas.com
www.pfizer.com

metastatic hormone-sensitive
prostate cancer, non-metastatic
high-risk hormone-sensitive prostate
cancer

Phase III
www.astellas.com
www.pfizer.com

Yonsa®
abiraterone acetate
(submicron particles)

Churchill Pharmaceuticals
King of Prussia, PA

metastatic castration-resistant
prostate cancer

application submitted
www.churchhillpharma.com

Prostate Cancer
Product Name

Sponsor

Indication

Development Phase

ZEN-3694
(BET inhibitor)

Zenith Epigenetics
San Francisco, CA

metastatic castration-resistant
prostate cancer

Phase I/II
www.zenithepigenetics.com

Zytiga®
abiraterone acetate

Janssen Research & Development
Raritan, NJ

castration-resistant metastatic
prostate cancer (chemotherapy naïve)
(+apalutamide)

Phase III
www.janssen.com

Sarcoma
Product Name

Sponsor

Indication

Development Phase

AL3818
(tyrosine kinase inhibitor)

Advenchen Laboratories
Moorpark, CA

metastatic or advanced alveolar
soft part sarcoma, leiomyosarcoma,
synovial sarcoma

Phase III
www.advenchen.com

aldoxorubicin
ORPHAN DRUG

CytRx
Los Angeles, CA
NantKwest
Culver City, CA

2L soft tissue sarcoma

Phase III
www.cytrx.com

soft tissue sarcoma (+ifosfamide)

Phase I/II
www.cytrx.com

AMG 337
(c-Met inhibitor)

NantPharma
Culver City, CA

advanced or metastatic clear cell sarcoma

Phase II
www.nantpharma.com

AU101
(HER2-CD28 CAR-T cell therapy)

Aurora BioPharma
Cambridge, MA

osteosarcoma

Phase I/II
www.aurora-biopharma.com

Sarcoma <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Cabometyx™ cabozantinib	Exelixis South San Francisco, CA	relapsed osteosarcoma, Ewing sarcoma, soft tissue sarcoma	Phase II www.exelixis.com
CBT-1 (tetrandrine)	CBA Pharma Lexington, KY	sarcoma	Phase I www.cbapharma.com
CMB305 (antigen-specific prime boost) ORPHAN DRUG	Immune Design Seattle, WA	soft tissue sarcoma	Phase II www.immunedesign.com
Gilotrif® afatinib	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	rhabdomyosarcoma	Phase I/II www.boehringer-ingelheim.com
GSK3377794 (NY-ESO-autologous engineered T-cell receptor therapy) ORPHAN DRUG	GlaxoSmithKline Research Triangle Park, NC	mixed round cell liposarcoma, synovial sarcoma	Phase II www.gsk.com
HDM201 (p53-HDM2 inhibitor)	Novartis Oncology East Hanover, NJ	liposarcoma (+LEE011)	Phase I www.novartis.com
inhaled lipid-complexed cisplatin	Eleison Pharmaceuticals Princeton, NJ	recurrent pulmonary osteosarcoma	Phase II www.eleison-pharma.com
Lartruvo® olaratumab	Eli Lilly Indianapolis, IN	soft tissue sarcoma (+pembrolizumab)	Phase I www.lilly.com

Sarcoma
Product Name

Sponsor

Indication

Development Phase

MNPR-201
(GPX-150; 5-imino-
13-deoxydoxorubicin)
ORPHAN DRUG

Monopar Therapeutics
Wilmette, IL

soft tissue sarcoma

Phase II
www.monopartx.com

naxitamab
(anti-GD2 3F8 mAb)
ORPHAN DRUG

Y-mAbs Therapeutics
New York, NY

osteosarcoma (pediatric)

Phase II
www.ymabs.com

NC-6300
(epirubicin micelle)
ORPHAN DRUG

NanoCarrier
Chiba, Japan

soft tissue sarcoma

Phase I
www.nanocarrier.co.jp

NKTR-214
(CD122-biased immune-
stimulatory cytokine)

Nektar Therapeutics
San Francisco, CA

sarcoma (+nivolumab)

Phase II
www.nektar.com

selinexor
(nuclear export inhibitor)
ORPHAN DRUG

Karyopharm Therapeutics
Newton, MA

liposarcoma

Phase III
www.karyopharm.com

tazemetostat
(EZH2 enzyme inhibitor)
ORPHAN DRUG

Epizyme
Cambridge, MA

synovial sarcoma

Phase I
www.epizyme.com

TK216
(c-ets inhibitor)
ORPHAN DRUG

Oncternal Therapeutics
San Diego, CA

Ewing sarcoma (Fast Track)

Phase I
www.oncternal.com

Sarcoma
Product Name

Sponsor

Indication

Development Phase

TRC-105
(carotuximab)
ORPHAN DRUG

TRACON Pharmaceuticals
San Diego, CA

angiosarcoma

Phase III
www.traconpharma.com

Vigil™
autologous tumor cell vaccine

Gradalis
Carrolton, TX

Ewing's sarcoma

Phase III
www.gradalisinc.com

Zejula®
niraparib

TESARO
Waltham, MA

Ewing's sarcoma (+chemotherapy)

Phase I
www.tesarobio.com

Skin Cancer
Product Name

Sponsor

Indication

Development Phase

APX005M
(CD40 agonistic antibody)

Apexigen
San Carlos, CA

malignant melanoma (+nivolumab)

Phase I/II
www.apexigen.com

Bavencio®
avelumab
(anti-PD-L1 inhibitor)

EMD Serono
Rockland, MA
Pfizer
New York, NY

melanoma (+4-1BB)

Phase II
www.emdserono.com
www.pfizer.com

binimetinib
(MEK inhibitor)

Array BioPharma
Boulder, CO

BRAF-mutant unresectable or
metastatic melanoma (+encorafenib)

application submitted
www.arraybiopharma.com

BMS-986205
(IDO1 inhibitor)

Bristol-Myers Squibb
Princeton, NJ

advanced melanoma (+nivolumab)

Phase III
www.bms.com

<u>Skin Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Cavatak® coxsackievirus ORPHAN DRUG	Viralytics Sydney, Australia	advanced melanoma (+pembrolizumab), advanced melanoma (+ipilimumab)	Phase I www.viralytics.com
cemiplimab (anti-PD-1 mAb)	Regeneron Pharmaceuticals Tarrytown, NY Sanofi Bridgewater, NJ	basal cell carcinoma	Phase II www.sanofi.com
CLL442	Novartis Oncology East Hanover, NJ	cutaneous squamous cell carcinoma in situ	Phase I/II www.novartis.com
CMP-001 (TLR9 agonist cancer vaccine)	Checkmate Pharmaceuticals Cambridge, MA	malignant melanoma (+pembrolizumab)	Phase I www.checkmatepharma.com
Cotellic® cobimetinib ORPHAN DRUG	Genentech South San Francisco, CA	1L BRAF-mutant metastatic melanoma (+ atezolizumab + vemurafenib), 1L BRAF wild type metastatic melanoma (+atezolizumab)	Phase III www.gene.com
		2L BRAF wild type metastatic melanoma (+atezolizumab), melanoma (+atezolizumab +vemurafenib)	Phase I www.gene.com
daromun (darleukin/fibromun) (L19IL2-L19TNF) (recombinant fusion proteins)	Philogen Sovicille, Italy	malignant melanoma	Phase III www.philogen.com

<u>Skin Cancer</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
encorafenib (BRAF inhibitor)	Array BioPharma Boulder, CO	malignant melanoma	application submitted www.arraybiopharma.com
entinostat (HDAC inhibitor)	Syndax Pharmaceuticals Waltham, MA	melanoma (+pembrolizumab)	Phase II www.syndax.com
epacadostat (IDO1 inhibitor)	Incyte Wilmington, DE	melanoma	Phase I www.incyte.com
evofosfamide	Molecular Templates Austin, TX	melanoma (+ipilimumab)	Phase I www.mtem.com
GR-MD-02 (galectin 3 inhibitor)	Galectin Therapeutics Norcross, GA	melanoma (+ipilimumab), melanoma (+pembrolizumab)	Phase I www.galectintherapeutics.com
GRN-1201 (cancer peptide vaccine)	BrightPath Biotherapeutics Tokyo, Japan	melanoma	Phase I www.brightpathbio.com
GSK3377794 (NY-ESO-autologous engineered T-cell receptor therapy)	GlaxoSmithKline Research Triangle Park, NC	melanoma	Phase II www.gsk.com
HBI-8000 (HDAC inhibitor)	HUYA Bioscience San Diego, CA	melanoma	Phase I/II www.huyabio.com

Skin Cancer
Product Name

Sponsor

Indication

Development Phase

HF10 (canerpturev, oncolytic virus therapy)	Takara Bio USA Mountain View, CA	malignant melanoma	Phase II www.takara-bio.com
Imfinzi® durvalumab	MedImmune Gaithersburg, MD	melanoma (+dabrafenib +trametinib)	Phase II www.medimmune.com
Imlygic® talimogene laherparepvec (oncolytic virus therapy)	Amgen Thousand Oaks, CA	mid- to late-stage metastatic melanoma (+pembrolizumab)	Phase III www.amgen.com
Imprime PGG® immunostimulant PGG glucan	Biothera Pharmaceuticals Eagan, MN	metastatic melanoma (+pembrolizumab)	Phase I/II www.biothera.com
indoximod (IDO inhibitor) ORPHAN DRUG	NewLink Genetics Ames, IA	advanced melanoma (+PD-1 inhibitors)	Phase II/III www.newlinkgenetics.com
IPI-549 (PI3K-gamma inhibitor)	Infinity Pharmaceuticals Cambridge, MA	melanoma (+nivolumab)	Phase I www.infi.com
LAG525 (anti-LAG3 mAb)	Novartis Oncology East Hanover, NJ	melanoma (+PDR001)	Phase I/II www.novartis.com
LN-144 (tumor-infiltrating lymphocyte) ORPHAN DRUG	Iovance Biotherapeutics San Carlos, CA	malignant melanoma (Fast Track)	Phase II www.iovance.com

Skin Cancer <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
MAGE-A10 TCR (T-cell receptor therapy)	Adaptimmune Philadelphia, PA	melanoma	Phase I/II www.adaptimmune.com
MORAb-004 (ontuxizumab)	Eisai Woodcliff Lake, NJ	melanoma	Phase II www.eisai.com
NanoPac® paclitaxel nanoformulation	NanOlogy Fort Worth, TX	cutaneous metastases	Phase II www.nanology.us
NANT merkel cell cancer vaccine (activated natural killer cells - haNK for infusion) ORPHAN DRUG	NantKwest Culver City, CA	merkel cell carcinoma	Phase II www.nantkwest.com
NEO-PV-01 (personal neoantigen vaccine)	Neon Therapeutics Cambridge, MA	melanoma	Phase I www.neontherapeutics.com
ONCOS-102 (oncolytic virus therapy)	Targovax Oslo, Norway	advanced or unresectable melanoma progressing after PD1 blockade	Phase I www.targovax.com
OT-101 (TGF-beta antisense)	Autotelic Costa Mesa, CA Oncotelic Agoura Hills, CA	melanoma	Phase II/III www.oncotelic.com
patidegib (hedgehog signaling inhibitor)	PellePharm San Francisco, CA	basal cell carcinoma	Phase II www.pellepharm.com

Skin Cancer
Product Name

Sponsor

Indication

Development Phase

PV-10 (rose bengal sodium) ORPHAN DRUG	Provectus Biopharmaceuticals Knoxville, TN	locally advanced cutaneous melanoma	Phase III www.provectusbio.com
		metastatic melanoma (+pembrolizumab)	Phase I www.provectusbio.com
REM-001 (rostoporfin) (photosensitizer)	Adgero Biopharmaceuticals Princeton, NJ	locally advanced basal cell carcinoma	Phase I www.adgerobiopharm.com
Resimmune® anti-CD3 immunotoxin	Angimmune Rockville, MD	malignant melanoma	Phase I/II www.angimmune.com
SD-101 (TLR9 agonist)	Dynavax Technologies Berkeley, CA	malignant melanoma (+pembrolizumab)	Phase I/II www.dynavax.com
seviprotimut-L (POL-103A) ORPHAN DRUG	Polynoma San Diego, CA	malignant melanoma	Phase III www.polynoma.com
spartalizumab (PDR001) (anti-PD-1 mAb)	Novartis Oncology East Hanover, NJ	malignant melanoma (+dabrafenib +trametinib)	Phase III www.novartis.com
		malignant melanoma	Phase II www.novartis.com
SUBA-itraconazole (hedgehog pathway inhibitor)	HedgePath Pharmaceuticals Tampa, FL	basal cell carcinoma nevus syndrome	Phase II www.hedgepathpharma.com

