

Summary of Carcinogenic Potency Database by Target Organ

A chemical is listed under each organ evaluated as positive in an experiment in that species by at least one author. For NCI/NTP an evaluation of “clear” or “some” evidence of carcinogenicity is considered positive. A chemical may be listed under several target organs and every chemical listed in the table is positive in at least one species. In order to compare results in rats and mice, symbols follow chemicals tested in both species: a † indicates that the chemical is positive at some site in both species, and a ‡ indicates that it was tested in both rats and mice but positive in only one. ^a

Example: Adrenal gland is the first of 35 target sites in the table. Under adrenal gland, one chemical is listed in hamsters, 8 in mice, and 18 in rats. If a chemical name is followed by a superscript (either † or ‡), this indicates that the CPDB includes test results in both rats and mice, e.g., under adrenal gland in rats 2-mercaptobenzothiazole but not isomazole, has a superscript. Since isomazole has no superscript, it only has tests in the CPDB in the species reported, in this case rats. The superscript † for 2-mercaptobenzothiazole, indicates that the chemical has been tested in both rats and mice but induced tumors only in the reported species, in this case rats. The superscript ‡; for 1,2-dibromo-3-chloropropane (DBCP) indicates that DBCP is carcinogenic at some target site in both rats and mice. Although the superscript ‡; does not indicate whether DBCP induced tumors at the same target site in both rats and mice, this can easily be determined by looking at mice under adrenal gland for the chemical name DBCP. Since it is not there, DBCP induced tumors in mice only at sites other than the adrenal gland. In contrast, pentachloroanisole[‡]; induced adrenal tumors in both species, since it is listed under that site for both species. By comparing the chemicals with superscripts listed under each species, the reader can determine that pentachloroanisole is the only chemical that induced adrenal tumors in both rats and mice. The superscripts † and ‡; apply only to results in rats and mice: for example, hamsters are reported under adrenal gland for urethane with the symbol ‡; indicating that urethane was positive at some site in rats and mice; however, the superscript does not indicate anything about hamsters.

N = the number of chemicals with at least one positive test at that site in that species. Since many chemicals induce tumors at more than one site in a given species, many chemicals appear more than once in the table. The total number of positive chemicals in the CPDB for each species is 562 for rats, 442 for mice, 44 for hamsters, 11 for monkeys, 3 for dogs and 1 each for bush babies and tree shrews.

Target site	Species	N	Chemicals that induce tumors at each site
Adrenal gland	Hamster	1	Urethane [‡]
	Mouse	8	Carbon tetrachloride [‡] ; Furan [‡] ; 4,4'-Methylenedianiline.2HCl [‡] ; Pentachloroanisole [‡] ; 2,3,4,5,6-Pentachlorophenol (Dowicide EC-7) [‡] ; 2,3,4,5,6-Pentachlorophenol, technical grade [‡] ; <i>p</i> -Rosaniline.HCl [‡] ; 1,1,2-Trichloroethane [†]
	Rat	18	Bromoethane [‡] ; 3-Chloro-4-(dichloromethyl)-5-hydroxy-2(5 <i>H</i>)-furanone; 4-Chloro- <i>m</i> -phenylenediamine [‡] ; Cobalt sulfate heptahydrate [‡] ; 1,2-Dibromo-3-chloropropane [‡] ; Diethylstilbestrol [‡] ; Ethyl alcohol [†] ; Indolidan; Isomazole; 2-Mercaptobenzothiazole [†] ; Mirex [‡] ; Pentachloroanisole [‡] ; Phenolphthalein [‡] ; 1,2-Propylene oxide [‡] ; C.I. pigment red 3 [‡] ; Reserpine [‡] ; Retinol acetate; Stoddard solvent IIC [†]
Bone	Rat	5	Acronycine; Deflazacort; <i>N,N</i> -Dimethylaniline [†] ; 1-(2-Hydroxyethyl)-1-nitrosourea [‡] ; <i>o</i> -Toluidine.HCl [‡]
Clitoral gland	Mouse	11	Acetaldehyde methylformylhydrazone; Benzene [‡] ; 1,3-Butadiene [‡] ; <i>N-n</i> -Butyl- <i>N</i> -formylhydrazine; Dimethylvinyl chloride [‡] ; <i>N</i> -Ethyl- <i>N</i> -formylhydrazine; Hexanal methylformylhydrazone; 3-Methylbutanal methylfor-

Target site	Species	N	Chemicals that induce tumors at each site
Ear/Zymbal's gland	Rat	22	mylhydrazone; Pentanal methylformylhydrazone; <i>N-N</i> -Propyl- <i>N</i> -formylhydrazine; Thio-tepa [‡] Acrylamide; C.I. direct blue 15; 2,4-Diaminoanisole sulfate [‡] ; 3,3'-Dimethoxybenzidine.2HCl [‡] ; 3,3'-Dimethylbenzidine.2HCl [‡] ; Glu-P-1 [‡] ; Glu-P-2 [‡] ; Glycidol [‡] ; IQ [‡] ; Isophorone [‡] ; MelQx [‡] ; 2-Mercaptobenzothiazole [‡] ; Nalidixic acid [‡] ; 1,5-Naphthalenediamine [‡] ; 5-Nitro- <i>o</i> -anisidine [‡] ; 5-Nitroacenaphthene [‡] ; <i>p</i> -Nitrobenzoic acid [‡] ; 1-Nitropyrene; <i>p</i> -Nitrotoluene [‡] ; C.I. acid red 114; 1,2,3-Trichloropropane [‡] ; Trp-P-2 acetate [‡]
	Hamster	1	Vinyl chloride [‡]
	Mouse	3	Benzene [‡] ; Chloroprene (>96% chloroprene) [‡] ; Cupferron [‡]
	Rat	42	Acrylonitrile [‡] ; 3-Amino-9-ethylcarbazole mixture [‡] ; Azoxymethane; Benzene [‡] ; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [‡] ; C.I. direct blue 15; <i>N-n</i> -Butyl- <i>N</i> -nitrosourea; Chlorambucil [‡] ; Cupferron [‡] ; <i>N</i> -1-Diacetamidofluorene; 2,4-Diaminoanisole sulfate [‡] ; 3,3'-Dichlorobenzidine; 2,5-Dimethoxy-4'-aminostilbene [‡] ; 3,3'-Dimethoxybenzidine.2HCl [‡] ; 3,3'-Dimethylbenzidine.2HCl [‡] ; <i>N</i> -(2-Fluorenyl)-2,2,2-trifluoroacetamide; Formic acid 2-[4-(5-nitro-2-furyl)-2-thiazolyl]hydrazide [‡] ; Glu-P-1 [‡] ; Glu-P-2 [‡] ; Glycidol [‡] ; Hydrazobenzene [‡] ; IQ [‡] ; IQ.HCl; MelQx [‡] ; 2-Methoxy-3-aminodibenzofuran; 8-Methoxypsoralen; <i>N</i> -(<i>N</i> -Methyl- <i>N</i> -nitrosocarbamoyl)- <i>l</i> -ornithine; 4,4'-Methylene-bis(2-chloroaniline); 5-Nitro- <i>o</i> -anisidine [‡] ; 5-Nitroacenaphthene [‡] ; <i>N</i> -(9-Oxo-2-fluorenyl)acetamide; Phenacetin [‡] ; Prednimustine; C.I. acid red 114; <i>p</i> -Rosaniline.HCl [‡] ; Thio-tepa [‡] ; 4,4'-Thiodianiline [‡] ; β -Thioguanine deoxyriboside; 1,2,3-Trichloropropane [‡] ; Vinyl bromide; Vinyl chloride [‡] ; Vinyl fluoride [‡]
Esophagus	Hamster	2	AF-2 [‡] ; <i>N</i> -Nitroso- <i>N</i> -methylurethan
	Mouse	8	Benzo(<i>a</i>)pyrene [‡] ; 1,2-Dibromoethane [‡] ; <i>N</i> -Ethyl- <i>N</i> '-nitro- <i>N</i> -nitrosoguanidine; <i>N</i> -Hydroxy-2-acetylaminofluorene [‡] ; 3-(5-Nitro-2-furyl)-imidazo(1,2- α)pyridine [‡] ; Nitrosodibutylamine [‡] ; <i>N</i> -Nitrosohexamethyleneimine; Vinyl acetate [‡]
	Monkey	1	<i>N</i> -Nitroso- <i>N</i> -methylurea [‡]
	Rat	37	2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [‡] ; Bis(2,3-dibromopropyl)phosphate, magnesium salt; <i>N-n</i> -Butyl- <i>N</i> -nitrosourea; Dihydrosafrole [‡] ; Dimethylvinyl chloride [‡] ; Dinitrosohomopiperazine; <i>Z</i> -Ethyl- <i>O,N,N</i> -azoxyethane; <i>N</i> -Methyl- <i>N</i> '-nitro- <i>N</i> -nitrosoguanidine [‡] ; 3-(5-Nitro-2-furyl)-imidazo(1,2- α)pyridine [‡] ; <i>N</i> -Nitroso-2,3-dihydroxypropyl-2-hydroxypropylamine; Nitroso-2,3-dihydroxypropyl-2-oxopropylamine; <i>N</i> -Nitroso-(2-hydroxypropyl)-(2-hydroxyethyl)amine; <i>N</i> -Nitroso- <i>N</i> -methyl-4-fluoroaniline; Nitroso- <i>N</i> -methyl- <i>N</i> -(2-phenyl)ethylamine; Nitroso-1,2,3,6-tetrahydropyridine; <i>N</i> -Nitroso(2,2,2-trifluoroethyl) ethylamine; <i>N</i> -Nitrosoallyl-2,3-dihydroxypropylamine; <i>N</i> -Nitrosoallyl-2-hydroxypropylamine; <i>N</i> -Nitrosoallyl-2-oxopropylamine; Nitrosoamylurethan; Nitrosoanabasine; <i>N</i> -Nitrosobis(2-hydroxypropyl)amine; <i>N</i> -Nitrosodiethanolamine; <i>N</i> -Nitrosodiethylamine; <i>N</i> -Nitrosodipropylamine; Nitrosoethylurethan; Nitrosoheptamethyleneimine; <i>N</i> -Nitrosomethyl-2,3-dihydroxypropylamine; <i>N</i> -Nitrosomethyl-2-hydroxypropylamine; <i>N</i> -Nitrosomethyl(2-oxopropyl)amine; 2-Nitrosomethylaminopyridine; Nitrosomethylaniline; <i>N</i> -Nitrosonornicotine;

