

SUPPLEMENTAL TABLE 2

FDA-APPROVED THERAPEUTICS FOR THE TREATMENT OF CANCER

DNA-synthesis Inhibitors (Antimetabolites)

Approved Indication	Generic Name	Trade Name
multiple cancers	5-fluorouracil (5FU)	Adrucil
certain leukemias	6-mercaptopurine	Purinethol
breast and colorectal cancers	capecitabine	Xeloda
certain leukemias; lymphoma	cladribine	Litrak; Movectro
certain leukemias	clofarabine	Clolar
certain leukemias; lymphoma	cytarabine	DepoCyt; Cytosar-U
stomach cancer	floxuridine	FUDR
certain leukemias; lymphoma	fludarabine	Fludara
breast; lung; ovarian; and pancreatic cancers	gemcitabine	Gemzar
certain leukemias	hydroxyurea	Droxia
multiple cancers	methotrexate	Rheumatrex; Trexall
multiple cancers	mitomycin	Mutamycin
certain leukemias; lymphoma	nelarabine	Arranon
lung and ovarian cancers; mesothelioma	pemetrexed	Alimta
certain leukemias	pentostatin	Nipent
certain lymphomas	pralatrexate	Folotyn

DNA-damaging Agents

Approved Indication	Generic Name	Trade Name
ovarian cancer	altretamine	Hexalen
certain leukemias	arsenic trioxide	Trisenox
multiple cancers	bendamustine	Treanda
certain lymphomas; squamous cell and testicular cancers	bleomycin sulfate	Blenoxane
certain leukemias	busulfan	Myleran; Busulfex
breast, lung and ovarian cancers	carboplatin	Paraplatin; Paraplat
brain tumors; certain lymphomas	carmustine	BiCNU
multiple cancers	chlorambucil	Leukeran
multiple cancers	cisplatin	Platinol-AQ
multiple cancers	cyclophosphamide	Cytoxan
melanoma; certain brain cancers	dacarbazine	DTIC-Dome
multiple cancers	dactinomycin	Cosmegen
certain leukemias	daunorubicin; daunomycin	Cerubidine
multiple cancers	doxorubicin hydrochloride	Adriamycin PFS; Adriamycin RDF*
certain leukemias; breast and stomach cancers	epirubicin hydrochloride	Ellence
testicular and lung cancers	etoposide phosphate	Etopophos; Topusar; VePesid
Certain type of leukemia	gemtuzumab ozogamicin	Mylotarg
certain leukemias	idarubicin	Idamycin PFS

multiple cancers	ifosfamide	Ifex
Certain types of leukemia	inotuzumab ozogamicin	Besponza
colon, lung and rectal cancers	irinotecan	Camptosar; Campostar
pancreatic cancer	irinotecan lioposome injection	Onivyde
brain tumors	lomustine	CeeNU
multiple cancers	mechlorethamine hydrochloride	Mustargen
multiple cancers	melphalan	Alkeran
certain lymphomas	methoxsalen	Uvadex
multiple cancers	mitoxantrone	Novantrone
colon cancer	oxaliplatin	Eloxatin
testicular cancer	plicamycin	Mithracin
certain lymphomas	procarbazine	Matulane
pancreatic cancer	streptozocin	Zanosar
melanoma; certain brain cancers	temozolomide	Temodar
certain leukemias	thioguanine	Thioguanine Tabloid
multiple cancers	thiotepa	Thioplex
ovarian and small cell lung cancers	topotecan	Hycamtin
colorectal cancer	trifluridine and tipiracil	Lonsurf
bladder cancer	valrubicin	Valstar

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Cell Cytoskeleton-modifying Agents

Approved Indication	Generic Name	Trade Name
prostate cancer	cabazitaxel	Jevtana
multiple cancers	docetaxel	Taxotere
breast cancer; liposarcoma	eribulin mesylate	Halaven
breast cancer	ixabepilone	Ixempra
multiple cancers	paclitaxel	Taxol
breast; lung; and pancreatic cancers	paclitaxel albumin-bound particles	Abraxane
multiple cancers	vinblastine	Velban
certain leukemias and lymphomas	vincristine	Oncovin
certain leukemias and lymphomas	vincristine sulfate liposomes	Marqibo
breast and lung cancers	vinorelbine tartrate	Navelbine

Antinutrients

Approved Indication	Generic Name	Trade Name
Certain leukemias	asparaginase	Elspar; Kidrolase