Skin Cancer

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
tavokinogene telsaplasimid (interleukin-12 gene therapy) ORPHAN DRUG	Oncosec Medical San Diego, CA	metastatic melanoma (Fast Track), advanced metastatic melanoma (+pembrolizumab)	Phase II www.oncosec.com
telomelysin (oncolytic virus immunotherapy)	Oncolys Biopharma Tokyo, Japan	metastatic melanoma	Phase II www.oncolys.com
tilsotolimod (IMO-2125) (TLR9 agonist) ORPHAN DRUG	Idera Pharmaceuticals Cambridge, MA	metastatic melanoma (+ipilimumab) (Fast Track)	Phase III www.iderapharma.com
		metastatic melanoma (+ipilimumab or pembrolizumab)	Phase I/II www.iderapharma.com
TLPLDC (tumor lysate particle-loaded dendritic cell vaccine)	Elios Therapeutics Austin, TX	metastatic melanoma	Phase II www.eliotherapeutics.com
X4P-001-IO (CXCR4 inhibitor)	X4 Pharmaceuticals Cambridge, MA	melanoma	Phase I/II www.4xpharma.com

Solid Tumors

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ABBV-085 (antibody-drug conjugate)	AbbVie North Chicago, IL	solid tumors	Phase I www.abbvie.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

ABBV-176
(antibody-drug conjugate)

AbbVie
North Chicago, IL

solid tumors

Phase I
www.abbvie.com

ABBV-181
(immunotherapeutic)

AbbVie
North Chicago, IL

solid tumors

Phase I
www.abbvie.com

ABBV-321

AbbVie
North Chicago, IL

advanced solid tumors

Phase I
www.abbvie.com

ABBV-368
(intravenous immunotherapeutic)

AbbVie
North Chicago, IL

solid tumors

Phase I
www.abbvie.com

ABBV-428
(anti-CD40 bispecific antibody)

AbbVie
North Chicago, IL

solid tumors

Phase I
www.abbvie.com

ABBV-621
(TRAIL receptor agonist)

AbbVie
North Chicago, IL

solid tumors

Phase I
www.abbvie.com

ABBV-927
(immunotherapeutic)

AbbVie
North Chicago, IL

solid tumors

Phase I
www.abbvie.com

abexinostat
(HDAC inhibitor)

Xynomic Pharmaceuticals
Cheyenne, WY

solid tumors (+pembrolizumab)

Phase II
www.xynomicpharma.com

ABT-165
(VEGF and DLL4 inhibitor)

AbbVie
North Chicago, IL

late-stage solid tumors

Phase I
www.abbvie.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Actimmune® interferon gamma-1b	Horizon Pharma Lake Forest, IL	solid tumors (+nivolumab)	Phase I www.horizonpharma.com
ADU-S100 (MIW815) (STING pathway activator)	Aduro Biotech Berkeley, CA Novartis Oncology East Hanover, NJ	solid tumors (+ipilimumab), solid tumors (monotherapy)	Phase I www.adoro.com
ADXS-HER2 (cancer immunotherapy)	Advaxis Princeton, NJ	HER2-expressing solid tumors	Phase I/II www.advaxis.com
AEB1102 (pegzilarginase)	Aeglea Biotherapeutics Austin, TX	advanced solid tumors	Phase I www.aegleabio.com
AG-270 (MAT2A inhibitor)	Agios Pharmaceuticals Cambridge, MA	solid tumors	Phase I www.agios.com
AGEN1884 (CTLA-4 antagonist)	Agenus Lexington, MA	advanced solid tumors	Phase I www.agenus.com
AGEN2034 (PD-1 protein inhibitor)	Agenus Lexington, MA	solid tumors	Phase I/II www.agenus.com
ALKS 4230 (fusion protein and immuno- therapeutic based on IL-2)	Alkermes Waltham, MA	solid tumors	Phase I www.alkermes.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ALRN-6924 (MDM2/MDMX antagonist)	Aileron Therapeutics Cambridge, MA	solid tumors	Phase I www.aileronrx.com
ALT-803 (IL-15 superagonist protein complex)	Altor BioScience Miramar, FL	advanced solid tumors	Phase I www.altorbioscience.com
ALX148 (CD47 checkpoint inhibitor)	Alexo Therapeutics South San Francisco, CA	solid tumors	Phase I www.alexotherapeutics.com
AM0010 (PEG-IL-10)	ARMO Biosciences Redwood City, CA	solid tumors	Phase I www.armobio.com
amcasertib (BBI503) (cancer cell [stemness] inhibitor)	Boston Biomedical Cambridge, MA	solid tumors (monotherapy)	Phase II www.bostonbiomedical.com
		solid tumors (combination therapy)	Phase I www.bostonbiomedical.com
AMG 337 (c-Met inhibitor)	NantPharma Culver City, CA	advanced or metastatic solid tumors	Phase II www.nantpharma.com
Ampligen® rintatolimod	Hemispherx Biopharma Philadelphia, PA	solid tumors	Phase I/II www.hemispherx.net
andecaliximab (MMP9 inhibitor mAb)	Gilead Sciences Foster City, CA	solid tumors	Phase I www.gilead.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

Andes-1537
(antisense oligonucleotide)

Andes Biotechnologies
Santiago, Chile

advanced unresectable solid tumors

Phase I
www.andesbio.com

anetumab ravtansine
(antibody-drug conjugate)

Bayer Pharmaceuticals
Whippany, NJ

mesothelin-expressing solid tumors

Phase I
www.pharma.bayer.com

anti-CD27 agonist

Aduro Biotech
Berkeley, CA
Merck
Kenilworth, NJ

advanced solid tumors
(+/-pembrolizumab)

Phase I
www.aduro.com
www.merck.com

APG-115
(MDM2-P53 inhibitor)

Ascentage Pharma
Rockville, MD

solid tumors

Phase I
en.ascentagepharma.com

APG-1252
(Bcl-2/Bcl-xl inhibitor)

Ascentage Pharma
Rockville, MD

solid tumors

Phase I
en.ascentagepharma.com

APG-1387
(IAP protein inhibitor)

Ascentage Pharma
Rockville, MD

solid tumors

Phase I
en.ascentagepharma.com

APN401
(siRNA-transfected peripheral
blood mononuclear cells)

Apeiron Biologics
Vienna, Austria

solid tumors

Phase II
www.apeiron-biologics.com

APS001F
(cytosine deaminase gene therapy)

Anaeropharma Science
Tokyo, Japan

solid tumors

Phase I/II
www.anaeropharma.co.jp

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

APX005M
(CD40 agonistic antibody)

Apexigen
San Carlos, CA

solid tumors

Phase I
www.apexigen.com

APX3330
(small molecule quinone derivative)

Apexian Pharmaceuticals
Indianapolis, IN

advanced solid tumors

Phase I
www.apexianpharma.com

ARQ 751
(pan-AKT inhibitor)

ArQule
Burlington, MA

solid tumors

Phase I
www.arqule.com

ARRY 382
(CSF-1R kinase inhibitor)

Array BioPharma
Boulder, CO

advanced solid tumors
(combination therapy)

Phase II
www.arraybiopharma.com

ASN002
(JAK/Syk inhibitor)

Asana BioSciences
Lawrenceville, NJ

solid tumors

Phase I/II
www.asanabiosciences.com

ASN003
(B-Raf/PI3K pathway inhibitor)

Asana BioSciences
Lawrenceville, NJ

solid tumors

Phase I
www.asanabiosciences.com

ASN007
(ERK 1/2 inhibitor)

Asana BioSciences
Lawrenceville, NJ

solid tumors

Phase I
www.asanabiosciences.com

ASP8374 (PTZ-201)
(TIGIT antagonist)

Astellas
Northbrook, IL
Potenza Therapeutics
Cambridge, MA

solid tumors

Phase I
www.astellas.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
AST-008 (TLR9 agonist)	Exicure Skokie, IL	solid tumors	Phase I www.exicuretx.com
ASTX660 (IAP inhibitor)	Astex Pharmaceuticals Pleasanton, CA	solid tumors	Phase II www.astx.com
ATI-1123 (docetaxel liposomal)	Cytori Therapeutics San Diego, CA	solid tumors	Phase I www.cytori.com
AVB-S6-500 (GAS6-AXL pathway inhibitor)	Aravive Biologics Houston, TX	solid tumors	Phase I www.aravive.com
AVID100 IV (antibody-drug conjugate)	Formation Biologics Austin, TX	advanced solid tumors	Phase I www.formationbiologics.com
AvidinOx (177Lu-ST2210)	Alfasigma Bologna, Italy	inoperable solid tumors	Phase I www.alfasigma.com
AZD0156 (ATM kinase inhibitor)	AstraZeneca Wilmington, DE	solid tumors	Phase I www.astrazeneca.com
AZD1775 (WEE1 kinase inhibitor)	AstraZeneca Wilmington, DE	advanced solid tumors	Phase I www.astrazeneca.com
AZD2811 (aurora B kinase inhibitor)	AstraZeneca Wilmington, DE	solid tumors	Phase I www.astrazeneca.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

AZD4547
(FGFR tyrosine kinase inhibitor)

AstraZeneca
Wilmington, DE

solid tumors

Phase II
www.astrazeneca.com

AZD4635
(adenosine A2A receptor antagonist)

AstraZeneca
Wilmington, DE

solid tumors

Phase I
www.astrazeneca.com

AZD4785 (IONIS-KRAS-2.5RX)
(KRAS protein inhibitor)

AstraZeneca
Wilmington, DE
Ionis Pharmaceuticals
Carlsbad, CA

solid tumors

Phase I
www.astrazeneca.com
www.ionispharma.com

AZD5153
(BRD4 protein inhibitor)

AstraZeneca
Wilmington, DE

solid tumors

Phase I
www.astrazeneca.com

AZD6738
(ATR protein inhibitor)

AstraZeneca
Wilmington, DE

solid tumors

Phase I
www.astrazeneca.com

AZD8186
(PI3 protein inhibitor)

AstraZeneca
Wilmington, DE

solid tumors

Phase I
www.astrazeneca.com

Bavencio®
avelumab
(anti-PD-L1 inhibitor)

EMD Serono
Rockland, MA
Pfizer
New York, NY

solid tumors (+talazopanib)

Phase I
www.emdserono.com
www.pfizer.com

BAY1436032
(mutant-IDH1 inhibitor)

Bayer Pharmaceuticals
Whippany, NJ

IDH1-mutant solid tumors

Phase I
www.pharma.bayer.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
BAY1895344 (ATR protein inhibitor)	Bayer Pharmaceuticals Whippany, NJ	solid tumors	Phase I www.pharma.bayer.com
BDB001 (TLR agonist)	Birdie Biopharmaceuticals Beijing, China	solid tumors (+/-pembrolizumab)	Phase I
Beleodaq® belinostat	Spectrum Pharmaceuticals Henderson, NV	UGT1A1 wild type gene solid tumors, UGT1A1*28 genotype solid tumors	Phase I www.sppirx.com
BI 754091 (anti-PD-1 mAb)	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	solid tumors	Phase I www.boehringer-ingelheim.com
BI 754111 (anti-LAG3 mAb)	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	solid tumors	Phase I www.boehringer-ingelheim.com
BI 836880 (VEGF/Ang2 bispecific nanobody)	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	solid tumors	Phase I www.boehringer-ingelheim.com
BI 891065 (SMAC mimetic)	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	solid tumors	Phase I www.boehringer-ingelheim.com
BI 894999 (BET protein inhibitor)	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	solid tumors	Phase I www.boehringer-ingelheim.com
birinapant (SMAC mimetic)	Medivir Stockholm, Sweden	solid tumors (+pembrolizumab)	Phase I/II www.medivir.se