Target site	Species	N	Chemicals that induce tumors at each site
Gall bladder	Hamster	1	<i>N</i> -Nitrosornicotine-1- <i>N</i> -oxide; <i>N</i> -Nitrosopiperidine [†] ; <i>N</i> -Nitrosothialdine; <i>N</i> -Nitrosothiomorpholine
	Mouse	4	<i>N</i> -Methyl- <i>N</i> -formylhydrazine
Harderian gland	Monkey	1	<i>N</i> -Ethyl- <i>N</i> -formylhydrazine; <i>N</i> -Methyl- <i>N</i> -formylhydrazine; 3-Methylbutanal methylformylhydrazone; <i>N</i> - <i>N</i> -Propyl- <i>N</i> -formylhydrazine
	Mouse	22	Aflatoxin B ₁ [†]
Hematopoietic system	Mouse	54	Acrylonitrile [†] ; Benzene [†] ; Benzidine.2HCl; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; 1,3-Butadiene [†] ; Captafol [†] ; 3-Chloro-2-methylpropene; Chloroprene (>96% chloroprene) [†] ; Cupferron [†] ; Dichloroacetylene [†] ; Ethylene oxide [†] ; Gentian violet; Glycidol [†] ; Iodinated glycerol [†] ; Isoprene [†] ; <i>N</i> -Methylolacrylamide [†] ; Nitromethane [†] ; 4,4'-Oxydianiline [†] ; Tetrachloroethylene [†] ; 1,2,3-Trichloropropane [†] ; 2,4,6-Trinitro-1,3-dimethyl-5- <i>tert</i> -butylbenzene; Vinyl fluoride [†]
	Monkey	1	Acetamide [†] ; Aflatoxin, crude [†] ; Allyl isovalerate [†] ; trans-5-Amino-3[2-(5-nitro-2-furyl)vinyl]-1,2,4-oxadiazole; 2-Amino-4-(<i>p</i> -nitrophenyl)thiazole; 2-Aminoanthraquinone [†] ; 5-Azacytidine [†] ; Azathioprine; Benzene [†] ; 1,4-Benzoquinone; Benzotrichloride; Benzoyl hydrazine; 1,3-Butadiene [†] ; 1,2-di- <i>n</i> -Butylhydrazine.2HCl; Captafol [†] ; Chlorambucil [†] ; Chlorinated paraffins (C ₂₃ , 43% chlorine) [†] ; Cyclophosphamide [†] ; Dacarbazine [†] ; DDT [†] ; Dibromodulcitol [†] ; Dibromomannitol [†] ; 1,4-Dichlorobenzene [†] ; Estradiol mustard [†] ; Ethylene oxide [†] ; 5-Fluorouracil [†] ; Formic acid 2-[4-(5-nitro-2-furyl)-2-thiazolyl]hydrazide [†] ; Gentian violet; Hexanamide [†] ; 2-Hydrazino-4-(<i>p</i> -aminophenyl)thiazole [†] ; 2-Hydrazino-4-(<i>p</i> -nitrophenyl)thiazole [†] ; 1-(2-Hydroxyethyl)-1-nitrosourea [†] ; ICRF-159 [†] ; Isophosphamide [†] ; Isoprene [†] ; MeIQx [†] ; Melphalan [†] ; 1-Methyl-1,4-dihydro-7-[2-(5-nitro-furyl)vinyl]-4-oxo-1,8-naphthyridine-3-carboxylate, potassium; Methyl methanesulfonate; 4,4'-Methylenedianiline.2HCl [†] ; Metronidazole [†] ; <i>N</i> -[4-(5-Nitro-2-furyl)-2-thiazolyl]formamide [†] ; Phenesterin [†] ; Phenolphthal- ein [†] ; PhIP.HCl [†] ; Phorbol; Procarbazine.HCl [†] ; Strobane; Tetrafluoroethylene [†] ; Thio-tepa [†] ; <i>p</i> -Tolylurea [†] ; Tris(2-chloroethyl)phosphate [†] ; Urethane [†] ; C.I. vat yellow 4 [†]
	Rat	57	Procarbazine.HCl [†]
			Allyl isovalerate [†] ; 1-Amyl-1-nitrosourea; Atrazine [†] ; Benzidine [†] ; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; C.I. direct blue 15; <i>N</i> - <i>n</i> -Butyl- <i>N</i> -nitrosourea; Cadmium chloride; Chlorambucil [†] ; 3-Chloro-4-(dichloromethyl)-5-hydroxy-2(5 <i>H</i>)-furanone; Cyclophosphamide [†] ; Dacarbazine [†] ; 1,3-Dibutyl-1-nitrosourea; Dichloroacetylene [†] ; 3,3'-Dichlorobenzidine; Dichlorvos [†] ; Diisononyl phthalate [†] ; Dimethoxane; 3,3'-Dimethoxybenzidine-4,4'-diisocyanate [†] ; Dimethyl morpholinophosphoramidate [†] ; 2-(2,2-Dimethylhydrazino)-4-(5-nitro-2-furyl)thiazole; Ethylene oxide [†] ; Formaldehyde [†] ; Formic acid 2-[4-(5-nitro-2-furyl)-2-thiazolyl]hydrazide [†] ; Furan [†] ; Glycidol [†] ; FD & C green no. 1 [†] ; FD & C green no. 2 [†] ; Hematoxylin; 2-Hydrazino-4-(<i>p</i> -aminophenyl)thiazole [†] ; Hydroquinone [†] ; 1-(2-Hydroxyethyl)-1-nitrosourea [†] ; Iodinated glycerol [†] ; Lasiocarpine; 2-Mercaptobenzothiazole [†] ; Metepa; Methyl <i>tert</i> -butyl ether [†] ; Mirex [†] ; <i>l</i> -5-Morpholinomethyl-3-[(5-nitro-furfurylidene)amino]-2-oxazolidinone.HCl; Nitrite, sodium [†] ; <i>N</i> -[5-(5-Nitro-2-furyl)-1,3,4-thiadiazol-2-yl]aceta-

Target site	Species	N	Chemicals that induce tumors at each site
Kidney/ureter	Hamster	1	<p>amide[†]; <i>o</i>-Nitroanisole[†]; 1-[(5-Nitrofurfurylidene)amino]-2-imidazolidinone; 1-Nitropyrene; <i>N</i>-Nitrosodiethanolamine; PhIP.HCl[†]; Procarbazine.HCl[†]; Propane sultone; <i>N</i>-Propyl-<i>N</i>-nitrosoourea; FD & C red no. 2; FD & C red no. 4[†]; Riddelliine[†]; Tetrachloroethylene[†]; Tetrafluoroethylene[†]; Thio-tepa[†]; 2,4,6-Trichlorophenol[†]; Trp-P-2 acetate[†]</p>
	Mouse	27	<p>Bromate, potassium[†]</p> <p><i>o</i>-Benzyl-<i>p</i>-chlorophenol[†]; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade[†]; Bromate, potassium[†]; Bromodichloromethane[†]; 1,3-Butadiene[†]; 1,2-di-<i>n</i>-Butylhydrazine.2HCl; Caffeic acid[†]; Chloroform[†]; Chloroprene (>96% chloroprene)[†]; Daminozide[†]; 2,4-Diaminophenol.2HCl[†]; Dichloroacetylene[†]; 2,4-Dinitrotoluene (containing 1.0-1.5% 2,6-dinitrotoluene)[†]; Furfuryl alcohol[†]; Hydroquinone[†]; <i>N</i>-Hydroxy-2-acetylaminofluorene[†]; 3-Hydroxy-<i>p</i>-butyrophenetidine; Lead acetate, basic[†]; Mercurymethyl chloride[†]; Nitrilotriacetic acid[†]; Ochratoxin A[†]; Phenacetin[†]; C.I. pigment red 3[†]; Streptozotocin[†]; Tris(2-chloroethyl)phosphate[†]; Tris(2,3-dibromopropyl)phosphate[†]; Vinylidene chloride[†]</p>
	Monkey	1	<p>Cycasin and methylazoxymethanol acetate</p>
	Rat	94	<p>Aflatoxin B₁[†]; 1-Amino-2,4-dibromoanthraquinone[†]; 1-Amino-2-methylantraquinone[†]; 2-Amino-5-(5-nitro-2-furyl)-1,3,4-oxadiazole; 2-Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole; 2-Amino-4-nitrophenol[†]; 2-Amino-5-nitrothiazole[†]; <i>o</i>-Anisidine.HCl[†]; Aristolochic acid, sodium salt (77% AA I, 21% AA II); Azoxymethane; Barbitol, sodium; Benzofuran[†]; Bromate, potassium[†]; Bromodichloromethane[†]; <i>tert</i>-Butyl alcohol[†]; Cadmium chloride; Caffeic acid[†]; Captafol[†]; Captan[†]; Chlorinated paraffins (C₁₂, 60% chlorine)[†]; Chloroform[†]; 3-(<i>p</i>-Chlorophenyl)-1,1-dimethylurea[†]; Chloroprene (>96% chloroprene)[†]; Chlorothalonil[†]; Cinnamyl anthranilate[†]; Citrinin; Coumarin[†]; Dichloroacetylene[†]; 1,4-Dichlorobenzene[†]; Diethylacetamide; 3,4-Dihydrocoumarin[†]; Diisononyl phthalate[†]; Dimethoxane; Dimethyl methylphosphonate[†]; 4,6-Dimethyl-2-(5-nitro-2-furyl)pyrimidine; Ethylbenzene[†]; <i>N</i>-4-(4'-Fluorobiphenyl)acetamide; Formic acid 2-[4-(5-nitro-2-furyl)-2-thiazolyl]hydrazide[†]; Fumonisin B₁[†]; Glycine; Hexachlorobutadiene; Hexachloroethane[†]; Hexamethylmelamine; 2-Hydrazino-4-(5-nitro-2-furyl)thiazole[†]; Hydroquinone[†]; 1-(2-Hydroxyethyl)-1-nitrosoourea[†]; Isophorone[†]; Isoprene[†]; Lead acetate[†]; Lead acetate, basic[†]; <i>α</i>-Limonene[†]; 2-Methoxy-3-aminodibenzofuran; 8-Methoxypsoralen; <i>Z</i>-Methyl-<i>O,N,N</i>-azoxyethane; Methyl <i>tert</i>-butyl ether[†]; <i>N</i>-(<i>N</i>-Methyl-<i>N</i>-nitrosocarbamoyl)-<i>L</i>-ornithine; <i>α</i>-Methylbenzyl alcohol[†]; Methyleugenol[†]; Mirex[†]; <i>L</i>-5-Morpholinomethyl-3-[(5-nitrofurfurylidene)amino]-2-oxazolidinone.HCl; Nitrilotriacetic acid[†]; Nitrilotriacetic acid, trisodium salt, monohydrate[†]; 3-(5-Nitro-2-furyl)-imidazo(1,2-<i>α</i>)pyridine[†]; <i>N</i>-{[3-(5-Nitro-2-furyl)-1,2,4-oxadiazole-5-yl]-methyl}acetamide; <i>N</i>-[5-(5-Nitro-2-furyl)-1,3,4-thiadiazol-2-yl]acetamide[†]; <i>o</i>-Nitroanisole[†]; Nitrobenzene[†]; 2-Nitrofluorene; 1-[(5-Nitrofurfurylidene)amino]hydantoin[†]; 1-Nitroso-1-hydroxyethyl-3-chloroethylurea; <i>N</i>-Nitrosodiethanolamine; <i>N</i>-Nitrosodiethylamine; <i>N</i>-Nitrosodimethylamine[†]; <i>N</i>-Nitrosopyrrolidine[†]; Ochratoxin</p>

Target site	Species	N	Chemicals that induce tumors at each site
			A [†] ; C.I. acid orange 3 [†] ; <i>N</i> -Oxydiethylene thiocarbonyl- <i>N</i> -oxydiethylene sulfenamide; Phenacetin [†] ; Phenazone; Phenolphthalein [†] ; Phenylbutazone [†] ; <i>o</i> -Phenylphenol, sodium [†] ; Pyridine [†] ; Quercetin [†] ; Salicylazosulfapyridine [†] ; Streptozotocin [†] ; Tetrachloroethylene [†] ; Tetrafluoroethylene [†] ; Tetrahydrofuran [†] ; 1,2,3-Trichloropropane [†] ; Tris(2-chloroethyl)phosphate [†] ; Tris(2,3-dibromopropyl)phosphate [†] ; Tris-(1,3-dichloro-2-propyl)phosphate; Vinyl chloride [†]
Large intestine	Hamster	5	1,1-Dimethylhydrazine [†] ; 1,2-Dimethylhydrazine.2HCl; Hydrazine [†] ; Methylhydrazine; Urethane [†]
	Mouse	3	Capsaicin; MeIQ; <i>o</i> -Nitrotoluene [†]
	Rat	32	Aflatoxin B ₁ [†] ; 1-Allyl-1-nitrosourea; 1-Amino-2,4-dibromoanthraquinone [†] ; Amylopectin sulfate; Azoxymethane; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; C.I. direct blue 15; Bromodichloromethane [†] ; <i>N-n</i> -Butyl- <i>N</i> -nitrosourea; Carrageenan, acid-degraded; Chrysazin [†] ; Dextran sulfate sodium (DS-M-1); 3,3'-Dimethoxybenzidine.2HCl [†] ; 3,3'-Dimethylbenzidine.2HCl [†] ; <i>Z</i> -Ethyl- <i>O,N,N</i> -azoxymethane; 1-Ethylnitroso-3-(2-oxopropyl)-urea; Formic acid 2-[4-(5-nitro-2-furyl)-2-thiazolyl]hydrazide [†] ; Glu-P-1 [†] ; Glu-P-2 [†] ; Glycidol [†] ; <i>N</i> -Hexylnitrosourea; 1-Hydroxyanthraquinone; 1-(2-Hydroxyethyl)-1-nitrosourea [†] ; IQ [†] ; <i>o</i> -Nitroanisole [†] ; <i>N</i> -Nitrosobis(2-oxopropyl)amine; Phenazopyridine.HCl [†] ; PhIP.HCl [†] ; C.I. acid red 114; 4,4'-Thiodianiline [†] ; Tribromomethane [†] ; Tris(2,3-dibromopropyl)phosphate [†]
Liver	Dog	2	3,3'-Dichlorobenzidine; 4,4'-Methylene-bis(2-chloroaniline)
	Hamster	16	2-Acetylaminofluorene [†] ; <i>p,p'</i> -DDE [†] ; 1,2-Dimethylhydrazine.2HCl; Hexachlorobenzene [†] ; Hydrazine sulfate [†] ; <i>N</i> -Hydroxy-2-acetylaminofluorene [†] ; <i>N</i> -Methyl- <i>N</i> -formylhydrazine; Methylhydrazine; Methylnitrosamino- <i>N,N</i> -dimethylethylamine; <i>N</i> -Nitroso-1,3-oxazolidine; Nitroso-2-oxopropylethanolamine; <i>N</i> -Nitrosoallyl-2-oxopropylamine; <i>N</i> -Nitrosoazetidine; <i>N</i> -Nitrosomorpholine; <i>N</i> -Nitrosopiperidine [†] ; <i>N</i> -Nitrosopyrrolidine [†]
	Mouse	254	A- α -C; Acetaminophen [†] ; 2-Acetylaminofluorene [†] ; Acifluorfen; Aldrin [†] ; 1-Amino-2,4-dibromoanthraquinone [†] ; 3-Amino-9-ethylcarbazole mixture [†] ; 1-Amino-2-methylantraquinone [†] ; 2-Aminoanthraquinone [†] ; 4-Aminodiphenyl; 2-Aminodiphenylene oxide; 3-Aminotriazole [†] ; Aramite [†] ; Aroclor 1254 [†] ; Auramine-O [†] ; Benzidine [†] ; Benzidine.2HCl; Benzofuran [†] ; Benzyl acetate [†] ; 3-Benzylsydnone-4-acetamide [†] ; 5,5'-(1,1'-Biphenyl)-2,5-dylbis(oxy)(2,2-dimethylpentanoic acid); Bis(2-chloro-1-methylethyl)ether, technical grade [†] ; Bis-2-chloroethylether; Bis-2-hydroxyethylthiocarbamic acid, potassium; C.I. direct black 38; C.I. direct blue 218 [†] ; HC blue no. 1 [†] ; HC blue no. 1 (purified); Bromodichloromethane [†] ; 1,3-Butadiene [†] ; Butylated hydroxytoluene [†] ; 1,1-di- <i>n</i> -Butylhydrazine; Captafol [†] ; Carbazole; Carbon tetrachloride [†] ; Chloral hydrate [†] ; Chloramben [†] ; Chlordane, technical grade [†] ; Chlorendic acid [†] ; Chlorinated paraffins (C ₁₂ , 60% chlorine) [†] ; 1-Chloro-2-nitrobenzene [†] ; 1-Chloro-4-nitrobenzene [†] ; 4-Chloro- <i>m</i> -phenylenediamine [†] ; 4-Chloro- <i>o</i> -phenylenediamine [†] ; 5-Chloro- <i>o</i> -toluidine [†] ; [4-Chloro-6-(2,3-xylidino)-2-pyrimidinylthio]acetic acid [†] ; 4-Chloro-6-(2,3-xylidino)-2-pyrimidinylthio(<i>N</i> - β -hydroxyethyl)acetamide [†] ; Chloroacetaldehyde; <i>p</i> -Chloroaniline.HCl [†] ; Chlorobenzilate [†] ; Chlorodibromomethane [†] ; Chloroform [†] ; Chloroprene (>96% chloroprene) [†] ; Chrysazin [†] ; Cin-