Gene-transcription Modifiers

Approved Indication	Generic Name	Trade Name
certain lymphomas	bexarotene	Targretin
liposarcoma and leiomyosarcoma	trabectedin	Yondelis
certain leukemias	tretinoin (all-trans retinoic acid)	Vesanoid

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* requires a companion diagnostic

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TABLE 2**
(CONTINUED)

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Radiation-emitting Drugs

Approved Indication	Generic Name	Trade Name
Certain types of adrenal tumors	iobenguane I131	Azedra
Certain types of neuroendocrine tumors	lutetium 177 dotatate	Lutathera
prostate cancer bone metastases	radium Ra 223 dichloride	Xofigo

Cell-death Promoting Agents

Approved Indication	Generic Name	Trade Name
certain form of leukemia	venetoclax	Venclexta

Hormones/Antihormones

Approved Indication	Generic Name	Trade Name
prostate cancer	abarelix	Plenaxis
prostate cancer	abiraterone acetate	Zytiga
breast cancer	anastrozole	Arimidex
Prostate cancer	apalutamide	Erleada
prostate cancer	bicalutamide	Casodex
prostate cancer	degarelix	Firmagon
prostate cancer	enzalutamide	Xtandi
prostate cancer	estramustine	Emcyt; Estracyt
breast cancer	exemestane	Aromasin
prostate cancer	flutamide	Eulexin
metastatic breast cancer	fulvestrant	Faslodex
prostate and breast cancers	goserelin acetate implant	Zoladex
breast cancer	letrozole	Femara
prostate cancer	leuprolide acetate	Eligard; Lupron; Viadur
breast and endometrial cancers	megestrol acetate	Megace; Megace Oral Suspension
breast cancer	tamoxifen	Nolvadex
prostate cancer	triptorelin pamoate	Trelstar Depot

Immune-system Modifiers

Approved Indication	Generic Name	Trade Name
multiple cancers	interferon alfa-2b	Intron A
melanoma; kidney cancer	aldesleukin	Proleukin
myelodysplastic syndrome; certain lymphomas	lenalidomide	Revlimid
multiple myeloma	pomalidomide	Pomalyst

Proteasome Inhibitors

Approved Indication	Generic Name	Trade Name
multiple myeloma	bortezomib	Velcade
multiple myeloma	carfilzomib	Kyprolis
multiple myeloma	ixazomib	Ninlaro

Protein-translation Inhibitors

Approved Indication	Generic Name	Trade Name
certain type of leukemia	omacetaxine	Synribo mepesuccinate

Epigenome-modifying Agents

Approved Indication	Generic Name	Trade Name
myelodysplastic syndrome	azacitidine	Vidaza
certain lymphomas	belinostat	Beleodaq
myelodysplastic syndrome	decitabine	Dacogen
certain type of leukemia	enasidenib*	Idhifa
certain type of leukemia	ivosidenib*	Tibsovo
multiple myeloma	panobinostat	Farydak
certain lymphomas	romidepsin	Istodax
certain lymphomas	vorinostat	Zolinza

DNA-repair Inhibitors

Approved Indication	Generic Name	Trade Name
Certain types of ovarian, fallopian tube, and primary peritoneal cancer	niraparib	Zejula
certain forms of breast and ovarian cancer	olaparib*	Lynparza
Certain type of ovarian cancer	rucaparib*	Rubraca

Immune-checkpoint Inhibitors

Approved Indication	Generic Name	Trade Name
certain type of bladder cancer and lung cancer	atezolizumab	Tecentriq
Certain types of bladder cancer and skin cancer	avelumab	Bavencio
Certain types of bladder cancer and lung cancer	durvalumab	Imfinzi
melanoma	ipilimumab	Yervoy
multiple cancers	nivolumab	Opdivo
multiple cancers	pembrolizumab	Keytruda

Bone-remodeling Inhibitors

Approved Indication	Generic Name	Trade Name
potentially lethal complication of advanced cancers*	denosumab	Xgeva

Angiogenesis Inhibitors

Approved Indication	Generic Name	Trade Name
kidney cancer	axitinib	Inlyta
multiple cancers	bevacizumab	Avastin
thyroid cancer; kidney cancer	cabozantinib	Cometriq; Cabometyx
certain type of thyroid cancer; kidney cancer	lenvatinib	Lenvima
kidney cancer; soft tissue sarcomas; gastrointestinal stromal tumors	pazopanib	Votrient
certain types of lung and stomach cancers	ramucirumab	Cyramza
colorectal cancer; gastrointestinal stromal tumors and liver cancer	regorafenib	Stivarga