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
BLU-667 (RET inhibitor)	Blueprint Medicines Cambridge, MA	solid tumors	Phase I www.blueprintmedicines.com
BLZ945 (CSF-1R antagonist)	Novartis Oncology East Hanover, NJ	advanced solid tumors	Phase I www.novartis.com
BMS-813160 (CCR2/5 dual antagonist)	Bristol-Myers Squibb Princeton, NJ	advanced solid tumors	Phase I www.bms.com
BMS-986148 (mesothelin directed antibody drug conjugate)	Bristol-Myers Squibb Princeton, NJ	advanced solid tumors (+nivolumab)	Phase I www.bms.com
BMS-986156 (anti-GITR mAb)	Bristol-Myers Squibb Princeton, NJ	solid tumors	Phase I/II www.bms.com
BMS-986158 (BET inhibitor)	Bristol-Myers Squibb Princeton, NJ	solid tumors	Phase I www.bms.com
BMS-986178 (anti-OX40 antibody)	Bristol-Myers Squibb Princeton, NJ	solid tumors	Phase I www.bms.com
BMS-986179 (anti-CD73 mAb)	Bristol-Myers Squibb Princeton, NJ	solid tumors	Phase I www.bms.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
BMS-986205 (IDO1 inhibitor)	Bristol-Myers Squibb Princeton, NJ	solid tumors (+nivolumab), solid tumors (+nivolumab +ipilimumab)	Phase I www.bms.com
BMS-986207 (anti-TIGHT mAb)	Bristol-Myers Squibb Princeton, NJ	solid tumors (+nivolumab)	Phase I www.bms.com
BMS-986218 (anti-CTLA-4 mAb)	Bristol-Myers Squibb Princeton, NJ	solid tumors	Phase I www.bms.com
BMS-986226 (anti-ICOS mAb)	Bristol-Myers Squibb Princeton, NJ	solid tumors	Phase I www.bms.com
BMS-986242	Bristol-Myers Squibb Princeton, NJ	solid tumors	Phase I www.bms.com
BMS-986249 (anti-CTLA- 4 probody)	Bristol-Myers Squibb Princeton, NJ	solid tumors	Phase I www.bms.com
BMS-986253 (HuMax-IL8 mAb)	Bristol-Myers Squibb Princeton, NJ	solid tumors (+nivolumab)	Phase I/II www.bms.com
BMS-986258 (immunotherapy)	Bristol-Myers Squibb Princeton, NJ	advanced solid tumors (+/-nivolumab)	Phase I www.bms.com
BMS-986299 (immunotherapy)	Bristol-Myers Squibb Princeton, NJ	advanced solid tumors (+/-nivolumab +ipilimumab)	Phase I www.bms.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
BN-brachyury cancer vaccine (prime-boost immunotherapy)	Bavarian Nordic Morrisville, NC National Cancer Institute Bethesda, MD	solid tumors	Phase I www.bavarian-nordic.com
BOS172722 (TTK protein inhibitor)	Boston Pharmaceuticals Cambridge, MA	solid tumors	Phase I www.bostonpharmaceuticals.com
BPM31510 (cancer cell metabolism restorer)	Berg Framingham, MA	solid tumors	Phase I www.berghealth.com
briciclib (cyclin D1 inhibitor)	Onconova Therapeutics Newtown, PA	solid tumors	Phase I www.onconova.com
BSK01™ (tumor-associated peptide antigen pulsed dendritic cell vaccine)	Kiromic Houston, TX	relapsed/refractory solid tumors	Phase I/II www.kiromic.com
BTP-114 (DNA cross linking agent)	Placon Therapeutics Cambridge, MA	solid tumors	Phase I www.placontx.com
BTRC4017A	Genentech South San Francisco, CA	HER2-expressing solid tumors	Phase I www.gene.com
BVD-523 (ERK inhibitor)	BioMed Valley Discoveries Kansas City, MO	advanced solid tumors	Phase I/II www.biomed-valley.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
BXCL701 (talabostat) (DPP 8/9 & FAP Inhibitor)	BioXcel Therapeutics Branford, CT	solid tumors	Phase I www.bioxcel.com
BXQ-350 (apoptosis stimulant)	Bexion Pharmaceuticals Covington, KY	solid tumors	Phase I www.bexionpharma.com
C188-9 (STAT3 inhibitor)	StemMed Houston, TX	solid tumors	Phase I www.stemmedcancer.com
CA-170 (PD-L1 checkpoint inhibitor)	Curis Lexington, MA	solid tumors	Phase I www.curis.com
CAB-AXL-ADC (anti-AXL antibody-drug conjugate)	BioAtla San Diego, CA	solid tumors	Phase I/II www.bioatla.com
CAB-ROR2-ADC (anti-ROR2 antibody-drug conjugate)	BioAtla San Diego, CA	solid tumors	Phase I/II www.bioatla.com
cabiralizumab (anti-CSF1R)	Five Prime Therapeutics South San Francisco, CA Bristol-Myers Squibb Princeton, NJ	solid tumors (+nivolumab)	Phase II www.fiveprime.com
Cabometyx™ cabozantinib	Exelixis South San Francisco, CA	advanced solid tumors (+atezolizumab)	Phase I www.exelixis.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

camptothecin (CRLX101)	BlueLink Pharmaceuticals Ames, IA	advanced solid tumors	Phase I
CB-5083 (p97 inhibitor)	Cleave Biosciences Burlingame, CA	solid tumors	Phase I www.cleavebio.com
CB-839 (glutaminase inhibitor)	Calithera Biosciences South San Francisco, CA	solid tumors (+nivolumab)	Phase II www.calithera.com
CBLC137 (curaxin)	Incuron Buffalo, NY	solid tumors	Phase I www.incuron.com
CBP501 (peptide mimetic)	CanBas Numazu, Japan	advanced solid tumors	Phase I www.canbas.co.jp
CBT-101 (c-Met inhibitor)	CBT Pharmaceuticals Pleasanton, CA	solid tumors	Phase I www.cbtpharma.com
CBT-101 + CBT-501 (c-Met + anti-PD-1)	CBT Pharmaceuticals Pleasanton, CA	solid tumors	Phase I www.cbtpharma.com
CBT-501 (genolimzumab) (anti-PD-1 mAb)	CBT Pharmaceuticals Pleasanton, CA	solid tumors	Phase I www.cbtpharma.com
CBT-501 + CBT-502 (anti-PD-1 + anti-PD-L1)	CBT Pharmaceuticals Pleasanton, CA	solid tumors	Phase I www.cbtpharma.com

<u>Solid Tumors</u> <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
CC-90002 (anti-CD47 antibody)	Celgene Summit, NJ	solid tumors	Phase I www.celgene.com
CC-90010 (BET inhibitor)	Celgene Summit, NJ	solid tumors	Phase I www.celgene.com
CC-90011 (LSD1 inhibitor)	Celgene Summit, NJ	solid tumors	Phase I www.celgene.com
CDX-0158 (anti-KIT IgG1 antibody-drug conjugate)	Celldex Therapeutics Hampton, NJ	solid tumors	Phase I www.celldex.com
CDX-1140 (anti-CD40 mAb)	Celldex Therapeutics Hampton, NJ	advanced solid tumors	Phase I www.celldex.com
ceramide nanoliposome	Keystone Nano State College, PA	solid tumors	Phase I/II www.keystonenano.com
CGX1321	Curegenix Burlingame, CA	solid tumors	Phase I
CK-301 (anti-PD-L1 mAb)	Checkpoint Therapeutics New York, NY	solid tumors	Phase I www.checkpointtx.com
CMB305 (antigen-specific prime boost)	Immune Design Seattle, WA	NY-ESO-1-expressing solid tumors	Phase II www.immunedesign.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
CNV-NT (<i>Clostridium novyi</i> -NT)	BioMed Valley Discoveries Kansas City, MO	solid tumors	Phase I www.biomed-valley.com
COH29 (ribonucleoside reductase inhibitor)	Novonco Therapeutics Los Angeles, CA	solid tumors	Phase I www.novoncotherapeutics.com
CPX-POM (ciclopirox prodrug)	CicloMed Kansas City, MO	advanced solid tumors	Phase I www.ciclomed.com
CRLX301 (docetaxel)	BlueLink Pharmaceuticals Ames, IA	solid tumors	Phase I/II
Crolibulin™ vascular disrupting agent	Cytovia Englewood Cliffs, NJ	solid tumors	Phase I/II www.immunepharma.com
CX-072 (PD-L1 targeting probody)	CytomX Therapeutics South San Francisco, CA	solid tumors	Phase I/II www.cytomix.com
CX-2009 (CD166-targeting probody- drug conjugate)	CytomX Therapeutics South San Francisco, CA	solid tumors	Phase I/II www.cytomx.com
CYAD-01 (NKG2D CAR-T cell therapy)	Celyad New York, NY	solid tumors	Phase I www.celyad.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
CYC065 (CDK2/CDK9 inhibitor)	Cyclacel Pharmaceuticals Berkeley Heights, NJ	solid tumors	Phase I www.cyclacel.com
CYT-6091 (nanotherapy comprised of cAU particles, tumor necrosis factor, PEG-Thiol)	CytImmune Sciences Rockville, MD	solid tumors	Phase I completed www.cytimmune.com
CZ48 (DNA topoisomerase I inhibitor)	Cao Pharmaceuticals Webster, TX NMT Pharmaceuticals Webster, TX	solid tumors	Phase I www.caopharmaceuticals.com
DCC-2618 (PDGFR-alpha kinase switch control inhibitor)	Deciphera Pharmaceuticals Waltham, MA	solid tumors	Phase I www.deciphera.com
DCC-3014 (CSF1R inhibitor)	Deciphera Pharmaceuticals Waltham, MA	solid tumors	Phase I www.deciphera.com
DCVax®-Direct cancer vaccine	Northwest Biotherapeutics Bethesda, MD	solid tumors	Phase I/II www.nwbio.com
derazantinib (ARQ 087) (FGFR antagonist)	ArQule Burlington, MA Basilea Pharmaceutica Basel, Switzerland	solid tumors	Phase I www.arqule.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

DFP 13318
(DNA topoisomerase I inhibitor)

Delta-Fly Pharma
Tokushima, Japan

solid tumors

Phase I
www.delta-flypharma.co.jp

DSP-0509
(TLR-7 agonist)

Sumitomo Dainippon Pharma
Osaka, Japan

solid tumors

Phase I
www.ds-pharma.com

DSP-7888
(adegramotide/nelatimotide)

Sumitomo Dainippon Pharma
Osaka, Japan

solid tumors

Phase I
www.ds-pharma.com

eFT508
(MKNK1/MKNK2 protein inhibitor)

eFFECTOR Therapeutics
San Diego, CA

advanced solid tumors

Phase I/II
www.effector.com

Elenagen™
p62 anti-cancer DNA Vaccine

CureLab Oncology
Boston, MA

solid tumors

Phase I/II completed
www.curelaboncology.com

emactuzumab (RG7155)
(mCS- receptor antagonist)

Roche/Genentech
South San Francisco, CA

solid tumors (+atezolizumab),
solid tumors (+selicrelumab)

Phase I
www.gene.com

enadenotucirev
(oncolytic virus therapeutic)

PsiOxus Therapeutics
Plymouth Meeting, PA

solid tumors (+nivolumab)

Phase I
www.psioxus.com

enoblituzumab
(anti-B7-H3 IgG1/κ mAb)

MacroGenics
Rockville, MD

solid tumors (+anti-PD-1)

Phase II
www.macrogenics.com

entolimod
(TLR5 agonist)

