

# Cancer

PRESENTED BY AMERICA'S BIOPHARMACEUTICAL COMPANIES

## 399 Medicines in Development Offer Hope in the War on Cancer

There are few things that cause patients more fear and uncertainty as a cancer diagnosis. Yet today—because of a steady stream of new and improved medicines and treatments—cancer can increasingly be managed and even beaten. Patients and their families are looking for even more and better treatments, and America's research biopharmaceutical companies are responding.

Biopharmaceutical researchers are working on 399 medicines for cancer. Many are high-tech weapons that fight the disease in new ways, while some involve research on new ways to use existing medicines. The research is being conducted by 178 pharmaceutical and biotechnology companies and by the National Cancer Institute.

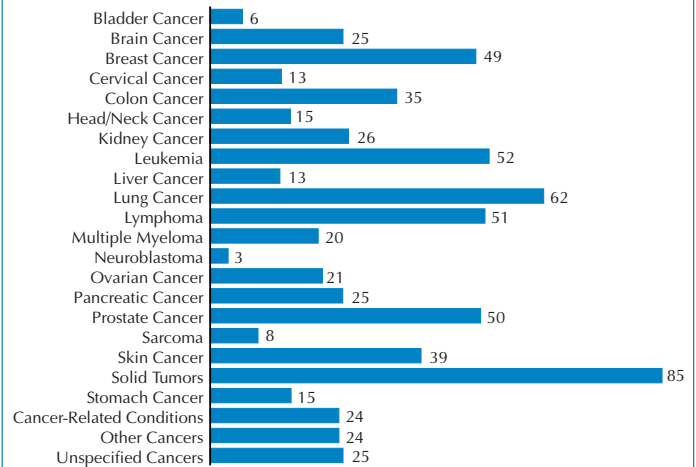
The medicines in development—all in either clinical trials or under Food and Drug Administration review—include 62 for lung cancer, the leading cause of cancer death in the United States; 49 for breast cancer, which is expected to strike more than 200,000 American women this year; 35 for colon cancer, the third most common cancer in both men and women in this country; and 50 for prostate cancer, which this year is expected to kill more than 30,000 American men. Additional medicines target kidney cancer, pancreatic cancer, brain cancer, skin cancer, ovarian cancer, and others. In addition, companies are working on medicines to improve the quality of life for people undergoing cancer treatment.

This commitment to patients and research promises to continue and accelerate the remarkable progress made in the past decade against cancer, which led to declines in both cancer cases and cancer deaths. Death rates for eight of the top 10 cancers remained level or declined during the 1990s, according to a *Journal of the National Cancer Institute* report.

Research-based pharmaceutical and biotechnology companies have made progress by bringing cutting-edge new cancer treatments to patients. For example:

- A breakthrough medicine to treat metastatic colorectal cancer is the first treatment approved to prevent the formation of new blood vessels that provide tumors with oxygen and nutrients—a process known as angiogenesis.
- A medicine for the treatment of non-small-cell lung cancer inhibits the formation and growth of tumor cells.

MEDICINES IN DEVELOPMENT FOR CANCER\*



\*Some medicines are listed in more than one category.

- The first in a new class of drugs prevents acute and delayed nausea and vomiting associated with chemotherapy.

Many of the new medicines in the pipeline also use new approaches and technologies to fight cancer. They include:

- A medicine that targets a protein that may interfere with the effectiveness of chemotherapy.
- A drug that delivers a synthetic version of a substance derived from scorpions directly to brain tumor cells.
- A medicine designed to induce a powerful immune response to melanoma.

Despite the progress, cancer remains the second leading cause of death by disease in the United States, exceeded only by heart disease. This year, some 570,280 Americans are expected to die of cancer—more than 1,500 people a day. The hundreds of new medicines to treat cancer now being developed by the research biopharmaceutical industry demonstrate our commitment to meeting patient needs as well as our best hope for stemming the toll of cancer-related deaths.

Billy Tauzin  
President and CEO  
PhRMA

# Medicines in Development for Cancer

## BLADDER CANCER

Product Name	Sponsor	Indication	Development Status*
<b>BCI Immune Activator</b> modified keyhole limpet hemocyanin (KLH) depsipeptide (FK228)	Intracel Resources <i>Frederick, MD</i>	superficial bladder cancer or carcinoma in situ (CIS) in patients refractory to BCG treatment	Phase III (301) 668-8400
	National Cancer Institute <i>Bethesda, MD</i> Gloucester Pharmaceuticals <i>Cambridge, MA</i>	(see also brain, colon, head/neck, leukemia, lung, lymphoma, ovarian, skin, solid tumors, stomach, other)	Phase II N C I T R I A L (800) 4-CANCER
EOquin	Spectrum Pharmaceuticals <i>Irvine, CA</i>	superficial bladder cancer (radiation sensitizer)	Phase II (949) 788-6700
lapatinib (ErbB-2 and EGFR dual kinase inhibitor)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also breast, head/neck, kidney, lung, stomach)	Phase III (888) 825-5249
<b>Proxinium™</b>	Viventia Biotech <i>Toronto, Ontario</i>	(see also head/neck)	Phase I (416) 291-1277
vinflunine	Bristol-Myers Squibb <i>Princeton, NJ</i>	(see also lung)	Phase III (212) 546-4000

## BRAIN CANCER

Product Name	Sponsor	Indication	Development Status
<sup>131</sup> I-TM-601 <b>(Orphan Drug)</b>	TransMolecular <i>Birmingham, AL</i>	recurrent glioma	Phase II (205) 972-0770
AP23573 (mTOR inhibitor)	ARIAD Pharmaceuticals <i>Cambridge, MA</i>	glioblastoma (see also cervical, leukemia, lymphoma, multiple myeloma, prostate, sarcoma, solid tumors)	Phase I (617) 494-0400
CC 8490	Celgene <i>Summit, NJ</i>	glioblastoma	Phase II (908) 673-9000
<b>Cervene™</b> (TP-38)	IVAX <i>Miami, FL</i>	recurrent glioblastoma	Phase II (305) 575-6000
cintredekin besudotox (IL13-PE38QQR) <b>(Orphan Drug)</b>	NeoPharm <i>Lake Forest, IL</i>	glioblastoma multiforme	Phase III (847) 295-8678
<b>Cloretazine™</b> VNP40101M <b>(Orphan Drug)</b>	Vion Pharmaceuticals <i>New Haven, CT</i>	recurrent adult glioma (see also leukemia)	Phase II (203) 498-4210

\* For more information about a specific medicine in this report, please call the telephone number listed.

# BRAIN CANCER

Product Name	Sponsor	Indication	Development Status
<b>Cotara</b> <sup>®</sup> TNT-tumor necrosis therapy	Peregrine Pharmaceuticals <i>Tustin, CA</i>	(see also colon)	Phase II/III (714) 508-6000
<b>DCVax</b> <sup>®</sup> -Brain	Northwest Biotherapeutics <i>Bothell, WA</i>	glioblastoma multiforme	Phase II (877) 606-9246
depsipeptide (FK228)	National Cancer Institute <i>Bethesda, MD</i> Gloucester Pharmaceuticals <i>Cambridge, MA</i>	(see also bladder, colon, head/neck, leukemia, lung, lymphoma, ovarian, skin, solid tumors, stomach, other)	Phase I/II N C I T R I A L (800) 4-CANCER
DTI 015/ carmustine (BCNU) for intratumoral injection	Direct Therapeutics <i>Redwood City, CA</i>	recurrent glioblastoma multiforme	Phase I/II completed (914) 696-7700
<b>Efaproxyn</b> <sup>™</sup> efaproxiral	Allos Therapeutics <i>Westminster, CO</i>	brain metastases from breast cancer (see also cervical)	application submitted (303) 426-6262
		glioblastoma multiforme	Phase II (303) 426-6262
EMD 121974	National Cancer Institute <i>Bethesda, MD</i> Merck KGaA <i>Darmstadt, Germany</i>	(see also prostate, skin, solid tumors)	Phase I/II N C I T R I A L (800) 4-CANCER
epothilone B analog (BMS 247550)	National Cancer Institute <i>Bethesda, MD</i> Bristol-Myers Squibb <i>Princeton, NJ</i>	(see also breast, kidney, liver, lymphoma, prostate, solid tumors, other)	Phase I/II N C I T R I A L (800) 4-CANCER
fenretinide (4-HPR)	National Cancer Institute <i>Bethesda, MD</i>	glioblastoma (see also prostate, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
GW572016	National Cancer Institute <i>Bethesda, MD</i> GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also breast, cervical, head/neck, liver, prostate, stomach)	Phase I/II N C I T R I A L (800) 4-CANCER
<b>Hemopure</b> <sup>®</sup> hemoglobin glutamer-250 (bovine)	Biopure <i>Cambridge, MA</i>	treatment of patients with glioblastoma as an adjunct to radiotherapy by increasing oxygen perfusion in hypoxic tumors	Phase I (617) 234-6500
<b>Hycamtin</b> <sup>®</sup> topotecan	National Cancer Institute <i>Bethesda, MD</i> GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also lung, ovarian)	Phase II N C I T R I A L (800) 4-CANCER
irofulven	MGI Pharma <i>Minneapolis, MN</i>	recurrent malignant glioma (see also liver, ovarian, prostate)	Phase II (952) 346-4700

## BRAIN CANCER

Product Name	Sponsor	Indication	Development Status
MPC-6827	Myriad Genetics <i>Salt Lake City, UT</i>	metastatic brain cancer	Phase I (801) 584-3600
O6-benzylguanine (O6-BG)	National Cancer Institute <i>Bethesda, MD</i> Keryx Biopharmaceuticals <i>New York, NY</i>	(see also lymphoma, solid tumors, cancer/chemotherapy)	Phase I/III N C I T R I A L (800) 4-CANCER
pyrazoloacridine	National Cancer Institute <i>Bethesda, MD</i> Pfizer <i>New York, NY</i>	glioblastoma multiforme, glioma	Phase I N C I T R I A L (800) 4-CANCER
SDX-102 (l-alanosine)	Salmedix <i>San Diego, CA</i>	previously treated brain tumors (see also lung, pancreatic, sarcoma)	Phase I/II (858) 622-5050
<b>Xcytrin</b> <sup>®</sup> motexafin gadolinium	Pharmacyclics <i>Sunnyvale, CA</i>	brain metastases from non-small- cell lung cancer in combination with radiotherapy (see also kidney, leukemia, lung, lymphoma, multiple myeloma, solid tumors)	Phase III (408) 774-0330
		brain metastases in combination with whole brain radiation therapy and stereotactic radiosurgery	Phase II (408) 774-0330
		malignant glioma in combination with Temodar <sup>®</sup>	Phase I (408) 774-0330
<b>Xerecept</b> <sup>™</sup> corticotropin- releasing factor (CRF)	Neurobiological Technologies <i>Richmond, CA</i>	reduction of brain edema associated with brain tumors (peritumoral brain edema)	Phase III (510) 262-1730
<b>Xinlay</b> atrasentan	Abbott Laboratories <i>Abbott Park, IL</i>	(see also kidney, lung, ovarian, prostate)	Phase II (847) 936-1189

## BREAST CANCER

Product Name	Sponsor	Indication	Development Status
17-allylamino- geldanamycin	National Cancer Institute <i>Bethesda, MD</i> Kosan Biosciences <i>Hayward, CA</i>	(see also kidney, leukemia, lymphoma, prostate, skin, solid tumors, other)	Phase II N C I T R I A L (800) 4-CANCER
adecatumumab	Serono <i>Rockland, MA</i>	metastatic breast cancer (see also prostate)	Phase II (800) 283-8088
<b>Advexin</b> <sup>®</sup> (p53)	Introgen Therapeutics <i>Austin, TX</i>	(see also head/neck, lung, prostate, stomach, other)	Phase II (512) 708-9310
arzoxifene (next-generation SERM)	Eli Lilly <i>Indianapolis, IN</i>	prevention of breast cancer	Phase III (317) 276-2000

## BREAST CANCER

Product Name	Sponsor	Indication	Development Status
atamestane	Intarcia Therapeutics <i>Emeryville, CA</i> Schering AG <i>Berlin, Germany</i>	combination hormonal therapy for treatment of hormone-dependent breast cancer	Phase III (510) 652-2600
<b>Avastin™</b> bevacizumab	Genentech <i>South San Francisco, CA</i>	metastatic breast cancer (see also colon, kidney, lung, ovarian, pancreatic)	Phase III (650) 225-1000
BAY 43-9006 (sorafenib)	Bayer Pharmaceuticals <i>West Haven, CT</i> Onyx Pharmaceuticals <i>Richmond, CA</i>	(see also kidney, leukemia, liver, lung)	Phase II (203) 937-2000 (510) 222-9700
<b>Bonviva®</b> ibandronate	Roche <i>Nutley, NJ</i>	metastatic bone disease in breast cancer	Phase III (973) 235-5000
breast cancer therapeutic (Her 2 Neu) (recombinant pharmaccine)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i> Corixa <i>Seattle, WA</i>	treatment of breast cancer	Phase I (888) 825-5249 (206) 366-3700
<b>BrevaRex®</b>	United Therapeutics <i>Silver Spring, MD</i> ViRexx <i>Edmonton, Alberta</i>	(see also multiple myeloma)	Phase I completed (301) 608-9292 (780) 433-4411
CA4P (combrestatin)	OXIGENE <i>Watertown, MA</i>	breast cancer in combination with paclitaxel and carboplatin (see also cervical, colon, head/neck, lung, ovarian, prostate, other)	Phase II (617) 673-7800
CMD-193	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	(see also lung)	Phase I (800) 934-5556
E7070	Eisai <i>Ridgefield Park, NJ</i>	(see also colon)	Phase II (201) 403-2500
E7389	Eisai <i>Ridgefield Park, NJ</i>	(see also lung)	Phase II (201) 403-2500
epothilone B analog (BMS 247550)	National Cancer Institute <i>Bethesda, MD</i> Bristol-Myers Squibb <i>Princeton, NJ</i>	(see also brain, kidney, liver, lymphoma, prostate, solid tumors, other)	Phase II N C I T R I A L (800) 4-CANCER
ERA 923 (tissue-selective estrogen receptor modulator-SERM)	Ligand Pharmaceuticals <i>San Diego, CA</i>		Phase II (858) 550-7500
everolimus (RAD001)	Novartis Pharmaceuticals <i>East Hanover, NJ</i>	metastatic breast cancer	Phase II (973) 781-8300
<b>Evista®</b> raloxifene	Eli Lilly <i>Indianapolis, IN</i>	breast cancer prevention, reduction of risk of breast cancer	Phase III (317) 276-2000
<b>Femara™</b> letrozole	Novartis Pharmaceuticals <i>East Hanover, NJ</i>	adjuvant treatment in breast cancer	Phase III (973) 781-8300

## BREAST CANCER

Product Name	Sponsor	Indication	Development Status
fowlpox and vaccinia CEA (6D)/TRICOM	National Cancer Institute <i>Bethesda, MD</i> Therion Biologics <i>Cambridge, MA</i>	(see also lung, solid tumors)	Phase I/II N C I T R I A L (800) 4-CANCER
<b>Gemzar®</b> gemcitabine	Eli Lilly <i>Indianapolis, IN</i>	(see also ovarian)	Phase III (317) 276-2000
<b>Genasense®</b> oblimersen sodium (G3139)	Genta <i>Berkeley Heights, NJ</i>	(see also colon, kidney, leukemia, lung, lymphoma, multiple myeloma, pancreatic, prostate, skin, stomach, other)	Phase II (908) 286-9800
GTI-2040 (antisense)	National Cancer Institute <i>Bethesda, MD</i> Lorus Therapeutics <i>Toronto, Ontario</i>	(see also kidney, leukemia, lung, prostate, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
GW572016	National Cancer Institute <i>Bethesda, MD</i> GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also brain, cervical, head/neck, liver, prostate, stomach)	Phase II N C I T R I A L (800) 4-CANCER
<b>Herceptin®</b> trastuzumab	Genentech <i>South San Francisco, CA</i>	metastatic breast cancer in combination with Taxotere® (see also cervical, sarcoma, solid tumors)	application submitted (650) 225-1000
		----- adjuvant breast cancer	Phase III (650) 225-1000
HKI-272	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	(see also lung)	Phase I (800) 934-5556
INGN 225 (p53 vaccine)	Introgen Therapeutics <i>Austin, TX</i>	(see also lung)	Phase I/II (512) 708-9310
<b>Iressa®</b> (ZD1839)	AstraZeneca <i>Wilmington, DE</i>	advanced refractory breast cancer (see also colon, head/neck, kidney, lung, solid tumors)	Phase II (800) 236-9933
ixabepilone	Bristol-Myers Squibb <i>Princeton, NJ</i>	metastatic breast cancer (see also kidney, pancreatic, prostate)	Phase III (212) 546-4000
lapatinib (ErbB-2 and EGFR dual kinase inhibitor)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also bladder, head/neck, kidney, lung, stomach)	Phase III (888) 825-5249
LR-103	Bone Care International <i>Middleton, WI</i>	(see also colon, prostate)	Phase I (608) 662-7800
MDX-010	Medarex <i>Princeton, NJ</i>	(see also prostate)	Phase II (609) 430-2880

# BREAST CANCER

Product Name	Sponsor	Indication	Development Status
MoAb 3A1	National Cancer Institute <i>Bethesda, MD</i>		Phase I N C I T R I A L (800) 4-CANCER
MST-997	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	(see also lung)	Phase I (800) 934-5556
<b>Neuvenge</b> <sup>®</sup> APC8024	Dendreon <i>Seattle, WA</i>	(see also colon, ovarian)	Phase I (206) 256-4545
<b>Omnitarg</b> <sup>™</sup> pertuzumab	Genentech <i>South San Francisco, CA</i>	HER2-negative breast cancer (see also lung, ovarian)	Phase II (650) 225-1000
<b>Panvac</b> <sup>™</sup> -VF	Therion Biologics <i>Cambridge, MA</i>	metastatic breast cancer (see also colon, lung, pancreatic)	Phase II (617) 475-7500
<b>Quadramet</b> <sup>®</sup> samarium Sm 153 leixidronom	Cytogen <i>Princeton, NJ</i>	(see also multiple myeloma, prostate)	Phase I (800) 833-3533
<b>SaponImmune</b> <sup>™</sup> immune enhancer	Galenica Pharmaceuticals <i>Birmingham, AL</i>	(see also prostate)	Phase I (205) 943-6646
SKI-606	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	(see also colon, leukemia, lung, pancreatic)	in clinical trials (800) 934-5556
suramin	National Cancer Institute <i>Bethesda, MD</i>	(see also kidney)	Phase I/II N C I T R I A L (800) 4-CANCER
<b>Telcyta</b> <sup>™</sup> TLK286	Telik <i>Palo Alto, CA</i>	(see also colon, lung, ovarian)	Phase II completed (866) 485-5286
temsirolimus (CCI-779, mTOR inhibitor)	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	metastatic breast cancer (see also kidney, lymphoma)	Phase III (800) 934-5556
<b>Xeloda</b> <sup>®</sup> capecitabine	Roche <i>Nutley, NJ</i>	adjuvant treatment of breast cancer (see also colon)	Phase III (973) 235-5000
<b>Xorane</b> oral paclitaxel	IVAX <i>Miami, FL</i>	(see also lung, stomach)	Phase II completed (305) 575-6000
XRP6258 (new toxoid)	Sanofi-aventis <i>Bridgewater, NJ</i>	breast tumors	Phase II (800) 633-1610
XRP9881 (tubulin inhibitor)	Sanofi-aventis <i>Bridgewater, NJ</i>		Phase III (800) 633-1610
<b>Yondelis</b> <sup>™</sup> (ET-743)	Johnson & Johnson Pharmaceutical Research & Development <i>Raritan, NJ</i> PharmaMar USA <i>Cambridge, MA</i>	(see also ovarian, sarcoma)	Phase II (800) 817-5286
<b>Zarnestra</b> <sup>™</sup> tipifarnib (R115777)	Johnson & Johnson Pharmaceutical Research & Development <i>Raritan, NJ</i>	(see also leukemia)	Phase II (800) 817-5286

