International Nonproprietary Names for Pharmaceutical Substances

Notice is hereby given that, in accordance with paragraph 7 of the Procedure for the Selection of Recommended International Nonproprietary Names for Pharmaceutical Substances*, the following names are selected as Recommended International Nonproprietary Names. The inclusion of a name in the lists of Recommended International Nonproprietary Names does not imply any recommendation of the use of the substance in medicine or pharmacy.

Recommended International Nonproprietary Names (Rec. INN): List 33

Lists of proposed (1–65) and recommended (1–31) international nonproprietary names can be found in Cumulative List No. 8, 1992.

Recommended International Nonproprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
alestramustinum alestramustine	estradiol 3-[bis(2-chloroethyl)carbamate], 17-ester with L-alanine $C_{26}H_{36}Cl_2N_2O_4$
alglucerasum alglucerase	glucosylceramidase (human placenta isoenzyme protein moiety reduced) $C_{2532}H_{3854}N_{672}O_{711}S_{16}$ (*for non-glycosylated protein*)
alovudinum alovudine	3'-deoxy-3'-fluorothymidine $C_{10}H_{13}FN_2O_4$
altumomabum altumomab	immunoglobulin G 1 (mouse monoclonal ZCE025 anti-human antigen CEA), disulfide with mouse monoclonal ZCE025 light chain, dimer
amesergidum amesergide	*N*-cyclohexyl-1-isopropyl-6-methylergoline-8β-carboxamide $C_{25}H_{35}N_3O$
amitivirum amitivir	1,3,4-thiadiazole-2-carbamonitrile $C_3H_2N_4S$
andolastum andolast	4,4'-di-1*H*-tetrazol-5-ylbenzanilide $C_{15}H_{11}N_9O$
ardeparinum natricum ardeparin sodium	Sodium salt of depolymerized heparin obtained by peroxide degradation (at elevated temperature) of heparin from pork intestinal mucosa; the end chain structure appears to be the same as the starting material with no unusual sugar residues present; the low molecular weight heparin produced differs from the starting material in molecular weight only; the average relative molecular mass range is 5,500 to 6,500 daltons, 98 per cent of which ranging between 2,000 and 15,000; the degree of sulfation is approximately 2,7 per disaccharidic unit.

* *Official Records of the World Health Organization*, 1955, **60**, 3 (Resolution EB15.R7); 1969, **173**, 10 (Resolution EB43.R9).

Recommended International Nonproprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
artilidum artilide	(+)-4'-[(*R*)-4-(dibutylamino)-1-hydroxybutyl]methanesulfonanilide $C_{19}H_{34}N_2O_3S$
atrinositolum atrinositol	D-*myo*-inositol 1,2,6-tris(dihydrogen phosphate) $C_6H_{15}O_{15}P_3$
avicatoninum avicatonin	1-butyric acid-2-L-alanine-3-L-serine-7-(L-2-aminobutyric acid)-26-L-aspartic acid-27-L-valine-29-L-alaninecalcitonin (salmon) $C_{147}H_{243}N_{41}O_{46}$
azasetronum azasetron	(±)-6-chloro-3,4-dihydro-4-methyl-3-oxo-*N*-3-quinuclidinyl-2*H*-1,4-benzoxazine-8-carboxamide $C_{17}H_{20}ClN_3O_3$
berefrinum berefrine	*m*-[(2*R*,5*R*)-2-*tert*-butyl-3-methyl-5-oxazolidinyl]phenol mixture with *m*-[(2*S*,5*R*)-2-*tert*-butyl-3-methyl-5-oxazolidinyl]phenol $C_{14}H_{21}NO_2$
besigomsinum besigomsin	(+)-(6*S*,7*S*, *biar-R*)-5,6,7,8-tetrahydro-1,2,3,13-tetramethoxy-6,7-dimethylbenzo[3,4]cycloocta[1,2-*f*][1,3]benzodioxol-6-ol $C_{23}H_{28}O_7$
bizelesinum bizelesin	1,3-bis[2-[[(*S*)-1-(chloromethyl)-1,6-dihydro-5-hydroxy-8-methylbenzo[1,2-*b*:4,3-*b*']dipyrrol-3(2*H*)-yl]carbonyl]indol-5-yl]urea $C_{43}H_{36}Cl_2N_8O_5$
camiglibosum camiglibose	methyl 6-deoxy-6-[(2*R*,3*R*,4*R*,5*S*)-3,4,5-trihydroxy-2-(hydroxymethyl)piperidino]-α-D-glucopyranoside $C_{13}H_{25}NO_9$
carsatrinum carsatrin	4-[bis(*p*-fluorophenyl)methyl]-α-[(9*H*-purin-6-ylthio)methyl]-1-piperazineethanol $C_{25}H_{26}F_2N_6OS$
carzelesinum carzelesin	N-[2-[[(*S*)-1-(chloromethyl)-1,6-dihydro-5-hydroxy-8-methyl=benzo[1,2-*b*:4,3-*b*']dipyrrol-3(2*H*)-yl]carbonyl]indol-5-yl]-6-(diethylamino)-2-benzofurancarboxamide carbanilate (ester) $C_{41}H_{37}ClN_6O_5$
cetefloxacinum cetefloxacin	(−)-7-[(2*S*,3*R*)-3-amino-2-methyl-1-azetidinyl]-1-(2,4-difluorophenyl)-6-fluoro-1,4-dihydro-4-oxo-3-quinolinecarboxylic acid $C_{20}H_{16}F_3N_3O_3$
cilansetronum cilansetron	(−)-(*R*)-5,6,9,10-tetrahydro-10-[(2-methylimidazol-1-yl)methyl]-4*H*-pyrido[3,2,1-*jk*]carbazol-11(8*H*)-one $C_{20}H_{21}N_3O$
cladribinum cladribine	2-chloro-2'-deoxyadenosine $C_{10}H_{12}ClN_5O_3$
clinafloxacinum clinafloxacin	(±)-7-(3-amino-1-pyrrolidinyl)-8-chloro-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-3-quinolinecarboxylic acid $C_{17}H_{17}ClFN_3O_3$