Cleveland BioLabs
Buffalo, NY

advanced solid tumors

Phase I
www.cbiolabs.com

Solid Tumors

<u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
entrectinib (panTRK/ROS1 inhibitor) ORPHAN DRUG	Ignyta San Diego, CA	NTRK-positive extracranial solid tumors	Phase I www.ignyta.com
ERY974 (anti-glypican3/CD3 bispecific antibody)	Chugai Pharmaceutical Tokyo, Japan	advanced solid tumors	Phase I www.chugai-pharm.co.jp
ETC-1922159 (PORCN protein inhibitor)	Biomedical Sciences Institute Singapore D3 (Drug Product and Development) Singapore	solid tumors	Phase I www.a-star.edu.sg/d3
FATE-NK100 (natural killer cell stimulant)	Fate Therapeutics La Jolla, CA	solid tumors (combination therapy)	Phase I www.fatetherapeutics.com
FAZ053 (anti-PD-L1 mAb)	Novartis Oncology East Hanover, NJ	advanced solid tumors (+/- PDR001)	Phase I www.novartis.com
fenretinide intravenous	CerRx Lubbock, TX	solid tumors (adults)	Phase II www.cerrx.com
		mixed tumors (pediatric)	Phase I www.cerx.com
FF-10502-01 (DNA synthesis inhibitor)	FUJIFILM Pharmaceuticals U.S.A. Cambridge, MA	solid tumors	Phase I www.fujifilmusa.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
FF-21101 (Y-90 radiolabeled mAb)	FUJIFILM Pharmaceuticals U.S.A. Cambridge, MA	solid tumors	Phase I www.fujifilmusa.com
FGF401 (FGFR4 antagonist)	Novartis Oncology East Hanover, NJ	solid tumors	Phase I/II www.novartis.com
fimepinostat (CUDC-907) (HDAC/PI3K inhibitor)	Curis Lexington, MA	solid tumors	Phase I www.curis.com
FLX475 (CCR4 receptor antagonist)	FLX Bio South San Francisco, CA	solid tumors	Phase I www.flxbio.com
FPA150 (B7-H4 antibody)	Five Prime Therapeutics South San Francisco, CA	solid tumors	Phase I www.fiveprime.com
fruquintinib (VEGFR inhibitor)	Hutchison MediPharma Shanghai, China	advanced solid tumors	Phase I www.hmpglobal.com
galinpepimut-S (anti-WT1 peptide cancer vaccine)	Sellas Life Sciences New York, NY	solid tumors (+pembrolizumab)	Phase I www.sellaslifesciences.com
galunisertib (TGF-beta 1 inhibitor)	Eli Lilly Indianapolis, IN	advanced refractory solid tumors (+nivolumab)	Phase I/II www.lilly.com
GDC-0077 (RG6114) (PI3K inhibitor)	Genentech South San Francisco, CA	solid tumors	Phase I www.gene.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
GDC-0575 (RG7741) (ChK1 inhibitor)	Array BioPharma Boulder, CO Genentech South San Francisco, CA	solid tumors	Phase I www.gene.com
GDC-5573 (RG6185) (RAF inhibitor)	Genentech South San Francisco, CA	solid tumors	Phase I www.gene.com
glesatinib (MGCD265) (multi-kinase inhibitor)	Mirati Therapeutics San Diego, CA	advanced solid tumors	Phase I www.mirati.com
GL-ONC1 (oncolytic virus therapy)	Genelux San Diego, CA	solid tumors	Phase II www.genelux.com
GMI-1359 (E-selectin/CXCR4 inhibitor)	GlycoMimetics Rockville, MD	solid tumors	Phase I www.glycomimetics.com
GS-5829 (BET inhibitor)	Gilead Sciences Foster City, CA	solid tumors	Phase I www.gilead.com
GSK1795091 (TLR4 agonist)	GlaxoSmithKline Research Triangle Park, NC	solid tumors	Phase I www.gsk.com
GSK3174998 (anti-OX40 mAb)	GlaxoSmithKline Research Triangle Park, NC	solid tumors	Phase I www.gsk.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
GSK3326595 (PRMT5 inhibitor)	GlaxoSmithKline Research Triangle Park, NC	solid tumors	Phase I www.gsk.com
GSK3359609 (induced T-cell costimulator agonist antibody)	GlaxoSmithKline Research Triangle Park, NC	solid tumors	Phase I www.gsk.com
GSK525762 (molibresib) (BET inhibitor)	GlaxoSmithKline Research Triangle Park, NC	solid tumors	Phase I www.gsk.com
guadecitabine (SGI-110) (DNMT1 inhibitor)	Astex Pharmaceuticals Pleasanton, CA	solid tumors	Phase II www.astx.com
GWN323 (anti-C+GITR mAb)	Novartis Oncology East Hanover, NJ	solid tumors (+PDR001)	Phase I www.novartis.com
haNK for infusion (nature killer cells)	NantKwest Culver City, CA	solid tumors	Phase I www.nantkwest.com
HDM201 (p53-HDM2 inhibitor)	Novartis Oncology East Hanover, NJ	solid tumors	Phase I www.novartis.com
HTI-1066 (antibody-drug conjugate)	Jiangsu Hengrui Medicine Jiangsu, China	advanced solid tumors	Phase I www.hrs.com.cn

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Hu5F9-G4 (CD47 antigen inhibitor mAb)	Forty Seven Menlo Park, CA	solid tumors	Phase I www.fortyseveninc.com
HuMax-AXL-ADC (anti-AXL antibody-drug conjugate)	Genmab Princeton, NJ Seattle Genetics Bothell, WA	solid tumors	Phase I/II www.seattlegenetics.com
IDO inhibitor(2)	Bristol-Myers Squibb Princeton, NJ	solid tumors	Phase I www.bms.com
IM156 (OXPHOS inhibitor)	ImmunoMet Houston, TX	solid tumors	Phase I www.immunomet.com
IMA101 (adoptive T-cell therapy)	Immatics US Houston, TX	solid tumors	Phase I www.immatics.com
IMA202 (adoptive T-cell therapy)	Immatics US Houston, TX	solid tumors	Phase I www.immatics.com
Imbruvica® ibrutinib	Janssen Research & Development Raritan, NJ Pharmacyclics Sunnyvale, CA	solid tumors	Phase II www.janssen.com www.pharmacyclics.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

Imfinzi®
durvalumab

MedImmune
Gaithersburg, MD

solid tumors (+MEDI0680),
solid tumors (monotherapy)

Phase II
www.medimmune.com

solid tumors (+AZD1775),
solid tumors (+MEDI0562),
solid tumors (+MEDI9197),
solid tumors (+monalizumab),
solid tumors (+oleclumab),
solid tumors (+selumetinib),
solid tumors (+tremelimumab)
solid tumors (+AZD9150 +chemotherapy)

Phase I
www.medimmune.com

Imlygic®
talimogene laherparepvec

Amgen
Thousand Oaks, CA

pediatric non-CNS tumors

Phase I
www.amgen.com

IMX-110
(STAT3/NF-kB/poly-tyrosine kinase
inhibitor, curcumin and low-dose
doxorubicin nanotherapy)

Immix Biopharma
Los Angeles, CA

solid tumors

Phase I/II
www.immixbio.com

INCAGN1876
(anti-GITR antibody)

Agenus
Lexington, MA
Incyte
Wilmington, DE

solid tumors

Phase I/II
www.agenus.com
www.incyte.com

INCAGN1949
(anti-OX40 antibody)

Agenus
Lexington, MA
Incyte
Wilmington, DE

solid tumors

Phase I/II
www.agenus.com
www.incyte.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
INCB01158 (arginase inhibitor)	Calithera Biosciences South San Francisco, CA Incyte Wilmington, DE	solid tumors (+checkpoint inhibitor), solid tumors (+chemotherapy), solid tumors (+epacadostat)	Phase I www.calithera.com
INO-1400 (hTERT DNA cancer vaccine)	Inovio Pharmaceuticals Plymouth Meeting, PA	solid tumors	Phase I www.inovio.com
INT230-6 (cisplatin-based intratumoral cancer vaccine)	Intensity Therapeutics Westport, CT	solid tumors	Phase I/II www.intensitytherapeutics.com
IPI-549 (PI3K-gamma inhibitor)	Infinity Pharmaceuticals Cambridge, MA	solid tumors (monotherapy), solid tumors (+nivolumab)	Phase I www.infi.com
IT-139 (cancer resistance pathway inhibitor)	Intezyne Tampa, FL	solid tumors	Phase I www.intezyne.com
IT-141 (TOP-1 inhibitor)	Intezyne Tampa, FL	solid tumors	Phase I www.intezyne.com
JNJ 63723283 (anti-PD-1 mAb)	Janssen Research & Development Raritan, NJ	advanced solid tumors	Phase I www.janssen.com
JNJ-64457107 (ADC-1013) (IgG1 antibody immunotherapy)	Janssen Research & Development Raritan, NJ	solid tumors	Phase I www.janssen.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

JTX-2011
(ICOS agonist)

Jounce Therapeutics
Cambridge, MA

solid tumors

Phase II
www.jouncetx.com

KA2507
(HDAC6-selective inhibitor)

Karus Therapeutics
Oxfordshire, United Kingdom

solid tumors

Phase I
www.karustherapeutics.com

Keytruda®
pembrolizumab

Merck
Kenilworth, NJ

advanced solid tumors

Phase II
www.merck.com

KHK2455
(IDO-1 inhibitor)

Kyowa Kirin
Princeton, NJ

solid tumors

Phase I
www.kyowa-kirin.com

KITE-718
(MAGE A3/A6 T-cell therapy)

Kite Pharma
Santa Monica, CA

solid tumors

Phase I
www.kitepharma.com

KN035
(anti-PD-L1 mAb)

Alphamab
Suzhou, China
3D Medicines
Shanghai, China

solid tumors

Phase I
www.3dmedcare.com

KO-947
(ERK inhibitor)

Kura Oncology
San Diego, CA

solid tumors

Phase I
www.kuraoncology.com

KPT-9274
(PAK4/NAMPT oral inhibitor)

Karyopharm Therapeutics
Newton, MA

solid tumors

Phase I
www.karyopharm.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

LAG525
(anti-LAG3 mAb)

Novartis Oncology
East Hanover, NJ

solid tumors

Phase I/II
www.novartis.com

LB-100
(PP2A inhibitor)

Lixte Biotechnology
East Setauket, NY

solid tumors (combination therapy)

Phase I
www.lixe.com

lefitolimod (MGN1703)
(DNA-based TLR9 agonist)

Mologen
Berlin, Germany
M.D. Anderson Cancer Center
Houston, TX

advanced solid tumors (+ipilimumab)

Phase I
www.mologen.com

Lenvima®
lenvatinib

Eisai
Woodcliff Lake, NJ

solid tumors (+pembrolizumab)

Phase I/II
www.eisai.com

LGK974
(PORCN protein inhibitor)

Novartis Oncology
East Hanover, NJ

Wnt ligand dependent tumors

Phase I
www.novartis.com

lirilumab
(anti-KIR mAb)

Bristol-Myers Squibb
Princeton, NJ

advanced solid tumors
(+nivolumab +ipilimumab)

Phase I/II
www.bms.com

LOXO-292
(RET kinase inhibitor)

Loxo Oncology
Stamford, CT

solid tumors

Phase I
www.loxooncology.com

LTT462
(MAP kinase inhibitor)

Novartis Oncology
East Hanover, NJ

advanced solid tumors

Phase I
www.novartis.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

lupartumab amadotin (C4-4a antibody-drug conjugate)	Bayer Pharmaceuticals Whippany, NJ	solid tumors	Phase I www.pharma.bayer.com
lurbinectedin (PM1183) (RNA polymerase II inhibitor)	PharmaMar Madrid, Spain	advanced solid tumors	Phase II www.pharmamar.com
LY3022855 (IMC-CS4) (CSF-1R mAb)	Eli Lilly Indianapolis, IN	solid tumors	Phase I www.lilly.com
LY3023414 (PI3K/mTOR inhibitor)	Eli Lilly Indianapolis, IN	advanced solid tumors	Phase I www.lilly.com
LY3039478 (NOTCH inhibitor)	Eli Lilly Indianapolis, IN	advanced or metastatic solid tumors (combination therapy)	Phase I www.lilly.com
LY3127804 (Ang2 antibody)	Eli Lilly Indianapolis, IN	solid tumors	Phase I www.lilly.com
LY3200882 (TGF-betaR1 kinase inhibitor)	Eli Lilly Indianapolis, IN	solid tumors	Phase I www.lilly.com
LY3214996 (ERK1/2 inhibitor)	Eli Lilly Indianapolis, IN	solid tumors	Phase I www.lilly.com
LY3300054 (PD-L1 antibody)	Eli Lilly Indianapolis, IN	solid tumors	Phase I www.lilly.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
LY3321367 (TIM-3 antibody)	Eli Lilly Indianapolis, IN	solid tumors (+/-LY3300054)	Phase I www.lilly.com
LY3381916 (IDO-1 inhibitor)	Eli Lilly Indianapolis, IN	solid tumors (+/-PD-L1)	Phase I www.lilly.com
LYC-55716 (ROR-gamma agonist)	Lycera Ann Arbor, MI	solid tumors	Phase II www.lycera.com
Lynparza® olaparib	AstraZeneca Wilmington, DE	solid tumors (+durvalumab)	Phase II www.astrazeneca.com
		solid tumors (+AZD1775)	Phase I www.astrazeneca.com
LZM009 (anti-PD-1 mAb)	Livzon Pharmaceutical Zhuhai City, China	solid tumors	Phase I
M2698 (p70S6K/AKT inhibitor)	EMD Serono Rockland, MA	solid tumors	Phase I www.emdserono.com
M3541 (ATM inhibitor)	EMD Serono Rockland, MA	solid tumors	Phase I www.emdserono.com
M3814 (DNA-PK inhibitor)	EMD Serono Rockland, MA	solid tumors	Phase I www.emdserono.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