## CERVICAL CANCER

Product Name	Sponsor	Indication	Development Status
AP23573 (mTOR inhibitor)	ARIAD Pharmaceuticals <i>Cambridge, MA</i>	endometrial cancer (see also brain, leukemia, lymphoma, multiple myeloma, prostate, sarcoma, solid tumors)	Phase II (617) 494-0400
CA4P (combrestatin)	OxIGENE <i>Watertown, MA</i>	advanced and recurring cervical cancer in combination with cisplatin (see also breast, colon, head/neck, lung, ovarian, prostate, other)	Phase I (617) 673-7800
<b>Cervarix</b> recombinant vaccine with MPL adjuvant	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i> MedImmune <i>Gaithersburg, MD</i> Corixa <i>Seattle, WA</i>	prevention of cervical cancer	Phase III (888) 825-5249 (301) 398-0000 (206) 366-3700
EF5	National Cancer Institute <i>Bethesda, MD</i>	(see also head/neck, lung, ovarian, cancer/chemotherapy)	in clinical trials N C I T R I A L (800) 4-CANCER
<b>Efaproxyn™</b> efaproxiral	Allos Therapeutics <i>Westminster, CO</i>	advanced cervical cancer (see also brain)	Phase I/II (303) 426-6262
<b>Eloxatin®</b> oxaliplatin	National Cancer Institute <i>Bethesda, MD</i> Sanofi-aventis <i>Bridgewater, NJ</i>	(see also liver, lymphoma, pancreatic, solid tumors, stomach)	Phase II N C I T R I A L (800) 4-CANCER
EM-1421	Erimos Pharmaceuticals <i>Raleigh, NC</i>	cervical intraepithelial neoplasia (CIN 1, 2, 3) (see also solid tumors)	Phase II (919) 821-5204, ext. 2803
<b>Gardasil™</b> human papillomavirus (types 6, 11, 16, 18) recombinant vaccine	Merck <i>Whitehouse Station, NJ</i>		Phase III (800) 672-6372
GW572016	National Cancer Institute <i>Bethesda, MD</i> GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	uterine cancer (see also brain, breast, head/neck, liver, prostate, stomach)	Phase II N C I T R I A L (800) 4-CANCER
<b>Herceptin®</b> trastuzumab	National Cancer Institute <i>Bethesda, MD</i> Genentech <i>South San Francisco, CA</i>	endometrial cancer (see also breast, sarcoma, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
<b>Lutrin®</b> motexafin lutetium	National Cancer Institute <i>Bethesda, MD</i> Pharmacyclics <i>Sunnyvale, CA</i>	photodynamic cancer therapy (see also prostate)	Phase I N C I T R I A L (800) 4-CANCER

## CERVICAL CANCER

Product Name	Sponsor	Indication	Development Status
SGN-00101 (HspE7)	National Cancer Institute <i>Bethesda, MD</i> StressGen Biotechnologies <i>San Diego, CA</i>		Phase II N C I T R I A L (800) 4-CANCER
ZYC101a	MGI Pharma <i>Minneapolis, MN</i>	high-grade cervical dysplasia	Phase II completed (952) 346-4700

## COLON CANCER

Product Name	Sponsor	Indication	Development Status
ALVAC-CEA vaccine	sanofi pasteur <i>Toronto, Ontario</i>	colorectal cancer	Phase I (416) 667-2955
ALVAC CEA B7.1	sanofi pasteur <i>Toronto, Ontario</i>	metastatic colorectal cancer	Phase II (416) 667-2955
<b>Aroplatin™</b>	Antigenics <i>New York, NY</i>	colorectal cancer (see also solid tumors)	Phase II (212) 994-8200
<b>Avastin™</b> bevacizumab	Genentech <i>South San Francisco, CA</i>	adjuvant colorectal cancer (see also breast, kidney, lung, ovarian, pancreatic)	Phase III (650) 225-1000
<b>Avastin™</b> bevacizumab <b>Erbix™</b> cetuximab combination	National Cancer Institute <i>Bethesda, MD</i> Genentech <i>South San Francisco, CA</i> Bristol-Myers Squibb <i>Princeton, NJ</i>	(see also kidney, pancreatic)	Phase II N C I T R I A L (800) 4-CANCER
<b>Avicine™</b> therapeutic cancer vaccine	AVI BioPharma <i>Portland, OR</i> SuperGen <i>Dublin, CA</i>	metastatic colorectal cancer (see also pancreatic)	Phase III (503) 227-0554 (925) 327-0200
CA4P (combrestatin)	OXiGENE <i>Watertown, MA</i>	advanced colorectal cancer in combination with MAB A5B7 (see also breast, cervical, head/neck, lung, ovarian, prostate, other)	Phase I/II (617) 673-7800
<b>Celebrex®</b> celecoxib	Pfizer <i>New York, NY</i>	sporadic adenomatous polyposis	Phase III (860) 732-7920
<b>Cotara®</b> TNT-tumor necrosis therapy	Peregrine Pharmaceuticals <i>Tustin, CA</i>	(see also brain)	Phase I (714) 508-6000
CTI-2106	Cell Therapeutics <i>Seattle, WA</i>	(see also ovarian)	Phase II (206) 282-7100
depsipeptide (FK228)	National Cancer Institute <i>Bethesda, MD</i> Gloucester Pharmaceuticals <i>Cambridge, MA</i>	(see also bladder, brain, head/neck, leukemia, lung, lymphoma, ovarian, skin, solid tumors, stomach, other)	Phase II N C I T R I A L (800) 4-CANCER

## COLON CANCER

Product Name	Sponsor	Indication	Development Status
E7070	Eisai <i>Ridgefield Park, NJ</i>	colorectal cancer (see also breast)	Phase II (201) 692-1100
EP-2101 therapeutic, multi-epitope vaccine	Epimmune <i>San Diego, CA</i>	colorectal cancer (see also lung)	Phase I/II (858) 860-2500
<b>Erbix™</b> cetuximab	Bristol-Myers Squibb <i>Princeton, NJ</i> Imclone Systems <i>New York, NY</i>	early stage colorectal cancer (1st-line, 2nd-line and adjuvant) (see also head/neck, lung, pancreatic)	Phase III (212) 546-4000 (908) 218-9588
<b>GCS-100®</b>	GlycoGenesys <i>Boston, MA</i>	colorectal cancer (see also pancreatic)	Phase II (617) 422-0674
<b>Genasense®</b> oblimersen sodium (G3139)	Genta <i>Berkeley Heights, NJ</i>	colorectal cancer (see also breast, kidney, leukemia, lung, lymphoma, multiple myeloma, pancreatic, prostate, skin, stomach, other)	Phase II (908) 286-9800
HSG-ETR1	Human Genome Sciences <i>Rockville, MD</i>	colorectal cancer (see also lung, lymphoma)	Phase II (301) 309-8504
HuC242-DM4	ImmunoGen <i>Cambridge, MA</i>	colorectal cancer (see also pancreatic, stomach)	Phase I (617) 995-2500
<b>HumASPECT®</b> 88BV59	Intracel Resources <i>Frederick, MD</i>	monitoring of colon cancer	application submitted (301) 668-8400
<b>Iressa®</b> (ZD1839)	AstraZeneca <i>Wilmington, DE</i>	advanced colon cancer (see also breast, head/neck, kidney, lung, solid tumors)	Phase II (800) 236-9933
LE-SN38 (liposome entrapped SN-38)	NeoPharm <i>Lake Forest, IL</i>	colorectal cancer	Phase II (847) 295-8678
<b>Leukine®</b> sargramostim	Berlex Laboratories <i>Montville, NJ</i>		Phase IV
LR-103	Bone Care International <i>Middleton, WI</i>	(see also breast, prostate)	Phase I (608) 662-7800
MoAb: I-131 HuCC49 Delta CH2	National Cancer Institute <i>Bethesda, MD</i>		Phase I N C I T R I A L (800) 4-CANCER
<b>Neuvenge®</b> APC8024	Dendreon <i>Seattle, WA</i>	colorectal cancer (see also breast, ovarian)	Phase I (206) 256-4545
NX473	AnorMED <i>Langley, British Columbia</i> NeoRx <i>Seattle, WA</i>	colorectal cancer (see also lung, solid tumors)	Phase II (888) 879-7007

## COLON CANCER

Product Name	Sponsor	Indication	Development Status
<b>OncovAX®</b> autologous vaccine	Intracel Resources <i>Frederick, MD</i>	stage II colon cancer	Phase III completed (301) 668-8400
		stage III colon cancer in combination with chemotherapy	Phase III (301) 668-8400
p53 and ras peptide vaccine	National Cancer Institute <i>Bethesda, MD</i> Amgen <i>Thousand Oaks, CA</i>	(see also lung, ovarian)	Phase I/II N C I T R I A L (800) 4-CANCER
panitumumab (ABX-EGF)	Abgenix <i>Fremont, CA</i> Amgen <i>Thousand Oaks, CA</i>	metastatic colorectal cancer (see also kidney, lung)	Phase III (805) 447-1000
<b>Panvac™-VF</b>	Therion Biologics <i>Cambridge, MA</i>	metastatic colorectal cancer (see also breast, lung, pancreatic)	Phase I (617) 475-7500
SKI-606	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	colorectal cancer (see also breast, leukemia, lung, pancreatic)	in clinical trials (800) 934-5556
sodium phenylbutyrate	National Cancer Institute <i>Bethesda, MD</i> Vectramed <i>Plainsboro, NJ</i>	(see also leukemia, solid tumors)	Phase I/II N C I T R I A L (800) 4-CANCER
<b>Telcyta™</b> TLK286	Telik <i>Palo Alto, CA</i>	colorectal cancer (see also breast, lung, ovarian)	Phase II completed (866) 485-5286
vatalanib (PTK 787)	Novartis Pharmaceuticals <i>East Hanover, NJ</i> Schering AG <i>Berlin, Germany</i>	colorectal cancer	Phase III (973) 781-8300
<b>Xeloda®</b> capecitabine	Roche <i>Nutley, NJ</i>	adjuvant and metastatic combination treatment of colon cancer (see also breast)	Phase III (973) 235-5000

## HEAD/NECK CANCER

Product Name	Sponsor	Indication	Development Status
<b>Advexin®</b> (p53)	National Cancer Institute <i>Bethesda, MD</i> Introgen Therapeutics <i>Austin, TX</i>	head and neck, including lip and oral cavity	Phase I/II N C I T R I A L (800) 4-CANCER
		Introgen Therapeutics <i>Austin, TX</i>	head and neck cancer (see also breast, lung, prostate, stomach, other)

## HEAD/NECK CANCER

Product Name	Sponsor	Indication	Development Status
CA4P (combrestatin)	OXiGENE <i>Watertown, MA</i>	head/neck cancer in combination with radiotherapy (see also breast, cervical, colon, lung, ovarian, prostate, other)	Phase I/II (617) 673-7800
cytochlor and tetrahydrouridine (FK228)	National Cancer Institute <i>Bethesda, MD</i> Halogenetics <i>Miami, FL</i>	oral cavity cancer (see also stomach)	Phase I N C I T R I A L (800) 4-CANCER
depsipeptide (FK228)	National Cancer Institute <i>Bethesda, MD</i> Gloucester Pharmaceuticals <i>Cambridge, MA</i>	(see also bladder, brain, colon, leukemia, lung, lymphoma, ovarian, skin, solid tumors, stomach, other)	Phase II N C I T R I A L (800) 4-CANCER
EF5	National Cancer Institute <i>Bethesda, MD</i>	(see also cervical, lung, ovarian, cancer/chemotherapy)	Phase I N C I T R I A L (800) 4-CANCER
<b>Erbix™</b> cetuximab	Bristol-Myers Squibb <i>Princeton, NJ</i> Imclone Systems <i>New York, NY</i>	(see also colon, lung, pancreatic)	Phase III (212) 546-4000 (908) 218-9588
GW572016	National Cancer Institute <i>Bethesda, MD</i> GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	salivary gland cancer, squamous cell carcinoma (see also brain, breast, cervical, liver, prostate, stomach)	Phase II N C I T R I A L (800) 4-CANCER
<b>HumaRAD</b> 16.88/88BV59	Intracel Resources <i>Frederick, MD</i>	(see also ovarian)	Phase I (301) 668-8400
<b>Iressa®</b> (ZD1839)	AstraZeneca <i>Wilmington, DE</i>	(see also breast, colon, kidney, lung, solid tumors)	Phase II (800) 236-9933
lapatinib (ErbB-2 and EGFR dual kinase inhibitor)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also bladder, breast, kidney, lung, stomach)	Phase III (888) 825-5249
<b>MedPulser® Therapy System</b>	Inovio Biomedical <i>San Diego, CA</i>	squamous cell carcinoma of the anterior oral cavity or pharynx and larynx that has failed primary curative therapy (see also pancreatic)	Phase III (858) 597-6006
<b>Multikine®</b> leukocyte interleukin, injection	CEL-SCI <i>Vienna, VA</i>	advanced primary squamous cell carcinoma of the oral cavity (see also prostate)	Phase II completed (703) 506-9460
		locally recurrent/locally metastatic head/neck cancer	Phase I/II completed (703) 506-9460
<b>Proxinium™</b>	Viventia Biotech <i>Toronto, Ontario</i>	(see also bladder)	Phase I (416) 291-1277

## HEAD/NECK CANCER

Product Name	Sponsor	Indication	Development Status
<b>Taxotere</b> <sup>®</sup> docetaxel	Sanofi-aventis <i>Bridgewater, NJ</i>	(see also stomach)	Phase III (800) 633-1610
<b>Tirazone</b> <sup>™</sup> tirapazamine	Sanofi-aventis <i>Bridgewater, NJ</i>		Phase III (800) 633-1610

## KIDNEY CANCER

Product Name	Sponsor	Indication	Development Status
17-allylamino- geldanamycin	National Cancer Institute <i>Bethesda, MD</i> Kosan Biosciences <i>Hayward, CA</i>	(see also breast, leukemia, lymphoma, prostate, skin, solid tumors, other)	Phase II N C I T R I A L (800) 4-CANCER
485232 (recombinant human IL-18 immunomodulator)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	immunologically sensitive renal cell cancer (see also skin)	Phase II (888) 825-5249
AG-013736	Pfizer <i>New York, NY</i>	(see also lung, pancreatic, skin, other)	Phase II (860) 732-7920
<b>Avastin</b> <sup>™</sup> bevacizumab	Genentech <i>South San Francisco, CA</i>	renal cell carcinoma (see also breast, colon, lung, ovarian, pancreatic)	Phase III (650) 225-1000
<b>Avastin</b> <sup>™</sup> bevacizumab <b>Erbix</b> <sup>™</sup> cetuximab combination	National Cancer Institute <i>Bethesda, MD</i> Genentech <i>South San Francisco, CA</i> Bristol-Myers Squibb <i>Princeton, NJ</i>	(see also colon, pancreatic)	Phase I/II N C I T R I A L (800) 4-CANCER
BAY 43-9006 (sorafenib)	Bayer Pharmaceuticals <i>West Haven, CT</i> Onyx Pharmaceuticals <i>Richmond, CA</i>	advanced kidney cancer (see also breast, leukemia, liver, lung)	Phase III (203) 937-2000 (510) 222-9700
Biomed 101	Intarcia Therapeutics <i>Emeryville, CA</i>	renal cell carcinoma	Phase I/II (510) 652-2600
epothilone B analog (BMS 247550)	National Cancer Institute <i>Bethesda, MD</i> Bristol-Myers Squibb <i>Princeton, NJ</i>	(see also brain, breast, liver, lymphoma, prostate, solid tumors, other)	Phase II N C I T R I A L (800) 4-CANCER
expanded activated T cells plus IL-2	National Cancer Institute <i>Bethesda, MD</i>	renal cell carcinoma	Phase II N C I T R I A L (800) 4-CANCER
FGF-5:172-176/ 217-220 peptide vaccine	National Cancer Institute <i>Bethesda, MD</i>	renal cell carcinoma	Phase II N C I T R I A L (800) 4-CANCER

## KIDNEY CANCER

Product Name	Sponsor	Indication	Development Status
<b>Genasense®</b> oblimersen sodium (G3139)	Genta <i>Berkeley Heights, NJ</i>	renal cell cancer (see also breast, colon, leukemia, lung, lymphoma, multiple myeloma, pancreatic, prostate, skin, stomach, other)	Phase II (908) 286-9800
GTI-2040 (antisense)	Lorus Therapeutics <i>Toronto, Ontario</i>	(see also breast, leukemia, lung, prostate, solid tumors)	Phase II (416) 798-1200
<b>IMOxine™</b>	Hybridon <i>Cambridge, MA</i>	renal cell carcinoma	Phase II (617) 679-5500
interleukin-12 arsenic trioxide	National Cancer Institute <i>Bethesda, MD</i> Wyeth Pharmaceuticals <i>Collegeville, PA</i>	(see also lymphoma, ovarian, solid tumors)	Phase I N C I T R I A L (800) 4-CANCER
<b>Iressa®</b> (ZD1839)	AstraZeneca <i>Wilmington, DE</i>	(see also breast, colon, head/neck, lung, solid tumors)	Phase II (800) 236-9933
ixabepilone	Bristol-Myers Squibb <i>Princeton, NJ</i>	renal cancer (see also breast, pancreatic, prostate)	Phase II (212) 546-4000
lapatinib (ErbB-2 and EGFR dual kinase inhibitor)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also bladder, breast, head/neck, lung, stomach)	Phase III (888) 825-5249
<b>Oncophage®</b> HSPPC-96	Antigenics <i>New York, NY</i>	nonmetastatic kidney cancer (see also lung, skin)	Phase III (212) 994-8200
		metastatic kidney cancer	Phase II (212) 994-8200
panitumumab (ABX-EGF)	Abgenix <i>Fremont, CA</i> Amgen <i>Thousand Oaks, CA</i>	renal cell cancer (see also colon, lung)	Phase II (805) 447-1000
SU11248	Pfizer <i>New York, NY</i>	metastatic renal cell carcinoma (see also solid tumors)	Phase III (860) 732-7920
suramin	National Cancer Institute <i>Bethesda, MD</i>	(see also breast)	Phase I/II N C I T R I A L (800) 4-CANCER
temsirolimus (CCI-779, mTOR inhibitor)	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	renal cell carcinoma (see also breast, lymphoma)	Phase III (800) 934-5556
<b>Thalomid®</b> thalidomide	Celgene <i>Summit, NJ</i>	renal cell cancer (see also multiple myeloma, prostate)	Phase III (908) 673-9000
tumor-derived activated cells (TDAC)	Cancer Therapeutics <i>Thomasville, GA</i>	(see also skin)	Phase II (800) 297-2976

## KIDNEY CANCER

Product Name	Sponsor	Indication	Development Status
<b>Xcytrin</b> <sup>®</sup> motexafin gadolinium	Pharmacyclics <i>Sunnyvale, CA</i>	renal cell carcinoma (see also brain, leukemia, lung, lymphoma, multiple myeloma, solid tumors)	Phase II (408) 774-0330
<b>Xinlay</b> atrasentan	Abbott Laboratories <i>Abbott Park, IL</i>	(see also brain, lung, ovarian, prostate)	Phase II (847) 936-1189