Target site	Species	N	Chemicals that induce tumors at each site
			<p>namyl anthranilate[†]; Ciprofibrate[†]; Clobuzarit[†]; Compound LY171883; Coumarin[†]; <i>p</i>-Cresidine[†]; Cupferon[†]; Cyclamate, sodium[†]; Cyclochlorotine; Cyproterone acetate; <i>p,p'</i>-DDD[†]; <i>p,p'</i>-DDE[†]; DDT[†]; Diallyate; 2,4-Diaminotoluene[†]; 2,4-Diaminotoluene.2HCl[†]; 3,5-Dichloro(<i>N</i>-1,1-dimethyl-2-propynyl)benzamide; 2,6-Dichloro-<i>p</i>-phenylenediamine[†]; Dichloroacetic acid[†]; 1,4-Dichlorobenzene[†]; 3,3'-Dichlorobenzidine.2HCl[†]; 1,2-Dichloroethane[†]; 1,2-Dichloropropane[†]; Dicofol[†]; Dieldrin[†]; Diftalone; 3,4-Dihydrocoumarin[†]; Dihydro-safrole[†]; 3,3'-Dihydroxybenzidine.2HCl; Diisononyl phthalate[†]; 2,5-Dimethoxy-4'-aminostilbene[†]; 3,3'-Dimethoxybenzidine.2HCl[†]; 1,1-Dimethylhydrazine[†]; 1,4-Dioxane[†]; 5,5-Diphenylhydantoin[†]; Dipyrone[†]; Doxylamine succinate[†]; Elmiron[†]; Estragole; <i>d,l</i>-Ethionine[†]; <i>o</i>-Ethoxybenzamide; <i>N</i>-Ethyl-<i>N</i>-formylhydrazine; Ethylbenzene[†]; Ethylene imine; Ethylene thiourea[†]; 2-Ethylhexanol[†]; di(2-Ethylhexyl)adipate[†]; di(2-Ethylhexyl)phthalate[†]; 4'-Fluoro-4-aminodiphenyl; Fumonisin B₁[†]; Furan[†]; Furfural[†]; Gentian violet; Glu-P-1[†]; Glu-P-2[†]; Glycidol[†]; Griseofulvin; HCDD mixture[†]; Heptachlor[†]; Hexachlorobenzene[†]; α-1,2,3,4,5,6-Hexachlorocyclohexane[†]; β-1,2,3,4,5,6-Hexachlorocyclohexane; γ-1,2,3,4,5,6-Hexachlorocyclohexane[†]; Hexachlorocyclohexane, technical grade; Hexachloroethane[†]; Hexanal methylformylhydrazone; Hexane, commercial grade (52% <i>n</i>-hexane, 16% 3-methylcyclopentane, 16% methylcyclopentane)[†]; Hydrazine sulfate[†]; Hydrazobenzene[†]; Hydroquinone[†]; <i>N</i>-Hydroxy-2-acetylaminofluorene[†]; 1'-Hydroxyestragole; 2-Hydroxyethylhydrazine; 1'-Hydroxysafrole[†]; IQ[†]; Isoniazid[†]; Isoprene[†]; Kepone[†]; Leupeptin; Lovastatin[†]; Luteoskyrin; Malonaldehyde, sodium salt[†]; MeA-α-C acetate[†]; MeIQ; MeIQx[†]; Methidathion; 3-Methoxy-4-aminoazobenzene; Methyl <i>tert</i>-butyl ether[†]; Methyl clofenapate[†]; <i>N</i>-Methyl-<i>N</i>-formylhydrazine; <i>N</i>-Methyl-2-pyrrolidone[†]; 3-Methylbutanal methylformylhydrazone; 4,4'-Methylene-bis(2-chloroaniline).2HCl[†]; Methylene chloride[†]; 4,4'-Methylenebis(<i>N,N</i>-dimethyl)benzenamine[†]; 4,4'-Methylenedianiline.2HCl[†]; Methylethylketoxime[†]; Methyleugenol[†]; Methylhydrazine; 2-Methylimidazole[†]; <i>N</i>-Methylolacrylamide[†]; Methylphenidate.HCl[†]; Michler's ketone[†]; Mirex[†]; 1,5-Naphthalenediamine[†]; 1-Naphthylamine; 2-Naphthylamine[†]; Nithiazide[†]; 3-Nitro-<i>p</i>-acetophenetide[†]; 5-Nitro-<i>o</i>-anisidine[†]; 2-Nitro-<i>p</i>-phenylenediamine[†]; 5-Nitro-<i>o</i>-toluidine[†]; 5-Nitroacenaphthene[†]; <i>o</i>-Nitroanisole[†]; Nitrobenzene[†]; 6-Nitrobenzimidazole[†]; Nitrofen[†]; Nitromethane[†]; Nitrosodibutylamine[†]; <i>N</i>-Nitrosodimethylamine[†]; <i>p</i>-Nitrosodiphenylamine[†]; <i>N</i>-Nitrosohexamethyleneimine; <i>N</i>-Nitrosopiperidine[†]; <i>o</i>-Nitrotoluene[†]; Nonabromobiphenyl; Ochratoxin A[†]; Oxazepam[†]; 4,4'-Oxydianiline[†]; Pentachloroethane[†]; Pentachloronitrobenzene[†]; 2,3,4,5,6-Pentachlorophenol (Dowicide EC-7)[†]; 2,3,4,5,6-Pentachlorophenol, technical grade[†]; Pentanal methylformylhydrazone; Phenazopyridine.HCl[†]; Phenobarbital[†]; Phenobarbital, sodium[†]; 2-Phenyl-1,3-propanediol dicarbamate[†]; Phenylbutazone[†]; <i>o</i>-Phenylenediamine.2HCl[†]; Piperonyl butoxide[†]; Piperonyl sulfoxide[†]; Polybrominated biphenyl mixture[†]; Primidone[†]; Probenecid[†]; <i>N,N</i>-Propyl-<i>N</i>-formylhydrazine; Propylene glycol mono-<i>t</i>-butyl ether[†]; Pyridine[†]; D & C red no. 5[†]; Rifampicin[†]; Ripazepam[†]; <i>p</i>-Rosaniline.HCl[†]; Safrole[†]; Salicylazosulfapyridine[†]; Selenium diethyldi-</p>

Target site	Species	N	Chemicals that induce tumors at each site
			thiocarbamate; Selenium sulfide [†] ; Strobane; T-2 toxin; 2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin [†] ; 1,1,1,2-Tetrachloroethane [†] ; 1,1,2,2-Tetrachloroethane [†] ; Tetrachloroethylene [†] ; Tetrachlorvinphos [†] ; Tetrafluoro- <i>m</i> -phenylenediamine.2HCl [†] ; Tetrafluoroethylene [†] ; Tetrahydrofuran [†] ; Thioacetamide [†] ; 4,4'-Thiodianiline [†] ; Thiouracil [†] ; <i>d</i> -Tocopherol mixture, natural (α, β, γ and δ); Toluene diisocyanate, commercial grade (2,4 (80%)- and 2,6 (20%)-) [†] ; <i>m</i> -Toluidine.HCl [†] ; <i>o</i> -Toluidine.HCl [†] ; <i>p</i> -Toluidine.HCl [†] ; Toxaphene [†] ; 3,4,4'-Triaminodiphenyl ether; Triamterene [†] ; Tributyl phosphate [†] ; Trichloroacetic acid [†] ; 2,4,6-Trichloroaniline [†] ; 1,1,2-Trichloroethane [†] ; Trichloroethylene [†] ; Trichloroethylene (without epichlorohydrin) [†] ; 2,4,6-Trichlorophenol [†] ; 1,2,3-Trichloropropane [†] ; Trifluralin, technical grade [†] ; 2,4,5-Trimethylaniline [†] ; 2,4,5-Trimethylaniline.HCl [†] ; 2,4,6-Trimethylaniline.HCl [†] ; 2,4,6-Trinitro-1,3-dimethyl-5- <i>tert</i> -butylbenzene; Tris(2-chloroethyl)phosphate [†] ; Tris(2,3-dibromopropyl)phosphate [†] ; Tris(2-ethylhexyl)phosphate [†] ; Trp-P-1 acetate [†] ; Trp-P-2 acetate [†] ; Urethane [†] ; Vinyl carbamate; Vinyl fluoride [†] ; 2,5-Xylidine.HCl [†] ; C.I. disperse yellow 3 [†] ; Zearalenone [†]
	Monkey	8	Aflatoxin B ₁ [†] ; Cycasin and methylazoxymethanol acetate; IQ [†] ; <i>N</i> -Nitrosodiethylamine; <i>N</i> -Nitrosodipropylamine; <i>N</i> -Nitrosopiperidine [†] ; Sterigmatocystin [†] ; Urethane [†]
	Rat	222	Acetamide [†] ; Acetaminophen [†] ; Acetoxime; 2-Acetylaminofluorene [†] ; Aflatoxicol; Aflatoxin B ₁ [†] ; Aflatoxin, crude [†] ; 1-Amino-2,4-dibromoanthraquinone [†] ; 3-Amino-9-ethylcarbazole mixture [†] ; 1-Amino-2-methylantraquinone [†] ; 2-Aminoanthraquinone [†] ; <i>o</i> -Aminoazotoluene [†] ; 11-Aminoundecanoic acid [†] ; Aramite [†] ; Aroclor 1016; Aroclor 1242; Aroclor 1254 [†] ; Aroclor 1260; Auramine-O [†] ; Azoxymethane; Bemitradine; Benzidine [†] ; 3-Benzylsydnone-4-acetamide [†] ; Bis(2,3-dibromopropyl)phosphate, magnesium salt; C.I. direct blue 15; Bromodichloromethane [†] ; Budesonide; Captafol [†] ; Carbon tetrachloride [†] ; Chlorendic acid [†] ; Chlorinated paraffins (C ₁₂ , 60% chlorine) [†] ; 4-Chloro-4'-aminodiphenylether [†] ; 3-Chloro-4-(dichloromethyl)-5-hydroxy-2(5 <i>H</i>)-furanone; 2-Chloro-5-(3,5-dimethylpiperidinosulphonyl)benzoic acid; [4-Chloro-6-(2,3-xylidino)-2-pyrimidinylthio]acetic acid [†] ; 4-Chloro-6-(2,3-xylidino)-2-pyrimidinylthio(<i>N</i> -β-hydroxyethyl)acetamide [†] ; Chlorobenzene [†] ; Chloroform [†] ; 3-(<i>p</i> -Chlorophenyl)-1,1-dimethylurea [†] ; Ciprofibrate [†] ; Clivorine; Clofibrate [†] ; Clophen A 30; Coumarin [†] ; <i>p</i> -Cresidine [†] ; Crotonaldehyde; Cupferron [†] ; Cyclopentanone oxime; DDT [†] ; Decabromodiphenyl oxide [†] ; Dehydroepiandrosterone; Dehydroepiandrosterone acetate; 2,4-Diaminotoluene [†] ; 2,4-Diaminotoluene.2HCl [†] ; 1,2-Dibromoethane [†] ; Dichloroacetic acid [†] ; Dichloroacetylene [†] ; <i>N,N</i> -Diethyl-4-(4'-[pyridyl-1'-oxide]azo)aniline; Diethylstilbestrol [†] ; Diisononyl phthalate [†] ; Dimethoxane; 3,3'-Dimethoxybenzidine.2HCl [†] ; 5,6-Dimethoxysterigmatocystin; <i>N,N</i> -Dimethyl-4-aminoazobenzene; 6-Dimethylamino-4,4-diphenyl-3-heptanol acetate.HCl [†] ; 3,3'-Dimethylbenzidine.2HCl [†] ; Dimethylnitramine; Dinitrosohomopiperazine; 2,6-Dinitrotoluene; 2,4-Dinitrotoluene (containing 1.0-1.5% 2,6-dinitrotoluene) [†] ; Dinitrotoluene, technical grade (2,4 (77%)- and 2,6 (19%)-); 1,4-Dioxane [†] ; Dipentyl-nitrosamine; Doxylamine succinate [†] ; Ethinyl estradiol; Ethionine; <i>d</i> -Ethionine [†] ; 4-Ethoxy-phenylurea;