M4112
(cancer immunotherapy)

EMD Serono
Rockland, MA

solid tumors

Phase II
www.emdserono.com

M4344 (VX-803)
(ATR inhibitor)

EMD Serono
Rockland, MA
Vertex Pharmaceuticals
Boston, MA

solid tumors

Phase I
www.emdserono.com

M6620 (VX-970)
(ATR inhibitor)

EMD Serono
Rockland, MA
Vertex Pharmaceuticals
Boston, MA

solid tumors

Phase I
www.emdserono.com

M7824
(PD-L1 / TGF-beta inhibitor)

EMD Serono
Rockland, MA

solid tumors

Phase II
www.emdserono.com

M8891
(MetAP2 inhibitor)

EMD Serono
Rockland, MA

solid tumors

Phase I
www.emdserono.com

M9241 (NHS-IL12)
(IL-12 stimulant)

EMD Serono
Rockland, MA

solid tumors

Phase I
www.emdserono.com

M9831
(DNA-PK inhibitor)

EMD Serono
Rockland, MA

solid tumors

Phase I
www.emdserono.com

MAGE-A4 TCR
(T-cell receptor cell therapy)

Adaptimmune
Philadelphia, PA

solid tumors

Phase I
www.adaptimmune.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

MBG453
(anti-TIM3 antibody)

Novartis Oncology
East Hanover, NJ

solid tumors

Phase I/II
www.novartis.com

MEDI1873
(GITR agonist fusion protein)

MedImmune
Gaithersburg, MD

solid tumors

Phase I
www.medimmune.com

MEDI4276
(ERBB 2 receptor modulator)

MedImmune
Gaithersburg, MD

solid tumors

Phase I
www.medimmune.com

MEDI5083
(immune activator)

MedImmune
Gaithersburg, MD

solid tumors

Phase I
www.medimmune.com

MEDI9197
(TLR7/8 agonist)

MedImmune
Gaithersburg, MD

solid tumors

Phase I
www.medimmune.com

MGA012 (INCMGA0012)
(anti-PD-1 mAb)

Incyte
Wilmington, DE
MacroGenics
Rockville, MD

solid tumors

Phase I
www.incyte.com
www.macrogenics.com

MGD009
(B7-H3 x CD3 bispecific antibody)

MacroGenics
Rockville, MD

solid tumors (monotherapy),
solid tumors (+MGA012)

Phase I
www.macrogenics.com

MGD013
(anti-PD-1 mAb x LAG-3)

MacroGenics
Rockville, MD

solid tumors

Phase I
www.macrogenics.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

minnelide (HSP70 heat shock protein inhibitor)	Minneamrita Therapeutics Tampa, FL	advanced solid tumors	Phase I
miransertib (ARQ-092) (pan-AKT inhibitor)	ArQule Burlington, MA	solid tumors	Phase I www.arqule.com
mivebresib (ABBV-075) (BET inhibitor)	AbbVie North Chicago, IL	solid tumors	Phase I www.abbvie.com
MK-1248	Merck Kenilworth, NJ	advanced solid tumors (+/-pembrolizumab)	Phase I www.merck.com
MK-1308 (CTLA-4 antagonist)	Merck Kenilworth, NJ	solid tumors	Phase I www.merck.com
MK-1454 (STING agonist)	Merck Kenilworth, NJ	solid tumors	Phase I www.merck.com
MK-2118	Merck Kenilworth, NJ	solid tumors (+/-pembrolizumab)	Phase I www.merck.com
MK-4166 (GITR protein stimulant)	Merck Kenilworth, NJ	solid tumors (+/-pembrolizumab)	Phase I www.merck.com
MK-4280 (anti-LAG3 mAb)	Merck Kenilworth, NJ	solid tumors (+/-pembrolizumab)	Phase I www.merck.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

MK-5890	Merck Kenilworth, NJ	solid tumors (+/-pembrolizumab)	Phase I www.merck.com
MK-7123 (navarixin) (CXCR2/CXCR1 antagonist)	Merck Kenilworth, NJ	advanced solid tumors (+pembrolizumab)	Phase I www.merck.com
MK-7162	Merck Kenilworth, NJ	solid tumors (+pembrolizumab)	Phase I www.merck.com
MK-7252	Merck Kenilworth, NJ	advanced solid tumors	Phase I www.merck.com
MK-7684 (anti-TIGIT)	Merck Kenilworth, NJ	advanced solid tumors (+/-pembrolizumab)	Phase I www.merck.com
MK-8353 (ERK inhibitor)	Merck Kenilworth, NJ	advanced solid tumors (+pembrolizumab)	Phase I www.merck.com
MM-310 (antibody-directed nanotherapeutic targeting EphA2 receptor)	Merrimack Pharmaceuticals Cambridge, MA	solid tumors	Phase I www.merrimack.com
mogamulizumab (CCR4 receptor antagonist)	Kyowa Hakko Kirin Princeton, NJ	solid tumors (+ docetaxel), solid tumors (+nivolumab) solid tumors (+ durvalumab + tremelimumab)	Phase I www.kyowa-kirin.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

MORAb-066
(anti-TF IgG mAb)

Eisai
Woodcliff Lake, NJ

solid tumors

Phase I
www.eisai.com

MORAb-202
(antibody-drug conjugate)

Eisai
Woodcliff Lake, NJ

solid tumors

Phase I
www.eisai.com

mRNA-2416
(OX40L protein modulator)

Moderna Therapeutics
Cambridge, MA

solid tumors

Phase I
www.modernatx.com

mRNA-4157
(personalized cancer vaccine)

Moderna Therapeutics
Cambridge, MA

solid tumors

Phase I
www.modernatx.com

MS201408-0005A

EMD Serono
Rockland, MA

solid tumors

Phase I
www.emdserono.com

MS201408-0005B

EMD Serono
Rockland, MA

solid tumors

Phase I
www.emdserono.com

MS201408-0005C

EMD Serono
Rockland, MA

solid tumors

Phase I
www.emdserono.com

MSB2311
(anti-PD-L1 antibody)

MabSpace Biosciences
Suzhou, China

solid tumors

Phase I
www.mabspacebio.com

MTIG7192A (RG6058)
(anti-TIGIT mAb)

Genentech
South San Francisco, CA

solid tumors

Phase I
www.gene.com

Solid Tumors <u>Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
MVA p53 vaccine (modified vaccinia virus ankara vaccine expressing p53)	Tara Immuno-Oncology New York, NY	solid tumors	Phase I
MVT-1075 (177Lu mAB 5B1/radio-immunotherapy)	MabVax Therapeutics San Diego, CA	CA19-9-expressing solid tumors	Phase I www.mabvax.com
MVT-5873 (5B1 mAb)	MabVax Therapeutics San Diego, CA	CA19-9-expressing solid tumors, CA19-9-expressing tumors (+ chemotherapy)	Phase I www.mabvax.com
napabucasin (STAT3 inhibitor)	Boston Biomedical Cambridge, MA	solid tumors (+immune checkpoint inhibitors)	Phase I/II www.bostonbiomedical.com
		advanced solid tumors (+amcasertib)	Phase I www.bostonbiomedical.com
NBT-011 (ABI-011) (angiogenesis inhibitor)	NantBioScience Culver City, CA	solid tumors	Phase I www.nantworks.com
NC-6300 (epirubicin micelle)	NanoCarrier Chiba, Japan	advanced solid tumors	Phase I www.nanocarrier.co.jp
NEV-801 (camptothecin/podophyllotoxin)	Neovia Oncology Bellevue, WA	solid tumors	Phase I www.neoviaoncology.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

NG-348
(CD80/CD3 T-SiGn oncolytic virus)

Bristol-Myers Squibb
Princeton, NJ
PsiOxus Therapeutics
Plymouth Meeting, PA

solid tumors

Phase I
www.bms.com
www.psioxus.com

NIR178
(adenosine receptor antagonist)

Novartis Oncology
East Hanover, NJ

solid tumors (+ PDR001)

Phase II
www.novartis.com

NIS793
(TGF-beta inhibitor)

Novartis Oncology
East Hanover, NJ

solid tumors (+PDR001)

Phase I
www.novartis.com

NIZ985
(heterodimeric IL-15)

Novartis Oncology
East Hanover, NJ

advanced or metastatic
solid tumors (+ PDR001)

Phase I
www.novartis.com

NKTR-214
(CD122-biased immune-
stimulatory cytokine)

Nektar Therapeutics
San Francisco, CA

advanced solid tumors,
advanced solid tumors (+NKTR-262),
advanced solid tumors (+nivolumab)

Phase I/II
www.nektar.com

advanced solid tumors (+atezolizumab),
advanced solid tumors (+pembrolizumab)

Phase I
www.nektar.com

NKTR-262
(TLR 7/8 agonist)

Nektar Therapeutics
San Francisco, CA

advanced solid tumors

Phase I
www.nektar.com

NLG802
(IDO inhibitor)

NewLink Genetics
Ames, IA

advanced solid tumors

Phase I
www.newlinkgenetics.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

NP-G2-044
(metastasis inhibitor)

Novita Pharmaceuticals
New York, NY

solid tumors

Phase I

OBP-801
(HDAC inhibitor)

Oncolys BioPharma
Tokyo, Japan

solid tumors

Phase I
www.oncolys.com

oleclumab (MEDI9447)
(nucleotidase inhibitor)

MedImmune
Gaithersburg, MD

solid tumors

Phase I
www.medimmune.com

OMP-313M32
(anti-TIGIT mAb)

OncoMed Pharmaceuticals
Redwood City, CA

solid tumors

Phase I
www.oncomed.com

OMP-336B11
(GITRL-Fc fusion protein)

OncoMed Pharmaceuticals
Redwood City, CA

solid tumors

Phase I
www.oncomed.com

ONC201
(dopamine receptor D2/3 antagonist)

Oncocutics
Philadelphia, PA

solid tumors

Phase I
www.oncocutics.com

ONO-4578
(EP4 antagonist)

Bristol-Myers Squibb
Princeton, NJ

solid tumors

Phase I
www.bms.com

ONO-7579
(Trk inhibitor)

Ono Pharmaceutical
Osaka, Japan

solid tumors

Phase I/II
www.ono.co.jp

OPB-111077
(signal transduction pathway inhibitor)

Otsuka Pharmaceutical
Rockville, MD

solid tumors

Phase I
www.otsuka.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

Opdivo®
nivolumab

Bristol-Myers Squibb
Princeton, NJ

virus positive/negative solid tumors

Phase I/II
www.bms.com

Opdivo® + Yervoy®
nivolumab + ipilimumab

Bristol-Myers Squibb
Princeton, NJ

virus positive/negative solid tumors

Phase I/II
www.bms.com

Oradoxel
docetaxel oral

Athenex
Buffalo, NY

solid tumors

Phase I
www.athenex.com

oral-Vimo-001
(alpha-tocopherolxyacetic acid)

Veana Therapeutics
Portland, OR

solid tumors

Phase I
www.veana-therapeutics.com

Oratecan™
irinotecan+HM30181A

Athenex
Buffalo, NY
Hamni Pharmaceutical
Seoul, South Korea

advanced solid tumors

Phase I
www.athenex.com

pamiparib (BGB-290)
(PARP inhibitor)

BeiGene USA
Cambridge, MA

solid tumors

Phase I/II
www.beigene.com

PCM-075
(PLK1 inhibitor)

TrovaGene
San Diego, CA

advanced solid tumors

Phase I
www.trovagene.com

PD-L1 mAb + LY combo

Eli Lilly
Indianapolis, IN

solid tumors

Phase I
www.lilly.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

pegargiminase
(ADI-PEG-20)

Polaris Pharmaceuticals
San Diego, CA

advanced solid tumors
(+pembrolizumab)

Phase I
www.polarispharma.com

PEN-866
(DNA topoisomerase I inhibitor)

Tarveda Therapeutics
Watertown, MA

solid tumors

Phase I/II
www.tarveda.com

PF-06804103
(antibody-drug conjugate)