## LEUKEMIA

Product Name	Sponsor	Indication	Development Status
17-allylamino- geldanamycin	National Cancer Institute <i>Bethesda, MD</i> Kosan Biosciences <i>Hayward, CA</i>	(see also breast, kidney, lymphoma, prostate, skin, solid tumors, other)	Phase I N C I T R I A L (800) 4-CANCER
506U78	National Cancer Institute <i>Bethesda, MD</i> GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also lymphoma)	Phase II N C I T R I A L (800) 4-CANCER
AEG 35156 XIAP inhibitor	Aegera Therapeutics <i>Nun's Island, Quebec</i>	acute leukemia (see also solid tumors)	Phase I (514) 288-5532
AG-858 (HSPPC-70)	Antigenics <i>New York, NY</i>	chronic myelogenous leukemia (CML)	Phase II (212) 994-8200
AP23573 (mTOR inhibitor)	ARIAD Pharmaceuticals <i>Cambridge, MA</i>	hematological malignancies (see also brain, cervical, lymphoma, multiple myeloma, prostate, sarcoma, solid tumors)	Phase II (617) 494-0400
apolizumab (MoAB Hu1D10)	National Cancer Institute <i>Bethesda, MD</i> Protein Design Labs <i>Fremont, CA</i>	chronic lymphocytic leukemia (CLL)	Phase II N C I T R I A L (800) 4-CANCER
		CLL in combination with Rituxan <sup>®</sup> (see also lymphoma)	Phase I N C I T R I A L (800) 4-CANCER
azacytidine	National Cancer Institute <i>Bethesda, MD</i> Pharmion <i>Boulder, CO</i>	acute myelogenous leukemia (AML) (Group C use)	Phase I N C I T R I A L (800) 4-CANCER
BAY 43-9006 (sorafenib)	Bayer Pharmaceuticals <i>West Haven, CT</i> Onyx Pharmaceuticals <i>Richmond, CA</i>	CML (see also breast, kidney, liver, lung)	Phase II (203) 937-2000 (510) 222-9700
bryostatin 1	National Cancer Institute <i>Bethesda, MD</i>	(see also lymphoma)	Phase I/II N C I T R I A L (800) 4-CANCER

## LEUKEMIA

Product Name	Sponsor	Indication	Development Status
<b>Campath®</b> alemtuzumab	National Cancer Institute <i>Bethesda, MD</i> Berlex Laboratories <i>Montville, NJ</i> Genzyme <i>Cambridge, MA</i>	(see also lymphoma)	Phase I/II N C I T R I A L (800) 4-CANCER
<b>Ceflatonin®</b> homoharringtonine	ChemGenex Pharmaceuticals <i>Menlo Park, CA</i>	CML, myelodysplastic syndromes (MDS)	Phase II (650) 474-9800
CEP-701 lestaurtinib	Cephalon <i>West Chester, PA</i>	AML	Phase II (610) 344-0200
<b>Ceplene™</b> histamine dihydrochloride	Maxim Pharmaceuticals <i>San Diego, CA</i>	AML	Phase III (858) 453-4040
CHIR-12.12	Chiron <i>Emeryville, CA</i> XOMA <i>Berkeley, CA</i>	CLL	Phase I (510) 655-8730
CHIR-258	Chiron <i>Emeryville, CA</i>	AML (see also solid tumors)	Phase I (510) 655-8730
<b>Cloretazine™</b> VNP40101M <b>(Orphan Drug)</b>	Vion Pharmaceuticals <i>New Haven, CT</i>	relapsed AML (see also brain)	Phase III (203) 498-4210
		AML and high-risk MDS	Phase II (203) 498-4210
CMLVAX100	Breakthrough Therapeutics <i>Greenwich, CT</i>	CML	Phase II
<b>Dacogen™</b> decitabine	MGI Pharma <i>Minneapolis, MN</i> SuperGen <i>Dublin, CA</i>	MDS (see also lung, solid tumors, other)	application submitted (925) 327-0200
depsipeptide (FK228)	National Cancer Institute <i>Bethesda, MD</i> Gloucester Pharmaceuticals <i>Cambridge, MA</i>	(see also bladder, brain, colon, head/neck, lung, lymphoma, ovarian, skin, solid tumors, stomach, other)	Phase II N C I T R I A L (800) 4-CANCER
<b>Ethylol®</b> AML	MedImmune <i>Gaithersburg, MD</i>	AML in elderly	Phase I/II (301) 398-0000
flavopiridol	National Cancer Institute <i>Bethesda, MD</i> Sanofi-aventis <i>Bridgewater, NJ</i>	(see also liver, lymphoma, ovarian, pancreatic, sarcoma, solid tumors)	Phase I/II N C I T R I A L (800) 4-CANCER
<b>Fodosine™</b> forodosine HCl <b>(Orphan Drug)</b>	BioCryst Pharmaceuticals <i>Birmingham, AL</i>	acute lymphocytic leukemia (ALL), CLL, aggressive T-cell malignancies	Phase I/II (205) 444-4600

## LEUKEMIA

Product Name	Sponsor	Indication	Development Status
<b>Genasense®</b> oblimersen sodium (G3139)	Genta <i>Berkeley Heights, NJ</i>	AML, CLL (see also breast, colon, kidney, lung, lymphoma, multiple myeloma, pancreatic, prostate, skin, stomach, other)	Phase III (908) 286-9800
<b>Gleevec™</b> imatinib mesylate	Novartis Pharmaceuticals <i>East Hanover, NJ</i>	pediatric dosing in CML	application submitted (973) 781-8300
GTI-2040 (antisense)	National Cancer Institute <i>Bethesda, MD</i> Lorus Therapeutics <i>Toronto, Ontario</i>	AML (see also breast, kidney, lung, prostate, solid tumors)	Phase I N C I T R I A L (800) 4-CANCER
<b>GVAX® Leukemia</b> cancer vaccine	Cell Genesys <i>South San Francisco, CA</i>		Phase II (650) 226-3000
LMB-2 immunotoxin	National Cancer Institute <i>Bethesda, MD</i>	(see also lymphoma)	Phase I/II N C I T R I A L (800) 4-CANCER
<b>Marqibo™</b> vincristine sulfate liposomes injection	Inex Pharmaceuticals <i>Burnaby, British Columbia</i>	relapsed ALL (see also lymphoma)	Phase II (604) 419-3200
midostaurine (PKC 412)	Novartis Pharmaceuticals <i>East Hanover, NJ</i>	AML (see also solid tumors)	Phase I/II (973) 781-8300
MLN 518	Millennium Pharmaceuticals <i>Cambridge, MA</i>	AML	Phase I/II (800) 589-9005
MS-275 histone deacetylase inhibitor	National Cancer Institute <i>Bethesda, MD</i> Schering AG <i>Berlin, Germany</i>	(see also skin, solid tumors)	Phase I N C I T R I A L (800) 4-CANCER
nelarabine (guanine arabinoside prodrug)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	acute lymphoblastic leukemia (see also lymphoma)	Phase III (888) 825-5249
<b>ONTAK®</b> denileukin diftitex	Ligand Pharmaceuticals <i>San Diego, CA</i>	CLL (see also lymphoma, cancer/chemotherapy)	Phase II (858) 550-7500
<b>Pivanex®</b>	Titan Pharmaceuticals <i>South San Francisco, CA</i>	CLL (see also lung)	Phase II (650) 244-4990
proteinase 3 peptide vaccine (PR-1)	National Cancer Institute <i>Bethesda, MD</i>		Phase I/II N C I T R I A L (800) 4-CANCER
rebeccamycin analog	National Cancer Institute <i>Bethesda, MD</i> Exelixis <i>South San Francisco, CA</i>	(see also liver, solid tumors)	Phase I N C I T R I A L (800) 4-CANCER

## LEUKEMIA

Product Name	Sponsor	Indication	Development Status
<b>Revlimid™</b> lenalidomide	Celgene <i>Summit, NJ</i>	MDS (see also multiple myeloma, skin, solid tumors)	Phase II (908) 673-9000
<b>Rituxan®</b> rituximab	Biogen Idec <i>Cambridge, MA</i> Genentech <i>South San Francisco, CA</i>	relapsed CLL (see also lymphoma)	Phase III (650) 225-1000
<b>Sarasar</b> lonafarnib	Schering-Plough <i>Kenilworth, NJ</i>	(see also solid tumors)	Phase II (908) 298-4000
SDX-101 (R-etodolac)	Salmedix <i>San Diego, CA</i>	CLL	Phase II (858) 622-5050
SKI-606	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	CML (see also breast, colon, lung, pancreatic)	in clinical trials (800) 934-5556
sodium phenylbutyrate	National Cancer Institute <i>Bethesda, MD</i> Vectramed <i>Plainsboro, NJ</i>	(see also colon, solid tumors)	Phase I N C I T R I A L (800) 4-CANCER
SRC/ABL kinase inhibitor	Bristol-Myers Squibb <i>Princeton, NJ</i>	CML (see also solid tumors)	Phase II (212) 546-4000
<b>Telintra™</b> TLK199	Telik <i>Palo Alto, CA</i>	MDS	Phase II (866) 485-5286
<b>Trisenox®</b> arsenic trioxide injection	Cell Therapeutics <i>Seattle, WA</i>	MDS, CML, acute promyelocytic leukemia (APL) (see also multiple myeloma, neuroblastoma, solid tumors)	Phase II (206) 282-7100
<b>Troxatyl™</b>	SGX <i>San Diego, CA</i>	relapsed AML (see also solid tumors)	Phase I (858) 558-4850
VX-944	Vertex Pharmaceuticals <i>Cambridge, MA</i> Avalon Pharmaceuticals <i>Germantown, MD</i>	hematologic malignancies	Phase I (617) 444-6777
<b>Xcellerated T Cells™</b>	Xcyte Therapies <i>Seattle, WA</i>	CLL	Phase I/II (206) 262-6200
<b>Xcytrin®</b> motexafrin gadolinium	Pharmacyclics <i>Sunnyvale, CA</i>	CLL (see also brain, kidney, lung, lymphoma, multiple myeloma, solid tumors)	Phase II (408) 774-0330
XK469	National Cancer Institute <i>Bethesda, MD</i> Bristol-Myers Squibb <i>Princeton, NJ</i>	(see also lymphoma)	Phase I N C I T R I A L (800) 4-CANCER

## LEUKEMIA

Product Name	Sponsor	Indication	Development Status
<b>Zarnestra™</b> tipifarnib (R115777)	Johnson & Johnson Pharmaceutical Research & Development <i>Raritan, NJ</i>	AML (see also breast)	application submitted (800) 817-5286
		MDS	Phase II (800) 817-5286
ZYC300	MGI Pharma <i>Minneapolis, MN</i>	metastatic hematological cancer (see also solid tumors)	Phase I/II completed (952) 346-4700

## LIVER CANCER

Product Name	Sponsor	Indication	Development Status
BAY 43-9006 (sorafenib)	Bayer Pharmaceuticals <i>West Haven, CT</i> Onyx Pharmaceuticals <i>Richmond, CA</i>	advanced liver cancer (see also breast, kidney, leukemia, lung)	Phase III (203) 937-2000 (510) 222-9700
DENSPM	Genzyme <i>Cambridge, MA</i>		Phase I/II (617) 252-7500
<b>Eloxatin®</b> oxaliplatin	National Cancer Institute <i>Bethesda, MD</i> Sanofi-aventis <i>Bridgewater, NJ</i>	(see also cervical, lymphoma, pancreatic, solid tumors, stomach)	Phase I/II N C I T R I A L (800) 4-CANCER
epothilone B analog (BMS 247550)	National Cancer Institute <i>Bethesda, MD</i> Bristol-Myers Squibb <i>Princeton, NJ</i>	(see also brain, breast, kidney, lymphoma, prostate, solid tumors, other)	Phase II N C I T R I A L (800) 4-CANCER
flavopiridol	National Cancer Institute <i>Bethesda, MD</i> Sanofi-aventis <i>Bridgewater, NJ</i>	(see also leukemia, lymphoma, ovarian, pancreatic, sarcoma, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
GW572016	National Cancer Institute <i>Bethesda, MD</i> GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also brain, breast, cervical, head/neck, prostate, stomach)	Phase II N C I T R I A L (800) 4-CANCER
irofulven	MGI Pharma <i>Minneapolis, MN</i>	inoperable liver cancer (see also brain, ovarian, prostate)	Phase II (952) 346-4700
<b>Occlusion™</b> <b>50 Injection</b>	ViRexx <i>Edmonton, Alberta</i>		Phase I (780) 433-4411
rebeccamycin analog	National Cancer Institute <i>Bethesda, MD</i> Exelixis <i>South San Francisco, CA</i>	(see also leukemia, solid tumors)	Phase I N C I T R I A L (800) 4-CANCER
<b>ThermoDox</b>	Celsion <i>Columbia, MD</i>		Phase I (410) 290-5390

## LIVER CANCER

Product Name	Sponsor	Indication	Development Status
<b>THYMITAQ®</b> nolatrexed dihydrochloride (Orphan Drug)	Eximias Pharmaceutical <i>Berwyn, PA</i>	hepatocellular carcinoma (liver cancer)	Phase III (610) 560-0600
Y-90 hAFP (IMMU-105)	Immunomedics <i>Morris Plains, NJ</i>	primary liver cancer (see also other)	Phase I (973) 605-8200
<b>Zadaxin®</b> thymalfasin	SciClone Pharmaceuticals <i>San Mateo, CA</i>	hepatocellular carcinoma (with radiofrequency ablation)	Phase II (650) 358-3452
		hepatocellular carcinoma (with TACE)	Phase I (650) 358-3452

## LUNG CANCER

Product Name	Sponsor	Indication	Development Status
715992 (kinesin spindle protein [KSP] inhibitor)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	non-small-cell lung cancer (NSCLC)	Phase II (888) 825-5249
<b>Advexin®</b> (p53)	Introgen Therapeutics <i>Austin, TX</i>	NSCLC (see also breast, head/neck, prostate, stomach, other)	Phase II completed (512) 708-9310
AG-013736	Pfizer <i>New York, NY</i>	(see also kidney, pancreatic, skin, other)	Phase II (860) 732-7920
<b>Avastin™</b> bevacizumab	Genentech <i>South San Francisco, CA</i>	advanced NSCLC (see also breast, colon, kidney, ovarian, pancreatic)	Phase III (650) 225-1000
BAY 43-9006 (sorafenib)	Bayer Pharmaceuticals <i>West Haven, CT</i> Onyx Pharmaceuticals <i>Richmond, CA</i>	NSCLC (see also breast, kidney, leukemia, liver)	Phase II (203) 937-2000 (510) 222-9700
BLP25 liposome vaccine (L-BLP25)	Biomira <i>Edmonton, Alberta</i> Merck KGaA <i>Darmstadt, Germany</i>	NSCLC	Phase II (877) 234-0444
CA4P (combrestatin)	OXIGENE <i>Watertown, MA</i>	lung cancer in combination with paclitaxel and carboplatin (see also breast, cervical, colon, head/neck, ovarian, prostate, other)	Phase II (617) 673-7800
		advanced NSCLC in combination with radiotherapy	Phase I/II (617) 673-7800
CMD-193	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	NSCLC (see also breast)	Phase I (800) 934-5556

# LUNG CANCER

Product Name	Sponsor	Indication	Development Status
CP-547,632 (anti-VEGF-tyrosine kinase)	OSI Pharmaceuticals <i>Melville, NY</i> Pfizer <i>New York, NY</i>		Phase II (860) 732-7920
<b>Dacogen™</b> decitabine	National Cancer Institute <i>Bethesda, MD</i> MGI Pharma <i>Minneapolis, MN</i> SuperGen <i>Dublin, CA</i>	NSCLC, pleural cancer, pulmonary cancer (see also leukemia, solid tumors, other)	Phase I N C I T R I A L (800) 4-CANCER
depsipeptide (FK228)	National Cancer Institute <i>Bethesda, MD</i> Gloucester Pharmaceuticals <i>Cambridge, MA</i>	small-cell lung cancer (SCLC) (see also bladder, brain, colon, head/neck, leukemia, lymphoma, ovarian, skin, solid tumors, stomach, other)	Phase II N C I T R I A L (800) 4-CANCER
DN-101	Novacea <i>South San Francisco, CA</i>	NSCLC (see also prostate)	Phase II (650) 228-1800
E7389	Eisai <i>Ridgefield Park, NJ</i>	NSCLC (see also breast)	Phase II (201) 403-2500
EF5	National Cancer Institute <i>Bethesda, MD</i>	NSCLC (see also cervical, head/neck, ovarian, cancer/chemotherapy)	Phase II N C I T R I A L (800) 4-CANCER
EP-2101 therapeutic, multi-epitope vaccine	Epimmune <i>San Diego, CA</i>	(see also colon)	Phase I/II (858) 860-2500
<b>Erbix™</b> cetuximab	Bristol-Myers Squibb <i>Princeton, NJ</i> Imclone Systems <i>New York, NY</i>	NSCLC (2nd-line, 1st-line) (see also colon, head/neck, pancreatic)	Phase III (212) 548-4000 (908) 218-9588
fowlpox and vaccinia CEA (6D)/TRICOM	National Cancer Institute <i>Bethesda, MD</i> Therion Biologics <i>Cambridge, MA</i>	adenocarcinoma of the lung (see also breast, solid tumors)	Phase I N C I T R I A L (800) 4-CANCER
<b>Genasense®</b> oblimersen sodium (G3139)	Genta <i>Berkeley Heights, NJ</i>	NSCLC (see also breast, colon, kidney, leukemia, lymphoma, multiple myeloma, pancreatic, prostate, skin, stomach, other)	Phase III (908) 286-9800
		SCLC	Phase I/II (908) 286-9800
GTI-2040 (antisense)	National Cancer Institute <i>Bethesda, MD</i> Lorus Therapeutics <i>Toronto, Ontario</i>	NSCLC (see also breast, kidney, leukemia, prostate, solid tumors)	Phase I/II N C I T R I A L (800) 4-CANCER

# LUNG CANCER

Product Name	Sponsor	Indication	Development Status
<b>GVAX® Lung</b> cancer vaccine	Cell Genesys <i>South San Francisco, CA</i>	NSCLC	Phase II (650) 266-3000
HKI-272	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	NSCLC (see also breast)	Phase I (800) 934-5556
HSG-ETR1	Human Genome Sciences <i>Rockville, MD</i>	NSCLC (see also colon, lymphoma)	Phase II (301) 309-8504
huN901-DM1	ImmunoGen <i>Cambridge, MA</i>	SCLC (see also myeloma)	Phase I/II (617) 995-2500
<b>Hycamtin®</b> topotecan	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	SCLC (oral, 2nd-line treatment) (see also brain, ovarian)	Phase III (888) 825-5249
IMC-BEC2 (cancer vaccine)	Imclone Systems <i>New York, NY</i>	SCLC	Phase III (212) 645-1405
INGN 225 (p53 vaccine)	Introgen Therapeutics <i>Austin, TX</i>	SCLC (see also breast)	Phase I/II (512) 708-9310
INGN 401 (FUS-1)	Introgen Therapeutics <i>Austin, TX</i>		Phase I (512) 708-9310
<b>Iressa®</b> (ZD1839)	AstraZeneca <i>Wilmington, DE</i>	NSCLC (see also breast, colon, head/neck, kidney, solid tumors)	Phase II/III (800) 236-9933
lapatinib (ErbB-2 and EGFR dual kinase inhibitor)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also bladder, breast, head/neck, kidney, stomach)	Phase III (888) 825-5249
MAC-321	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	NSCLC	Phase II (800) 934-5556
mage 3 (249553; recombinant pharmaccine)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	treatment of lung cancer (see also skin)	Phase II (888) 825-5249
meclinertant (neurotensin antagonist)	Sanofi-aventis <i>Bridgewater, NJ</i>	SCLC	Phase II (800) 633-1610
MST-997	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	NSCLC (see also breast)	Phase I (800) 934-5556
<b>Neovastat®</b> AE-941	National Cancer Institute <i>Bethesda, MD</i> AEterna Zentaris <i>Sainte-Foy, Quebec</i>	NSCLC	Phase III N C I T R I A L (800) 4-CANCER
NOV-002	Novelos Therapeutics <i>Newton, MA</i>	NSCLC	Phase I/II (617) 244-1616
NX473	AnorMED <i>Langley, British Columbia</i> NeoRx <i>Seattle, WA</i>	SCLC (see also colon, solid tumors)	Phase II (888) 879-7007