Target site	Species	N Chemicals that induce tumors at each site
		<p>Ethyl alcohol[†]; Z-Ethyl-<i>O,N,N</i>-azoxyethane; Z-Ethyl-<i>O,N,N</i>-azoxymethane; Ethylene thiourea[†]; di-(2-Ethylhexyl)phthalate[†]; Fluconazole[†]; <i>N</i>-(2-Fluorenyl)-2,2,2-trifluoroacetamide; Formic acid 2-[4-(5-nitro-2-furyl)-2-thiazolyl]hydrazide[†]; Fumonisin B₁[†]; Furan[†]; Furfural[†]; Gemfibrozil[†]; Glu-P-1[†]; Glu-P-2[†]; FD & C green no. 1[†]; HCDD mixture[†]; Hexachlorobenzene[†]; α-1,2,3,4,5,6-Hexachlorocyclohexane[†]; Hydrazine[†]; Hydrazine sulfate[†]; Hydrazobenzene[†]; Hydrochlorofluorocarbon 123; <i>N</i>-Hydroxy-2-acetylaminofluorene[†]; 1-Hydroxyanthraquinone; 1'-Hydroxysafrole[†]; IQ[†]; IQ.HCl; Isatidine; Isoniazid[†]; Kepone[†]; Lasiocarpine; MeA-α-C acetate[†]; MeIQx[†]; Methapyrilene.HCl; Z-Methyl-<i>O,N,N</i>-azoxyethane; Methyl carbamate[†]; Methyl clofenapate[†]; 3'-Methyl-4-dimethylaminoazobenzene; 2-Methyl-1-nitroanthraquinone[†]; 4-(4-<i>N</i>-Methyl-<i>N</i>-nitrosaminostyryl)quinoline; 4,4'-Methylene-bis(2-chloroaniline); 4,4'-Methylene-bis(2-methylaniline); 4,4'-Methylenedianiline.2HCl[†]; Methylethylketoxime[†]; Methyleugenol[†]; 4-(Methylnitrosamino)-1-(3-pyridyl)-1-(butanone); Metronidazole[†]; Michler's ketone[†]; Mirex[†]; Monocrotaline; Nafenopin; Nitrite, sodium[†]; Nitrobenzene[†]; 2-Nitrobutane; 2-Nitrofluorene; 3-Nitropentane; <i>N</i>-Nitroso-bis-(4,4,4-trifluoro-<i>N</i>-butyl)amine; 1-Nitroso-5,6-dihydrouracil; <i>N</i>-Nitroso-2,3-dihydroxypropylethanolamine; 1-Nitroso-1-hydroxyethyl-3-chloroethylurea; 1-Nitroso-1-(2-hydroxypropyl)-3-chloroethylurea; <i>N</i>-Nitroso-(2-hydroxypropyl)-(2-hydroxyethyl)amine; <i>N</i>-Nitroso-<i>N</i>-methyl-<i>N</i>-dodecylamine; <i>N</i>-Nitroso-<i>N</i>-methyldecylamine; 3-Nitroso-2-oxazolidinone; Nitroso-2-oxopropylethanolamine; Nitroso-1,2,3,6-tetrahydropyridine; <i>N</i>-Nitrosoallyl-2-hydroxypropylamine; <i>N</i>-Nitrosoallyl-2-oxopropylamine; <i>N</i>-Nitrosoallylethanolamine; <i>N</i>-Nitrosobis(2-oxopropyl)amine; Nitrosodibutylamine[†]; <i>N</i>-Nitrosodiethanolamine; <i>N</i>-Nitrosodiethylamine; <i>N</i>-Nitrosodimethylamine[†]; <i>p</i>-Nitrosodiphenylamine[†]; <i>N</i>-Nitrosodipropylamine; Nitrosododecamethyleneimine; <i>N</i>-Nitrosoephedrine; Nitrosoethylmethylamine; Nitrosoheptamethyleneimine; <i>N</i>-Nitrosomethyl-2,3-dihydroxypropylamine; <i>N</i>-Nitrosomethyl-(2-hydroxyethyl)amine; <i>N</i>-Nitrosomethyl-(3-hydroxypropyl)amine; <i>N</i>-Nitrosomethyl(2-oxopropyl)amine; <i>N</i>-Nitrosomethyl-(2-tosyloxyethyl)amine; Nitrosomethylundecylamine; <i>N</i>-Nitrosomorpholine; <i>N</i>-Nitrosopiperidine[†]; <i>N</i>-Nitrosopyrrolidine[†]; <i>N</i>-Nitrosothialdine; <i>o</i>-Nitrosotoluene; <i>o</i>-Nitrotoluene[†]; Norlestrin[†]; <i>N</i>-(9-Oxo-2-fluorenyl)acetamide; 4,4'-Oxydianiline[†]; Oxy-metholone; 2,3,4,5,6-Pentachlorophenol, technical grade[†]; Petasitenine; Phenobarbital, sodium[†]; 2-Phenyl-1,3-propanediol dicarbamate[†]; 1-Phenylazo-2-naphthol[†]; <i>o</i>-Phenylenediamine.2HCl[†]; Piperonyl butoxide[†]; Polybrominated biphenyl mixture[†]; Prednisolone; Pyrilamine maleate[†]; C.I. acid red 114; C.I. pigment red 3[†]; D & C red no. 5[†]; D & C red no. 9[†]; FD & C red no. 1; Retrorsine; Riddelliine[†]; <i>p</i>-Rosaniline.HCl[†]; Safrole[†]; Selenium sulfide[†]; Senkirkine; Sterigmatocystin[†]; Symphytine; Tamoxifen citrate[†]; Telone II, technical grade (with 1% epichlorohydrin)[†]; Telone II, technical grade (without epichlorohydrin)[†]; 3,3',4,4'-Tetraaminobiphenyl.4HCl[†]; 2,3,7,8-Tetrachlorodibenzo-<i>p</i>-dioxin[†]; Tetrafluoroethylene[†]; Thioacetamide[†]; 4,4'-Thiodianiline[†]; Toluene diisocyanate, commercial grade (2,4 (80%)- and 2,6 (20%)-)[†]; Triamcino-lone acetonide; 2,4,5-Trimethylaniline[†]; 2,4,5-Trimethylaniline.HCl[†]; 2,4,6-Trimethylaniline.HCl[†]; Trimethylarsine oxide; Trinitroglycerin; Tris-(1,3-dichloro-2-propyl)phosphate; Trp-P-1 acetate[†]; Trp-P-2 acetate[†];</p>

Target site	Species	N	Chemicals that induce tumors at each site
Lung	Tree shrew	1	Vinyl acetate [†] ; Vinyl bromide; Vinyl chloride [†] ; Vinyl fluoride [†] ; <i>N</i> -Vinylpyrrolidone-2; C.I. disperse yellow 3 [†] Aflatoxin B ₁ [†]
	Hamster	3	Methylnitrosamino- <i>N,N</i> -dimethylethylamine; Nitroso-2,6-dimethylmorpholine; 1-Nitroso-3,4,5-trimethylpiperazine
	Mouse	121	Acetaldehyde methylformylhydrazone; <i>N</i> -Acetyl-4-(hydroxymethyl)phenylhydrazine; 1-Acetyl-2-isonicotinoylhydrazine; Allylhydrazine.HCl; 1-Amino-2,4-dibromoanthraquinone [†] ; Arecoline.HCl; 5-Azacytidine [†] ; Benzene [†] ; Benzenediazonium sulfate; Benzofuran [†] ; Benzotrichloride; Benzoyl hydrazine; Benzylhydrazine.2HCl; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; Bis(2-chloro-1-methylethyl)ether, technical grade [†] ; Bis-(chloromethyl)ether [†] ; 1,3-Butadiene [†] ; <i>N-n</i> -Butyl- <i>N</i> -formylhydrazine; Butylated hydroxytoluene [†] ; 1,1-di- <i>n</i> -Butylhydrazine; <i>n</i> -Butylhydrazine.HCl; 1,2-di- <i>n</i> -Butylhydrazine.2HCl; Caffeic acid [†] ; Carbamyl hydrazine.HCl; 1-Carbamyl-2-phenylhydrazine; Chlorambucil [†] ; Chloroprene (>96% chloroprene) [†] ; Cobalt sulfate heptahydrate [†] ; Coumarin [†] ; Cyclophosphamide [†] ; Dacarbazine [†] ; Daminozide [†] ; <i>p,p'</i> -DDD [†] ; DDT [†] ; 1,1-Diallylhydrazine; 1,2-Diallylhydrazine.2HCl; Dibenz(<i>a,h</i>)anthracene; 1,2-Dibromo-3-chloropropane [†] ; Dibromodulcitol [†] ; 1,2-Dibromoethane [†] ; Dibromomannitol [†] ; 1,2-Dichloroethane [†] ; 1,2-Diformylhydrazine; Dihydrosafrole [†] ; 2,5-Dimethoxy-4'-aminostilbene [†] ; 3,3'-Dimethylbenzidine.2HCl [†] ; 1,1-Dimethylhydrazine [†] ; 1,2-Dimethylhydrazine.2HCl; α -Ecdysone; Estradiol mustard [†] ; <i>N</i> -Ethyl- <i>N</i> -formylhydrazine; Ethylbenzene [†] ; Ethylene imine; Ethylene oxide [†] ; Ethylhydrazine.HCl; 5-Fluorouracil [†] ; Formylhydrazine; Glycidol [†] ; γ -1,2,3,4,5,6-Hexachlorocyclohexane [†] ; Hexanal methylformylhydrazone; Hydrazine [†] ; Hydrazine sulfate [†] ; IQ [†] ; Isobutyl nitrite [†] ; Isoniazid [†] ; Isonicotinic acid vanillylidenehydrazide; Isoprene [†] ; Lovastatin [†] ; MeIQx [†] ; Melphalan [†] ; 1-Methyl-1,4-dihydro-7-[2-(5-nitrofuryl)vinyl]-4-oxo-1,8-naphthyridine-3-carboxylate, potassium; <i>N</i> -Methyl- <i>N</i> -formylhydrazine; Methyl methanesulfonate; 3-Methylbutanal methylformylhydrazine; Methylene chloride [†] ; Methylhydrazine; Methylhydrazine sulfate; (<i>N</i> -6)-(Methylnitroso)adenine; (<i>N</i> -6)-(Methylnitroso)adenosine; <i>N</i> -Methylolacrylamide [†] ; Metronidazole [†] ; Molybdenum trioxide [†] ; Monoacetyl hydrazine; Naphthalene [†] ; 1,5-Naphthalenediamine [†] ; Nicotinic acid hydrazide; <i>N</i> -[4-(5-Nitro-2-furyl)-2-thiazolyl]formamide [†] ; 3-Nitro-3-hexene [†] ; Nitrobenzene [†] ; Nitromethane [†] ; Nitrosodibutylamine [†] ; <i>N</i> -Nitrosodimethylamine [†] ; <i>N</i> -Nitrosohexamethyleneimine; <i>N</i> -Nitrosopiperidine [†] ; Ozone [†] ; Pentanal methylformylhydrazine; <i>n</i> -Pentylhydrazine.HCl; Phenesterin [†] ; Phenylethylhydrazine sulfate; Procarbazine.HCl [†] ; <i>N-N</i> -Propyl- <i>N</i> -formylhydrazine; Propylhydrazine.HCl; Riddelliine [†] ; Selenium sulfide [†] ; Streptozotocin [†] ; Styrene [†] ; Sulfalate [†] ; T-2 toxin; Telone II, technical grade (with 1% epichlorohydrin) [†] ; Telone II, technical grade (without epichlorohydrin) [†] ; 3,3',4,4'-Tetraaminobiphenyl.4HCl [†] ; Tetranitromethane [†] ; Trichloroethylene [†] ; Trifluralin, technical grade [†] ; 2,4,5-Trimethylaniline.HCl [†] ; Tris(2,3-dibromopropyl)phosphate [†] ; Urethane [†] ; Vinyl chloride [†] ; Vinyl fluoride [†] ; Vinylidene chloride [†] ; 2,4-Xylidine.HCl [†]