Recommended International Nonproprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
clinprostum clinprost	(+)-methyl (3a*S*,5*R*,6*R*,6a*S*)-1,3a,4,5,6,6a-hexahydro-5-hydroxy-6-[(*E*)-(3*S*)-3-hydroxy-1-octenyl]-2-pentalenevalerate $C_{22}H_{36}O_4$
deferipronum deferiprone	3-hydroxy-1,2-dimethyl-4(1*H*)-pyridone $C_7H_9NO_2$
dexniguldipinum dexniguldipine	(+)-(*R*)-3-(4,4-diphenylpiperidino)propyl methyl 1,4-dihydro-2,6-dimethyl-4-(*m*-nitrophenyl)-3,5-pyridinedicarboxylate $C_{36}H_{39}N_3O_6$
dezinamidum dezinamide	3-[(α,α,α-trifluoro-*m*-tolyl)oxy]-1-azetidinecarboxamide $C_{11}H_{11}F_3N_2O_2$
dimiracetamum dimiracetam	(±)-dihydro-1*H*-pyrrolo[1,2-*a*]imidazole-2,5(3*H*,6*H*)-dione $C_6H_8N_2O_2$
dorzolamidum dorzolamide	(4*S*,6*S*)-4-(ethylamino)-5,6-dihydro-6-methyl-4*H*-thieno[2,3-*b*]thiopyran-2-sulfonamide 7,7-dioxide $C_{10}H_{16}N_2O_4S_3$
drospirenonum drospirenone	(6*R*,7*R*,8*R*,9*S*,10*R*,13*S*,14*S*,15*S*,16*S*,17*S*)-1,3',4',6,6a,7,8,9,10,11,12,13,14,15,15a,16-hexadecahydro-10,13-dimethylspiro-[17*H*-dicyclopropa[6,7:15,16]cyclopenta[*a*]phenanthrene-17,2'(5'*H*)-furan]-3,5'(2*H*)-dione $C_{24}H_{30}O_3$
duloxetinum duloxetine	(+)-(*S*)-*N*-methyl-γ-(1-naphthyloxy)-2-thiophenepropylamine $C_{18}H_{19}NOS$
ecabapidum ecabapide	*m*-[[[(3,4-dimethoxyphenethyl)carbamoyl]methyl]amino]-*N*-methylbenzamide $C_{20}H_{25}N_3O_4$
ecadotrilum ecadotril	*N*-[(*S*)-α-(mercaptomethyl)hydrocinnamoyl]glycine, benzyl ester, acetate (ester) $C_{21}H_{23}NO_4S$
enadolinum enadoline	*N*-methyl-*N*-[(5*R*,7*S*,8*S*)-7-(1-pyrrolidinyl)-1-oxaspiro[4.5]dec-8-yl]-4-benzofuranacetamide $C_{24}H_{32}N_2O_3$
enazadremum enazadrem	4,6-dimethyl-2-[(6-phenylhexyl)amino]-5-pyrimidinol $C_{18}H_{25}N_3O$
enofelastum enofelast	(*E*)-4'-fluoro-3,5-dimethyl-4-stilbenol $C_{16}H_{15}FO$
epoetinum alfa epoetin alfa	1-165-erythropoietin (human clone λHEPOFL 13 protein moiety), glycoform α $C_{809}H_{1301}N_{229}O_{240}S_5$ (*for non-glycosylated protein*)
epoetinum beta epoetin beta	1-165-erythropoietin (human clone λHEPOFL 13 protein moiety), glycoform β $C_{809}H_{1301}N_{229}O_{240}S_5$ (*for non-glycosylated protein*)