# LUNG CANCER

Product Name	Sponsor	Indication	Development Status
<b>Omnitarg™</b> pertuzumab	Genentech <i>South San Francisco, CA</i>	NSCLC (see also breast, ovarian)	Phase II (650) 225-1000
<b>ONCONASE®</b> ranpirnase	Alfacell <i>Bloomfield, NJ</i>	malignant mesothelioma	Phase III (973) 748-8082
		NSCLC	Phase I/II (973) 748-8082
<b>Oncophage®</b> HSPPC-96	Antigenics <i>New York, NY</i>	(see also kidney, skin)	Phase I/II (212) 994-8200
oral taxane	Bristol-Myers Squibb <i>Princeton, NJ</i>	NSCLC	Phase II (212) 546-4000
p53 and ras peptide vaccine	National Cancer Institute <i>Bethesda, MD</i> Amgen <i>Thousand Oaks, CA</i>	NSCLC (see also colon, ovarian)	Phase II N C I T R I A L (800) 4-CANCER
panitumumab (ABX-EGF)	Abgenix <i>Fremont, CA</i> Amgen <i>Thousand Oaks, CA</i>	NSCLC (see also colon, kidney)	Phase II (805) 447-1000
<b>Panvac™-VF</b>	Therion Biologics <i>Cambridge, MA</i>	metastatic lung cancer (see also breast, colon, pancreatic)	Phase II (617) 475-7500
<b>Pivanex®</b>	Titan Pharmaceuticals <i>South San Francisco, CA</i>	NSCLC (see also leukemia)	Phase II (650) 244-4990
pralatrexate	Allos Therapeutics <i>Westminster, CO</i>	advanced NSCLC (see also lymphoma)	Phase II completed (303) 426-6262
		mesothelioma	Phase I/II (303) 426-6262
<b>ProMune®</b>	Coley Pharmaceutical <i>Wellesley, MA</i>	NSCLC (see also lymphoma, skin)	Phase II (781) 431-9000
<b>Resmycin™</b> doxorubicin HCl inhalation solution	Zivena <i>Columbus, OH</i>	NSCLC	Phase I/II
SAI-EGF	CancerVax <i>Carlsbad, CA</i>	NSCLC	Phase I/II (760) 494-4200
SDX-102 (l-alanosine)	Salmedix <i>San Diego, CA</i>	mesothelioma, NSCLC (see also brain, pancreatic, sarcoma)	Phase II (858) 622-5050
SGN-15 (cBR96-doxorubicin immunoconjugate)	Seattle Genetics <i>Bothell, WA</i>	NSCLC	Phase II (425) 527-4000
SKI-606	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	NSCLC (see also breast, colon, leukemia, pancreatic)	in clinical trials (800) 934-5556

# LUNG CANCER

Product Name	Sponsor	Indication	Development Status
<b>Tarceva™</b> erlotinib	Genentech <i>South San Francisco, CA</i> OSI Pharmaceuticals <i>Melville, NY</i> Roche <i>Nutley, NJ</i>	adjuvant NSCLC (see also pancreatic)	Phase III (650) 225-1000 (800) 572-1932 (973) 235-5000
<b>Targretin® Capsules</b> bexarotene (LGD 1069)	Ligand Pharmaceuticals <i>San Diego, CA</i>		Phase III (858) 550-7500
tasidotin	Genzyme <i>Cambridge, MA</i>	NSCLC (see also prostate, skin)	Phase II (617) 252-7500
<b>Telcyta™</b> TLK286	Telik <i>Palo Alto, CA</i>	advanced NSCLC (see also breast, colon, ovarian)	Phase III (866) 485-5286
		NSCLC	Phase II completed (866) 485-5286
		NSCLC in combination with carboplatin and paclitaxel	Phase II (866) 485-5286
		NSCLC in combination with cisplatin	Phase II (866) 485-5286
UCN-01	National Cancer Institute <i>Bethesda, MD</i> Kyowa Pharmaceutical <i>Princeton, NJ</i>	(see also lymphoma, pancreatic, skin, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
<b>Velcade®</b> bortezomib	Millennium Pharmaceuticals <i>Cambridge, MA</i>	NSCLC (see also lymphoma, solid tumors)	Phase II (800) 589-9005
vinflunine	Bristol-Myers Squibb <i>Princeton, NJ</i>	NSCLC (see also bladder)	Phase III (212) 546-4000
<b>Xcytrin®</b> motexafin gadolinium	Pharmacyclics <i>Sunnyvale, CA</i>	NSCLC (see also brain, kidney, leukemia, lymphoma, multiple myeloma, solid tumors)	Phase II (408) 774-0300
		NSCLC in combination with Taxotere®	Phase II (408) 774-0300
		NSCLC in combination with cisplatin and Taxotere®	Phase I (408) 774-0300
<b>Xinlay</b> atrasentan	Abbott Laboratories <i>Abbott Park, IL</i>	(see also brain, kidney, ovarian, prostate)	Phase II (847) 936-1189
<b>Xorane</b> oral paclitaxel	IVAX <i>Miami, FL</i>	(see also breast, stomach)	Phase II completed (305) 575-6000
<b>Xyotax™</b> polyglutamate paclitaxel	Cell Therapeutics <i>Seattle, WA</i>	NSCLC (see also ovarian, solid tumors)	Phase III (206) 282-7100

## LYMPHOMA

Product Name	Sponsor	Indication	Development Status
17-allylamino-geldanamycin	National Cancer Institute <i>Bethesda, MD</i> Kosan Biosciences <i>Hayward, CA</i>	(see also breast, kidney, leukemia, prostate, skin, solid tumors, other)	Phase I N C I T R I A L (800) 4-CANCER
17-DMAG	National Cancer Institute <i>Bethesda, MD</i> Kosan Biosciences <i>Hayward, CA</i>	(see also solid tumors)	Phase I N C I T R I A L (800) 4-CANCER
506U78	National Cancer Institute <i>Bethesda, MD</i> GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also leukemia)	Phase II N C I T R I A L (800) 4-CANCER
AMD-3100	AnorMED <i>Langley, British Columbia</i>	non-Hodgkin lymphoma (NHL) (see also multiple myeloma)	Phase III (604) 530-1057
AP23573 (mTOR inhibitor)	ARIAD Pharmaceuticals <i>Cambridge, MA</i>	(see also brain, cervical, leukemia, multiple myeloma, prostate, sarcoma, solid tumors)	Phase I (617) 494-0400
apolizumab (Hu1D10) and <b>Rituxan®</b>	National Cancer Institute <i>Bethesda, MD</i> Protein Design Labs <i>Fremont, CA</i>	(see also leukemia)	Phase I N C I T R I A L (800) 4-CANCER
<b>BIOVAXID™</b>	Accentia BioPharmaceuticals <i>Morrisville, NC</i>	indolent, follicular NHL	Phase III (877) 654-6052
bryostatin 1	National Cancer Institute <i>Bethesda, MD</i>	NHL (see also leukemia)	Phase II N C I T R I A L (800) 4-CANCER
<b>Campath®</b> alemtuzumab	Berlex Laboratories <i>Montville, NJ</i> Genzyme <i>Cambridge, MA</i>	NHL (see also leukemia)	Phase I/II (617) 252-7500
carboxyamido-triazole (CAI)	National Cancer Institute <i>Bethesda, MD</i>	(see also other)	Phase I N C I T R I A L (800) 4-CANCER
CB3304	Cougar Biotechnology <i>Los Angeles, CA</i>	NHL	Phase I (310) 443-4209
CMC-544	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	NHL	Phase I (800) 934-5556
depsipeptide (FK228)	National Cancer Institute <i>Bethesda, MD</i> Gloucester Pharmaceuticals <i>Cambridge, MA</i>	(see also bladder, brain, colon, head/neck, leukemia, lung, ovarian, skin, solid tumors, stomach, other)	Phase I/II N C I T R I A L (800) 4-CANCER

## LYMPHOMA

Product Name	Sponsor	Indication	Development Status
<b>Eloxatin</b> <sup>®</sup> oxaliplatin	National Cancer Institute <i>Bethesda, MD</i> Sanofi-aventis <i>Bridgewater, NJ</i>	(see also cervical, liver, pancreatic, solid tumors, stomach)	Phase I N C I T R I A L (800) 4-CANCER
elsamitrucin	Spectrum Pharmaceuticals <i>Irvine, CA</i>	refractory NHL	Phase II (949) 788-6700
epothilone B analog (BMS 247550)	National Cancer Institute <i>Bethesda, MD</i> Bristol-Myers Squibb <i>Princeton, NJ</i>	(see also brain, breast, kidney, liver, prostate, solid tumors, other)	Phase II N C I T R I A L (800) 4-CANCER
epratuzumab (IMMU-103)	Immunomedics <i>Morris Plains, NJ</i>	NHL	Phase I/II completed (973) 605-8200
<b>Favid</b> <sup>®</sup> (favid-04) vaccine	Favrille <i>San Diego, CA</i>	B-cell NHL	Phase III (800) 870-0084
flavopiridol	National Cancer Institute <i>Bethesda, MD</i> Sanofi-aventis <i>Bridgewater, NJ</i>	(see also leukemia, liver, ovarian, pancreatic, sarcoma, solid tumors)	Phase I/II N C I T R I A L (800) 4-CANCER
<b>Ganite</b> <sup>®</sup> gallium nitrate injection	Genta <i>Berkeley Heights, NJ</i>	NHL	Phase II (908) 286-9800
<b>Genasense</b> <sup>®</sup> oblimersen sodium (G3139)	Genta <i>Berkeley Heights, NJ</i>	NHL (see also breast, colon, kidney, leukemia, lung, multiple myeloma, pancreatic, prostate, skin, stomach, other)	Phase II (908) 286-9800
hCD20 (IMMU-106)	Immunomedics <i>Morris Plains, NJ</i>	NHL	Phase I (973) 605-8200
HSG-ETR1	Human Genome Sciences <i>Rockville, MD</i>	NHL (see also colon, lung)	Phase II (301) 309-8504
IL-12 plus IL-2	National Cancer Institute <i>Bethesda, MD</i> Chiron <i>Emeryville, CA</i> Wyeth Pharmaceuticals <i>Collegeville, PA</i>	(see also neuroblastoma)	Phase I N C I T R I A L (800) 4-CANCER
interleukin-12 (IL-12)	National Cancer Institute <i>Bethesda, MD</i> Wyeth Pharmaceuticals <i>Collegeville, PA</i>	(see also kidney, ovarian, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
LMB-2 immunotoxin	National Cancer Institute <i>Bethesda, MD</i>	(see also leukemia)	Phase I/II N C I T R I A L (800) 4-CANCER

## LYMPHOMA

Product Name	Sponsor	Indication	Development Status
<b>Marqibo™</b> vincristine sulfate liposomes injection	Inex Pharmaceuticals <i>Burnaby, British Columbia</i>	relapsed, aggressive NHL (see also leukemia)	Phase III (604) 419-3200
		relapsed Hodgkin disease	Phase II (604) 419-3200
		1st-line NHL (combination therapy)	Phase II (604) 419-3200
		relapsed NHL in combination with Rituxan®	Phase II (604) 419-3200
		relapsed NHL in combination with etoposide	Phase II (604) 419-3200
MDX-060	Medarex <i>Princeton, NJ</i>	Hodgkin disease, anaplastic large- cell lymphoma (ALCL)	Phase II (609) 430-2880
MoAb HeFi-1	National Cancer Institute <i>Bethesda, MD</i>		Phase I N C I T R I A L (800) 4-CANCER
nelarabine (guanine arabinoside prodrug)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also leukemia)	Phase III (888) 825-5249
O6-benzylguanine (O6-BG)	National Cancer Institute <i>Bethesda, MD</i> Keryx Biopharmaceuticals <i>New York, NY</i>	(see also brain, solid tumors, cancer/chemotherapy)	Phase II N C I T R I A L (800) 4-CANCER
<b>Oncolym®</b>	Peregrine Pharmaceuticals <i>Tustin, CA</i>		Phase I (714) 508-6000
<b>ONTAK™</b> denileukin diftitox	Ligand Pharmaceuticals <i>San Diego, CA</i>	B-cell NHL (see also leukemia, cancer/chemotherapy)	Phase II (858) 550-7500
pixantrone (BBR 2778)	Cell Therapeutics <i>Seattle, WA</i>	aggressive NHL	Phase III (206) 282-7100
PPI-2458	Praecis Pharmaceuticals <i>Waltham, MA</i>	NHL	Phase I (781) 795-4100
pralatrexate	Allos Therapeutics <i>Westminster, CO</i>	NHL (see also lung)	Phase I/II (303) 426-6262
<b>Proleukin®</b> aldesleukin (IL-2)	Chiron <i>Emeryville, CA</i>	refractory low-grade NHL in combination with Rituxan® (see also skin)	Phase II (510) 655-8730
		refractory high-grade NHL in combination with Rituxan® and chemotherapy	Phase II (510) 655-8730

## LYMPHOMA

Product Name	Sponsor	Indication	Development Status
<b>ProMune</b> <sup>®</sup>	Coley Pharmaceutical <i>Wellesley, MA</i>	cutaneous T-cell lymphoma (CTCL) (see also lung, skin)	Phase II (781) 431-9000
<b>Rituxan</b> <sup>®</sup> rituximab	Genentech <i>South San Francisco, CA</i> Biogen Idec <i>Cambridge, MA</i>	treatment of frontline indolent NHL, frontline aggressive NHL, indolent maintenance NHL (see also leukemia)	Phase III completed (650) 225-1000
SAHA (suberaylanilide hydroxamic acid)	Merck <i>Whitehouse Station, NJ</i>	CTCL	Phase II (800) 672-6372
SGN-30 (cAC10)	Seattle Genetics <i>Bothell, WA</i>	Hodgkin disease, NHL, other lymphoproliferative diseases	Phase II (425) 527-4000
SGN-40	Seattle Genetics <i>Bothell, WA</i>	NHL (see also multiple myeloma)	Phase I (425) 527-4000
siplizumab (MEDI-507)	MedImmune <i>Gaithersburg, MD</i>	T-cell lymphoma	Phase I (301) 398-0000
temsirolimus (CCI-779, mTOR inhibitor)	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	mantle cell lymphoma (see also breast, kidney)	Phase II (800) 934-5556
<b>Treanda</b> <sup>™</sup> bendamustine HCl	Salmedix <i>San Diego, CA</i>	NHL	Phase II (858) 622-5050
UCN-01 (KW-2401)	National Cancer Institute <i>Bethesda, MD</i> Kyowa Pharmaceutical <i>Princeton, NJ</i>	(see also lung, pancreatic, skin, solid tumors)	Phase I/II N C I T R I A L (800) 4-CANCER
<b>Velcade</b> <sup>®</sup> bortezomib	Millennium Pharmaceuticals <i>Cambridge, MA</i>	mantle cell lymphoma, NHL (see also lung, solid tumors)	Phase II (800) 589-9005
<b>Xcytrin</b> <sup>®</sup> motexafin gadolinium	Pharmacyclics <i>Sunnyvale, CA</i>	low-grade NHL (see also brain, kidney, leukemia, lung, multiple myeloma, solid tumors)	Phase II (408) 774-0330
		NHL in combination with Zevalin <sup>®</sup>	Phase I/II (408) 774-0330
XK469	National Cancer Institute <i>Bethesda, MD</i> Bristol-Myers Squibb <i>Princeton, NJ</i>	(see also leukemia)	Phase I N C I T R I A L (800) 4-CANCER
Y-90 epratuzumab (IMMU-102)	Immunomedics <i>Morris Plains, NJ</i>	indolent and aggressive NHL	Phase I (973) 605-8200
<b>Zevalin</b> <sup>®</sup>	National Cancer Institute <i>Bethesda, MD</i> Biogen Idec <i>Cambridge, CA</i>		Phase I/II N C I T R I A L (800) 4-CANCER

## MULTIPLE MYELOMA

Product Name	Sponsor	Indication	Development Status
<b>Actimid™</b>	Celgene <i>Summit, NJ</i>	(see also prostate)	Phase I (908) 673-9000
AMD-3100	AnorMED <i>Langley, British Columbia</i>	(see also lymphoma)	Phase III (604) 530-1057
AP23573 (mTOR inhibitor)	ARIAD Pharmaceuticals <i>Cambridge, MA</i>	(see also brain, cervical, leukemia, lymphoma, prostate, sarcoma, solid tumors)	Phase I (617) 494-0400
<b>BrevaRex®</b>	United Therapeutics <i>Silver Spring, MD</i> ViRexx <i>Edmonton, Alberta</i>	(see also breast)	Phase I completed (301) 608-9292 (780) 433-4411
<b>GCS-100LE™</b>	GlycoGenesys <i>Boston, MA</i>	(see also solid tumors)	Phase I/II (617) 422-0674
<b>Genasense®</b> oblimersen sodium (G3139)	Genta <i>Berkeley Heights, NJ</i>	(see also breast, colon, kidney, leukemia, lung, lymphoma, pancreatic, prostate, skin, stomach, other)	Phase III (908) 286-9800
<b>GVAX® Myeloma</b> cancer vaccine	Cell Genesys <i>South San Francisco, CA</i>		Phase I/II (650) 266-3000
HuN901-DM1	ImmunoGen <i>Cambridge, MA</i>	(see also lung)	Phase I (617) 995-2500
MRA (tocilizumab)	Chugai Pharma USA <i>San Diego, CA</i>		Phase I (858) 535-5900
myeloma-derived idiotypic antigen vaccine	National Cancer Institute <i>Bethesda, MD</i>		Phase I/II N C I T R I A L (800) 4-CANCER
<b>Panzem® Capsules</b> 2ME2 <b>(Orphan Drug)</b>	EntreMed <i>Rockville, MD</i>		Phase II (240) 864-2142
PXD101	CuraGen <i>New Haven, CT</i>		Phase II (888) 436-6642
<b>Quadramet®</b> samarium Sm 153 lexidronom	Cytogen <i>Princeton, NJ</i>	(see also breast, prostate)	Phase I (800) 833-3533
<b>Revlimid™</b> lenalidomide	Celgene <i>Summit, NJ</i>	(see also leukemia, skin, solid tumors)	Phase III (908) 673-9000
SGN-40 <b>(Orphan Drug)</b>	Seattle Genetics <i>Bothell, WA</i>	(see also lymphoma)	Phase I (425) 527-4000
<b>STR™</b> skeletal targeted radiotherapy	NeoRx <i>Seattle, WA</i>		Phase III (206) 281-7001
TACI-Ig	Serono <i>Rockland, MA</i>	(see also other)	Phase II (800) 283-8088
<b>Thalomid®</b> thalidomide	Celgene <i>Summit, NJ</i>	(see also kidney, prostate)	application submitted (908) 673-9000

## MULTIPLE MYELOMA

Product Name	Sponsor	Indication	Development Status
<b>Trisenox</b> <sup>®</sup> arsenic trioxide injection	Cell Therapeutics <i>Seattle, WA</i>	multiple myeloma (see also leukemia, neuroblastoma, solid tumors)	Phase II (206) 282-7100
<b>Xcytrin</b> <sup>®</sup> motexafin gadolinium	Pharmacyclics <i>Sunnyvale, CA</i>	(see also brain, kidney, leukemia, lung, lymphoma, solid tumors)	Phase II (408) 774-0330

## NEUROBLASTOMA

Product Name	Sponsor	Indication	Development Status
chimeric MoAb 14.18	National Cancer Institute <i>Bethesda, MD</i>		Phase III N C I T R I A L (800) 4-CANCER
IL-12 plus IL-2	National Cancer Institute <i>Bethesda, MD</i> Chiron <i>Emeryville, CA</i> Wyeth Pharmaceuticals <i>Collegeville, PA</i>	(see also lymphoma)	Phase I N C I T R I A L (800) 4-CANCER
<b>Trisenox</b> <sup>®</sup> arsenic trioxide injection	Cell Therapeutics <i>Seattle, WA</i>	(see also leukemia, multiple myeloma, solid tumors)	Phase II (206) 282-7100

