

**Cancer drug costs for a month of treatment at initial Food and Drug
Administration approval**

Generic name	Brand name	Year of FDA approval	Monthly cost (actual \$)	Monthly cost (2014\$)
vinblastine	Velban	1965	\$78	\$586
thioguanine, 6-TG	Thioguanine Tabloid	1966	\$17	\$124
hydroxyurea	Hydrea	1967	\$14	\$99
cytarabine	Cytosar-U, Tarabine PFS	1969	\$13	\$84
procarbazine	Matulane	1969	\$2	\$13
testolactone	Teslac	1969	\$179	\$1,158
mitotane	Lysodren	1970	\$134	\$816
plicamycin	Mithracin	1970	\$50	\$305
mitomycin C	Mutamycin	1974	\$5	\$23
dacarbazine	DTIC-Dome	1975	\$29	\$128
lomustine	CeeNU	1976	\$10	\$42
carmustine	BiCNU, BCNU	1977	\$33	\$129
tamoxifen citrate	Nolvadex	1977	\$44	\$170
cisplatin	Platinol	1978	\$125	\$454
estramustine	Emcyt	1981	\$420	\$1,094
streptozocin	Zanosar	1982	\$61	\$150
etoposide, VP-16	Vepesid	1983	\$181	\$430
interferon alfa 2a	Roferon A	1986	\$742	\$1,603
daunorubicin, daunomycin	Cerubidine	1987	\$533	\$1,111
doxorubicin	Adriamycin	1987	\$521	\$1,086
mitoxantrone	Novantrone	1987	\$477	\$994
ifosfamide	IFEX	1988	\$1,667	\$3,336
flutamide	Eulexin	1989	\$213	\$406
altretamine	Hexalen	1990	\$341	\$618
idarubicin	Idamycin	1990	\$227	\$411
levamisole	Ergamisol	1990	\$105	\$191
carboplatin	Paraplatin	1991	\$860	\$1,495
fludarabine phosphate	Fludara	1991	\$662	\$1,151
pamidronate	Aredia	1991	\$507	\$881
pentostatin	Nipent	1991	\$1,767	\$3,071
aldesleukin	Proleukin	1992	\$13,503	\$22,784
melphalan	Alkeran	1992	\$35	\$59
cladribine	Leustatin, 2-CdA	1993	\$764	\$1,252
asparaginase	Elspar	1994	\$694	\$1,109
paclitaxel	Taxol	1994	\$2,614	\$4,176
pegaspargase	Oncaspar	1994	\$3,006	\$4,802
vinorelbine	Navelbine	1994	\$1,035	\$1,653
anastrozole	Arimidex	1995	\$189	\$294
bicalutamide	Casodex	1995	\$311	\$483
doxorubicin liposomal	Doxil, Dox-SL, Evacet, LipoDox	1995	\$1,488	\$2,311

goserelin acetate	Zoladex	1995	\$415	\$645
porfimer sodium	Photofrin	1995	\$520	\$808
tretinoin, ATRA	Vesanoid	1995	\$2,435	\$3,782
bleomycin	Blenoxane	1996	\$421	\$635
daunorubicin liposomal	DanuoXome	1996	\$847	\$1,278
etoposide phosphate	Etopophos	1996	\$685	\$1,034
gemcitabine	Gemzar	1996	\$2,129	\$3,212
irinotecan	Camptosar	1996	\$5,326	\$8,036
nilutamide	Nilandron	1996	\$320	\$483
topotecan	Hycamtin	1996	\$2,344	\$3,537
docetaxel	Taxotere	1996	\$2,610	\$3,938
letrozole	Femara	1997	\$180	\$265
rituximab	Rituxan	1997	\$3,475	\$5,126
toremifene	Fareston	1997	\$93	\$138
BCG Live	TICE BCG	1998	\$53	\$77
capecitabine	Xeloda	1998	\$1,045	\$1,518
leuprolide acetate	Eligard, Lupron, Lupron Depot	1998	\$206	\$299
trastuzumab	Herceptin	1998	\$3,208	\$4,659
valrubicin	Valstar	1998	\$3,209	\$4,661
bexarotene	Targretin	1999	\$2,361	\$3,356
busulfan	Busulfex (Myleran)	1999	\$1,427	\$2,028
cytarabine liposomal	DepoCyt, DepoFoam	1999	\$3,351	\$4,762
denileukin	Ontak	1999	\$14,291	\$20,307
epirubicin	Ellence	1999	\$2,295	\$3,261
exemestane	Aromasin	1999	\$205	\$292
methoxsalen	Uvadex	1999	\$80	\$113
temozolomide	Temodar	1999	\$1,574	\$2,237
arsenic trioxide	Trisenox	2000	\$5,400	\$7,424
gemtuzumab ozogamicin	Mylotarg	2000	\$4,262	\$5,859
triptorelin pamoate	Trelstar Depot	2000	\$450	\$618
alemtuzumab	Campath	2001	\$19,925	\$26,634
imatinib mesylate	Gleevec	2001	\$3,401	\$4,546
fulvestrant	Faslodex	2002	\$948	\$1,248
ibritumomab tiuxetan	Zevalin	2002	\$1,000	\$1,315
oxaliplatin	Eloxatin	2002	\$5,911	\$7,778
zoledronic acid	Zometa	2002	\$881	\$1,159
abarelix	Plenaxis depot	2003	\$2,607	\$3,354
bortezomib	Velcade	2003	\$3,392	\$4,364
gefitinib	Iressa	2003	\$1,608	\$2,069
tositumomab	Bexxar	2003	\$1,449	\$1,864
azacitidine	Vidaza, Mylosar	2004	\$3,909	\$4,899
bevacizumab	Avastin	2004	\$4,429	\$5,551
cetuximab	Erbitux	2004	\$9,465	\$11,862
erlotinib	Tarceva	2004	\$4,174	\$5,231
pemetrexed disodium	Alimta	2004	\$5,086	\$6,374