Recommended International Nonproprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
epoetinum gamma epoetin gamma	1-165-erythropoietin (human clone λHEPOFL 13 protein moiety), glycoform γ $C_{809}H_{1301}N_{229}O_{240}S_5$ (*for non-glycosylated protein*)
fialuridinum fialuridine	1-(2-deoxy-2-fluoro-β-D-arabinofuranosyl)-5-iodouracil $C_9H_{10}FIN_2O_5$
flezelastinum flezelastine	(±)-4-(*p*-fluorobenzyl)-2-(hexahydro-1-phenethyl-1*H*-azepin-4-yl)-1(2*H*)-phthalazinone $C_{29}H_{30}FN_3O$
furnidipinum furnidipine	(±)-methyl tetrahydrofurfuryl,1,4-dihydro-2,6-dimethyl-4-(*o*-nitrophenyl)-3,5-pyridinedicarboxylate $C_{21}H_{24}N_2O_7$
ganefromycinum ganefromycin	An antibiotic produced by *Streptomyces lydicus.* Ganefromycin is a complex antibiotic with two major components: α and β. component α (2*E*,4*E*,6*E*)-7-[(2*R**,3*R**,5*R**)-5-[7-[(3*E*,5*E*)-3-[[*O*-2,6-dideoxy-3-*O*-methyl-α-*lyxo*-hexopyranosyl-(1→4)-*O*-2,6-dideoxy-3-*O*-methyl-β-*ribo*-hexopyranosyl-(1→4)-2,6-dideoxy-3-*O*-methyl-α-*lyxo*-hexopyranosyl]oxy]-2-[(2*S**,3*S**,4*S**,6*R**)-tetrahydro-2,3,4-trihydroxy-5,5-dimethyl-6-[(1*E*,3*Z*)-1,3-pentadienyl]-2*H*-pyran-2-yl]propionamido]-2-methoxy-1,3-dimethyl-3,5-heptadienyl]tetrahydro-3-hydroxy-2-furyl]-2,4,6-heptatrienoic acid, 2^3-phenylacetate component β (2*E*,4*E*,6*E*)-7-[(2*R**,3*R**,5*R**)-5-[7-[(3*E*,5*E*)-3-[[*O*-2,6-dideoxy-3-*O*-methyl-α-*lyxo*-hexopyranosyl-(1→4)-*O*-2,6-dideoxy-3-*O*-methyl-β-*ribo*-hexopyranosyl-(1→4)-2,6-dideoxy-3-*O*-methyl-α-*lyxo*-hexopyranosyl]oxy]-2-[(2*S**,3*S**,4*S**,6*R**)-tetrahydro-2,3,4-trihydroxy-5,5-dimethyl-6-[(1*E*,3*Z*)-1,3-pentadienyl]-2*H*-pyran-2-yl]propionamido]-2-methoxy-1,3-dimethyl-3,5-heptadienyl]tetrahydro-3-hydroxy-2-furyl]-2,4,6-heptatrienoic acid, 2^4-phenylacetate $C_{65}H_{95}NO_{21}$ *(empirical molecular formula)*
glemanserinum glemanserin	(±)-1-phenethyl-α-phenyl-4-piperidinemethanol $C_{20}H_{25}NO$
grepafloxacinum grepafloxacin	(±)-1-cyclopropyl-6-fluoro-1,4-dihydro-5-methyl-7-(3-methyl-1-piperazinyl)-4-oxo-3-quinolinecarboxylic acid $C_{19}H_{22}FN_3O_3$
gusperimus gusperimus	(±)-*N*-[[[4-[(3-aminopropyl)amino]butyl]carbamoyl]hydroxymethyl]-7-guanidinoheptanamide $C_{17}H_{37}N_7O_3$
icatibantum icatibant	(*R*)-arginyl-(*S*)-arginyl-(*S*)-prolyl-(2*S*,4*R*)-(4-hydroxyprolyl)glycyl-(*S*)-[3-(2-thienyl)alanyl]-(*S*)-seryl-(*R*)-[(1,2,3,4-tetrahydro-3-isoquinolyl)carbonyl]-(2*S*,3a*S*,7a*S*)-[(hexahydro-2-indolinyl)carbonyl]-(*S*)-arginine $C_{59}H_{89}N_{19}O_{13}S$
icodextrinum icodextrin	dextrin, having more than 85% of its molecules with molecular masses between 1640 and 45000 with a claimed-average molecular mass of approximatively 20000 $[C_6H_{12}O_6]_n$