## OVARIAN CANCER

Product Name	Sponsor	Indication	Development Status
<b>Avastin</b> <sup>™</sup> bevacizumab	Genentech <i>South San Francisco, CA</i>	1st-line treatment (see also breast, colon, kidney, lung, pancreatic)	Phase III (650) 225-1000
CA4P (combrestatin)	OXIGENE <i>Watertown, MA</i>	ovarian cancer in combination with paclitaxel and carboplatin (see also breast, cervical, colon, head/neck, lung, prostate, other)	Phase II (617) 673-7800
		ovarian cancer in combination with paclitaxel or carboplatin	Phase I/II (617) 673-7800
CTI-2106	Cell Therapeutics <i>Seattle, WA</i>	(see also colon)	Phase II (206) 282-7100
depsipeptide (FK228)	National Cancer Institute <i>Bethesda, MD</i> Gloucester Pharmaceuticals <i>Cambridge, MA</i>	(see also bladder, brain, colon, head/neck, leukemia, lung, lymphoma, skin, solid tumors, stomach, other)	Phase II N C I T R I A L (800) 4-CANCER
EF5	National Cancer Institute <i>Bethesda, MD</i>	(see also cervical, head/neck, lung, cancer/chemotherapy)	Phase II N C I T R I A L (800) 4-CANCER

# OVARIAN CANCER

Product Name	Sponsor	Indication	Development Status
flavopiridol	National Cancer Institute <i>Bethesda, MD</i> Sanofi-aventis <i>Bridgewater, NJ</i>	(see also leukemia, liver, lymphoma, pancreatic, sarcoma, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
<b>Gemzar®</b> gemcitabine	Eli Lilly <i>Indianapolis, IN</i>	(see also breast)	Phase III (317) 276-2000
<b>HumaRAD</b> 16.88/88BV59	Intracel Resources <i>Frederick, MD</i>	(see also head/neck)	Phase I (301) 668-8400
<b>Hycamtin®</b> topotecan	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	1st-line treatment (see also brain, lung)	Phase III (888) 825-5249
interleukin-12 (IL-12)	National Cancer Institute <i>Bethesda, MD</i> Wyeth Pharmaceuticals <i>Collegeville, PA</i>	(see also kidney, lymphoma, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
irofulven	National Cancer Institute <i>Bethesda, MD</i> MGI Pharma <i>Minneapolis, MN</i>	refractory or recurrent advanced epithelial ovarian cancer (see also brain, liver, prostate)	Phase II N C I T R I A L (800) 4-CANCER
MORAb-003	Morphotek <i>Exton, PA</i>	advanced ovarian cancer	Phase I (610) 423-6106
<b>Neuvenge®</b> APC8024	Dendreon <i>Seattle, WA</i>	(see also breast, colon)	Phase I (206) 256-4545
<b>Omnitarg™</b> pertuzumab	Genentech <i>South San Francisco, CA</i>	(see also breast, lung)	Phase II (650) 225-1000
<b>OvaRex®</b> oregovomab (MAb-B43.13)	United Therapeutics <i>Silver Spring, MD</i> ViRexx <i>Edmonton, Alberta</i>		Phase III (301) 608-9292 (780) 433-4411
p53 and ras peptide vaccine	National Cancer Institute <i>Bethesda, MD</i> Amgen <i>Thousand Oaks, CA</i>	(see also colon, lung)	Phase I/II N C I T R I A L (800) 4-CANCER
phenoxodiol	Marshall Edwards <i>New York, NY</i> Novogen <i>Stamford, CT</i>		Phase I/II (203) 327-1188
<b>Telcyta™</b> TLK286	Telik <i>Palo Alto, CA</i>	advanced ovarian cancer (see also breast, colon, lung)	Phase III (866) 485-5286
		advanced ovarian cancer in combination with carboplatin	Phase III (866) 485-5286
		ovarian cancer	Phase II completed (866) 485-5286
<b>Xinlay</b> atrasentan	Abbott Laboratories <i>Abbott Park, IL</i>	(see also brain, kidney, lung, prostate)	Phase II (847) 936-1189

## OVARIAN CANCER

Product Name	Sponsor	Indication	Development Status
<b>Xyotax™</b> polyglutamate paclitaxel	Cell Therapeutics Seattle, WA	(see also lung, solid tumors)	Phase III (206) 282-7100
<b>Yondelis™</b> (ET-743) (Orphan Drug)	Johnson & Johnson Pharmaceutical Research & Development Raritan, NJ PharmaMar USA Cambridge, MA	(see also breast, sarcoma)	Phase III (800) 817-5286

## PANCREATIC CANCER

Product Name	Sponsor	Indication	Development Status
AG-013736	Pfizer New York, NY	(see also kidney, lung, skin, other)	Phase II (860) 732-7920
<b>Avastin™</b> bevacizumab	Genentech South San Francisco, CA	locally advanced pancreatic cancer (see also breast, colon, kidney, lung, ovarian)	Phase III (650) 225-1000
<b>Avastin™</b> bevacizumab <b>Erbix™</b> cetuximab combination	National Cancer Institute Bethesda, MD Genentech South San Francisco, CA Bristol-Myers Squibb Princeton, NJ	(see also colon, kidney)	Phase II N C I T R I A L (800) 4-CANCER
<b>Avicine™</b> therapeutic cancer vaccine	AVI BioPharma Portland, OR SuperGen Dublin, CA	(see also colon)	Phase II completed (503) 227-0554 (925) 327-0200
<b>Eloxatin®</b> oxaliplatin	National Cancer Institute Bethesda, MD Sanofi-aventis Bridgewater, NJ	(see also cervical, liver, lymphoma, solid tumors, stomach)	Phase I/III N C I T R I A L (800) 4-CANCER
<b>Erbix™</b> cetuximab	Bristol-Myers Squibb Princeton, NJ Imclone Systems New York, NY	(see also colon, head/neck, lung)	Phase III (212) 546-4000 (908) 218-9588
flavopiridol	National Cancer Institute Bethesda, MD Sanofi-aventis Bridgewater, NJ	(see also leukemia, liver, lymphoma, ovarian, sarcoma, solid tumors)	Phase I N C I T R I A L (800) 4-CANCER
<b>GCS-100®</b>	GlycoGenesys Boston, MA	(see also colon)	Phase II (617) 422-0674
<b>Genasense®</b> oblimersen sodium (G3139)	Genta Berkeley Heights, NJ	(see also breast, colon, kidney, leukemia, lung, lymphoma, multiple myeloma, prostate, skin, stomach, other)	Phase I/II (908) 286-9800

## PANCREATIC CANCER

Product Name	Sponsor	Indication	Development Status
<b>GVAX® Pancreatic</b> cancer vaccine	Cell Genesys <i>South San Francisco, CA</i>		Phase II (650) 266-3000
HuC242-DM4	ImmunoGen <i>Cambridge, MA</i>	(see also colon, stomach)	Phase I (617) 995-2500
<b>Insegia™</b> anti-gastrin 17 therapeutic vaccine	Aphton <i>Miami, FL</i> sanofi pasteur <i>Toronto, Ontario</i>	(see also stomach)	Phase III (416) 667-2701
ixabepilone	Bristol-Myers Squibb <i>Princeton, NJ</i>	(see also breast, kidney, prostate)	Phase II (212) 546-4000
<b>MedPulser®</b> <b>Therapy System</b>	Inovio Biomedical <i>San Diego, CA</i>	(see also head/neck)	Phase I (858) 597-6006
<b>OctreoTher™</b> edotreotide	Novartis Pharmaceuticals <i>East Hanover, NJ</i>	metastatic carcinoid and metastatic pancreatic islet cell tumors	Phase II (973) 781-8300
<b>Orathecin®</b> rubitecan	SuperGen <i>Dublin, CA</i>	advanced pancreatic cancer in combination with gemcitabine	Phase II (925) 327-0200
<b>Panvac™-VF</b>	Therion Biologics <i>Cambridge, MA</i>	metastatic pancreatic cancer (see also breast, colon, lung)	Phase III (617) 475-7500
SDX-102 (l-alanosine)	Salmedix <i>San Diego, CA</i>	(see also brain, lung, sarcoma)	Phase II (858) 622-5050
SKI-606	Wyeth Pharmaceuticals <i>Collegeville, PA</i>	(see also breast, colon, leukemia, lung)	in clinical trials (800) 934-5556
<b>Tarceva™</b> erlotinib	Genentech <i>South San Francisco, CA</i> OSI Pharmaceuticals <i>Melville, NY</i> Roche <i>Nutley, NJ</i>	(see also lung)	Phase III completed (650) 225-1000 (800) 572-1932 (973) 235-5000
<b>TNFerade™</b>	GenVec <i>Gaithersburg, MD</i>		Phase II (240) 632-0740
<b>Triapine®</b>	Vion Pharmaceuticals <i>New Haven, CT</i>		Phase II (203) 498-4210
UCN-01 (KW-2401)	National Cancer Institute <i>Bethesda, MD</i> Kyowa Pharmaceutical <i>Princeton, NJ</i>	(see also lung, lymphoma, skin, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
<b>Virulizin®</b>	Lorus Therapeutics <i>Toronto, Ontario</i>		Phase III (416) 798-1200
Y-90 hPAM4 (IMMU-107)	Immunomedics <i>Morris Plains, NJ</i>		Phase I (973) 605-8200

## PROSTATE CANCER

Product Name	Sponsor	Indication	Development Status
17-allylamino-geldanamycin	National Cancer Institute <i>Bethesda, MD</i> Kosan Biosciences <i>Hayward, CA</i>	(see also breast, kidney, leukemia, lymphoma, skin, solid tumors, other)	Phase II N C I T R I A L (800) 4-CANCER
<b>Actimid™</b>	Celgene <i>Summit, NJ</i>	(see also multiple myeloma)	Phase II (908) 673-9000
adecatumumab	Serono <i>Rockland, MA</i>	(see also breast)	Phase II (800) 283-8088
<b>Advexin®</b> (p53)	Introgen Therapeutics <i>Austin, TX</i>	(see also breast, head/neck, lung, stomach, other)	Phase I completed (512) 708-9310
AP23573 (mTOR inhibitor)	ARIAD Pharmaceuticals <i>Cambridge, MA</i>	hormone refractory prostate cancer (see also brain, cervical, leukemia, lymphoma, multiple myeloma, sarcoma, solid tumors)	Phase II (617) 494-0400
CA4P (combrestatin)	OXiGENE <i>Watertown, MA</i>	prostate cancer in combination with radiotherapy (see also breast, cervical, colon, head/neck, lung, ovarian, other)	Phase I/II (617) 673-7800
CG7870	Cell Genesys <i>South San Francisco, CA</i>		Phase I/II (650) 266-3000
CP-675,206	Pfizer <i>New York, NY</i>	(see also skin)	Phase II (860) 732-7920
<b>DCVax®-Prostate</b>	Northwest Biotherapeutics <i>Bothell, WA</i>	non-metastatic hormone-independent prostate cancer	Phase III (877) 606-9246
DN-101	Novacea <i>South San Francisco, CA</i>	(see also lung)	Phase II (650) 228-1800
EMD 121974	National Cancer Institute <i>Bethesda, MD</i> Merck KGaA <i>Darmstadt, Germany</i>	(see also brain, skin, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
epothilone B analog (BMS 247550)	National Cancer Institute <i>Bethesda, MD</i> Bristol-Myers Squibb <i>Princeton, NJ</i>	(see also brain, breast, kidney, liver, lymphoma, solid tumors, other)	Phase II N C I T R I A L (800) 4-CANCER
fenretinide (4-HPR)	National Cancer Institute <i>Bethesda, MD</i>	(see also brain, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
<b>Flurizan™</b> (MPC-7869)	Myriad Genetics <i>Salt Lake City, UT</i>		Phase III (801) 584-3600
fowlpox and vaccinia PSA TRICOM vaccine	National Cancer Institute <i>Bethesda, MD</i> Therion Biologics <i>Cambridge, MA</i>		Phase I/II N C I T R I A L (800) 4-CANCER
fowlpox PSA vaccine	National Cancer Institute <i>Bethesda, MD</i> Therion Biologics <i>Cambridge, MA</i>		Phase II N C I T R I A L (800) 4-CANCER

## PROSTATE CANCER

Product Name	Sponsor	Indication	Development Status
<b>Genasense</b> <sup>®</sup> oblimersen sodium (G3139)	Genta <i>Berkeley Heights, NJ</i>	(see also breast, colon, kidney, leukemia, lung, lymphoma, multiple myeloma, pancreatic, skin, stomach, other)	Phase II (908) 286-9800
GTI-2040 (antisense)	National Cancer Institute <i>Bethesda, MD</i> Lorus Therapeutics <i>Toronto, Ontario</i>	(see also breast, kidney, leukemia, lung, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
GTI-2501 (antisense)	Lorus Therapeutics <i>Toronto, Ontario</i>		Phase II (416) 798-1200
<b>GVAX</b> <sup>®</sup> Prostate cancer vaccine	Cell Genesys <i>South San Francisco, CA</i>		Phase III (650) 266-3000
GW572016	National Cancer Institute <i>Bethesda, MD</i> GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also brain, breast, cervical, head/neck, liver, stomach)	Phase II N C I T R I A L (800) 4-CANCER
<b>Hectorol</b> <sup>®</sup> doxercalciferol	Bone Care International <i>Middleton, WI</i>		Phase II (608) 662-7800
irofulven	MGI Pharma <i>Minneapolis, MN</i>	hormone refractory prostate cancer (see also brain, liver, ovarian)	Phase II (952) 346-4700
ixabepilone	Bristol-Myers Squibb <i>Princeton, NJ</i>	(see also breast, kidney, pancreatic)	Phase II (212) 546-4000
LR-103	Bone Care International <i>Middleton, WI</i>	(see also breast, colon)	Phase I (608) 662-7800
<b>Lutrin</b> <sup>®</sup> motexafin lutetium	National Cancer Institute <i>Bethesda, MD</i> Pharmacyclics <i>Sunnyvale, CA</i>	photodynamic cancer therapy (see also cervical)	Phase I N C I T R I A L (800) 4-CANCER
MDX-010	Medarex <i>Princeton, NJ</i>	(see also breast)	Phase II (609) 430-2880
MDX-010 in combination with GVAX	Cell Genesys <i>South San Francisco, CA</i> Medarex <i>Princeton, NJ</i>		Phase I (609) 430-2880
MDX-070	Medarex <i>Princeton, NJ</i>		Phase II (609) 430-2880
MLN2704	Millennium Pharmaceuticals <i>Cambridge, MA</i>		Phase I/II (800) 589-9005
modrenal	Bioenvision <i>New York, NY</i>		Phase II (212) 750-6700
<b>Multikine</b> <sup>™</sup> leukocyte interleukin, injection	CEL-SCI <i>Vienna, VA</i>	newly diagnosed advanced primary prostate cancer (see also head/neck)	Phase I completed (703) 506-9460

## PROSTATE CANCER

Product Name	Sponsor	Indication	Development Status
OGX-011 (ISIS 112989) (antisense)	Isis Pharmaceuticals <i>Carlsbad, CA</i> Oncogenex Technologies <i>Vancouver, British Columbia</i>		Phase I (800) 679-4747 (604) 736-3678
OSI-461	OSI Pharmaceuticals <i>Melville, NY</i>		Phase II (800) 572-1932
P501 (recombinant pharmaccine)	Aphton <i>Miami, FL</i> GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	treatment of prostate cancer	Phase I (888) 825-5249
<b>PROSTVAC®-VF</b>	Therion Biologics <i>Cambridge, MA</i>	hormone refractory metastatic prostate cancer	Phase II (617) 876-7779
<b>Provenge®</b> APC8015	Dendreon <i>Seattle, WA</i>		Phase II/III (206) 256-4545
<b>Quadramet®</b> samarium Sm 153 lexidronom	Cytogen <i>Princeton, NJ</i>	(see also breast, multiple myeloma)	Phase I (800) 833-3533
recombinant fowlpox GM-CSF	National Cancer Institute <i>Bethesda, MD</i> Therion Biologics <i>Cambridge, MA</i>	adjuvant therapy for prostate cancer (see also solid tumors)	Phase I/II N C I T R I A L (800) 4-CANCER
recombinant soluble PSMA vaccine	Progenics Pharmaceuticals <i>Tarrytown, NY</i>		Phase I (914) 789-2800
<b>SaponImmune™</b> immune enhancer	Galenica Pharmaceuticals <i>Birmingham, AL</i>	vaccine adjuvant (see also breast)	Phase I (205) 943-6646
satraplatin	Spectrum Pharmaceuticals <i>Irvine, CA</i>	hormone refractory prostate cancer	Phase III (949) 788-6700
SP-153	Spectrum Pharmaceuticals <i>Irvine, CA</i>	hormone-dependent prostate cancer	Phase II (949) 788-6700
squalamine lactate	Genaera <i>Plymouth Meeting, PA</i>		Phase II (610) 941-4020
tasidotin	Genzyme <i>Cambridge, MA</i>	(see also lung, skin)	Phase II (617) 252-7500
telomerase cancer vaccine	Geron <i>Menlo Park, CA</i>	metastatic prostate cancer	Phase I/II completed (650) 473-7700
<b>Thalomid®</b> thalidomide	Celgene <i>Summit, NJ</i>	(see also kidney, multiple myeloma)	Phase II (908) 673-9000
toremifene citrate	GTx <i>Memphis, TN</i>	prevention of prostate cancer in men with high-grade prostatic intraepithelial neoplasia (PIN) (see also cancer/chemotherapy)	Phase III (901) 523-9700
<b>Vitaxin®</b>	MedImmune <i>Gaithersburg, MD</i>	(see also skin)	Phase II (301) 398-0000

## PROSTATE CANCER

Product Name	Sponsor	Indication	Development Status
<b>Xinlay</b> atrasentan	Abbott Laboratories <i>Abbott Park, IL</i>	(see also brain, kidney, lung, ovarian)	application submitted (847) 936-1189

## SARCOMA

Product Name	Sponsor	Indication	Development Status
AMG 706 <b>(Orphan Drug)</b>	Amgen <i>Thousand Oaks, CA</i>	gastrointestinal stromal tumor (GIST), soft tissue sarcoma	Phase I/II (800) 772-6436
AP23573 (mTOR inhibitor)	ARIAD Pharmaceuticals <i>Cambridge, MA</i>	soft tissue and bone sarcomas (see also brain, cervical, leukemia, lymphoma, multiple myeloma, prostate, solid tumors)	Phase II (617) 494-0400
flavopiridol	National Cancer Institute <i>Bethesda, MD</i> Sanofi-aventis <i>Bridgewater, NJ</i>	(see also leukemia, liver, lymphoma, ovarian, pancreatic, solid tumors)	Phase I N C I T R I A L (800) 4-CANCER
halofunginone	National Cancer Institute <i>Bethesda, MD</i> Collgard Pharmaceuticals <i>Atlanta, GA</i>	HIV-related Kaposi's sarcoma	Phase II N C I T R I A L (800) 4-CANCER
<b>Herceptin®</b> trastuzumab	National Cancer Institute <i>Bethesda, MD</i> Genentech <i>South San Francisco, CA</i>	osteosarcoma (see also breast, cervical, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
PAX3/FKHR/EWS/ FLI 1&2 peptide vaccine	National Cancer Institute <i>Bethesda, MD</i>	Ewing's sarcoma, alveolar rhabdomyosarcoma	Phase II N C I T R I A L (800) 4-CANCER
SDX-102 (l-alanosine)	Salmedix <i>San Diego, CA</i>	osteosarcoma, soft tissue sarcoma (see also brain, lung, pancreatic)	Phase II (858) 622-5050
<b>Yondelis™</b> (ET-743)	Johnson & Johnson Pharmaceutical Research & Development <i>Raritan, NJ</i> PharmaMar USA <i>Cambridge, MA</i>	soft tissue sarcoma (see also breast, ovarian)	Phase II (800) 817-5286

## SKIN CANCER

Product Name	Sponsor	Indication	Development Status
17-allylamino-geldanamycin	National Cancer Institute <i>Bethesda, MD</i> Kosan Biosciences <i>Hayward, CA</i>	(see also breast, kidney, leukemia, lymphoma, prostate, solid tumors, other)	Phase II N C I T R I A L (800) 4-CANCER