Target site	Species	N	Chemicals that induce tumors at each site
	Monkey	1	Urethane [†]
	Rat	58	1-Allyl-1-nitrosourea; 2-Amino-5-(5-nitro-2-furyl)-1,3,4-oxadiazole; 2-Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole; 2-Amino-5-nitrothiazole [†] ; 1-Amyl-1-nitrosourea; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; Bis-(chloromethyl)ether [†] ; HC blue no. 1 [†] ; Bromoethane [†] ; <i>N-n</i> -Butyl- <i>N</i> -nitrosourea; Cadmium chloride; Cadmium sulphate (1:1); 3-Chloro-4-(dichloromethyl)-5-hydroxy-2(5 <i>H</i>)-furanone; 1-Chloroethylnitroso-3-(2-hydroxypropyl)urea; Chloroprene (>96% chloroprene) [†] ; Cobalt sulfate heptahydrate [†] ; 1,2-Dibromoethane [†] ; Dichromate, sodium; Dimethyl hydrogen phosphite [†] ; trans-2-[(Dimethylamino)methylimino]-5-[2-(5-nitro-2-furyl)vinyl]-1,3,4-oxadiazole; 3,3'-Dimethylbenzidine.2HCl [†] ; 1,2-Epoxybutane [†] ; 1-Ethyl nitroso-3-(2-oxopropyl)-urea; <i>N</i> -Hexylnitrosourea; Hydrazine [†] ; Hydrazine sulfate [†] ; 1-(2-Hydroxyethyl)-1-nitrosourea [†] ; Isobutyl nitrite [†] ; Isoniazid [†] ; 4,4'-Methylene-bis(2-chloroaniline); 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanol; 4-(Methylnitrosamino)-1-(3-pyridyl)-1-(butanone); <i>N</i> -{[3-(5-Nitro-2-furyl)-1,2,4-oxadiazole-5-yl]-methyl}acetamide; <i>N</i> -[5-(5-Nitro-2-furyl)-1,3,4-thiadiazol-2-yl]acetamide [†] ; 3-Nitro-3-hexene [†] ; 5-Nitroacenaphthene [†] ; <i>N</i> -Nitroso-bis-(4,4,4-trifluoro- <i>N</i> -butyl)amine; <i>N</i> -Nitroso- <i>N</i> -methyl- <i>N</i> -dodecylamine; <i>N</i> -Nitroso- <i>N</i> -methyl- <i>N</i> -tetradecylamine; <i>N</i> -Nitroso- <i>N</i> -methyldecylamine; <i>N</i> -Nitroso- <i>N</i> -methylurea [†] ; <i>N</i> -Nitrosobis(2-hydroxypropyl)amine; <i>N</i> -Nitrosobis(2-oxopropyl)amine; Nitrosodibutylamine [†] ; <i>N</i> -Nitrosodimethylamine [†] ; <i>N</i> -Nitrosoephedrine; Nitrosoethylmethylamine; <i>N</i> -Nitrosomethyl-2,3-dihydroxypropylamine; <i>N</i> -Nitrosomethyl-(3-hydroxypropyl)amine; Nitrosomethylundecylamine; <i>o</i> -Nitrotoluene [†] ; Oxymetholone; C.I. acid red 114; 2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin [†] ; Tetranitromethane [†] ; 2,4,5-Trimethylaniline [†] ; 2,4,6-Trimethylaniline.HCl [†] ; Vinyl chloride [†]
Mesovarium Mammary gland	Rat	2	Salbutamol; Terbutaline
	Dog	1	Lynestrenol
	Hamster	1	Vinyl chloride [†]
	Mouse	22	5-Azacytidine [†] ; Benzene [†] ; C.I. direct black 38; 1,3-Butadiene [†] ; Chloroprene (>96% chloroprene) [†] ; 1,2-Dibromoethane [†] ; 1,2-Dichloroethane [†] ; Diethylstilbestrol [†] ; α -Ecdysone; Ethylene oxide [†] ; Furosemide [†] ; Glycidol [†] ; Griseofulvin; Isoniazid [†] ; Isonicotinic acid vanillylidenehydrazide; (<i>N</i> -6)-(Methylnitroso)adenosine; Nitrobenzene [†] ; Reserpine [†] ; Sulfallate [†] ; Vinyl chloride [†] ; Vinyl fluoride [†] ; Vinylidene chloride [†]
	Rat	107	4-Acetylamino-biphenyl; 2-Acetylamino-fluorene [†] ; Acronycine; Acrylamide; Acrylonitrile [†] ; AF-2 [†] ; 1-Allyl-1-nitrosourea; 2-Amino-5-(5-nitro-2-furyl)-1,3,4-oxadiazole; 2-Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole; 2-Amino-5-nitrothiazole [†] ; 4-Aminodiphenyl.HCl; 1-Amyl-1-nitrosourea; Atrazine [†] ; Bemitradine; Benzidine [†] ; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; 4-Bis(2-hydroxyethyl)amino-2-(5-nitro-2-thienyl)quinazoline; 1,3-Butadiene [†] ; <i>N-n</i> -Butyl- <i>N</i> -nitrosourea; Captafol [†] ; Carbon tetrachloride [†] ; Carboxymethylnitrosourea; Chlorambucil [†] ; 3-Chloro-4-(dichloromethyl)-5-hydroxy-2(5 <i>H</i>)-furanone; Chloroprene (>96% chlo-

Target site	Species	N	Chemicals that induce tumors at each site
			roprene) [†] ; Cyanazine; Cytembena [†] ; Dacarbazine [†] ; <i>N</i> -1-Diacetamidofluorene; 4,6-Diamino-2-(5-nitro-2-furyl)- <i>S</i> -triazine; 2,4-Diaminoanisole sulfate [†] ; 2,4-Diaminotoluene [†] ; 1,2-Dibromo-3-chloropropane [†] ; 1,2-Dibromoethane [†] ; Dibromomannitol [†] ; 1,3-Dibutyl-1-nitroso-urea; 3,3'-Dichlorobenzidine; 1,2-Dichloroethane [†] ; 3,3'-Dimethoxybenzidine.2HCl [†] ; 4,6-Dimethyl-2-(5-nitro-2-furyl)pyrimidine; 1,2-Dimethyl-5-nitroimidazole; trans-2-[(Dimethylamino)methylimino]-5-[2-(5-nitro-2-furyl)vinyl]-1,3,4-oxadiazole; Dimethylaminoethylnitrosoethylurea, nitrite salt; 3,3'-Dimethylbenzidine.2HCl [†] ; 2-(2,2-Dimethylhydrazino)-4-(5-nitro-2-furyl)thiazole; 2,4-Dinitrotoluene (containing 1.0-1.5% 2,6-dinitrotoluene) [†] ; 1,4-Dioxane [†] ; 1-Ethylnitroso-3-(2-hydroxyethyl)-urea; 1-Ethylnitroso-3-(2-oxopropyl)-urea; <i>N</i> -(2-Fluorenyl)-2,2,2-trifluoroacetamide; Formic acid 2-(4-methyl-2-thiazolyl)hydrazide; Formic acid 2-[4-(5-nitro-2-furyl)-2-thiazolyl]hydrazide [†] ; Glycidol [†] ; Hexamethylmelamine; <i>N</i> -Hexylnitroso-urea; 2-Hydrazino-4-(<i>p</i> -aminophenyl)thiazole [†] ; 2-Hydrazino-4-(5-nitro-2-furyl)thiazole [†] ; 2-Hydrazino-4-(<i>p</i> -nitrophenyl)thiazole [†] ; Hydrazobenzene [†] ; 1-(2-Hydroxyethyl)-3-[(5-nitrofurfurylidene)amino]-2-imidazolidinone; 1-(2-Hydroxyethyl)-nitroso-3-ethylurea; 1-(2-Hydroxyethyl)-1-nitroso-urea [†] ; Indomethacin; IQ [†] ; IQ.HCl; Isoniazid [†] ; Isoprene [†] ; 2-Methoxy-3-aminodibenzofuran; 4-Methyl-1-[(5-nitrofurfurylidene)amino]-2-imidazolidinone; <i>N</i> -(<i>N</i> -Methyl- <i>N</i> -nitrosocarbamoyl)- <i>L</i> -ornithine; 3-Methylcholanthrene; 4,4'-Methylene-bis(2-chloroaniline); 4,4'-Methylene-bis(2-methylaniline); Methylene chloride [†] ; Methyleugenol [†] ; Metronidazole [†] ; <i>L</i> -5-Morpholinomethyl-3-[(5-nitrofurfurylidene)amino]-2-oxazolidinone.HCl; Nithiazide [†] ; 5-Nitro-2-furaldehyde semicarbazone [†] ; 3-(5-Nitro-2-furyl)-imidazo(1,2- α)pyridine [†] ; 4-(5-Nitro-2-furyl)thiazole; <i>N</i> -[4-(5-Nitro-2-furyl)-2-thiazolyl]acetamide; <i>N,N</i> -[6-(5-Nitro-2-furyl)- <i>S</i> -triazine-2,4-diyl]bisacetamide; 5-Nitroacenaphthene [†] ; 1-[(5-Nitrofurfurylidene)amino]-2-imidazolidinone; Nitromethane [†] ; 1-Nitropyrene; <i>o</i> -Nitrotoluene [†] ; Norlestrin [†] ; Ochratoxin A [†] ; <i>N</i> -(9-Oxo-2-fluorenyl)acetamide; Phenacetin [†] ; Phenesterin [†] ; PhIP.HCl [†] ; Procarbazine.HCl [†] ; Propane sultone; 1,2-Propylene oxide [†] ; Styrene [†] ; Sulfallate [†] ; 4,4'-Sulfonylbisacetanilide; Toluene diisocyanate, commercial grade (2,4 (80%)- and 2,6 (20%)-) [†] ; <i>o</i> -Toluidine.HCl [†] ; 1,2,3-Trichloropropane [†] ; 2,2,2-Trifluoro- <i>N</i> -[4-(5-nitro-2-furyl)-2-thiazolyl]acetamide [†] ; Trp-P-2 acetate [†] ; Vinyl chloride [†] ; FD & C violet no. 1 [†]
Myocardium	Mouse	2	Estradiol mustard [†] ; Phenesterin [†]
Nasal cavity ^b	Bush baby	1	<i>N</i> -Nitrosodiethylamine
	Hamster	11	Acetaldehyde; Diallylnitrosamine; Dimethylcarbamil chloride; Hydrazine [†] ; Methylnitrosamino- <i>N,N</i> -dimethylethylamine; Nitroso-2,6-dimethylmorpholine; <i>N</i> -Nitrosoallyl-2-oxopropylamine; <i>N</i> -Nitrosomethyl-2,3-dihydroxypropylamine; <i>N</i> -Nitrosomorpholine; <i>N</i> -Nitrosornicotine; <i>N</i> -Nitrosopiperidine [†]
	Mouse	6	Allyl glycidyl ether [†] ; 1,2-Dibromo-3-chloropropane [†] ; 1,2-Dibromoethane [†] ; Formaldehyde [†] ; <i>N</i> -Nitroso-hexamethyleneimine; 1,2-Propylene oxide [†]