Recommended International Nonproprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
icodulinum icoduline	6-(2-thiazolylamino)-*m*-cresol $C_{10}H_{10}N_2OS$
idoxifenum idoxifene	1-[2-[*p*-[(*E*-β-ethyl-α-(*p*-iodophenyl)styryl]phenoxy]ethyl]pyrrolidine $C_{28}H_{30}INO$
igmesinum igmesine	(+)-α-[(*E*)-cinnamyl]-*N*-(cyclopropylmethyl)-α-ethyl-*N*-methylbenzylamine $C_{23}H_{29}N$
intoplicinum intoplicine	11-[[3-(dimethylamino)propyl]amino]-8-methyl-7*H*-benzo[*e*]pyrido[4,3-*b*]=indol-3-ol $C_{21}H_{24}N_4O$
iobitridolum iobitridol	*N,N'*-bis(2,3-dihydroxypropyl)-5-[2-(hydroxymethyl)hydracrylamido]-2,4,6-triiodo-*N,N'*-dimethylisophthalamide $C_{20}H_{28}I_3N_3O_9$
iofratolum iofratol	*N,N''*-(2-hydroxytrimethylene)bis[*N'*-[2-hydroxy-1-(hydroxymethyl)ethyl]-2,4,6-triiodo-5-[(*S*)-lactamido]isophthalamide] $C_{31}H_{36}I_6N_6O_{13}$
itasetronum itasetron	2-oxo-*N*-1α*H*,5α*H*-tropan-3α-yl-1-benzimidazoline-1-carboxamide $C_{16}H_{20}N_4O_2$
latanoprostum latanoprost	isopropyl (*Z*)-7-[(1*R*,2*R*,3*R*,5*S*)-3,5-dihydroxy-2-[(3*R*)-3-hydroxy-5-phenylpentyl]cyclopentyl]-5-heptenoate $C_{26}H_{40}O_5$
leminoprazolum leminoprazole	(±)-2-[[*o*-(isobutylmethylamino)benzyl]sulfinyl]benzimidazole $C_{19}H_{23}N_3OS$
levosimendanum levosimendan	mesoxalonitrile (–)-[*p*[(*R*)-1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl]phenyl]hydrazone $C_{14}H_{12}N_6O$
lifibrolum lifibrol	(±)-*p*-[4-(*p*-*tert*-butylphenyl)-2-hydroxybutoxy]benzoic acid $C_{21}H_{26}O_4$
linopirdinum linopirdine	1-phenyl-3,3-bis(4-pyridylmethyl)-2-indolinone $C_{26}H_{21}N_3O$
lomerizinum lomerizine	1-[bis(*p*-fluorophenyl)methyl]-4-(2,3,4-trimethoxybenzyl)piperazine $C_{27}H_{30}F_2N_2O_3$
losoxantronum losoxantrone	7-hydroxy-2-[2-[(2-hydroxyethyl)amino]ethyl]-5-[[2-[(2-hydroxyethyl)amino]ethyl]amino]anthra[1,9-*cd*]pyrazol-6(2*H*)-one $C_{22}H_{27}N_5O_4$
mideplaninum mideplanin	a mixture of six substances of which 70% is: 34-[(2-acetamido-2-deoxy-β-D-glucopyranosyl)oxy]-15-amino-22,31-dichloro-56-[[2-deoxy-2-(8-methylnonanamido)-β-D-glucopyranosyl]oxy]-*N*-[3-(dimethylamino)propyl]-2,3,16,17,18,19,35,36,37,38,48,49,50,50a-tetradeca=hydro-6,11,40,44-tetrahydroxy-42-(α-D-mannopyranosyloxy)-2,16,36,50,51,59-hexaoxo-1*H*,15*H*,34*H*-20,23:30,33-dietheno-3,18:35,48-bis(iminomethano)-4,8:10,14:25,28:43,47-tetrametheno-28*H*-[1,14,6,22]dioxadiazacycloocta=cosino[4,5-*m*][10,2,16]benzoxadiazacyclotetracosine-38-carboxamide $C_{93}H_{109}Cl_2N_{11}O_{32}$