## SKIN CANCER

Product Name	Sponsor	Indication	Development Status
852 <b>(Orphan Drug)</b>	3M Pharmaceuticals <i>St. Paul, MN</i>	melanoma	Phase I (651) 733-0968
485232 (recombinant human IL-18 immunomodulator)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	immunologically-sensitive melanoma (see also kidney)	Phase II (888) 825-5249
A-007	DEKK-TEC <i>New Orleans, LA</i>	breast cancer, lymphomas, and melanoma spread to skin and other cutaneous sites	Phase I completed
AG-013736	Pfizer <i>New York, NY</i>	melanoma (see also kidney, lung, pancreatic, other)	Phase II (860) 732-7920
<b>Allovectin-7®</b> HLA-B7 plasmid/ lipid complex <b>(Orphan Drug)</b>	Vical <i>San Diego, CA</i>	metastatic melanoma	Phase II completed (858) 646-1100
ALS-357	Advanced Life Sciences <i>Woodbridge, IL</i>	melanoma	Phase I (630) 739-6744
anti-MART-1 TCR retroviral vector-transduced autologous cells	National Cancer Institute <i>Bethesda, MD</i>	melanoma	Phase II N C I T R I A L (800) 4-CANCER
autologous T cells plus fowlpox gp100: P209	National Cancer Institute <i>Bethesda, MD</i> Therion Biologics <i>Cambridge, MA</i>	melanoma	Phase I/II N C I T R I A L (800) 4-CANCER
autologous T cells retrovirally transduced IL-2	National Cancer Institute <i>Bethesda, MD</i>	melanoma	Phase I/II N C I T R I A L (800) 4-CANCER
<b>Canvaxin™</b>	CancerVax <i>Carlsbad, CA</i> Serono <i>Rockland, MA</i>	stage III melanoma	Phase III (760) 494-4200 (800) 283-8088
CP-675,206	Pfizer <i>New York, NY</i>	metastatic melanoma (see also prostate)	Phase II (860) 732-7920
depsipeptide (FK228)	National Cancer Institute <i>Bethesda, MD</i> Gloucester Pharmaceuticals <i>Cambridge, MA</i>	(see also bladder, brain, colon, head/neck, leukemia, lung, lymphoma, ovarian, solid tumors, stomach, other)	Phase II N C I T R I A L (800) 4-CANCER
<b>Dimericine®</b> T4N5 liposomes	AGI Dermatics <i>Freeport, NY</i>	treatment of photosensitivity to ultraviolet rays in patients with xeroderma pigmentosa	Phase III completed (516) 868-9026
EMD 121974	National Cancer Institute <i>Bethesda, MD</i> Merck KGaA <i>Darmstadt, Germany</i>	(see also brain, prostate, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER

## SKIN CANCER

Product Name	Sponsor	Indication	Development Status
ESO-1:157-165 (165V) peptide vaccine	National Cancer Institute <i>Bethesda, MD</i>	melanoma	Phase II N C I T R I A L (800) 4-CANCER
fowlpox and vaccinia TRICOM	National Cancer Institute <i>Bethesda, MD</i> Therion Biologics <i>Cambridge, MA</i>	melanoma (see also solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
<b>Genasense</b> <sup>®</sup> oblimersen sodium (G3139)	Genta <i>Berkeley Heights, NJ</i>	melanoma (see also breast, colon, kidney, leukemia, lung, lymphoma, multiple myeloma, pancreatic, prostate, stomach, other)	Phase III (908) 286-9800
GMK vaccine (therapeutic)	Progenics Pharmaceuticals <i>Tarrytown, NY</i>	melanoma	Phase III (914) 789-2800
gp100 peptide vaccine	National Cancer Institute <i>Bethesda, MD</i>	melanoma	Phase II/III N C I T R I A L (800) 4-CANCER
gp100 protein (184V)	National Cancer Institute <i>Bethesda, MD</i>	melanoma	Phase I/II N C I T R I A L (800) 4-CANCER
IMC-GP75	Imclone Systems <i>New York, NY</i>	melanoma	Phase I (212) 645-1405
INGN 241 (mda-7)	Introgen Therapeutics <i>Austin, TX</i>	melanoma (see also solid tumors)	Phase I/II (512) 708-9310
mage 3 (249553; recombinant pharmaccine)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	treatment of melanoma (see also lung)	Phase II (888) 825-5249
MART-1 peptide vaccine	National Cancer Institute <i>Bethesda, MD</i>	melanoma	Phase II/III N C I T R I A L (800) 4-CANCER
MDX-010 (anti-CTLA4) (melanoma vaccine-gp100)	Medarex <i>Princeton, NJ</i> Bristol-Myers Squibb <i>Princeton, NJ</i>	metastatic melanoma	Phase III (609) 430-2880 (212) 546-4000
MS-275 (histone deacetylase inhibitor)	Berlex Laboratories <i>Montville, NJ</i>	melanoma (see also leukemia, solid tumors)	Phase II
<b>Oncophage</b> <sup>®</sup> HSPPC-96	Antigenics <i>New York, NY</i>	melanoma (see also kidney, lung)	Phase III (212) 994-8200
<b>PEG-INTRON</b> <sup>™</sup> peginterferon-alfa 2b	Enzon <i>Piscataway, NJ</i> Schering-Plough <i>Kenilworth, NJ</i>	malignant melanoma	Phase III (732) 980-4500

## SKIN CANCER

Product Name	Sponsor	Indication	Development Status
peripheral blood lymphocytes transduced with a gene encoding a chimeric T-cell receptor	National Cancer Institute <i>Bethesda, MD</i>	melanoma	Phase II N C I T R I A L (800) 4-CANCER
<b>Proleukin</b> <sup>®</sup> aldesleukin (IL-2)	National Cancer Institute <i>Bethesda, MD</i> Chiron <i>Emeryville, CA</i>	potentiates the effects of other agents in melanoma (see also lymphoma)	Phase I/II N C I T R I A L (800) 4-CANCER
<b>ProMune</b> <sup>®</sup>	Coley Pharmaceutical <i>Wellesley, MA</i>	melanoma (see also lung, lymphoma)	Phase II (781) 431-9000
<b>Revlimid</b> <sup>™</sup> lenalidomide	Celgene <i>Summit, NJ</i>	metastatic melanoma (see also leukemia, multiple myeloma, solid tumors)	Phase III (908) 673-9000
tasidotin	Genzyme <i>Cambridge, MA</i>	melanoma (see also lung, prostate)	Phase II (617) 252-7500
<b>Taxoprexin</b> <sup>®</sup> DHA-paclitaxel	Luitpold Pharmaceuticals <i>Shirley, NY</i>	malignant melanoma	Phase III (631) 924-4000
tumor-derived activated cells (TDAC)	Cancer Therapeutics <i>Thomasville, GA</i>	melanoma (see also kidney)	Phase II (800) 297-2976
tyrosinase 368-376 (370D) peptide vaccine	National Cancer Institute <i>Bethesda, MD</i>	melanoma	Phase II/III N C I T R I A L (800) 4-CANCER
UCN-01	National Cancer Institute <i>Bethesda, MD</i> Kyowa Pharmaceutical <i>Princeton, NJ</i>	(see also lung, lymphoma, pancreatic, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
<b>Vitaxin</b> <sup>®</sup>	MedImmune <i>Gaithersburg, MD</i>	melanoma (see also prostate)	Phase II (301) 398-0000

## SOLID TUMORS

Product Name	Sponsor	Indication	Development Status
17-allylamino-geldanamycin	National Cancer Institute <i>Bethesda, MD</i> Kosan Biosciences <i>Hayward, CA</i>	(see also breast, kidney, leukemia, lymphoma, prostate, skin, other)	Phase I N C I T R I A L (800) 4-CANCER
17-DMAG	National Cancer Institute <i>Bethesda, MD</i> Kosan Biosciences <i>Hayward, CA</i>	(see also lymphoma)	Phase I N C I T R I A L (800) 4-CANCER

## SOLID TUMORS

Product Name	Sponsor	Indication	Development Status
786034 (vascular endothelial growth factor 2 tyrosine kinase inhibitor)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>		Phase II (888) 825-5249
AEE 788	Novartis Pharmaceuticals <i>East Hanover, NJ</i>	advanced solid tumors	Phase I (973) 781-8300
AEG 35156 XIAP inhibitor	Aegera Therapeutics <i>Nun's Island, Quebec</i>	(see also leukemia)	Phase I (514) 288-5532
<b>Alimta™</b> pemetrexed disodium, multi-targeted antifolate	Eli Lilly <i>Indianapolis, IN</i>		Phase II (317) 276-2000
AP5346 (DACH polymer platinite)	Access Pharmaceuticals <i>Dallas, TX</i>		Phase I (214) 905-5100
AP23573 (mTOR inhibitor)	ARIAD Pharmaceuticals <i>Cambridge, MA</i>	(see also brain, cervical, leukemia, lymphoma, multiple myeloma, prostate, sarcoma)	Phase I (617) 494-0400
<b>Aroplatin™</b>	Antigenics <i>New York, NY</i>	(see also colon)	Phase I/II (212) 994-8200
ATN-161	Attenuon <i>San Diego, CA</i>	advanced solid tumors	Phase I (858) 720-8797
ATN-224	Attenuon <i>San Diego, CA</i>		Phase I (858) 720-8797
autologous cancer vaccine (ACV)	Cancer Therapeutics <i>Thomasville, GA</i>		Phase I/II (800) 297-2976
AVE0005 (VEGF-trap)	Sanofi-aventis <i>Bridgewater, NJ</i> Regeneron Pharmaceuticals <i>Tarrytown, NY</i>		Phase I (800) 633-1610
AZD2171	AstraZeneca <i>Wilmington, DE</i>		Phase I (800) 236-9933
BMS 214662 (farnesyl transferase inhibitor)	Bristol-Myers Squibb <i>Princeton, NJ</i>		Phase I (212) 546-4000
BNP1350 karenitecin	BioNumerik Pharmaceuticals <i>San Antonio, TX</i>		Phase II (210) 614-1701
camptosar IV	Pfizer <i>New York, NY</i>		Phase III (860) 732-7920
camptosar oral	Pfizer <i>New York, NY</i>		Phase II (860) 732-7920
CAP-1/CAP-1 (6D) peptide vaccine	National Cancer Institute <i>Bethesda, MD</i>	(see also stomach)	Phase I N C I T R I A L (800) 4-CANCER

## SOLID TUMORS

Product Name	Sponsor	Indication	Development Status
CEP-7055	Cephalon West Chester, PA Sanofi-aventis Bridgewater, NJ		Phase I/II (610) 344-0200 (800) 633-1610
CHIR-258	Chiron Emeryville, CA	(see also leukemia)	Phase I (510) 655-8730
CI-1033 pan-erbB tyrosine kinase inhibitor	Pfizer New York, NY		Phase II (860) 732-7920
clofarabine	Genzyme Cambridge, MA		Phase I (617) 252-7500
CNF1010	Conforma Therapeutics San Diego, CA		Phase I (858) 657-0300
<b>Dacogen™</b> decitabine	National Cancer Institute Bethesda, MD MGI Pharma Minneapolis, MN SuperGen Dublin, CA	(see also leukemia, lung, other)	Phase I N C I T R I A L (800) 4-CANCER
<b>Davanat</b>	Pro-Pharmaceuticals Newton, MA		Phase I (617) 559-0033
depsipeptide (FK228)	National Cancer Institute Bethesda, MD Gloucester Pharmaceuticals Cambridge, MA	(see also bladder, brain, colon, head/neck, leukemia, lung, lymphoma, ovarian, skin, stomach)	Phase I N C I T R I A L (800) 4-CANCER
<b>Eloxatin®</b> oxaliplatin	National Cancer Institute Bethesda, MD Sanofi-aventis Bridgewater, NJ	(see also cervical, liver, lymphoma, pancreatic, stomach)	Phase I/II N C I T R I A L (800) 4-CANCER
EM-1421	Erimos Pharmaceuticals Raleigh, NC	refractory solid tumors (see also cervical)	Phase II (919) 821-5204, ext. 2803
EMD 121974	National Cancer Institute Bethesda, MD Merck KGaA Darmstadt, Germany	(see also brain, prostate, skin)	Phase II N C I T R I A L (800) 4-CANCER
epothilone B analog (BMS 247550)	National Cancer Institute Bethesda, MD Bristol-Myers Squibb Princeton, NJ	(see also brain, breast, kidney, liver, lymphoma, prostate, other)	Phase I N C I T R I A L (800) 4-CANCER
ethynylcytidine (selective RNA polymerase inhibitor)	GlaxoSmithKline Philadelphia, PA Rsch. Triangle Park, NC		Phase II (888) 825-5249
fenretinide (4-HPR)	National Cancer Institute Bethesda, MD	(see also brain, prostate)	Phase I N C I T R I A L (800) 4-CANCER

## SOLID TUMORS

Product Name	Sponsor	Indication	Development Status
flavopiridol	National Cancer Institute <i>Bethesda, MD</i> Sanofi-aventis <i>Bridgewater, NJ</i>	(see also leukemia, liver, lymphoma, ovarian, pancreatic, sarcoma)	Phase I N C I T R I A L (800) 4-CANCER
fowlpox and vaccinia CEA(6D)/TRICOM	National Cancer Institute <i>Bethesda, MD</i> Therion Biologics <i>Cambridge, MA</i>	CEA-expressing solid tumors (see also breast, lung)	Phase I N C I T R I A L (800) 4-CANCER
fowlpox and vaccinia TRICOM	National Cancer Institute <i>Bethesda, MD</i> Therion Biologics <i>Cambridge, MA</i>	(see also skin)	Phase I N C I T R I A L (800) 4-CANCER
<b>GCS-100LE™</b>	GlycoGenesys <i>Boston, MA</i>	(see also multiple myeloma)	Phase I (617) 422-0674
<b>GEM® 231</b> (antisense)	Hybridon <i>Cambridge, MA</i>		Phase I/II (617) 679-5500
GTI-2040 (antisense)	National Cancer Institute <i>Bethesda, MD</i> Lorus Therapeutics <i>Toronto, Ontario</i>	(see also breast, kidney, leukemia, lung, prostate)	Phase I N C I T R I A L (800) 4-CANCER
<b>Herceptin®</b> trastuzumab	National Cancer Institute <i>Bethesda, MD</i> Genentech <i>South San Francisco, CA</i>	(see also breast, cervical, sarcoma)	Phase I N C I T R I A L (800) 4-CANCER
HGS-TR2J	Human Genome Sciences <i>Rockville, MD</i>	advanced solid malignancies	Phase I (301) 309-8504
INGN 241 (mda-7)	Introgen Therapeutics <i>Austin, TX</i>	(see also skin)	Phase I/II (512) 708-9310
interleukin-12 (IL-12)	National Cancer Institute <i>Bethesda, MD</i> Wyeth Pharmaceuticals <i>Collegeville, PA</i>	(see also kidney, lymphoma, ovarian)	Phase I N C I T R I A L (800) 4-CANCER
<b>Iressa®</b> (ZD1839)	AstraZeneca <i>Wilmington, DE</i>	(see also breast, colon, head/neck, kidney, lung)	Phase II/III (800) 236-9933
irinotecan (CPT-11)	National Cancer Institute <i>Bethesda, MD</i> Pfizer <i>New York, NY</i>		Phase I N C I T R I A L (800) 4-CANCER
labetuzumab (IMMU-100)	Immunomedics <i>Morris Plains, NJ</i>	inoperable metastatic solid tumors	Phase I completed (973) 605-8200
LAQ 824	Novartis Pharmaceuticals <i>East Hanover, NJ</i>	advanced solid tumors	Phase I (973) 781-8300
LEP-ETU liposome entrapped paclitaxel (easy-to-use)	NeoPharm <i>Lake Forest, IL</i>		Phase II (847) 295-8678

## SOLID TUMORS

Product Name	Sponsor	Indication	Development Status
LErafAON liposome- encapsulated antisense oligo- nucleotide to raf-1 proto oncogene	NeoPharm <i>Lake Forest, IL</i>		Phase I (847) 295-8678
midostaurine (PKC 412)	Novartis Pharmaceuticals <i>East Hanover, NJ</i>	(see also leukemia)	Phase II (973) 781-8300
MS-275 histone deacetylase inhibitor	National Cancer Institute <i>Bethesda, MD</i> Schering AG <i>Berlin, Germany</i>	(see also leukemia, skin)	Phase I N C I T R I A L (800) 4-CANCER
NM-3	Genzyme <i>Cambridge, MA</i>		Phase I (617) 252-7500
NX473	AnorMED <i>Langley, British Columbia</i> NeoRx <i>Seattle, WA</i>	(see also colon, lung)	Phase II (888) 879-7007
O6-benzylguanine (O6-BG)	National Cancer Institute <i>Bethesda, MD</i> Keryx Biopharmaceuticals <i>New York, NY</i>	(see also brain, lymphoma, cancer/chemotherapy)	Phase II N C I T R I A L (800) 4-CANCER
pan her kinase inhibitor	Bristol-Myers Squibb <i>Princeton, NJ</i>		Phase I (212) 546-4000
patupilone (EPO 906)	Novartis Pharmaceuticals <i>East Hanover, NJ</i>		Phase II (973) 781-8300
R1454 (enzyme inhibitor)	Roche <i>Nutley, NJ</i>		Phase I (973) 235-5000
R1492 (KOS-862)	Roche <i>Nutley, NJ</i> Kosan Biosciences <i>Hayward, CA</i>		Phase II (973) 235-5000
R1536	Roche <i>Nutley, NJ</i> Beaufour Ipsen <i>Paris, France</i>		Phase II (973) 235-5000
R1550 (MAb)	Roche <i>Nutley, NJ</i> Antisoma <i>London, England</i>		Phase I (973) 235-5000
R1559 (enzyme inhibitor)	Roche <i>Nutley, NJ</i> Beaufour Ipsen <i>Paris, France</i>		Phase I (973) 235-5000

## SOLID TUMORS

Product Name	Sponsor	Indication	Development Status
R1645 (epithilone D)	Roche Nutley, NJ Kosan Biosciences Hayward, CA		Phase I (973) 235-5000
rebeccamycin analog	National Cancer Institute Bethesda, MD Exelixis South San Francisco, CA	(see also leukemia, liver)	Phase I N C I T R I A L (800) 4-CANCER
recombinant fowlpox GM-CSF	National Cancer Institute Bethesda, MD Therion Biologics Cambridge, MA	CEA-expressing tumors (see also prostate)	Phase I N C I T R I A L (800) 4-CANCER
<b>Revlimid™</b> lenalidomide	Celgene Summit, NJ	(see also leukemia, multiple myeloma, skin)	Phase II (908) 673-9000
RH1	Allos Therapeutics Westminster, CO	advanced solid tumors	Phase I (303) 426-6262
<b>Sarasar</b> lonafamib	Schering-Plough Kenilworth, NJ	(see also leukemia)	Phase II (908) 298-4000
SJG136	National Cancer Institute Bethesda, MD Ipsen Slough, Berkshire, UK		Phase I N C I T R I A L (800) 4-CANCER
sodium phenylbutyrate	National Cancer Institute Bethesda, MD Vectramed Plainsboro, NJ	(see also colon, leukemia)	Phase I N C I T R I A L (800) 4-CANCER
SRC/ABL kinase inhibitor	Bristol-Myers Squibb Princeton, NJ	(see also leukemia)	Phase I (212) 546-4000
SS1(dsFv) PE38	National Cancer Institute Bethesda, MD		Phase I N C I T R I A L (800) 4-CANCER
SU11248	Pfizer New York, NY	(see also kidney)	Phase III (860) 732-7920
survivin ASO LY2181308 (antisense)	Isis Pharmaceuticals Carlsbad, CA Eli Lilly Indianapolis, IN		Phase I (800) 679-4747 (317) 276-2000
<b>Trisenox®</b> arsenic trioxide injection	Cell Therapeutics Seattle, WA	(see also leukemia, multiple myeloma, neuroblastoma)	Phase II (206) 282-7100
<b>Troxatyl™</b>	SGX San Diego, CA	(see also leukemia)	Phase I (858) 558-4850
UCN-01 (KW-2401)	National Cancer Institute Bethesda, MD Kyowa Pharmaceutical Princeton, NJ	(see also lung, lymphoma, pancreatic, skin)	Phase I N C I T R I A L (800) 4-CANCER