Target site	Species	N	Chemicals that induce tumors at each site
Nervous system	Rat	50	Acetaldehyde; Acrylonitrile [†] ; 1-Azoxopropane; Benzene [†] ; Bis-(chloromethyl)ether [†] ; <i>p</i> -Cresidine [†] ; 3-(Cyclopentyloxy)- <i>N</i> -(3,5-dichloro-4-pyridyl)-4-methoxybenzamide; Diallylnitrosamine; 1,2-Dibromo-3-chloropropane [†] ; 1,2-Dibromoethane [†] ; 1,4-Dichlorobutene-2 (65% trans-, 35% cis-); Dimethylnitramine; Dimethylvinyl chloride [†] ; Dinitrosohomopiperazine; 1,4-Dioxane [†] ; 1,2-Epoxybutane [†] ; <i>Z</i> -Ethyl- <i>O,N,N</i> -azoxyethane; Ethylbenzene [†] ; Ethylnitrosocyanamide; Formaldehyde [†] ; Furfuryl alcohol [†] ; Hexamethylphosphoramide; Hydrazine [†] ; Mononitrosocaffeidine; Naphthalene [†] ; <i>N</i> -Nitroso- <i>N</i> -methyldecylamine; di(<i>N</i> -Nitroso)perhydropyrimidine; <i>N</i> -Nitroso(2,2,2-trifluoroethyl)ethylamine; 1-Nitroso-3,4,5-trimethylpiperazine; <i>N</i> -Nitrosoallyl-2,3-dihydroxypropylamine; <i>N</i> -Nitrosoallyl-2-hydroxypropylamine; <i>N</i> -Nitrosoallylethanolamine; <i>N</i> -Nitrosobis(2-hydroxypropyl)amine; <i>N</i> -Nitrosobis(2-oxopropyl)amine; <i>N</i> -Nitrosodiethanolamine; <i>N</i> -Nitrosodipropylamine; Nitrosoethylmethylamine; <i>N</i> -Nitrosomethyl-2,3-dihydroxypropylamine; <i>N</i> -Nitrosomethyl-(2-hydroxyethyl)amine; <i>N</i> -Nitrosomethyl-2-hydroxypropylamine; <i>N</i> -Nitrosomethyl(2-oxopropyl)amine; <i>N</i> -Nitrosornicotine-1- <i>N</i> -oxide; <i>N</i> -Nitrosopiperidine [†] ; 2,3,4,5,6-Pentachlorophenol [†] ; Phenacetin [†] ; Phenylglycidyl ether; 1,2-Propylene oxide [†] ; Vinyl acetate [†] ; Vinyl chloride [†] ; <i>N</i> -Vinylpyrrolidone-2
	Mouse	3	1,3-Butadiene [†] ; <i>N</i> -Nitrosodimethylamine [†] ; Procarbazine.HCl [†]
	Rat	21	Acrylamide; Acrylonitrile [†] ; Bromoethane [†] ; Chlorambucil [†] ; 1-(4-Chlorophenyl)-1-phenyl-2-propynyl carbamate; Cyclophosphamide [†] ; 1-Ethyl-1-nitrosourea; Ethylene oxide [†] ; 1-Ethylnitroso-3-(2-oxopropyl)-urea; Glu-P-1 [†] ; Glu-P-2 [†] ; Glycidol [†] ; <i>R</i> (-)-2-Methyl- <i>N</i> -nitrosopiperidine; <i>S</i> (+)-2-Methyl- <i>N</i> -nitrosopiperidine; Methyl-nitramine; <i>N</i> -Nitroso- <i>N</i> -methylurea [†] ; <i>N</i> -Nitrosodiethanolamine; 1-Phenyl-3,3-dimethyltriazene; Procarbazine.HCl [†] ; Propane sultone; Vinyl chloride [†]
Oral cavity ^c	Hamster	4	Acetaldehyde; Nitroso-2,6-dimethylmorpholine; <i>N</i> -Nitrosomorpholine; <i>N</i> -Nitrosopiperidine [†]
	Mouse	4	Benzo(<i>a</i>)pyrene [†] ; <i>N</i> -Nitrosohexamethyleneimine; 1,2,3-Trichloropropane [†] ; Vinyl acetate [†]
	Rat	34	Acrylamide; Acrylonitrile [†] ; Benzene [†] ; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; C.I. direct blue 15; C.I. direct blue 218 [†] ; Chloroprene (>96% chloroprene) [†] ; 3-Diazotyramine.HCl; 1,2-Dibromo-3-chloropropane [†] ; 3,3'-Dimethoxybenzidine.2HCl [†] ; 3,3'-Dimethylbenzidine.2HCl [†] ; Dimethylvinyl chloride [†] ; Dinitrosohomopiperazine; Glycidol [†] ; IQ [†] ; MeA- α -C acetate [†] ; <i>N</i> -Nitroso-2,3-dihydroxypropyl-2-hydroxypropylamine; Nitroso-2,3-dihydroxypropyl-2-oxopropylamine; Nitroso- <i>N</i> -methyl- <i>N</i> -(2-phenyl)ethylamine; Nitrosoamylurethan; <i>N</i> -Nitrosodiethylamine; Nitrosoethylurethan; Nitrosoheptamethyleneimine; 1-Nitrosohydantoin; <i>N</i> -Nitrosomethyl(2-oxopropyl)amine; <i>N</i> -Nitrosothialdine; <i>N</i> -Nitrosothiomorpholine; Potassium iodide; C.I. acid red 114; 2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin [†] ; Toluene [†] ; 1,2,3-Trichloropropane [†] ; <i>N</i> -Vinylpyrrolidone-2; Xylene mixture (50.31% <i>m</i> -xylene, 26.9% <i>o</i> -xylene, 22.24% <i>p</i> -xylene)
Ovary	Mouse	10	Benzene [†] ; 1,3-Butadiene [†] ; Diethylstilbestrol [†] ; <i>N</i> -Methylolacrylamide [†] ; 5-Nitro-2-furaldehyde semicarbazone [†] ; 5-Nitroacenaphthene [†] ; 1-[(5-Nitrofurfurylidene)amino]hydantoin [†] ; Phenolphthalein [†] ; Tamoxifen cit

Target site	Species	N	Chemicals that induce tumors at each site
Pancreas	Hamster	3	rate [†] ; 4-Vinylcyclohexene
	Monkey	1	Nitroso-2,3-dihydroxypropyl-2-oxopropylamine; Nitroso-2,6-dimethylmorpholine; Nitroso-2-oxopropyl-ethanolamine
	Rat	26	Urethane [†]
Peritoneal cavity	Mouse	8	2-Amino-5-nitrophenol [†] ; 1-(Aminomethyl)cyclohexaneacetic acid; Azaserine; Butyl benzyl phthalate [†] ; Chlorendic acid [†] ; 3-Chloro-4-(dichloromethyl)-5-hydroxy-2(5 <i>H</i>)-furanone; Cinnamyl anthranilate [†] ; Clofibrate [†] ; Dichlorvos [†] ; Ethyl alcohol [†] ; Hydrochlorofluorocarbon 123; IQ.HCl; Malonaldehyde, sodium salt [†] ; MeA- α -C acetate [†] ; 2-Mercaptobenzothiazole [†] ; Methyl clofenapate [†] ; <i>N</i> -(<i>N</i> -Methyl- <i>N</i> -nitrosocarbamoyl)- <i>L</i> -ornithine; 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanol; 4-(Methylnitrosamino)-1-(3-pyridyl)-1-(butanone); Nafenopin; Nitrofen [†] ; Oil, corn; Oil, safflower; Toluene diisocyanate, commercial grade (2,4 (80%)- and 2,6 (20%)-) [†] ; Tricaprylin; 1,2,3-Trichloropropane [†]
	Rat	27	Bis-1,2-(chloromethoxy)ethane; Bis-1,4-(chloromethoxy)- <i>p</i> -xylene; Bis-(chloromethyl)ether [†] ; Chloroprene (>96% chloroprene) [†] ; trans-1,4-Dichlorobutene-2; Dimethylcarbamyl chloride; Phenoxybenzamine.HCl [†] ; Tris-1,2,3-(chloromethoxy)propane
Pituitary gland	Mouse	8	Acronycine; Acrylamide; Actinomycin D; Aniline.HCl [†] ; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; Bromate, potassium [†] ; Chlorozotocin; Cytembena [†] ; Dapsone [†] ; 1,2-Dibromoethane [†] ; Dibromomannitol [†] ; 1,2-Dichloroethane [†] ; 3,3'-Dimethoxybenzidine.2HCl [†] ; 3,3'-Dimethylbenzidine.2HCl [†] ; 1,4-Dioxane [†] ; Ethylene oxide [†] ; 1-Ethylnitroso-3-(2-oxopropyl)-urea; Glycidol [†] ; Melphalan [†] ; <i>N</i> -Methyl- <i>N</i> ,4-dinitrosoaniline; Methyleugenol [†] ; Mitomycin-C; <i>N</i> -Nitroso-2,2,4-trimethyl-1,2-dihydroquinoline polymer; <i>o</i> -Nitrotoluene [†] ; 2,3,4,5,6-Pentachlorophenol [†] ; Phenoxybenzamine.HCl [†] ; <i>o</i> -Toluidine.HCl [†]
	Rat	7	Diethylstilbestrol [†] ; Enovid; Ethylene thiourea [†] ; Iodinated glycerol [†] ; Isoprene [†] ; Norlestrin [†] ; Propylthiouracil [†] ; Zearalenone [†]
Prostate	Rat	4	3-Aminotriazole [†] ; 1,2-Dibromoethane [†] ; Diethylstilbestrol [†] ; Ethyl alcohol [†] ; 2-Mercaptobenzothiazole [†] ; Metronidazole [†] ; Norlestrin [†]
Skin	Hamster	2	Cadmium chloride; <i>N</i> -Nitrosobis(2-hydroxypropyl)amine; <i>N</i> -Nitrosobis(2-oxopropyl)amine; PHIP.HCl [†]
	Mouse	3	Urethane [†] ; Vinyl chloride [†]
	Rat	35	5-Azacytidine [†] ; Glycidol [†] ; Thio-tepa [†]
	Rat	35	2-Acetylaminofluorene [†] ; 3-Amino-9-ethylcarbazole mixture [†] ; 1-Azoxopropane; 2-Azoxopropane; Benzene [†] ; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; C.I. direct blue 15; Carboxymethylnitrosourea; 2,4-Diaminoanisole sulfate [†] ; Dibromodulcitol [†] ; Dibromomannitol [†] ; Dimethoxane; 2,5-Dimethoxy-4'-aminostilbene [†] ; 3,3'-Dimethoxybenzidine-4,4'-diisocyanate [†] ; 3,3'-Dimethoxybenzidine.2HCl [†] ; 3,3'-Dimethylbenzidine.2HCl [†] ; Dimethylvinyl chloride [†] ; 2,4-Dinitrotoluene (containing 1.0-1.5% 2,6-dinitrotoluene) [†] ; 1-Ethylnitroso-3-(2-hydroxyethyl)-urea; 1-Ethylnitroso-3-(2-oxopropyl)-urea; Glycidol [†] ; 1-(2-Hydroxyethyl)-nitroso-3-