Pfizer
New York, NY

solid tumors

Phase I
www.pfizer.com

PIN-2
(Immune modulator)

PIN Pharma
New York, NY

solid tumors

Phase I
www.pinpharma.com

PLX51107
(BET inhibitor)

Plexxikon
Berkeley, CA

solid tumors

Phase I
www.plexxikon.com

PLX73086
(CSR-1R antagonist)

Plexxikon
Berkeley, CA

solid tumors

Phase I
www.plexxikon.com

PLX7486
(Fms/TRK inhibitor)

Plexxikon
Berkeley, CA

solid tumors

Phase I
www.plexxikin.com

PLX8394
(BRAF inhibitor)

Plexxikon
Berkeley, CA

BRAF-mutant solid tumors

Phase II
www.plexxikon.com

PLX9486
(c-kit inhibitor)

Plexxikon
Berkeley, CA

KIT-mutant solid tumors

Phase I
www.plexxikon.com

Poly-ICLC
(biological response modifier)

Oncovir
Washington, DC

solid tumors

Phase II
www.oncovir.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

PRN1371
(FGFR inhibitor)

Principia Biopharma
South San Francisco, CA

solid tumors

Phase I
www.principiabio.com

PRS-343
(HER2/41BB bispecific mAb)

Pieris Pharmaceuticals
Boston, MA

solid tumors

Phase I
www.pieris.com

PT-112
phosphaplatin

Phosplatin Therapeutics
New York, NY

advanced solid tumors

Phase I
www.phosplatin.com

PT2977
(HIF-2 α inhibitor)

Peloton Therapeutics
Dallas, TX

advanced solid tumors

Phase I
www.pelotontherapeutics.com

PTX-100
(geranylgeranyl transferase inhibitor)

Prescient Therapeutics
South Melbourne, Australia

solid tumors

Phase I completed
www.ptxtherapeutics.com

pyrotinib
(EGFR/ErbB2 kinase inhibitor)

Hengrui Therapeutics
Princeton, NJ

HER2-positive solid tumors

Phase I
www.hengruitherapeutics.com

relacorilant
(glucocorticoid receptor II antagonist)

Corcept Therapeutics
Menlo Park, CA

solid tumors (+nab-paclitaxel),

Phase I/II
www.corcept.com

relatlimab
(anti-LAG3 mAb)

Bristol-Myers Squibb
Princeton, NJ

solid tumors (+/-nivolumab)

Phase I/II
www.bms.com

RG6146
(BET inhibitor)

Roche/Genentech
South San Francisco, CA

solid tumors

Phase I
www.roche.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

RG7386
(FAP-DR5 bispecific mAb)

Roche/Genentech
South San Francisco, CA

solid tumors

Phase I
www. Roche.com

RG7461
(IL-1 variant fused to FAP antagonist)

Roche/Genentech
South San Francisco, CA

solid tumors

Phase I
www. Roche.com

RG7802
(CEA T-cell bispecific mAb)

Roche/Genentech
South San Francisco, CA

solid tumors (+atezolizumab)

Phase I
www. Roche.com

RG7813
(cergutuzumab amunaleukin)

Roche/Genentech
South San Francisco, CA

solid tumors (+atezolizumab)

Phase I
www. Roche.com

RGX-104
(LXR agonist)

Rgenix
New York, NY

solid tumors

Phase I
www. rgenix.com

rivoceranib
(VEGFr-2 antagonist)

LSK Biopharma
Salt Lake City, UT

solid tumors (+nivolumab)

Phase I
www. lskbiopharma.com

rogaratinib
(pan-EGFR inhibitor)

Bayer Pharmaceuticals
Whippany, NJ

solid tumors

Phase I
www. pharma. bayer.com

rosmantuzumab
(RSPO3 protein inhibitor)

OncoMed Pharmaceuticals
Redwood City, CA

solid tumors

Phase I
www. oncomed.com

RP1
(oncolytic virus immunotherapy)

Replimmune
Woburn, MA

solid tumors

Phase I/II
www. replimmune.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

RRx-001
(free radical stimulant)

EpicentRx
La Jolla, CA

advanced or metastatic solid tumors

Phase I
www.epicentrx.com

rSIFN-co
(interferon)

Sichuan Huiyang
Chengdu City, China

solid tumors

Phase I

RDX-105
(VEGFR-sparing RET inhibitor)

Ignyta
San Diego, CA

solid tumors

Phase I
www.ignyta.com

SAR408701
(maytansin-loaded anti-CEACAM5 mAb)

Sanofi
Bridgewater, NJ

solid tumors

Phase I
www.sanofi.com

SAR439459
(anti-TGF-beta mAb)

Sanofi
Bridgewater, NJ

advanced solid tumors

Phase I
www.sanofi.com

SAR439859
(SERD)

Sanofi
Bridgewater, NJ

advanced solid tumors (+cemiplimab)

Phase I
www.sanofi.com

SC-004
(antibody-drug conjugate)

AbbVie
North Chicago, IL

solid tumors

Phase I
www.abbvie.com

SDX-7320
(MetAP2 inhibitor)

SynDevRx
Cambridge, MA

solid tumors

Phase I
www.syndevrx.com

SEA-CD40
(anti-CD40 mAb)

Seattle Genetics
Bothell, WA

solid tumors (+/-checkpoint inhibitor)

Phase I
www.seattlegenetics.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

selicrelumab
(anti-CD40 mAb)

Roche/Genentech
South San Francisco, CA

solid tumors (combination therapy)

Phase I
www.rocche.com

sEphB4-HSA
(recombinant fusion protein)

VasGene Therapeutics
Los Angeles, CA

solid tumors

Phase I

Seprehvir®
oncolytic virus immunotherapy

Sorrento Therapeutics
San Diego, CA

solid tumors

Phase I
www.sorrentotherapeutics.com

SGN-2FF
(fucosylation inhibitor)

Seattle Genetics
Bothell, WA

advanced solid tumors

Phase I
www.seattlegenetics.com

SGT-53
(gene therapy)

SynerGene Therapeutics
Rockville, MD

solid tumors (pediatric)

Phase I

sitravatinib (MGCD516)
(multi kinase inhibitor)

Mirati Therapeutics
San Diego, CA

advanced solid tumors

Phase I/II
www.mirati.com

SL-801
(XPO1 inhibitor)

Stemline Therapeutics
New York, NY

advanced solid tumors

Phase I
www.stemline.com

SM08502
(Wnt signaling pathway inhibitor)

Samumed
San Diego, CA

solid tumors

Phase I
www.samumed.com

SNDX-6352
(CSF-1R antagonist)

Syndax Pharmaceuticals
Waltham, MA

solid tumors

Phase I
www.syndax.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

SOR-C13
(TRPV6 protein inhibitor)

Soricimed Biopharma
Moncton, Canada

solid tumors

Phase I
www.soricimed.com

SRF231
(anti-CD47 mAb)

Surface Oncology
Cambridge, MA

solid tumors

Phase I
www.surfaceoncology.com

sulfatinib
(VEGFR/FGFR-1/CSF1R inhibitor)

Hutchison MediPharma
Shanghai, China

advanced solid tumors

Phase I
www.hmplglobal.com

SY-1365
(CDK7 inhibitor)

Syros Pharmaceuticals
Cambridge, MA

solid tumors

Phase I
www.syros.com

Sym015
(MET inhibitor)

Symphogen
Somerville, NJ

met-amplified advanced solid tumors

Phase I/II
www.symphogen.com

Sym021
(anti-PD-1 mAb)

Symphogen
Somerville, NJ

solid tumors

Phase I
www.symphogen.com

SYN004
(anti-EGFR mAb)

Synermore Biologics
Taipei City, Taiwan

solid tumors

Phase I
www.synermore.com

Taclantis™
paclitaxel liposomal

Sun Pharma Advanced Research
Mumbai, India

solid tumors

Phase II
www.sparc.life

TAK-202
(CCR2 antagonist)

Takeda Oncology
Deerfield, IL

solid tumors

Phase I
www.takeda.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

TAK-243
(ubiquitin-activating enzyme inhibitor)

Takeda Oncology
Deerfield, IL

solid tumors

Phase I
www.takeda.com

TAK-580
(Pan-Raf kinase inhibitor)

Takeda Oncology
Deerfield, IL

solid tumors

Phase II
www.takeda.com

TAK-931
(CDC7 inhibitor)

Takeda Oncology
Deerfield, IL

solid tumors

Phase I
www.takeda.com

TAS-116
(HSP90 inhibitor)

Taiho Oncology
Princeton, NJ

solid tumors

Phase I
www.taihooncology.com

TAS-119
(aurora kinase A inhibitor)

Taiho Oncology
Princeton, NJ

advanced solid tumors

Phase I
www.taihooncology.com

TAS-120
(FGF/FGFR inhibitor)

Taiho Oncology
Princeton, NJ

advanced solid tumors

Phase I/II
www.taihooncology.com

tavolimab (MEDI0562)
(OX40 agonist)

MedImmune
Gaithersburg, MD

solid tumors

Phase I
www.medimmune.com

tazemetostat
(EZH2 enzyme inhibitor)

Epizyme
Cambridge, MA

INI1-negative solid tumors

Phase II
www.epizyme.com

advanced solid tumors

Phase I/II
www.epizyme.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

Tecentriq®
atezolizumab

Genentech
South San Francisco, CA

solid tumors (monotherapy),
solid tumors (Morpheus platform),
solid tumors (+cobimetinib),
solid tumors (+ipi/IFN)

Phase I
www.gene.com

telisotuzumab vedotin (ABBV-399)
(antibody-drug conjugate)

AbbVie
North Chicago, IL

solid tumors

Phase I
www.abbvie.com

TEW-7197
(TGF-beta antagonist)

MedPacto
Suwon, South Korea

advanced solid tumors

Phase I
www.medpacto.com

TI-061
(anti-CD47 mAb)

Arch Oncology
San Francisco, CA

solid tumors

Phase I/II
www.archoncology.com

tilsotolimod (IMO-2125)
(TLR9 agonist)

Idera Pharmaceuticals
Cambridge, MA

refractory solid tumors

Phase I
www.iderapharma.com

tinostamustine (EDO-S101)
(histone deacetylase inhibitor)

Mundipharma
Cambridge, United Kingdom

advanced solid tumors

Phase I/II
www.mundipharma.com

tisotumab vedotin
(tissue factor antibody-drug conjugate)

Genmab
Princeton, NJ
Seattle Genetics
Bothell, WA

solid tumors

Phase II
www.seattlegenetics.com

TLC178
(vinorelbine liposomal)

Taiwan Liposome Company
Taipei, Taiwan

advanced solid tumors

Phase I/II
www.tlcbio.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

TNO155
(SHP2 inhibitor)

Novartis Oncology
East Hanover, NJ

solid tumors

Phase I
www.novartis.com

Toca 511 + Toca Fc
(vocimagene amiretrorepvec-
flucytosine gene therapy)

Tocagen
San Diego, CA

solid tumors

Phase I
www.tocagen.com

TP-0903
(Axl kinase inhibitor)

Tolero Pharmaceuticals
Lehi, UT

solid tumors

Phase I
www.toleropharma.com

TPX-0005 (ropotrectinib)
(ALK/ROS-1/TRK inhibitor)

TP Therapeutics
San Diego, CA

solid tumors

Phase I/II
www.tptherapeutics.com

tractinostat
(HDAC inhibitor)

Viracta Therapeutics
Cardiff, CA

EBV-positive solid tumors
(+valganciclovir)

Phase I
www.viracta.com

TRC-102
(methoxyamine hydrochloride)

TRACON Pharmaceuticals
San Diego, CA

solid tumors

Phase I
www.traconpharma.com

tremelimumab
(IgG2 monoclonal antibody)

MedImmune
Gaithersburg, MD

solid tumors (+MEDI0562)

Phase I
www.medimmune.com

TRK-950
(mAb)

Apexigen
San Carlos, CA
Toray
Tokyo, Japan

solid tumors

Phase I
www.apexigen.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

TRX518
(GITR agonist antibody)

Leap Therapeutics
Cambridge, MA

solid tumors (+anti-PD-1),
solid tumors (+chemotherapy)

Phase I/II
www.leaptx.com

solid tumors (monotherapy)

Phase I
www.leaptx.com

TRX-818 (CVM-1118)
(angiogenesis inhibitor)