## SOLID TUMORS

Product Name	Sponsor	Indication	Development Status
VEGFR-2 inhibitor	Bristol-Myers Squibb <i>Princeton, NJ</i>		Phase I (212) 546-4000
<b>Velcade®</b> bortezomib	Millennium Pharmaceuticals <i>Cambridge, MA</i>	advanced solid tumors (see also lung, lymphoma)	Phase I/II (617) 679-7000
VX-680 (aurora kinase inhibitor)	Merck <i>Whitehouse Station, NJ</i> Vertex Pharmaceuticals <i>Cambridge, MA</i>		Phase I (800) 672-6372 (617) 444-6777
<b>Xcytrin®</b> motexafin gadolinium	Pharmacyclics <i>Sunnyvale, CA</i>	solid tumors in combination with Taxotere® (see also brain, kidney, leukemia, lung, lymphoma, multiple myeloma)	Phase I (408) 774-0330
<b>Xyotax™</b> polyglutamate paclitaxel	Cell Therapeutics <i>Seattle, WA</i>	(see also lung, ovarian)	Phase I (206) 282-7100
Y-90 labetuzumab (IMMU-101)	Immunomedics <i>Morris Plains, NJ</i>	inoperable metastatic solid tumors	Phase I completed (973) 605-8200
ZD4054	AstraZeneca <i>Wilmington, DE</i>		Phase II (800) 236-9933
ZD6474	AstraZeneca <i>Wilmington, DE</i>		Phase II (800) 236-9933
ZYC300	MGI Pharma <i>Minneapolis, MN</i>	metastatic solid tumors (see also leukemia)	Phase I/II completed (952) 346-4700

## STOMACH CANCER

Product Name	Sponsor	Indication	Development Status
<b>Advexin®</b> (p53)	Introgen Therapeutics <i>Austin, TX</i>	esophageal cancer (see also breast, head/neck, lung, prostate, other)	Phase I/II (512) 708-9310
CAP-1/CAP-1 (6D) peptide vaccine	National Cancer Institute <i>Bethesda, MD</i>	(see also solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
cytochlor and tetrahydrouridine (FK228)	National Cancer Institute <i>Bethesda, MD</i> Halogenetics <i>Miami, FL</i>	esophageal cancer (see also head/neck)	Phase I N C I T R I A L (800) 4-CANCER
depsipeptide (FK228)	National Cancer Institute <i>Bethesda, MD</i> Gloucester Pharmaceuticals <i>Cambridge, MA</i>	esophageal cancer, stomach cancer (see also bladder, brain, colon, head/neck, leukemia, lung, lymphoma, ovarian, skin, solid tumors, other)	Phase II N C I T R I A L (800) 4-CANCER

## STOMACH CANCER

Product Name	Sponsor	Indication	Development Status
<b>Eloxatin®</b> oxaliplatin	National Cancer Institute <i>Bethesda, MD</i> Sanofi-aventis <i>Bridgewater, NJ</i>	esophageal cancer (see also cervical, liver, lymphoma, pancreatic, solid tumors)	Phase II N C I T R I A L (800) 4-CANCER
<b>Genasense®</b> oblimersen sodium (G3139)	Genta <i>Berkeley Heights, NJ</i>	gastric cancer (see also breast, colon, kidney, leukemia, lung, lymphoma, multiple myeloma, pancreatic, prostate, skin, other)	Phase II (908) 286-9800
GW572016	National Cancer Institute <i>Bethesda, MD</i> GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	(see also brain, breast, cervical, head/neck, liver, prostate)	Phase II N C I T R I A L (800) 4-CANCER
HuC242-DM4	ImmunoGen <i>Cambridge, MA</i>	gastric cancer (see also colon, pancreatic)	Phase I (617) 995-2500
<b>Insegia™</b> anti-gastrin 17 therapeutic vaccine	Aphton <i>Miami, FL</i> sanofi pasteur <i>Toronto, Ontario</i>	gastric and/or esophageal cancer (see also pancreatic)	Phase II completed (416) 667-2701
lapatinib (ErbB-2 and EGFR dual kinase inhibitor)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	gastric cancer (see also bladder, breast, head/neck, kidney, lung)	Phase III (888) 825-5249
LMB-9	IVAX <i>Miami, FL</i>		Phase II (305) 575-6000
OSI-7904L (thymidylate synthase inhibitor)	OSI Pharmaceuticals <i>Melville, NY</i>	gastric cancer	Phase II (800) 572-1932
SC-1	H3 Pharma <i>Montreal, Quebec</i>		Phase II (514) 842-9976
<b>Taxotere®</b> docetaxel	Sanofi-aventis <i>Bridgewater, NJ</i>	gastric cancer (see also head/neck)	Phase III (800) 633-1610
<b>Xorane</b> oral paclitaxel	IVAX <i>Miami, FL</i>	gastric cancer (see also breast, lung)	Phase II completed (305) 575-6000

## CANCER/CHEMOTHERAPY-RELATED CONDITIONS

Product Name	Sponsor	Indication	Development Status
497115 (thrombopoietin agonist)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	thrombocytopenia	Phase II (888) 825-5249
679769 (NK1 antagonist)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	chemotherapy-induced nausea and vomiting	Phase II (888) 825-5249

## CANCER/CHEMOTHERAPY-RELATED CONDITIONS

Product Name	Sponsor	Indication	Development Status
<sup>99m</sup> Tc-NC100692	GE Healthcare <i>Princeton, NJ</i>	diagnostic imaging agent for the detection of angiogenesis associated with metastatic disease	Phase II (609) 514-6000
APF530	A.P. Pharma <i>Redwood City, CA</i>	prevention of acute and delayed chemotherapy-induced nausea and vomiting	Phase II (650) 366-2626
<b>Aranesp</b> <sup>®</sup> darbepoetin alfa	Amgen <i>Thousand Oaks, CA</i>	chemotherapy-induced anemia (three week dosing)	application submitted (800) 772-6436
CG53135	CuraGen <i>New Haven, CT</i>	oral mucositis prevention	Phase II (888) 436-6642
<b>CyPat</b> <sup>™</sup> cyproterone acetate	Duramed Research <i>Bala Cynwyd, PA</i>	reduction of moderate to severe vasomotor associated with surgical or chemical castration in prostate cancer patients	Phase II (610) 747-2687
deferasirox (ICL 670)	Novartis Pharmaceuticals <i>East Hanover, NJ</i>	chronic iron overload	Phase III (973) 781-8300
<b>Dynepo</b> <sup>™</sup> epoietin delta (gene-activated erythropoietin)	Transkaryotic Therapies <i>Cambridge, MA</i>	treatment of anemia associated with cancer chemotherapy	Phase III completed (617) 349-0200
EF5	National Cancer Institute <i>Bethesda, MD</i>	detection of tumor hypoxia (see also cervical, head/neck, lung, ovarian)	in clinical trials N C I T R I A L (800) 4-CANCER
<b>Entereg</b> <sup>™</sup> alvimopan	Adolor <i>Exton, PA</i>	opioid-induced bowel dysfunction	Phase II (484) 595-1500
<b>Ethylol</b> <sup>®</sup> amifostine	MedImmune <i>Gaithersburg, MD</i>	prevention of mucositis in non-small-cell lung cancer	Phase II (877) 633-4411
<b>Focalin</b> <sup>™</sup>	Celgene <i>Summit, NJ</i>	cancer fatigue	Phase II (908) 673-9000
<b>Kepivance</b> <sup>™</sup> palifermin	Amgen <i>Thousand Oaks, CA</i>	oral mucositis associated with radiation therapy and chemotherapy for solid tumors	Phase III (800) 772-6436
<b>Nipent</b> <sup>®</sup> pentostatin	SuperGen <i>Dublin, CA</i>	graft vs. host disease (GVHD)	Phase II (925) 327-0200
O6-benzylguanine (O6-BG)	National Cancer Institute <i>Bethesda, MD</i> Keryx Biopharmaceuticals <i>New York, NY</i>	potentiates the activity of other chemotherapy agents (see also brain, lymphoma, solid tumors)	Phase I N C I T R I A L (800) 4-CANCER
<b>Rapinyl</b> <sup>™</sup>	Endo Pharmaceuticals <i>Chadds Ford, PA</i>	breakthrough cancer pain	Phase II (610) 558-9800
RK-0202	RxKinetix <i>Louisville, CO</i>	prevention and treatment of oral mucositis	Phase II (303) 926-1900
<b>Saforis</b> <sup>™</sup> AES-14	MGI Pharma <i>Minneapolis, MN</i>	oral mucositis	Phase III completed (952) 346-4700

## CANCER/CHEMOTHERAPY-RELATED CONDITIONS

Product Name	Sponsor	Indication	Development Status
STS <b>(Orphan Drug)</b>	Adherex <i>Rsch. Triangle Park, NC</i>	hearing loss resulting from platinum-based chemotherapy	Phase II (919) 484-8484
<b>Tavocept™</b> BNP7787	BioNumerik Pharmaceuticals <i>San Antonio, TX</i>	chemoprotection for taxane- and platinum-associated common toxicity	Phase III (210) 614-1701
toremifene citrate	GTx <i>Memphis, TN</i>	treatment of side effects in men with advanced prostate cancer on androgen ablation therapy (see also prostate)	Phase III (901) 523-9700
vestipitant (597599, NK1 antagonist)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>	chemotherapy-induced nausea and vomiting	Phase II (888) 825-5249
<b>Voraxaze™</b> glucarpidase <b>(Orphan Drug)</b>	National Cancer Institute <i>Bethesda, MD</i> Protherics <i>Brentwood, TN</i>	methotrexate overdose	Phase III N C I T R I A L (800) 4-CANCER

## OTHER CANCERS

Product Name	Sponsor	Indication	Development Status
17-allylamino-geldanamycin	National Cancer Institute <i>Bethesda, MD</i> Kosan Biosciences <i>Hayward, CA</i>	advanced malignancies, thyroid cancer (see also breast, kidney, leukemia, lymphoma, prostate, skin, solid tumors)	Phase I/II N C I T R I A L (800) 4-CANCER
<b>Advexin®</b> (p53)	Introgen Therapeutics <i>Austin, TX</i>	postoperative and surgery (see also breast, head/neck, lung, prostate, stomach)	Phase I/II (512) 708-9310
AG-013736	Pfizer <i>New York, NY</i>	thyroid cancer (see also kidney, lung, pancreatic, skin)	Phase II (860) 732-7920
anti- $\alpha 5\beta 1$ integrin	Protein Design Labs <i>Fremont, CA</i>	advanced cancer	Phase I (510) 574-1400
<b>Atrigel-Octreotide</b>	QLT USA <i>Fort Collins, CO</i>	carcinoid tumors	Phase I (604) 707-7000
AVR118	Advanced Viral Research <i>Yonkers, NY</i>	advanced cancers	Phase II
banoxantrone (AQ4N)	Novacea <i>South San Francisco, CA</i>	advanced malignancies	Phase I (650) 228-1800
benzoylphenylurea (BPU)	National Cancer Institute <i>Bethesda, MD</i> Ishihara Sangyo Kaisha <i>Shiga, Japan</i>	advanced malignancies	Phase I N C I T R I A L (800) 4-CANCER

## OTHER CANCERS

Product Name	Sponsor	Indication	Development Status
<b>Beta LT™</b>	LifeTime Pharmaceuticals <i>College Park, MD</i>	Waldenstrom's macroglobulinemia	Phase I/II (301) 314-1480
CA4P (combrestatin)	OXiGENE <i>Watertown, MA</i>	advanced regional or metastatic anaplastic thyroid cancer (ATC) (see also breast, cervical, colon, head/neck, lung, ovarian, prostate)	Phase II (617) 673-7800
		newly diagnosed ATC in combination with doxorubicin, cisplatin and radiotherapy	Phase I/II (617) 673-7800
CAL (humanized anti-PTHrP MAb)	Chugai Pharma USA <i>San Diego, CA</i>	bone metastases in breast cancer	Phase I/II (858) 535-5900
carboxyamido- triazole (CAI)	National Cancer Institute <i>Bethesda, MD</i>	refractory cancers (see also lymphoma)	Phase I N C I T R I A L (800) 4-CANCER
clodronate	Berlex Laboratories <i>Montville, NJ</i>	to reduce the occurrence of bone metastases in the adjuvant (post-surgical) treatment of breast cancer	application submitted (973) 487-2222
<b>Dacogen™</b> decitabine	National Cancer Institute <i>Bethesda, MD</i> MGI Pharma <i>Minneapolis, MN</i> SuperGen <i>Dublin, CA</i>	advanced malignancies, thyroid cancer (see also leukemia, lung, solid tumors)	Phase I/II N C I T R I A L (800) 4-CANCER
depsipeptide (FK228)	National Cancer Institute <i>Bethesda, MD</i> Gloucester Pharmaceuticals <i>Cambridge, MA</i>	advanced malignancies, thyroid cancer (see also bladder, brain, colon, head/neck, leukemia, lung, lymphoma, ovarian, skin, solid tumors, stomach)	Phase I/II N C I T R I A L (800) 4-CANCER
epothilone B analog (BMS 247550)	National Cancer Institute <i>Bethesda, MD</i> Bristol-Myers Squibb <i>Princeton, NJ</i>	advanced malignancies, germ cell tumors (see also brain, breast, kidney, liver, lymphoma, prostate, solid tumors)	Phase I/II N C I T R I A L (800) 4-CANCER
<b>Genasense®</b> oblimersen sodium (G3139)	Genta <i>Berkeley Heights, NJ</i>	mantle cell cancer (see also breast, colon, kidney, leukemia, lung, lymphoma, multiple myeloma, pancreatic, prostate, skin, stomach)	Phase II (908) 286-9800
HGS-ETR2	Human Genome Sciences <i>Rockville, MD</i>	advanced tumors	Phase I (301) 309-8504
MDX-214	Medarex <i>Princeton, NJ</i>	EGFR+ cancers	Phase I/II (609) 430-2880
OXi4503	OXiGENE <i>Watertown, MA</i>	advanced cancer	Phase I (617) 673-7800

## OTHER CANCERS

Product Name	Sponsor	Indication	Development Status
Panzem® NCD 2ME2	EntreMed <i>Rockville, MD</i>	advanced cancer	Phase I (240) 864-2142
RAV12 (anti-RAAG12 MAb)	Raven Biotechnologies <i>South San Francisco, CA</i>	metastatic or recurrent adenocarcinoma	Phase I (650) 624-2600
TACI-Ig	Serono <i>Rockland, MA</i>	relapsed/refractory B-cell malignancies (see also multiple myeloma)	Phase I (800) 283-8088
Y-90 hAFP (IMMU-105)	Immunomedics <i>Morris Plains, NJ</i>	germ cell cancer (see also liver)	Phase I (973) 605-8200

## UNSPECIFIED CANCERS

(DRUGS THAT HAVE POTENTIAL FOR ONE OR MORE OF THE PREVIOUS CANCERS)

Product Name	Sponsor	Indication	Development Status
743921 (kinesin spindle protein [KSP] inhibitor)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>		Phase I (888) 825-5249
ABT-510	Abbott Laboratories <i>Abbott Park, IL</i>		Phase II (847) 936-1189
ABT-751	Abbott Laboratories <i>Abbott Park, IL</i>		Phase II (847) 936-1189
Apo2L/TRIAL	Amgen <i>Thousand Oaks, CA</i> Genentech <i>South San Francisco, CA</i>		Phase I (805) 447-1000 (650) 225-1000
AVE-8062	Sanofi-aventis <i>Bridgewater, NJ</i>		Phase I (800) 633-1610
AVI-4126 (antisense)	AVI BioPharma <i>Portland, OR</i>		Phase I completed (503) 227-0554
CC 401	Celgene <i>Summit, NJ</i>		Phase II (908) 673-9000
CYT997	Cytopia <i>Melbourne, Australia</i> <i>Rensselaer, NY</i>		Phase I
DE-310	Daiichi Pharmaceutical <i>Montvale, NJ</i>		Phase I (877) 324-4244
DJ-927	Daiichi Pharmaceutical <i>Montvale, NJ</i>		Phase I (877) 324-4244
DX-8951f (exatecan)	Daiichi Pharmaceutical <i>Montvale, NJ</i>		Phase III (877) 324-4244
E7820	Eisai <i>Ridgefield Park, NJ</i>		Phase I (201) 403-2500

## UNSPECIFIED CANCERS

(DRUGS THAT HAVE POTENTIAL FOR ONE OR MORE OF THE PREVIOUS CANCERS)

Product Name	Sponsor	Indication	Development Status
elacridar (oral bioenhancer)	GlaxoSmithKline <i>Philadelphia, PA</i> <i>Rsch. Triangle Park, NC</i>		Phase I (888) 825-5249
gallium maltolate	Titan Pharmaceuticals <i>South San Francisco, CA</i>		Phase I (650) 244-4990
IMC-1121b	Imclone Systems <i>New York, NY</i>		Phase I (212) 645-1405
KRX-0403 (spindle poison)	Keryx Biopharmaceuticals <i>New York, NY</i>		Phase I completed (212) 531-5965
KW-2401	Kyowa Pharmaceutical <i>Princeton, NJ</i>		Phase II (609) 919-1100
KW-2871	Kyowa Pharmaceutical <i>Princeton, NJ</i>		Phase I/II (609) 919-1100
ON 01910	Onconova <i>Princeton, NJ</i>		Phase I (609) 844-7735
<b>Quinamed</b> <sup>®</sup> amonafile dihydrochloride	ChemGenex Pharmaceuticals <i>Menlo Park, CA</i>		Phase II (650) 474-9800
rhIGFBP-3	Insmed <i>Glen Allen, VA</i>		Phase I (804) 565-3000
SNS-595	Sunesis Pharmaceuticals <i>South San Francisco, CA</i>		Phase I (650) 266-3500
<b>Stanate</b> <sup>™</sup> stansoporphin	Infacare Pharmaceutical <i>Neptune, NJ</i> Wellspring Pharmaceutical <i>Sarasota, FL</i>		Phase II (732) 938-5885
TZT-1027	Daiichi Pharmaceutical <i>Montvale, NJ</i>		Phase I (877) 324-4244
ZIO-201	ZIOPHARM <i>New Haven, CT</i>		Phase I (203) 848-3400

The content of this survey has been obtained through government and industry sources based on the latest information. Survey current as of **April 15, 2005**. The information may not be comprehensive. For more specific information about a particular product, contact the individual company directly. The entire series of *Medicines in Development* is available on PhRMA's web site.

**PhRMA Internet address:** <http://www.phrma.org>

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# Glossary

**adenomatous**—Relating to adenoma: an ordinarily benign neoplasm of epithelial tissue in which the tumor cells form glands or glandlike structures in the framework of an organ, gland or other structure.

**adjuvant**—A substance or drug that aids another substance in its action.

**anaplastic thyroid carcinoma**—An aggressive, invasive form of cancer of the thyroid gland. It occurs most often in people over age 60. The cause is unknown. Anaplastic cancer accounts for only about 1 percent of all thyroid cancers and is a very rare disease.

**angiogenesis**—The physiological process involving the formation of new blood vessels from pre-existing vessels. This is a normal process in growth and development, as well as in wound healing. However, this is also a fundamental step in the transition of tumors from a dormant state to a malignant state.

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

**autologous**—In blood transfusion and transplantation, a situation in which the donor and recipient are the same person. An autologous graft is providing a graft, for example of skin, to yourself.

**B cell**—A class of white blood cells important to the body's immune system.

**BCG**—*Bacillus Calmette-Guérin*. Immunotherapy for bladder cancer.

**carcinoma**—A malignant tumor that arises from epithelial tissues, such as skin.

**cervical**—Relating to the neck of the uterus.

**curative therapy**—Therapy that attempts permanent control of a tumor

using aggressive but not excessively debilitating treatments. Multiple treatment modalities are often employed.

**cutaneous**—Pertaining to the skin.

**emesis**—Vomiting.

**familial adenomatous polyposis (FAP)**—A colon cancer predisposition syndrome in which hundreds to thousands of precancerous colonic polyps develop, beginning at a mean age of 16. By age 35, 95 percent of individuals with FAP have polyps. Without colectomy, colon cancer is inevitable. The mean age of colon cancer in untreated individuals is 39 years. Familial adenomatous polyposis is caused by a genetic mutation. In the United States, estimates vary from 1 case in 6,850 people to 1 case in 31,250 people.