Target site	Species	N	Chemicals that induce tumors at each site
Small intestine	Mouse	6	ethylurea; IQ [†] ; Lasiocarpine; MeIQx [†] ; <i>N</i> -(<i>N</i> -Methyl- <i>N</i> -nitrosocarbamoyl)- <i>L</i> -ornithine; 5-Nitro- <i>o</i> -anisidine [†] ; <i>o</i> -Nitrotoluene [†] ; Oxymetholone; C.I. acid red 114; <i>p</i> -Rosaniline.HCl [†] ; Thio-tepa [†] ; Thiourea [†] ; Vinyl chloride [†] ; FD & C violet no. 1 [†]
	Monkey	1	Captafol [†] ; Captan [†] ; <i>N</i> -Ethyl- <i>N</i> '-nitro- <i>N</i> -nitrosoguanidine; Hydrogen peroxide; <i>N</i> -Methyl- <i>N</i> '-nitro- <i>N</i> -nitrosoguanidine [†] ; <i>N</i> -(Trichloromethylthio)phthalimide
	Rat	29	Urethane [†] Acrylonitrile [†] ; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; Bis(2,3-dibromopropyl)phosphate, magnesium salt; 4-Bis(2-hydroxyethyl)amino-2-(5-nitro-2-thienyl)quinazoline; C.I. direct blue 15; Carboxymethylnitrosourea; 1-(4-Chlorophenyl)-1-phenyl-2-propynyl carbamate; 2,5-Dimethoxy-4'-aminostilbene [†] ; 3,3'-Dimethoxybenzidine.2HCl [†] ; 4,6-Dimethyl-2-(5-nitro-2-furyl)pyrimidine; trans-2-[(Dimethylamino)methylimino]-5-[2-(5-nitro-2-furyl)vinyl]-1,3,4-oxadiazole; 3,3'-Dimethylbenzidine.2HCl [†] ; <i>Z</i> -Ethyl- <i>O,N,N</i> -azoxy-methane; 1-Ethyl-1-nitrosourea; Formic acid 2-[4-(5-nitro-2-furyl)-2-thiazolyl]hydrazide [†] ; Glu-P-1 [†] ; Glu-P-2 [†] ; IQ [†] ; Lasiocarpine; <i>N</i> -Methyl- <i>N</i> '-nitro- <i>N</i> -nitrosoguanidine [†] ; <i>N</i> -[5-(5-Nitro-2-furyl)-1,3,4-thiadiazol-2-yl]acetamide [†] ; <i>N</i> -Nitroso- <i>N</i> -isobutylurea; 3-Nitroso-2-oxazolidinone; Nitrosoethylurethan; PhIP.HCl [†] ; Propane sulfone; Quercetin [†] ; C.I. acid red 114; Trp-P-2 acetate [†]
Spleen	Rat	7	Aniline.HCl [†] ; Azobenzene [†] ; <i>p</i> -Chloroaniline.HCl [†] ; Dapsone [†] ; <i>o</i> -Nitrosotoluene; D & C red no. 9 [†] ; <i>o</i> -Toluidine.HCl [†]
Stomach	Hamster	18	AF-2 [†] ; 1,4-Dinitroso-2,6-dimethylpiperazine; 1-Ethylnitroso-3-(2-hydroxyethyl)-urea; 1-Ethylnitroso-3-(2-oxopropyl)-urea; Formic acid 2-[4-(5-nitro-2-furyl)-2-thiazolyl]hydrazide [†] ; Hydrazine [†] ; <i>N</i> -Hydroxy-2-acetylaminofluorene [†] ; <i>N</i> -[4-(5-Nitro-2-furyl)-2-thiazolyl]acetamide; <i>N</i> -[4-(5-Nitro-2-furyl)-2-thiazolyl]formamide [†] ; <i>N</i> -Nitroso-2,3-dihydroxypropyl-2-hydroxypropylamine; Nitroso-2,3-dihydroxypropyl-2-oxopropylamine; Nitroso-5-methyloxazolidone; <i>N</i> -Nitroso- <i>N</i> -methylurethan; <i>N</i> -Nitroso-1,3-oxazolidine; <i>N</i> -Nitroso-2-phenylethylurea; 1-Nitroso-3,4,5-trimethylpiperazine; Urethane [†] ; Vinyl chloride [†]
	Mouse	69	Acetaldehyde methylformylhydrazone; Acifluorfen; Acrylonitrile [†] ; AF-2 [†] ; 1-Amino-2,4-dibromoanthraquinone [†] ; 2-Amino-4-(5-nitro-2-furyl)thiazole [†] ; trans-5-Amino-3[2-(5-nitro-2-furyl)vinyl]-1,2,4-oxadiazole; Arecoline.HCl; Benzaldehyde [†] ; Benzo(<i>a</i>)pyrene [†] ; Benzofuran [†] ; Benzotrichloride; Benzyl acetate [†] ; Benzyl chloride [†] ; 2-Butoxyethanol [†] ; Bromoethanol; 1,3-Butadiene [†] ; Butylated hydroxyanisole [†] ; 1,1-di- <i>n</i> -Butylhydrazine; Caffeic acid [†] ; Captafol [†] ; Carbazole; Catechol [†] ; 3-Chloro-2-methylpropene; 3-Chloro-2-methylpropene, technical grade (containing 5% dimethylvinyl chloride) [†] ; 3-(Chloromethyl)pyridine.HCl [†] ; Chloroprene (>96% chloroprene) [†] ; 2-Chloropropanal; 1-Chloropropene; Cyproterone acetate; 1,1-Diallylhydrazine; 1,2-Dibromo-3-chloropropane [†] ; 1,2-Dibromoethane [†] ; Dichlorvos [†] ; Diglycidyl resorcinol ether, technical grade [†] ; Dimethylvinyl chloride [†] ; Dinitrosopiperazine; Estradiol mustard [†] ; Ethyl acrylate [†] ; Formic acid 2-[4-(5-nitro-2-furyl)-2-thiazolyl]hydrazide [†] ; Glycidol [†] ; 2,4-Hexadienal (89% trans,trans-, 11% cis,trans-

Target site	Species	N	Chemicals that induce tumors at each site
) [†] ; 2-Hydrazino-4-(5-nitro-2-furyl)thiazole [†] ; <i>N</i> -Hydroxy-2-acetylaminofluorene [†] ; 3-((Imino((2,2,2-trifluoroethyl)amino)methyl) amino)1 <i>H</i> -pyrazole-1-pentamide [†] ; IQ [†] ; Isoprene [†] ; Lovastatin [†] ; MelQ; 1-Methyl-1,4-dihydro-7-[2-(5-nitrofuryl) vinyl]-4-oxo-1,8-naphthyridine-3-carboxylate, potassium; Methyleugenol [†] ; 3-(5-Nitro-2-furyl)-imidazo(1,2- α) pyridine [†] ; <i>N</i> -[5-(5-Nitro-2-furyl)-1,3,4-thiadiazol-2-yl]acetamide [†] ; <i>N</i> -[4-(5-Nitro-2-furyl)-2-thiazolyl]formamide [†] ; <i>N</i> -Nitroso- <i>N</i> -methylurea [†] ; Nitrosodibutylamine [†] ; <i>N</i> -Nitrosohexamethyleneimine; <i>N</i> -Nitrosopiperidine [†] ; β -Propiolactone [†] ; Sesamol [†] ; Styrene oxide [†] ; Telone II, technical grade (with 1% epichlorohydrin) [†] ; <i>N</i> -(Trichloromethylthio)phthalimide; 1,2,3-Trichloropropane [†] ; 2,2,2-Trifluoro- <i>N</i> -[4-(5-nitro-2-furyl)-2-thiazolyl]acetamide [†] ; Trifluralin, technical grade [†] ; Tris(2-chloroethyl)phosphate [†] ; Tris(2,3-dibromopropyl)phosphate [†] ; Vinyl acetate [†]
	Rat	88	Acetone[4-(5-nitro-2-furyl)-2-thiazolyl]hydrazone; 1'-Acetoxysafrole [†] ; Acrylonitrile [†] ; 1-Allyl-1-nitrosourea; 3-Amino-4-[2-[(2-guanidinothiazol-4-yl)methylthio], ethylamino]-1,2,5-thiadiazole; 2-Amino-5-(5-nitro-2-furyl)-1,3,4-oxadiazole; 2-Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole; 2-Amino-4-(5-nitro-2-furyl)thiazole [†] ; 1-Amyl-1-nitrosourea; Aristolochic acid, sodium salt (77% AA I, 21% AA II); Benzene [†] ; Benzo(<i>a</i>)pyrene [†] ; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; Bis(2,3-dibromopropyl)phosphate, magnesium salt; <i>N-n</i> -Butyl- <i>N</i> -nitrosourea; Butylated hydroxyanisole [†] ; β -Butyrolactone; Caffeic acid [†] ; Catechol [†] ; 3-Chloro-2-methylpropene, technical grade (containing 5% dimethylvinyl chloride) [†] ; 4-Chloro- <i>o</i> -phenylenediamine [†] ; Chlorofluoromethane; 3-(Chloromethyl)pyridine.HCl [†] ; Ciprofibrate [†] ; Cupferron [†] ; 1,2-Dibromo-3-chloropropane [†] ; 1,2-Dibromoethane [†] ; 1,2-Dichloroethane [†] ; Diglycidyl resorcinol ether, technical grade [†] ; 2,5-Dimethoxy-4'-aminostilbene [†] ; Dimethyl hydrogen phosphite [†] ; 4,6-Dimethyl-2-(5-nitro-2-furyl)pyrimidine; trans-2-[(Dimethylamino)methylimino]-5-[2-(5-nitro-2-furyl)vinyl]-1,3,4-oxadiazole; Dimethylvinyl chloride [†] ; Dinitrosocaffeidine; Epichlorohydrin [†] ; Ethyl acrylate [†] ; Ethylene oxide [†] ; 2-Fluoroethyl-nitrosourea; Glycidol [†] ; 2,4-Hexadienal (89% trans,trans-, 11% cis,trans-) [†] ; <i>N</i> -Hexylnitrosourea; 1-Hydroxyanthraquinone; 1-(2-Hydroxyethyl)-1-nitrosourea [†] ; 1-(3-Hydroxypropyl)-1-nitrosourea; 1'-Hydroxysafrole [†] ; 3-((Imino((2,2,2-trifluoroethyl)amino)methyl)amino)1 <i>H</i> -pyrazole-1-pentamide [†] ; Loxtidine; Lupitidine.3HCl; Mercuric chloride [†] ; 3-Methoxycatechol; 4-Methoxyphenol; <i>N</i> -Methyl- <i>N'</i> -nitro- <i>N</i> -nitrosoguanidine [†] ; <i>N</i> -Methyl- <i>N</i> -nitrosobenzamide; 4-Methylcatechol; Methyleugenol [†] ; Methylnitrosocyanamide; 3-(5-Nitro-2-furyl)-imidazo(1,2- α)pyridine [†] ; <i>N</i> -[5-(5-Nitro-2-furyl)-1,3,4-thiadiazol-2-yl]acetamide [†] ; 4-(5-Nitro-2-furyl)thiazole; 2-Nitrofluorene; 8-Nitroquinoline; Nitroso-Baygon; <i>N</i> -Nitroso-2,3-dihydroxypropyl-2-hydroxypropylamine; Nitroso-2,3-dihydroxypropyl-2-oxopropylamine; 1-Nitroso-3,5-dimethyl-4-benzoylpiperazine; <i>N</i> -Nitroso- <i>N</i> -methyl- <i>N</i> -dodecylamine; Nitroso- <i>N</i> -methyl- <i>N</i> -(2-phenyl)ethylamine; <i>N</i> -Nitroso- <i>N</i> -methyldecylamine; <i>N</i> -Nitroso- <i>N</i> -methylurea [†] ; Nitroso-1,2,3,6-tetrahydropyridine; <i>N</i> -Nitrosobenzthiazuron; Nitrosodibutylamine [†] ; <i>N</i> -Nitrosodiethylamine; <i>N</i> -Nitrosoephedrine; Nitrosoethylurethan; Omeprazole; Phenacetin [†] ; Pivalolactone [†] ; β -Propiolactone [†] ; <i>N</i> -Propyl- <i>N'</i> -nitro- <i>N</i> -nitrosoguanidine; 1,2-Propylene oxide [†] ; Sesamol [†] ;

Target site	Species	N	Chemicals that induce tumors at each site
Subcutaneous tissue	Mouse	5	Styrene oxide [†] ; Sulfallate [†] ; Telone II, technical grade (with 1% epichlorohydrin) [†] ; 1,2,3-Trichloropropane [†] ; 2,4,6-Trimethylaniline.HCl [†]
	Rat	15	2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; Chloroprene (>96% chloroprene) [†] ; 1,2-Dibromoethane [†] ; <i>N</i> 2- γ -Glutamyl- <i>p</i> -hydrazinobenzoic acid; Glycidol [†]
Testes	Mouse	4	Diethylstilbestrol [†] ; Finasteride; Reserpine [†] ; Tamoxifen citrate [†]
	Rat	22	5-Azacytidine [†] ; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; 1,3-Butadiene [†] ; <i>N</i> -Butyl- <i>N</i> -(4-hydroxybutyl)nitrosamine; Cadmium chloride; 2-Chloro-1,1,1-trifluoroethane; 1,1-Dichloro-1-fluoroethane; Ethylbenzene [†] ; Hydrochlorofluorocarbon 123; Isoprene [†] ; Methyl <i>tert</i> -butyl ether [†] ; Methyl clofenapate [†] ; Metronidazole [†] ; <i>N</i> -Nitrosodimethylamine [†] ; Oxolinic acid [†] ; 2-Phenyl-1,3-propanediol dicarbamate [†] ; SDZ 200-110; 1,1,1,2-Tetrafluoroethane [†] ; Trichloroethylene [†] ; Trinitroglycerin; Tris-(1,3-dichloro-2-propyl)phosphate; Vinyl chloride [†]
Thyroid gland	Hamster	4	Hexachlorobenzene [†] ; Hydrazine [†] ; Methylthiouracil; Urethane [†]
	Mouse	21	3-Amino-4-ethoxyacetanilide [†] ; HC blue no. 1 [†] ; <i>tert</i> -Butyl alcohol [†] ; Chlorinated paraffins (C ₁₂ , 60% chlorine) [†] ; 2,4-Diaminoanisole sulfate [†] ; Diethylstilbestrol [†] ; Doxylamine succinate [†] ; Ethionamide [†] ; Ethylene thiourea [†] ; Kojic acid; 4,4'-Methylenedianiline.2HCl [†] ; 2-Methylimidazole [†] ; 1,5-Naphthalenediamine [†] ; Nitrobenzene [†] ; Oxazepam [†] ; 4,4'-Oxydianiline [†] ; Primidone [†] ; C.I. pigment red 3 [†] ; Sulfamethazine; 2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin [†] ; 4,4'-Thiodianiline [†]
	Rat	37	Acrylamide; 3-Aminotriazole [†] ; <i>o</i> -Anisidine.HCl [†] ; Aroclor 1242; Aroclor 1254 [†] ; Aroclor 1260; 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; Bromate, potassium [†] ; Chlorinated paraffins (C ₁₂ , 60% chlorine) [†] ; 3-Chloro-4-(dichloromethyl)-5-hydroxy-2(5 <i>H</i>)-furanone; Chloroprene (>96% chloroprene) [†] ; 2,4-Diaminoanisole sulfate [†] ; <i>N,N</i> -Diethylthiourea [†] ; 1-Ethyl-1-nitroso-urea; Ethylene thiourea [†] ; 1-Ethyl-1-nitroso-3-(2-oxopropyl)-urea; Fluvastatin; Glycidol [†] ; Iodinated glycerol [†] ; Isobutene [†] ; Malonaldehyde, sodium salt [†] ; Methimazole; 4,4'-Methylenebis(<i>N,N</i> -dimethyl)benzenamine [†] ; 4,4'-Methylenedianiline.2HCl [†] ; 2-Methylimidazole [†] ; Mirex, photo-; Nitrobenzene [†] ; <i>N</i> -Nitrosobis(2-oxopropyl)amine; 4,4'-Oxydianiline [†] ; Propylthiouracil [†] ; <i>p</i> -Rosaniline.HCl [†] ; 2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin [†] ; 4,4'-Thiodianiline [†] ; Thiouracil [†] ; Trimethylthiourea [†] ; Vinyl acetate [†] ; Zinc dimethyldithiocarbamate [†]
Urinary bladder/urethra	Dog	2	3,3'-Dichlorobenzidine; 4,4'-Methylene-bis(2-chloroaniline)
	Hamster	3	Formic acid 2-[4-(5-nitro-2-furyl)-2-thiazolyl]hydrazide [†] ; <i>N</i> -[4-(5-Nitro-2-furyl)-2-thiazolyl]acetamide; <i>N</i> -[4-(5-