TaiRx
Taipei, Taiwan

solid tumors

Phase I
www.tairx.tw

TSR-022
(anti-TIM-3 mAb)

TESARO
Waltham, MA

solid tumors

Phase I
www.tesarobio.com

TSR-033
(anti-LAG3 mAb)

TESARO
Waltham, MA

solid tumors

Phase I
www.tesarobio.com

TSR-042
(anti-PD-1 mAb)

TESARO
Waltham, MA

solid tumors

Phase I
www.tesarobio.com

TTI-621
(CD47 inhibitors/SIRPA stimulant)

Trillium Therapeutics
Mississauga, Canada

solid tumors

Phase I
www.trilliumtherapeutics.com

urelumab
(anti-CD137 mAb)

Bristol-Myers Squibb
Princeton, NJ

advanced solid tumors (+nivolumab)

Phase I/II
www.bms.com

USL311
(CXCR4 antagonist)

Upsher-Smith
Maple Grove, MN

solid tumors

Phase I/II
www.upsher-smith.com

Solid Tumors
Product Name

Sponsor

Indication

Development Phase

Vigil™
autologous tumor cell vaccine

Gradalis
Carrolton, TX

solid tumors (+PD-1/PD-L1)

Phase II
www.gradalisinc.com

vistusertib
(mTORC1/2 inhibitor)

AstraZeneca
Wilmington, DE

solid tumors

Phase II
www.astrazeneca.com

VLX600
(iron chelator)

Vivolux
Uppsala, Sweden

solid tumors

Phase I
www.vivolux.com

vorolanib (X-82)
(VEGFR and PDGFR inhibitor)

Tyrogenex
Rockville, MD

advanced solid tumors

Phase I completed

VSV-IFN-beta-NIS

Vyriad
Rochester, NY

solid tumors

Phase I
www.vyriad.com

VT1021
(peptide immunomodulator)

Vigeo Therapeutics
Cambridge, MA

solid tumors

Phase I
www.vigeotherapeutics.com

WT-2725
(peptide cancer vaccine)

Sunovion Pharmaceuticals
Marlborough, MA

solid tumors

Phase I
www.sunovion.com

X4P-001-IO
(CXCR4 inhibitor)

X4 Pharmaceuticals
Cambridge, MA

solid tumors

Phase I/II
www.x4pharma.com

XMT-1536
(anti-NaPi2b immunoconjugate)

Mersana Therapeutics
Cambridge, MA

NaPi2b-expressing solid tumors

Phase I
www.mersana.com

<u>Other Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
abexinostat (HDAC inhibitor)	Xynomic Pharmaceuticals Cheyenne, WY	gynecologic cancer	Phase II www.xynomicpharma.com
ABI-009 (nab-rapamycin/mTOR inhibitor)	AADi Bioscience Los Angeles, CA	malignant perivascular epithelioid cell tumors	Phase II www.aadibio.com
ADX5-DUAL (cancer immunotherapy vaccine)	Advaxis Princeton, NJ	metastatic cervical cancer (+nivolumab)	Phase III www.advaxis.com
AGEN1884 (CTLA-4 antagonist)	Agenus Lexington, MA	cervical cancer (+AGEN2034)	Phase I/II www.agenus.com
aglatimagene besadenovec (gene therapy)	Advantagene Auburndale, MA	malignant pleural effusion	Phase I www.advantagene.com
AL3818 (tyrosine kinase inhibitor)	Advenchen Laboratories Moorpark, CA	cervical cancer, endometrial cancer, fallopian tube cancer, primary peritoneal cancer	Phase I/II www.advenchen.com
AQST-305 (octreotide oral film)	Aquestive Therapeutics Warren, NJ	malignant carcinoid syndrome	Phase I www.aquestive.com
AU-011 (light-activated viral nanoparticles) ORPHAN DRUG	Aura Biosciences Cambridge, MA	uveal melanoma (Fast Track)	Phase I/II www.aurabiosciences.com

<u>Other Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
axalimogene filolisbac (AXAL) (cancer immunotherapy vaccine) ORPHAN DRUG	Advaxis Princeton, NJ	high-risk locally advanced cervical cancer (Fast Track)	Phase III www.advaxis.com
		metastatic anal cancer, metastatic cervical cancer (+durvalumab)	Phase II www.advaxis.com
Azedra® Ultratrace® iobenguane I-131 ORPHAN DRUG	Progenics Pharmaceuticals New York, NY	malignant and/or recurrent pheochromocytoma and paraganglioma (Fast Track)	application submitted www.progenics.com
BMS-986277	Bristol-Myers Squibb Princeton, NJ	epithelial cancer	Phase I/II www.bms.com
Cabometyx™ cabozantinib	Exelixis South San Francisco, CA	carcinoid tumors, endometrial cancer (+nivolumab)	Phase II www.exelixis.com
		genitourinary tumors (+nivolumab +/-ipilimumab)	Phase I www.exelixis.com
CBT-1 (tetrandrine)	CBA Pharma Lexington, KY	cancer with multiple drug resistance (adjunctive therapy)	application submitted www.cbapharma.com

<u>Other Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
cemiplimab (anti-PD-1 mAb)	Regeneron Pharmaceuticals Tarrytown, NY Sanofi Bridgewater, NJ	squamous cell carcinoma (Breakthrough Therapy)	application submitted www.sanofi.com
		2L cervical cancer	Phase III www.sanofi.com
CLR-131 (phospholipid-drug conjugate)	Cellectar Biosciences Madison, WI	pediatric cancer	Phase I www.cellectar.com
COTI-2 (p53 gene modulator)	Cotinga Pharmaceuticals London, Canada	cervical cancer, endometrial cancer, fallopian tube cancer, peritoneal cancer	Phase I www.cotingapharma.com
CPP-1X (eflornithine + high dose powder sachet) ORPHAN DRUG	Cancer Prevention Pharmaceuticals Tucson, AZ	neuroblastoma	Phase II www.canprevent.com
DCC-2618 (PDGFR-alpha kinase switch control inhibitor)	Deciphera Pharmaceuticals Waltham, MA	advanced systemic mastocytosis	Phase I www.deciphera.com
DKN-01 (anti-DKK1 mAb)	Leap Therapeutics Cambridge, MA	relapsed/refractory endometroid endometrial cancer	Phase II www.leaptx.com
DP-1038 (intranasal octreotide)	Dauntless Pharmaceuticals San Diego, CA	neuroendocrine tumors	Phase I www.dauntlessph.com

Other Product Name	Sponsor	Indication	Development Phase
DPX-E7 (peptide cancer vaccine)	Immunovaccine Halifax, Canada	HPV-related anal cancer, HPV-related cervical cancer	Phase I/II www.imvaccine.com
DPX-Survivac (cancer vaccine)	Immunovaccine Halifax, Canada	advanced fallopian cancer (Fast Track), advanced peritoneal cancer (Fast Track)	Phase I www.imvaccine.com
E7046 (EP4 antagonist)	Adlai Nortye Hangzhou, China	rectal cancer	Phase I www.adlainortye.com
erdafitinib (FGFR1 kinase inhibitor)	Janssen Research & Development Raritan, NJ	urogenital cancer	Phase II www.janssen.com
fimepinostat (CUDC-907) (HDAC/PI3K inhibitor)	Curis Lexington, MA	neuroblastoma	Phase I www.curis.com
Gilotrif® afatinib ORPHAN DRUG	Boehringer Ingelheim Pharmaceuticals Ridgefield, CT	neuroectodermal tumors	Phase I/II www.boehringer-ingelheim.com
GL-ONC1 (oncolytic virus therapy)	Genelux San Diego, CA	peritoneal cavity cancer	Phase I www.genelux.com
IMCgp100 (T-cell receptor therapy) ORPHAN DRUG	Immunocore Conshohocken, PA	uveal melanoma	Phase II www.immunocore.com

<u>Other Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ingenol disoxate (protein kinase C stimulant)	LEO Pharma Madison, NJ	squamous cell carcinoma (prevention)	Phase III www.leo-pharma.us
iobenguane-I-131	Jubilant DraxImage Kirkland, Canada New Approaches to Neuroblastoma Therapy Consortium Los Angeles, CA	neuroblastoma	Phase II www.draximage.com
IPI-549 (PI3K-gamma inhibitor)	Infinity Pharmaceuticals Cambridge, MA	adrenocortical carcinoma (+nivolumab)	Phase I www.infi.com
Keytruda® pembrolizumab	Merck Kenilworth, NJ	nasopharyngeal cancer	Phase III www.merck.com
larotrectinib (LOXO-101) (TRK inhibitor) ORPHAN DRUG	Loxo Oncology Stamford, CT	locally advanced or metastatic solid tumors harboring an NTRK gene fusion (Breakthrough Therapy)	application submitted www.loxooncology.com
		solid or primary CNS tumors with TRK infusions (adults)	Phase II www.loxooncology.com
		solid or primary CNS tumors with TRK infusions (pediatric)	Phase I/II www.loxooncology.com
LN-145 (tumor-infiltrating lymphocyte)	Iovance Biotherapeutics San Carlos, CA	cervical cancer	Phase II www.iovance.com

Other Product Name	Sponsor	Indication	Development Phase
lurbinectedin (PM1183) (RNA polymerase II inhibitor)	PharmaMar Madrid, Spain	2L endometrial cancer	Phase II www.pharmamar.com
LXS196 (protein kinase C inhibitor)	Novartis Oncology East Hanover, NJ	uveal melanoma	Phase I www.novartis.com
MCS110 (CSF-1 mAb)	Novartis Oncology East Hanover, NJ	giant cell tumor of the tendon sheath	Phase II www.novartis.com
mirvetuximab soravtansine (folate receptor 1 antagonist)	ImmunoGen Waltham, MA	FOLR1-positive endometrial cancer	Phase I www.immunogen.com
navicixizumab (anti-DLL4/VEGF bispecific mAb)	OncoMed Pharmaceuticals Redwood City, CA	fallopian tube cancer, peritoneal cancer	Phase I www.oncomed.com
naxitamab (anti-GD2 3F8 mAb) ORPHAN DRUG	Y-mAbs Therapeutics New York, NY	relapsed/refractory neuroblastoma	Phase III www.ymabs.com
nirogacestat (gamma secretase inhibitor)	SpringWorks Therapeutics New York, NY	desmoid tumor	Phase II www.springworkstx.com
omburtamab I-131 (B7-H3 inhibitor) ORPHAN DRUG	Y-mAbs Therapeutics New York, NY	CNS/leptomeningeal metastasis from neuroblastoma	Phase II/III www.ymabs.com
		desmoplastic small round cell tumor	Phase I/II www.ymabs.com

<u>Other Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
ONC201 (dopamine receptor D2/3 antagonist)	Oncocyte Philadelphia, PA	endometrial cancer, neuroendocrine tumors	Phase II www.oncoceutics.com
ovapuldenceI-T (dendritic cell cancer vaccine)	AiVita Biomedical Irvine, CA	advanced peritoneal cancer advanced fallopian tube cancer	Phase II www.aivitabiomedical.com
p53 cell penetrating peptide	CDG Therapeutics Chicago, IL	recurrent or progressive CNS tumors	Phase I completed www.cdgti.com
patidegib (hedgehog signaling inhibitor) ORPHAN DRUG	PellePharm San Francisco, CA	basal cell nevus syndrome (Gorlin Syndrome)	Phase II www.pellepharm.com
pegargiminase (ADI-PEG-20)	Polaris Pharmaceuticals San Diego, CA	ASS1-deficient tumors (+pemetrexed +cisplatin)	Phase I www.polarispharma.com
PEGPH20 (pegylated recombinant human hyaluronidase)	Halozyme Therapeutics San Diego, CA	gallbladder adenocarcinoma (+atezolizumab)	Phase I www.halozyme.com
PEN-221 (somatostatin receptor 2 modulator)	Tarveda Therapeutics Watertown, MA	neuroendocrine tumors	Phase I/II www.tarveda.com
Pixuvri® pixantrone	CTI BioPharma Seattle, WA	relapsed/refractory cancer (pediatric)	Phase I www.ctibiopharma.com