**gastric**—Of or relating to the stomach.

**glioblastoma multiforme**—A fast growing and highly malignant type of brain tumor arising from glial (supporting) cells within the brain. There are about five to 10 new cases per million population per year in the United States, and the cause is unknown.

**glioma**—A type of brain tumor arising from the supporting glial cells within the brain. Gliomas make up about 60 percent of all primary brain tumors and are frequently malignant.

**graft vs. host disease (GVHD)**—A complication in bone marrow transplants where immune system cells attack the transplant recipient's tissues.

**hepatocellular cancer/carcinoma**—A cancer that begins in the liver cells.

**imaging agent**—A substance used to enhance x-ray images of organs and spaces in the body.

**immunotoxin**—A hybrid molecule created by coupling an antibody or antigen with part or all of a toxin. The

hybrid molecule combines the specificity of the antibody or antigen with the toxicity of the toxin. The possible targets of immunotoxins include cancer cells and cells containing HIV.

**intratumoral**—Within a tumor.

**islet cell cancer**—A rare cancer in which malignant cells are found in certain tissues of the pancreas. The pancreas has two basic jobs in the body. It produces digestive juices that help break down (digest) food and hormones (such as insulin) that regulate how the body stores and uses food. The area of the pancreas that produces digestive juices is called the exocrine pancreas. About 95 percent of pancreatic cancers begin in the exocrine pancreas. The hormone-producing area of the pancreas has special cells called islet cells and is called the endocrine pancreas. Only about 5 percent of pancreatic cancers start there.

**Kaposi's sarcoma**—A rare, malignant skin tumor that occurs in some AIDS patients. It can be accompanied by fever, enlarged lymph nodes and gastrointestinal problems.

**leukemia**—A form of cancer in which abnormally growing white blood cells are scattered throughout the body and bone marrow. They can take over the marrow and prevent it from making enough normal blood cells (white, red and platelets), leaving the patient highly susceptible to serious infections, anemia and bleeding episodes. The cells can also spill into the blood, infiltrating and interfering with the function of other organs. The four main types of leukemia are: **acute lymphoblastic leukemia (ALL)**, **acute myelogenous leukemia (AML)**, **chronic lymphocytic leukemia (CLL)**, and **chronic myelogenous leukemia (CML)**. The acute types have a rapid onset, and overwhelming infection or blood loss can cause death. The chronic forms progress much more slowly.

# Glossary

**lung cancer**—The leading cause of cancer deaths in both men and women. There are several types of lung cancer, the most common being squamous cell carcinoma, small (oat) cell carcinoma, adenocarcinoma and large cell carcinoma. Each has a different growth pattern and response to treatment. The squamous cell, small cell and large cell types are all strongly associated with tobacco abuse.

**lymphoma**—Cancers in which the cells of lymphoid tissue, found mainly in the lymph nodes and spleen, multiply unchecked. Lymphomas fall into two categories: Hodgkin disease, characterized by a particular kind of abnormal cell, and **non-Hodgkin lymphomas**, which vary in their malignancy according to the nature and activity of the abnormal cells. **Mantle cell lymphoma** is a type of non-Hodgkin lymphoma.

**melanoma**—A cancer made up of pigmented (usually brown-colored) skin cells anywhere in the body.

**mesothelioma**—A tumor of the lining of the lung and chest cavity (the pleura).

**metastases/metastatic**—Areas of secondary cancer that have spread from the primary or original cancer site.

**mucositis**—The swelling, irritation, and ulceration of the mucosal cells that line the digestive tract. Mucositis can occur anywhere along the digestive tract from the mouth to the anus. It can be a very troublesome and painful side effect of chemotherapy.

**multiple myeloma**—A malignant condition of middle to old age, characterized by the uncontrolled proliferation and disordered function of plasma cells in the bone marrow. The condition, which makes the patient particularly prone to infection, is rare, with about three new cases annually per 100,000 population.

**myelodysplastic syndromes (MDS)**—Blood disorders that ultimately are fatal. Patients usually succumb to infections or bleeding. The term “preleukemia” has been used to describe these disorders.

**Phase I**—Safety testing and pharmacological profiling of new drugs in humans.

**Phase II**—Effectiveness testing and identification of side effects of new drugs in humans.

**Phase III**—Extensive clinical trials in humans to verify effectiveness and monitor adverse reactions of new drugs.

**Phase IV**—Additional post-marketing testing of drugs required by the FDA.

**photodynamic therapy (PDT)**—A treatment that uses a drug, called a photosensitizer or photosensitizing agent, and a particular type of light. When photosensitizers are exposed to a specific wavelength of light, they produce a form of oxygen that kills nearby cancer cells.

**potentiate**—To make potent or powerful; to enhance or increase the effect of (a drug); to promote or strengthen (a biochemical or physiological action or effect).

**prostatic intraepithelial neoplasia (PIN)**—A precursor lesion to prostate cancer. It has been estimated that 30 percent of men with high-grade PIN develop clinical evidence of prostate cancer within a year.

**refractory**—Resistant to treatment or cure.

**rhabdomyosarcoma**—A malignant neoplasm derived from skeletal (striated) muscle.

**sarcoma**—A malignant tumor that arises from deep body tissues, such as muscle, bone or fibrous tissue.

**stereotactic radiosurgery (SRS)**—A way of treating brain disorders with a precise delivery of a single high dose

of radiation in a one-day session. Treatment involves the use of focused radiation beams delivered to a specific area of the brain to treat abnormalities, tumors or other functional disorders. Stereotactic radiosurgery is limited to the head and neck as these areas can be immobilized with skeletal fixation devices that completely restrict the head's movement, permitting the most precise and accurate treatment.

**T cell**—One of two main classes of white blood cells called lymphocytes, which are important to the body's disease-fighting immune system.

**thrombocytopenia**—A reduction in the number of platelet cells in the blood, which causes a tendency to bleed, especially from the smaller blood vessels.

**vasomotor**—Relating to the nerves and muscles that cause the blood vessels to constrict or dilate.

**Waldenstrom's macroglobulinemia**—A rare, chronic cancer that is classified as a plasma cell neoplasm. It affects plasma cells, which develop from white blood cells called B-lymphocytes or B cells. In Waldenstrom's macroglobulinemia, abnormal plasma cells multiply out of control. They invade the bone marrow, lymph nodes, and spleen and produce excessive amounts of an antibody called IgM. Excess IgM in the blood causes hyperviscosity (thickening) of the blood. In extreme cases, the increased concentration of IgM in the blood can lead to heart failure. The disease usually occurs in people over age 65 but can occur in younger people. It is more common among men than women and among whites than blacks.

**xeroderma pigmentosa**—A rare, inherited skin disease caused by extreme sensitivity to sunlight, which causes the skin to become dry, wrinkled, freckled and prematurely aged by about the age of five. Various types of benign and malignant skin tumors also develop.

# SELECTED FACTS ABOUT CANCER IN THE UNITED STATES

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## Overview<sup>1</sup>

- Cancer is the second leading cause of death by disease—1 of every 4 deaths—in the United States, exceeded only by heart disease. This year about 570,280 Americans are expected to die of cancer, more than 1,500 people a day.
  - In 2005, nearly 1.4 million new cancer cases are expected to be diagnosed. Since 1990, more than 17 million new cancer cases have been diagnosed. The National Cancer Institute estimates that approximately 9.8 million Americans with a history of cancer were alive in January 2001. The 5-year relative survival rate for all cancers diagnosed between 1995 and 2000 is 64 percent, up from 50 percent in the mid-70s.
  - Men have a little less than a 1 in 2 lifetime risk of developing cancer, and for women the risk is a little more than 1 in 3. About 76 percent of all cancers are diagnosed in people ages 55 and older.
- 

## Costs<sup>1</sup>

- The National Institutes of Health estimate overall costs for cancer in 2004 at \$189.8 billion: \$69.4 billion for direct medical costs (total of all health expenditures); \$16.9 billion for indirect morbidity costs (cost of lost productivity due to illness); and \$103.5 billion for indirect mortality costs (cost of productivity due to premature death).
- 

## Bladder (Urinary) Cancer<sup>1</sup>

- Overall, bladder cancer incidence is nearly four times higher in men than in women and two times higher in whites than in African Americans.
- 

## Breast Cancer<sup>1</sup>

- Breast cancer, the most frequently diagnosed cancer in women, ranks second among cancer deaths in women (after lung cancer). Mortality rates declined by 2.3 percent per year from 1990 to 2001, with larger decreases in younger (under age 50) women due to increased awareness, earlier detection, and improved treatment.
- 

## Cervical Cancer/Uterine (Endometrial) Cancer<sup>1</sup>

- An estimated 10,370 cases of invasive cervical cancer are expected to be diagnosed in 2005. Incidence rates have decreased steadily over the past several decades in both white and African-American women. Mortality rates have also declined steadily; an estimated 3,710 cervical cancer deaths are expected in 2005.
  - Nearly 41,000 cases of cancer of the uterine corpus (body of the uterus), usually of the endometrium or lining of the uterus, are expected to be diagnosed in 2005. After increasing from 1988 to 1998, incidence rates leveled off through 2001.
- 

## Colorectal Cancer<sup>1</sup>

- An estimated 104,950 colon and 40,340 rectal cancer cases are expected to occur in 2005. Colorectal cancer is the third most common cancer in men and women.
  - The primary risk factor for colorectal cancer is age; more than 90 percent of cases are diagnosed in people over age 50.
- 

## Leukemia<sup>1</sup>

- An estimated 34,810 new leukemia cases are expected in 2005, with slightly more acute (15,930) than chronic (14,330) forms of the disease.
  - Although often thought of as primarily a childhood disease, leukemia is diagnosed 10 times more often in adults than in children. **Acute lymphocytic leukemia** accounts for approximately 78 percent of the leukemia cases among children. In adults, the most common types are **acute myeloid leukemia** (about 10,980 cases) and **chronic lymphocytic leukemia** (about 8,900 cases).
- 

## Lung Cancer<sup>1</sup>

- Lung cancer is the leading cause of cancer death in men and women. The estimated 163,510 deaths expected this year will account for about 29 percent of all cancer deaths. Death rates have continued to decline significantly in men since 1991 by about 1.9 percent per year.

# SELECTED FACTS ABOUT CANCER IN THE UNITED STATES

## Lung Cancer<sup>1</sup> (continued)

- Since 1987, more women have died each year of lung cancer than from breast cancer. Female lung cancer death rates have recently reached a plateau after continuously increasing for several decades.

## Lymphoma<sup>1</sup>

- Of the estimated 63,740 new cases of lymphoma this year, 7,350 will be **Hodgkin lymphoma** and 56,390 will be **non-Hodgkin lymphoma** (NHL). Since the early 1970s, incidence rates for NHL nearly doubled, but more recently those rates stabilized due primarily to the decline in AIDS-related NHL. Overall, incidence rates for Hodgkin lymphoma have declined significantly since 1990 at a rate of 1.2 percent per year.

## Ovarian Cancer<sup>1</sup>

- The estimated 22,220 new cases of ovarian cancer expected this year would account for about 3 percent of all cancers among women. It ranks second among gynecologic cancers, following cancer of the uterine corpus.
- Ovarian cancer causes more deaths than any other cancer of the female reproductive system—more than 16,000 deaths are expected in 2005.

## Pain

- While not all people with cancer experience pain, it is common in cancer patients. Up to 50 percent of people with cancer experience pain while undergoing treatment, and 70 percent to 90 percent of people with advanced cancer experience pain.<sup>2</sup>
- The most common cancer pain is from tumors that metastasize to the bone. Up to 80 percent of cancer patients with bone metastasis experience pain. The second most common cancer pain, and perhaps the most severe, is caused by tumors infiltrating the nerve and hollow viscus. The third most common pain associated with cancer occurs as a result of chemotherapy, radiation, or surgery.<sup>3</sup>

## Prostate Cancer<sup>1</sup>

- Prostate cancer is the second leading cause of cancer death in men, and an estimated 30,350 are expected to die this year. Although death rates have been declining among both white and African-American men since the early '90s, rates in African-American men remain more than twice as high as rates in white men.

## Skin Cancer<sup>1</sup>

- The most serious form of skin cancer is **melanoma**, which is expected to be diagnosed in nearly 60,000 people in 2005. During the 1970s, the incidence rate of melanoma increased rapidly by about 6 percent per year. Since 1981, the rate of increase slowed to a little less than 3 percent a year.

## New Cancer Cases/Deaths<sup>1</sup>

Cancer Type	Estimated 2005 New Cases	Estimated 2005 Deaths
All Sites	1,372,910	570,280
Male	710,040	295,280
Female	662,870	275,000
Acute Lymphocytic Leukemia	3,970	1,490
Male	2,180	850
Female	1,790	640
Acute Myeloid Leukemia	11,960	9,000
Male	6,530	5,040
Female	5,430	3,960
Bladder Cancer	63,210	13,180
Male	47,010	8,970
Female	16,200	4,210

## SELECTED FACTS ABOUT CANCER IN THE UNITED STATES

Cancer Type	Estimated 2005 New Cases	Estimated 2005 Deaths
Bone Cancer (and joints)	2,570	1,210
Male	1,480	670
Female	1,090	540
Brain Cancer (and other nervous system)	18,500	12,760
Male	10,620	7,280
Female	7,880	5,480
Breast Cancer	212,930	40,870
Male	1,690	460
Female	211,240	40,410
Cervical Cancer/Uterine Cancer	51,250	11,020
Male	—	—
Female	51,250	11,020
Chronic Lymphocytic Leukemia	9,730	4,600
Male	5,780	2,520
Female	3,950	2,080
Chronic Myeloid Leukemia	4,600	850
Male	2,640	430
Female	1,960	420
Colorectal Cancer	145,290	56,290
Male	71,820	28,540
Female	73,470	27,750
Esophageal Cancer	14,520	13,570
Male	11,220	10,530
Female	3,300	3,040
Kidney Cancer (and renal pelvis)	36,160	12,660
Male	22,490	8,020
Female	13,670	4,640
Leukemia (all types)	34,810	22,570
Male	19,640	12,540
Female	15,170	10,030
Liver Cancer	17,550	15,420
Male	12,130	10,330
Female	5,420	5,090
Lung Cancer (and bronchus)	172,570	163,510
Male	93,010	90,490
Female	79,560	73,020
Lymphoma (All Types)	63,740	20,610
Male	33,050	10,930
Female	30,690	9,680
Lymphoma (non-Hodgkin)	56,390	19,200
Male	29,070	10,150
Female	27,320	9,050

## SELECTED FACTS ABOUT CANCER IN THE UNITED STATES

Cancer Type	Estimated 2005 New Cases	Estimated 2005 Deaths
Melanoma-Skin Cancer	59,580	7,770
Male	33,580	4,910
Female	26,000	2,860
Multiple Myeloma	15,980	11,300
Male	8,600	5,660
Female	7,380	5,640
Ovarian Cancer	22,220	16,210
Male	—	—
Female	22,220	16,210
Pancreatic Cancer	32,180	31,800
Male	16,100	15,820
Female	16,080	15,980
Prostate Cancer	232,090	30,350
Male	232,090	30,350
Female	—	—
Stomach Cancer	21,860	11,550
Male	13,510	6,770
Female	8,350	4,780

### Sources:

1. *Cancer Facts & Figures 2005*, American Cancer Society ([www.cancer.org](http://www.cancer.org))
2. Cancer-Pain.org ([www.cancer-pain.org](http://www.cancer-pain.org))
3. Oncology Channel ([www.oncologychannel.com](http://www.oncologychannel.com))

## THE DRUG DISCOVERY, DEVELOPMENT AND APPROVAL PROCESS

It takes 10-15 years on average for an experimental drug to travel from the lab to U.S. patients. Only five in 5,000 compounds that enter preclinical testing make it to human testing. One of these five tested in people is approved.

Discovery/ Preclinical Testing		Clinical Trials			FDA	Phase IV
		Phase I	Phase II	Phase III		
Years	6.5	1.5	2	3.5	1.5	
Test Population	Laboratory and animal studies	20 to 100 healthy volunteers	100 to 500 patient volunteers	1,000 to 5,000 patient volunteers	Review process/ approval	Additional post- marketing testing required by FDA
Purpose	Assess safety, biological activity and formulations	Determine safety and dosage	Evaluate effectiveness, look for side effects	Confirm effectiveness, monitor adverse reactions from long-term use		
Success Rate	5,000 compounds evaluated	5 enter trials			1 approved	

## THE DRUG DEVELOPMENT AND APPROVAL PROCESS

The U.S. system of new drug approvals is perhaps the most rigorous in the world.

It takes 10–15 years, on average, for an experimental drug to travel from lab to U.S. patients, according to the Tufts Center for the Study of Drug Development, based on drugs approved from 1994 through 1998. Only five in 5,000 compounds that enter preclinical testing make it to human testing. And only one of those five is approved for sale.

On average, it costs a company \$802 million to get one new medicine from the laboratory to U.S. patients, according to a November 2001 report by the Tufts Center for the Study of Drug Development.

Once a new compound has been identified in the laboratory, medicines are developed as follows:

**Preclinical Testing.** A pharmaceutical company conducts laboratory and animal studies to show biological activity of the compound against the targeted disease, and the compound is evaluated for safety.

**Investigational New Drug Application (IND).** After completing preclinical testing, a company files an IND with the U.S. Food and Drug Administration (FDA) to begin to test the drug in people. The IND becomes effective if FDA does not disapprove it within 30 days. The IND shows results of previous experiments; how, where and by whom the new studies will be conducted; the chemical structure of the compound; how it is thought to work in the body; any toxic effects found in the animal studies; and how the compound is manufactured. All clinical trials must be reviewed and approved by the Institutional Review Board (IRB) where the trials will be conducted. Progress reports on clinical trials must be submitted at least annually to FDA and the IRB.

**Clinical Trials, Phase I.** These tests involve about 20 to 100 normal, healthy volunteers. The tests study a drug's safety profile, including the safe dosage range. The studies also determine how a drug is absorbed, distributed, metabolized, and excreted as well as the duration of its action.

**Clinical Trials, Phase II.** In this phase, controlled trials of approximately 100 to 500 volunteer patients (people with the disease) assess a drug's effectiveness.

**Clinical Trials, Phase III.** This phase usually involves 1,000 to 5,000 patients in clinics and hospitals. Physicians monitor patients closely to confirm efficacy and identify adverse events.

**New Drug Application (NDA)/Biologic License Application (BLA).** Following the completion of all three phases of clinical trials, a company analyzes all of the data and files an NDA or BLA with FDA if the data successfully demonstrate both safety and effectiveness. The applications contain all of the scientific information that the company has gathered. Applications typically run 100,000 pages or more. The average review time for the 36 new therapeutics approved by the FDA in 2004 was 18.1 months.

**Approval.** Once FDA approves an NDA or BLA, the new medicine becomes available for physicians to prescribe. A company must continue to submit periodic reports to FDA, including any cases of adverse reactions and appropriate quality-control records. For some medicines, FDA requires additional trials (Phase IV) to evaluate long-term effects.

Discovering and developing safe and effective new medicines is a long, difficult, and expensive process. PhRMA member companies invested an estimated \$38.8 billion in research and development in 2004.

*Medicines in Development for Cancer* is presented by PhRMA in cooperation with the following organizations:

American Academy of Otolaryngology–Head and Neck Surgery  
American Academy of Physician Assistants  
American Association for Cancer Education  
American Association for Cancer Research  
American Brain Tumor Association  
American Cancer Society  
American Nurses Association  
American Pain Society  
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National Cancer Institute  
National Cervical Cancer Coalition  
National Childhood Cancer Foundation  
National Chronic Pain Outreach Association  
National Coalition for Cancer Survivorship  
National Foundation for Cancer Research  
National Medical Association  
National Prostate Cancer Coalition  
Oncology Nursing Society  
Patient Advocates for Advanced Cancer Treatments (PAACT)  
People Living Through Cancer  
Skin Cancer Foundation  
Us TOO International Prostate Cancer Education and Support Network  
V Foundation for Cancer Research  
Y-ME National Breast Cancer Organization

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