lenalidomide	Revlimid	2005	\$7,989	\$9,684
nelarabine	Arranon	2005	\$19,425	\$23,546
paclitaxel albumin-stabilized nanoparticle formulation	Abraxane, Nanoparticle Paclitaxel	2005	\$5,640	\$6,837
sorafenib	Nexavar	2005	\$5,097	\$6,178
dasatinib	Sprycel	2006	\$4,529	\$5,318
decitabine	Dacogen	2006	\$4,652	\$5,463
panitumumab	Vectibix	2006	\$7,991	\$9,384
sunitinib maleate	Sutent	2006	\$4,590	\$5,390
thalidomide	Thalomid, Synovir	2006	\$5,613	\$6,591
vorinostat	Zolinza	2006	\$8,134	\$9,552
ixabepilone	Ixempra	2007	\$6,781	\$7,742
lapatinib ditosylate	Tykerb	2007	\$3,124	\$3,567
nilotinib	Tasigna	2007	\$6,140	\$7,010
temsirolimus	Torisel	2007	\$5,497	\$6,276
degarelix	Firmagon	2008	\$595	\$654
bendamustine HCL	Treanda	2008	\$7,026	\$7,725
everolimus	Afinitor	2009	\$7,885	\$8,701
pralatrexate injection	Folotyn	2009	\$19,732	\$21,773
pazopanib	Votrient	2009	\$6,013	\$6,635
romidepsin	Istodax	2009	\$16,958	\$18,713
ofatumumab	Arzerra	2009	\$18,315	\$19,884
cabazitaxel	Jevtana Injection	2010	\$10,842	\$11,771
sipuleucel-T	Provenge	2010	\$35,588	\$38,637
eribulin mesylate	Halaven	2010	\$6,193	\$6,724
ipilimumab	Yervoy	2011	\$37,956	\$39,947
vandetanib	Caprelsa	2011	\$10,413	\$10,959
abiraterone acetate	Zytiga	2011	\$5,259	\$5,535
vemurafenib tablets	Zelboraf	2011	\$10,767	\$11,332
brentuximab vedotin	Adcetris	2011	\$19,495	\$20,517
crizotinib	Xalkori	2011	\$11,011	\$11,589
asparaginase Erwinia chrysanthemi	Erwinaze	2011	\$24,622	\$25,021
ruxolitinib phosphate	Jakafi	2011	\$8,865	\$8,878
axitinib	Inlyta	2012	\$9,291	\$9,580
vismodegib	Erivedge	2012	\$8,546	\$8,812
ziv-aflibercept	Zaltrap	2012	\$11,063	\$11,407
enzalutamide	Xtandi	2012	\$7,078	\$7,298
bosutinib	Bosulif	2012	\$8,287	\$8,545
regorafenib	Stivarga	2012	\$9,620	\$9,919
omacetaxine mepesuccinate	Synribo	2012	\$6,357	\$6,555
cabozantinib	Cometriq	2012	\$9,921	\$10,229
ponatinib	Iclusig	2012	\$9,104	\$9,387
carfilzomib	Kyprolis	2012	\$7,959	\$8,089

pertuzumab	Perjeta	2012	\$7,758	\$7,883
ado-trastuzumab emtansine	Kadcyla	2013	\$10,635	\$10,807
pomalidomide	Pomalyst	2013	\$11,336	\$11,520
trametinib	Mekinist	2013	\$8,812	\$8,955
dabrafenib	Tafinlar	2013	\$9,411	\$9,564
Ra 223	Xofigo	2013	\$12,455	\$12,657
ibrutinib	Imbruvica	2013	\$10,900	\$11,077
obinutuzumab	Gazyva	2013	\$5,878	\$5,973
afatanib	Gilotrif	2013	\$6,071	\$6,170
ceritinib	Zykadia	2014	\$13,672	\$13,672
ramucirumab	Cyramza	2014	\$13,256	\$13,256
pembrolizumab	Keytruda	2014	\$8,725	\$8,725
blinatumomab	Blinicyto	2014	\$64,260	\$64,260
nivolumab	Opdivo	2014	\$12,500	\$12,500
lenvatinib	Lenvima	2015	\$13,766	\$13,945
palbociclib	Ibrance	2015	\$9,850	\$9,978
panobinostat	Farydak	2015	\$9,906	\$10,035