<u>Other Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
Prolanta™ prolactin receptor antagonist	Oncolix Houston, TX	fallopian tube cancer, peritoneal cancer	Phase I www.oncolixbio.com
PTC596 (tumor stem cell targeting)	PTC Therapeutics South Plainfield, NJ	fallopian tube cancer, peritoneal cancer	Phase I www.ptcbio.com
PV-10 (rose bengal sodium)	Provectus Biopharmaceuticals Knoxville, TN	neuroendocrine tumors	Phase I www.provectusbio.com
REM-001 (rostoporfin) (photosensitizer) ORPHAN DRUG	Adgero Biopharmaceuticals Princeton, NJ	cutaneous metastatic recurrent basal cell nevus syndrome	Phase I www.adgerobiopharm.com
Rova-T (rovalpituzumab tesirine)	AbbVie North Chicago, IL	neuroendocrine tumors	Phase I www.abbvie.com
RRx-001 (free radical stimulant)	EpicentRx La Jolla, CA	neuroendocrine tumors	Phase II www.epicentrx.com
sacituzumab govitecan (anti-TROP-2-SN-38 ADC)	Immunomedics Morris Plains, NJ	metastatic endometrial can cer	Phase II www.immunomedics.com
selinexor (nuclear export inhibitor)	Karyopharm Therapeutics Newton, MA	endometrial cancer	Phase III www.karyopharm.com

<u>Other Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
selumetinib (MEK1/2 inhibitor) ORPHAN DRUG	AstraZeneca Wilmington, DE Merck Kenilworth, NJ	differentiated thyroid cancer	Phase III www.astrazeneca.com www.merck.com
SNX-5422 (Hsp90 inhibitor)	Esanex Indianapolis, IN	neuroendocrine tumors	Phase I www.esanexpharma.com
Sym013 (EGFR/HER2/HER3 inhibitor)	Symphogen Somerville, NJ	advanced epithelial cancer	Phase I/II www.symphogen.com
tirabrutinib (Btk inhibitor)	Gilead Sciences Foster City, CA	B-cell malignancies	Phase II www.gilead.com
TT12 (armoured HPVST) (HPV-specific T-cell therapy)	Tessa Therapeutics Singapore	cervical cancer	Phase I www.tessatherapeutics.com
VGX-3100 (DNA cancer vaccine)	Inovio Pharmaceuticals Plymouth meeting, PA	cervical high-grade squamous intraepithelial lesions	Phase III www.inovio.com
		vulvar high-grade squamous intraepithelial lesions	Phase II www.inovio.com
XBIO-101 (cridanimod) ORPHAN DRUG	Xenetic Biosciences Lexington, MA	recurrent or persistent endometrial cancer	Phase II www.xeneticbio.com

<u>Other Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
XmAb18087 (SSTR2 x CD3 bispecific mAb)	Xencor Monrovia, CA	neuroendocrine tumors	Phase I www.xencor.com
Xofigo® radium Ra 223 dichloride	Bayer Pharmaceuticals Whippany, NJ	bone metastases in breast cancer	Phase II www.pharma.bayer.com
<u>Unspecified Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
AB122 (anti-PD-1 mAb)	Arcus Biosciences Hayward, CA	cancer	Phase I www.arcusbio.com
AB928 (adenosine A2A/A2B receptor antagonist)	Arcus Biosciences Hayward, CA	cancer	Phase I www.arcusbio.com
AK107 (checkpoint inhibitor)	Akeso Biopharma Guangdong, China Merck Kenilworth, NJ	cancer	Phase I www.akesobio.com
anti-PD-L1 mAb	TG Therapeutics New York, NY	cancer	Phase I www.tgtherapeutics.com
autologous stem cell-based cancer immunotherapy	StemImmune San Diego, CA	cancer	Phase I completed www.stemimmune.com

<u>Unspecified Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
AutoSynVax® autologous synthetic vaccine	Agenus Lexington, MA	advanced cancer	Phase I www.agenusbio.com
Bavencio® avelumab (anti-PD-L1 inhibitor)	EMD Serono Rockland, MA Pfizer New York, NY	cancer (+OX40 +4-1BB)	Phase I www.emdserono.com www.pfizer.com
bevacizumab biosimilar	Apobiologix Weston, FL	cancer	in clinical trials www.apobiologix.com
BMS-986205 (IDO1 inhibitor)	Bristol-Myers Squibb Princeton, NJ	advanced cancer (+nivolumab)	Phase I www.bms.com
BPX-501 (rivogenlecleucel)	Bellicum Pharmaceuticals Houston, TX	cancer (adults)	Phase I/II www.bellicum.com
cemiplimab (anti-PD-1 mAb)	Regeneron Pharmaceuticals Tarrytown, NY Sanofi Bridgewater, NJ	advanced cancer (+REGN3767)	Phase I www.sanofi.com
CPI-006 (type 2 humanized IgG1 antibody)	Corvus Pharmaceuticals Burlingame, CA	advanced cancer (+/-CPI-444 +/-pembrolizumab)	Phase I www.corvuspharma.com
CPI-444 (adenosine A2A receptor antagonist)	Corvus Pharmaceuticals Burlingame, CA	advanced cancer (+/-atezolizumab)	Phase I www.corvuspharma.com

<u>Unspecified Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
dendritic cancer vaccine	ImmunoRestoration Warminster, PA	cancer	Phase I/II completed www.immunorestoration.com
FS118 (anti-LAG-3/anti-PD-L1) bispecific antibody)	F-star Biotechnology Cambridge, United Kingdom	advanced malignancies	Phase I www.f-star.com
gedatolisib (PF-05212384) (PI3K/mTOR inhibitor)	Pfizer New York, NY	cancer	Phase I www.pfizer.com
glasdegib (SMO antagonist)	Pfizer New York, NY	cancer	Phase I www.pfizer.com
human microbiome modulator	Kaleido Biosciences Bedford, MA	cancer	Phase I www.kaleido.com
Ibrance ® palbociclib	Pfizer New York, NY	cancer	Phase I www.pfizer.com
IDH305 (IDH1 inhibitor)	Novartis Oncology East Hanover, NJ	advanced malignancies with IDH1R132 mutations	Phase I www.novartis.com
INCB53914 (pan-PIM kinase inhibitor)	Incyte Wilmington, DE	advanced malignancies	Phase I/II www.incyte.com

<u>Unspecified Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
INCB57643 (bromodomain inhibitor)	Incyte Wilmington, DE	advanced malignancies	Phase I/II www.incyte.com
Inlyta ® axitinib	Pfizer New York, NY	cancer (+pembrolizumab)	Phase I www.pfizer.com
IRX5183 (RXR agonist)	Io Therapeutics Santa Ana, CA	cancer	Phase I www.io-therapeutics.com
LOXO-195 (TRK inhibitor)	Bayer Pharmaceuticals Whippany, NJ Loxo Oncology Stamford, CT	cancer	Phase I www.pharma.bayer.com www.loxooncology.com
MCS110 (CSF-1 mAb)	Novartis Oncology East Hanover, NJ	advanced malignancies (+PDR001)	Phase I/II www.novartis.com
napabucasin (STAT3 inhibitor)	Boston Biomedical Cambridge, MA	advanced malignancies (+ paclitaxel)	Phase I/II www.bostonbiomedical.com
ORB-101 (prednisone microencapsulated)	Orbis Biosciences Lenexa, KS	cancer	Phase I www.orbisbio.com
ORIC-101 (glucocorticoid receptor antagonist)	ORIC Pharmaceuticals South San Francisco, CA	cancer	Phase I www.oricpharma.com

<u>Unspecified Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
PAC-1 (VO-100) (procaspase activating compound-1)	Vanquish Oncology Campaign, IL	advanced malignancies	Phase I www.vanquishoncology.com
PF-04518600 (OX40 receptor agonist)	Pfizer New York, NY	cancer	Phase I www.pfizer.com
PF-06647020 (cofetuzumab pelidotin) (PTK7 targeted cytotoxicity)	Pfizer New York, NY	cancer	Phase I www.pfizer.com
PF-06671008 (anti-CD3/P-cadherin bispecific antibody)	Pfizer New York, NY	cancer	Phase I www.pfizer.com
PF-06688992 (antibody-drug conjugate)	Pfizer New York, NY	cancer	Phase I www.pfizer.com
PF-06747775 (mavelertinib) (epidermal growth factor receptor)	Pfizer New York, NY	cancer	Phase I www.pfizer.com
PF-06801591 (PD-1 antagonist immunotherapy)	Pfizer New York, NY	cancer	Phase I www.pfizer.com
PLX2853 (BRD4 inhibitor)	Plexxikon Berkeley, CA	cancer	Phase I www.plexxikon.com

<u>Unspecified Product Name</u>	<u>Sponsor</u>	<u>Indication</u>	<u>Development Phase</u>
REGN1979 (anti-CD20/CD3 bispecific mAb)	Regeneron Pharmaceuticals Tarrytown, NY	cancer (+cemiplimab)	Phase I www.regeneron.com
REGN3767 (anti-LAG-3 mab)	Regeneron Pharmaceuticals Tarrytown, NY Sanofi Bridgewater, NJ	advanced cancer	Phase I www.regeneron.com www.sanofi.com
RG6180 (personalized cancer vaccine)	Genentech South San Francisco, CA	cancer	Phase I www.gene.com
rituximab biosimilar	Apobiologix Weston, FL	cancer	in clinical trials www.apobiologix.com
TAB001 (anti-PD-1 mAb)	Shanghai Junshi Biosciences Shanghai, China	advanced malignancies	Phase I www.junshipharma.com
TSR-042 (anti-PD-1 mAb)	TESARO Waltham, MA	advanced or metastatic (combination therapy)	Phase I www.tesarobio.com
veltuzumab (anti-CD20 mAb)	Immunomedics Morris Plains, NJ	cancer	Phase II completed www.immunomedics.com

The content of this report has been obtained through public, government and industry sources, and the Springer "Adis Insight" database based on the latest information. Report current as of May 6, 2018. The medicines in this listing include medicines being developed by U.S.-based companies conducting trials in the United States abroad, PhRMA-member companies conducting trials in the United States and abroad, and foreign companies conducting clinical trials in the United States. Some products may not be in active clinical trials. The information may not be comprehensive. For more, specific information about a particular product, contact the individual company directly or go to www.clinicaltrials.gov. The entire series of *Medicines in Development* is available on PhRMA's website: www.phrma.org.

Definitions

Application Submitted—An application for marketing has been submitted by the company to the U.S. Food and Drug Administration (FDA).

Breakthrough Therapy—Upon request by a sponsor, the FDA can grant this designation to expedite the development and review of a drug or biologic intended, alone or in combination with one or more other drugs, to treat a serious or life threatening disease or condition and preliminary clinical evidence indicates that it may demonstrate substantial improvement over existing therapies on one or more clinically-significant endpoints, such as substantial treatment effects observed early in clinical development. If a drug or biologic is designated as a Breakthrough Therapy, the FDA will expedite the development and review. With this designation, all Fast Track features convey to the medicine.

Fast Track—Upon request by a sponsor, the FDA can grant this designation to facilitate the development and expedite the review of a drug or biologic to treat a serious condition and fill an unmet medical need. When considering a biopharmaceutical company's request for Fast Track designation for an investigational drug or biologic, the FDA evaluates whether it will affect factors such as survival, day-to-day functioning, or the likelihood that the disease, if left untreated, will progress from a less severe condition to a more serious one, and whether a condition can be adequately addressed by available therapy. With Fast Track designation, early and frequent communication between the FDA and the biopharmaceutical company is encouraged throughout the entire drug development and review process to help to quickly resolve any questions or issues that arise, potentially leading to an earlier approval and access by patients.

Orphan Designation—Upon request by a sponsor, the FDA can grant special status ("orphan status") to a drug or biologic to treat a rare disease or condition. In order to receive an orphan designation, a qualifying drug or biologic must be intended for the treatment, diagnosis, or prevention of a rare disease or condition that affects usually fewer than 200,000 people in the United States.

Phase I—Researchers test the investigational drug or biologic in a small group of people, usually between 20 and 100 healthy adult volunteers, to evaluate its initial safety and tolerability profile, determine a safe dosage range, and identify potential side effects.

Phase II—The investigational drug or biologic is given to volunteer patients, usually between 100 and 500, to determine whether it is effective, identify an optimal dose, and to further evaluate its short-term safety.

Phase III—The investigational drug or biologic is given to a larger, more diverse patient population, often involving between 1,000 and 5,000 patients (but sometimes many more), to generate statistically significant evidence to confirm its safety and effectiveness. Phase III studies are the longest studies and usually take place in multiple sites around the world.