Target site	Species	N	Chemicals that induce tumors at each site
Uterus	Mouse	12	Nitro-2-furyl)-2-thiazolyl]formamide [†] 2-Acetylaminofluorene [†] ; 4-Aminodiphenyl; 2-Aminodiphenylene oxide; <i>o</i> -Anisidine.HCl [†] ; 4-Chloro-4'-aminodiphenylether [†] ; <i>p</i> -Cresidine [†] ; 4-Ethylsulphonylnaphthalene-1-sulfonamide; <i>N</i> -Hydroxy-2-acetylaminofluorene [†] ; <i>N</i> -[4-(5-Nitro-2-furyl)-2-thiazolyl]formamide [†] ; Phenacetin [†] ; Telone II, technical grade (with 1% epichlorohydrin) [†] ; Uracil [†]
	Monkey	1	2-Naphthylamine [†]
	Rat	52	Acetaminophen [†] ; Allyl isothiocyanate [†] ; 1-Amino-2,4-dibromoanthraquinone [†] ; 2-Amino-4-(5-nitro-2-furyl)thiazole [†] ; 4-Amino-2-nitrophenol [†] ; 11-Aminoundecanoic acid [†] ; <i>o</i> -Anisidine.HCl [†] ; Aristolochic acid, sodium salt (77% AA I, 21% AA II); 2,2-Bis(bromomethyl)-1,3-propanediol, technical grade [†] ; C.I. disperse blue 1 [†] ; <i>N</i> -Butyl- <i>N</i> -(4-hydroxybutyl)nitrosamine; 4-Chloro- <i>o</i> -phenylenediamine [†] ; <i>m</i> -Cresidine [†] ; <i>p</i> -Cresidine [†] ; Cyclophosphamide [†] ; Diethylene glycol; Dimethylarsinic acid [†] ; Fosetyl Al; IQ.HCl; MeA- α -C acetate [†] ; Melamine [†] ; 2-Methoxy-3-aminodibenzofuran; 2-Naphthylamine [†] ; Nitrilotriacetic acid [†] ; Nitrilotriacetic acid, trisodium salt, monohydrate [†] ; <i>N</i> -[4-(5-Nitro-2-furyl)-2-thiazolyl]formamide [†] ; <i>o</i> -Nitroanisole [†] ; <i>N</i> -Nitroso- <i>N</i> -methyl- <i>N</i> -dodecylamine; <i>N</i> -Nitroso- <i>N</i> -methyl- <i>N</i> -tetradecylamine; <i>N</i> -Nitroso- <i>N</i> -methyldecylamine; <i>N</i> -Nitrosobis(2-oxopropyl)amine; Nitrosodibutylamine [†] ; <i>N</i> -Nitrosodiphenylamine [†] ; Nitrosomethyl-3-carboxypropylamine; <i>o</i> -Nitrosotoluene; Ochratoxin A [†] ; <i>N</i> -Oxydiethylene thiocarbonyl- <i>N</i> -oxydiethylene sulfenamide; Phenacetin [†] ; Phenazone; <i>o</i> -Phenylphenol [†] ; <i>o</i> -Phenylphenol, sodium [†] ; Potassium bicarbonate; Purpurin; Quercetin [†] ; <i>p</i> -Quinone dioxime [†] ; Saccharin, sodium [†] ; Salicylazosulfapyridine [†] ; <i>o</i> -Toluenesulfonamide; <i>o</i> -Toluidine.HCl [†] ; Tributyl phosphate [†] ; Trp-P-2 acetate [†] ; Uracil [†]
	Hamster	1	1-EthylNitroso-3-(2-hydroxyethyl)-urea
Mouse	12	Bromoethane [†] ; Chloroethane [†] ; Dacarbazine [†] ; 1,2-Dichloroethane [†] ; Diethylstilbestrol [†] ; Ethylene oxide [†] ; Glycidol [†] ; (<i>N</i> -6)-(Methylnitroso)adenosine; Procarbazine.HCl [†] ; 1,2,3-Trichloropropane [†] ; Trimethylphosphate [†] ; Vinyl acetate [†]	
	Rat	26	Acrylamide; 1-Allyl-1-nitroso-urea; 3-Amino-9-ethylcarbazole mixture [†] ; 1-Amyl-1-nitroso-urea; Atrazine [†] ; C.I. direct blue 15; Bromocriptine mesylate [†] ; <i>N</i> - <i>n</i> -Butyl- <i>N</i> -nitroso-urea; Calcium valproate; Captan [†] ; 2-Chloro-1,1,1-trifluoroethane; Dacarbazine [†] ; Daminozide [†] ; 3,3'-Dimethoxybenzidine-4,4'-diisocyanate [†] ; 3,3'-Dimethoxybenzidine.2HCl [†] ; Dimethylaminoethylnitrosoethylurea, nitrite salt; 1-EthylNitroso-3-(2-hydroxyethyl)-urea; 1-EthylNitroso-3-(2-oxopropyl)-urea; <i>N</i> -Hexylnitroso-urea; ICRF-159 [†] ; Isophosphamide [†] ; 1,5-Naphthalenediamine [†] ; Nitrobenzene [†] ; Norlestrin [†] ; 4,4'-Thiodianiline [†] ; Vinyl acetate [†]
Vagina	Mouse	1	AZT [†]
	Rat	2	AZT [†] ; <i>N</i> - <i>n</i> -Butyl- <i>N</i> -nitroso-urea
Vascular system	Hamster	9	1,2-Dimethylhydrazine.2HCl; 1-EthylNitroso-3-(2-hydroxyethyl)-urea; 1-EthylNitroso-3-(2-oxopropyl)-urea; Glycidol [†] ; Hexachlorobenzene [†] ; <i>N</i> -Nitroso-2-phenylethylurea; 1-(2-Oxopropyl)nitroso-3-(2-chloroethyl)

Target site	Species	N	Chemicals that induce tumors at each site
			urea; 2-OxopropylNitrosourea; Vinyl chloride [†]
	Mouse	64	A- α -C; <i>N</i> -Acetyl-4-(hydroxymethyl)phenylhydrazine; 1-Acetyl-2-phenylhydrazine; Allylhydrazine.HCl; Arecoline.HCl; Azathioprine; Benzidine.2HCl; 2-Butoxyethanol [†] ; 2-Biphenylamine.HCl [†] ; 1,3-Butadiene [†] ; Captafol [†] ; Carbamyl hydrazine.HCl; 4-Chloro-4'-aminodiphenylether [†] ; 1-Chloro-4-nitrobenzene [†] ; 5-Chloro- <i>o</i> -toluidine [†] ; 4-Chloro- <i>o</i> -toluidine.HCl [†] ; <i>p</i> -Chloroaniline.HCl [†] ; Chloroprene (>96% chloroprene) [†] ; Cupferon [†] ; Dacarbazine [†] ; Daminozide [†] ; 2,4-Diaminotoluene.2HCl [†] ; 1,2-Dibromoethane [†] ; 1,2-Dichloroethane [†] ; Diftalone; 7,12-Dimethylbenz(<i>a</i>)anthracene; 1,1-Dimethylhydrazine [†] ; 1,2-Dimethylhydrazine.2HCl; Elmiron [†] ; <i>N</i> -Ethyl- <i>N</i> -formylhydrazine; Ethylhydrazine.HCl; Glu-P-1 [†] ; Glu-P-2 [†] ; <i>p</i> -Hydrazinobenzoic acid.HCl; 1'-Hydroxysafrole [†] ; Isoprene [†] ; MeA- α -C acetate [†] ; <i>N</i> -Methyl- <i>N</i> -formylhydrazine; 2-Methyl-1-nitroanthraquinone [†] ; Michler's ketone [†] ; 5-Nitro- <i>o</i> -toluidine [†] ; Nitrofen [†] ; <i>N</i> -Nitroso- <i>N</i> -methylurea [†] ; <i>o</i> -Nitrotoluene [†] ; Pentachloroanisole [†] ; 2,3,4,5,6-Pentachlorophenol (Dowicide EC-7) [†] ; 2,3,4,5,6-Pentachlorophenol, technical grade [†] ; <i>n</i> -Pentylhydrazine.HCl; Phenylethylhydrazine sulfate; Phenylhydrazine.HCl; Riddelline [†] ; Sterigmatocystin [†] ; Tetrafluoroethylene [†] ; Toluene diisocyanate, commercial grade (2,4 (80%)- and 2,6 (20%)-) [†] ; <i>o</i> -Toluidine.HCl [†] ; 2,4,6-Trichloroaniline [†] ; 2,4,5-Trimethylaniline.HCl [†] ; 2,4,6-Trimethylaniline.HCl [†] ; Urethane [†] ; Vinyl carbamate; Vinyl chloride [†] ; Vinyl fluoride [†] ; Vinylidene chloride [†] ; 2,5-Xylidine.HCl [†]
	Monkey	2	Aflatoxin B ₁ [†] ; Urethane [†]
	Rat	33	Aniline.HCl [†] ; Azobenzene [†] ; Benzene [†] ; Clivorine; Cupferron [†] ; 1,2-Dibromoethane [†] ; 1,2-Dichloroethane [†] ; 4,6-Dimethyl-2-(5-nitro-2-furyl)pyrimidine; <i>Z</i> -Ethyl- <i>O,N,N</i> -azoxyethane; <i>Z</i> -Ethyl- <i>O,N,N</i> -azoxymethane; IQ.HCl; Lasiocarpine; 4,4'-Methylene-bis(2-chloroaniline); <i>N</i> -[5-(5-Nitro-2-furyl)-1,3,4-thiadiazol-2-yl]acetamide [†] ; <i>N</i> -Nitroso-(2-hydroxypropyl)-(2-hydroxyethyl)amine; Nitroso-1,2,3,6-tetrahydropyridine; <i>N</i> -Nitrosobis(2-oxopropyl)amine; <i>N</i> -Nitrosodiethanolamine; <i>N</i> -Nitrosodiethylamine; <i>N</i> -Nitrosodimethylamine [†] ; <i>N</i> -Nitrosomethyl-(2-tosyloxyethyl)amine; <i>N</i> -Nitrosomorpholine; <i>N</i> -Nitrosopyrrolidine [†] ; Petasitenine; Riddelline [†] ; Sterigmatocystin [†] ; Symphytine; Tetrafluoroethylene [†] ; <i>o</i> -Toluidine.HCl [†] ; Trp-P-2 acetate [†] ; Vinyl bromide; Vinyl chloride [†] ; Vinyl fluoride [†]

^a There was no reported target site in one species (rats or mice) for 4 chemicals with superscripts, but the chemical was evaluated by the published author as a carcinogen: Aldrin[†], Dieldrin[†], *N*-Nitrosopyrrolidine[†], and Urethane[†].

^b Nasal cavity includes tissues of the nose, nasal turbinates, paranasal sinuses and trachea.

^c Oral cavity includes tissues of the mouth, oropharynx, pharynx, and larynx.

In this table, NCI evaluations of “associated” are not considered positive. For a few cases, however, an NCI Technical Report indicated that tumors were “associated” with compound administration, and the NTP later assigned a “positive” evaluation, while noting that “these experiments were particularly difficult to evaluate based on the wording in the Technical Report Summaries” (Haseman *et al.*, *Environ. Health Perspect.* 74: 229-235, 1987). These sites are not listed in the compendium: 2-Amino-5-nitrothiazole (hematopoietic

Target site	Species	N	Chemicals that induce tumors at each site
system in rats),	Butyl benzyl phthalate (hematopoietic system in rats),	2,4-Dinitrotoluene, practical grade (mammary gland and subcutaneous tissue in rats),	Tetrachlorvinphos (adrenal gland and thyroid gland in rats) and trimethylphosphate (subcutaneous tissue in rats).