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Angiogenesis Inhibitors *(continued)*

Approved Indication	Generic Name	Trade Name
kidney cancer; certain type of thyroid cancer	sorafenib	Nexavar
gastrointestinal stromal tumors; kidney cancer; some pancreatic cancers	sunitinib	Sutent
thyroid cancer	vandetanib	Caprelsa
colorectal cancer	ziv-aflibercept	Zaltrap

Cell-lysis Mediators

Approved Indication	Generic Name	Trade Name
certain leukemias	alemtuzumab	Campath
certain types of leukemia	blinatumomab	Blincyto
certain lymphomas	brentuximab vedotin	Adcetris
multiple myeloma	daratumumab	Darzalex
neuroblastoma	dinutuximab	Unituxin
multiple myeloma	elotuzumab	Empliciti
certain lymphomas	ibritumomab	Zevalin
certain form of leukemia; certain form of lymphoma	obinutuzumab	Gazyva
certain leukemias	ofatumumab	Arzerra
certain lymphomas	rituximab	Rituxan

Oncolytic Virus

Approved Indication	Generic Name	Trade Name
melanoma	talimogene laherparepvec [^]	Imlygic

Therapeutic Vaccines

Approved Indication	Generic Name	Trade Name
prostate cancer	sipuleucel-T	Provenge

CAR T-cell Therapy

Approved Indication	Generic Name	Trade Name
Certain type of non-Hodgkin lymphoma	axicabtagene ciloleucel	Yescarta
Certain types of leukemia and non-Hodgkin lymphoma [†]	tisagenlecleucel	Kymriah

Cell-signaling Inhibitors

Approved Indication	Generic Name	Trade Name
Certain type of breast cancer	abemaciclib	Verzenio
Certain type of non-Hodgkin lymphoma	acalabrutinib	Calquence
HER2+ breast cancer	ado-trastuzumab emtansine	Kadcyla
certain type of lung cancer	afatinib	Gilotrif
certain form of lung cancer	alectinib	Alecensa
certain type of leukemia	bosutinib	Bosulif

Certain type of melanoma [†]	binimetinib and encorafenib	Braftovi and Mektovi
Certain type of lung cancer	brigatinib	Alunbrig
certain type of metastatic ALK-positive lung cancer	ceritinib	Zykadia
colon cancer*; head and neck cancer	cetuximab	Erbix
certain form of melanoma*	cobimetinib	Cotellic and Zelboraf
Certain type of non-Hodgkin lymphoma	copanlisib	Aliqopa
specific lung cancers*	crizotinib	Xalkori
multiple cancers	dabrafenib	Tafinlar
some leukemias	dasatinib	Sprycel
some lung cancers*; pancreatic cancer	erlotinib	Tarceva
some pancreatic cancers; kidney cancer; non-cancerous kidney tumors; HER2+ breast cancers; neuroendocrine tumors	everolimus	Afinitor
lung cancer	gefitinib	Iressa
certain form of lymphoma and non-Hodgkin lymphoma	ibrutinib	Imbruvica
certain types of leukemia and lymphoma	idelalisib	Zydelig
some leukemias; stomach cancer; certain type of skin cancer	imatinib	Gleevec; Glivec
HER2+ breast cancers	lapatinib	Tykerb
Certain types of leukemia	midostaurin*	Rydapt
certain form of lung cancer	necitumumab	Portrazza
Certain type of breast cancer	neratinib	Nerlynx
some leukemias	nilotinib	Tasigna
Soft tissue sarcoma	olaratumab	Lartruvo
certain form of lung cancer*	osimertinib	Tagrisso
certain subtype of breast cancer	palbociclib	Ibrance
colon cancer	panitumumab	Vectibix
HER2+ breast cancer	pertuzumab	Perjeta
certain types of leukemia	ponatinib	Iclusig
Certain type of breast cancer	ribociclib	Kisqali
myelofibrosis	ruxolitinib	Jakafi
most common type of skin cancer	sonidegib	Odomzo
multiple cancers	trametinib	Mekinist
HER2+ breast cancer	trastuzumab	Herceptin
kidney cancer	temsirolimus	Torisel; Torisel
thyroid cancer	vandetanib	Caprelsa
Certain type of blood cancer and melanoma*	vemurafenib	Zelboraf
most common type of skin cancer	vismodegib	Erivedge

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