Recommended International Nonproprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
moexiprilatum moexiprilat	(3*S*)-2-[(2*S*)-*N*-[(1*S*)-1-carboxy-3-phenylpropyl]alanyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-3-isoquinolinecarboxylic acid $C_{25}H_{30}N_2O_7$
monatepilum monatepil	(±)-*N*-(6,11-dihydrodibenzo[*b*,*e*]thiepin-11-yl)-4-(*p*-fluorophenyl)-1-piperazinebutyramide $C_{28}H_{30}FN_3OS$
namirotenum namirotene	*p*-[(*E*)-2-(5-isopropyl-2-thienyl)propenyl]benzoic acid $C_{17}H_{18}O_2S$
nasaruplasum nasaruplase	prourokinase (enzyme-activating) (human clone pA3/pD2/pF1 protein moiety) $C_{2031}H_{3121}N_{585}O_{601}S_{31}$
nerisopamum nerisopam	1-(*p*-aminophenyl)-7,8-dimethoxy-4-methyl-5*H*-2,3-benzodiazepine $C_{18}H_{19}N_3O_2$
nexopamilum nexopamil	(2*S*)-5-(hexylmethylamino)-2-isopropyl-2-(3,4,5-trimethoxyphenyl)valeronitrile $C_{24}H_{40}N_2O_3$
niravolinum niravoline	*N*-methyl-2-(*m*-nitrophenyl)-*N*-[(1*S*,2*S*)-2-(1-pyrrolidinyl)-1-indanyl]acetamide $C_{22}H_{25}N_3O_3$
olanzapinum olanzapine	2-methyl-4-(4-methyl-1-piperazinyl)-10*H*-thieno[2,3-*b*][1,5]benzodiazepine $C_{17}H_{20}N_4S$
orbifloxacinum orbifloxacin	1-cyclopropyl-7-(*cis*-3,5-dimethyl-1-piperazinyl)-5,6,8-trifluoro-1,4-dihydro-4-oxo-3-quinolinecarboxylic acid $C_{19}H_{20}F_3N_3O_3$
osateronum osaterone	(+)-6-chloro-17-hydroxy-2-oxapregna-4,6-diene-3,20-dione $C_{20}H_{25}ClO_4$
pegaldesleukinum pegaldesleukin	125-L-serine-2-133-interleukin 2 (human reduced), reaction product with glutaric anhydride, esters with polyethylene glycol monomethyl ester
pendetidum pendetide	N^6-[*N*-[2-[[2-[bis(carboxymethyl)amino]ethyl](carboxymethyl)amino]ethyl]-*N*-(carboxymethyl)glycyl]-N^2-(*N*-glycyl-L-tyrosyl)-L-lysine $C_{31}H_{47}N_7O_{14}$
pidobenzonum pidobenzone	5-oxo-L-proline, *p*-hydroxyphenyl ester $C_{11}H_{11}NO_4$
polidroninii chloridum polidronium chloride	α-[(*E*)-4-[tris(2-hydroxyethyl)ammonio]-2-butenyl-ω-[tris(2-hydroxyethyl)=ammonio]poly[(dimethyliminio)[(*E*)-2-butenylene] chloride] dichloride $(C_6H_{12}ClN)_n \cdot C_{16}H_{36}Cl_2N_2O_6$
pranlukastum pranlukast	*N*-[4-oxo-2-(1*H*-tetrazol-5-yl)-4*H*-1-benzopyran-8-yl]-*p*-(4-phenylbutoxy)=benzamide $C_{27}H_{23}N_5O_4$

Recommended International Nonproprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
prezatidi cuprici acetas prezatide copper acetate	hydrogen [N^2-(*N*-glycyl-L-histidyl)-L-lysinato][N^2-(*N*-glycyl-L-histidyl)-L-lysinato(2–)]cuprate(1–), diacetate $C_{28}H_{46}CuN_{12}O_8 \cdot 2\ C_2H_4O_2$
ramorelixum ramorelix	1-[*N*-acetyl-3-(2-naphthyl)-D-alanyl-*p*-chloro-D-phenylalanyl-D-tryptophyl-L-seryl-L-tyrosyl-*O*-(6-deoxy-α-L-mannopyranosyl)-D-seryl-L-leucyl-L-arginyl-L-prolyl]semicarbazide $C_{74}H_{95}ClN_{16}O_{18}$
raxofelastum raxofelast	(±)-2,3-dihydro-5-hydroxy-4,6,7-trimethyl-2-benzofuranacetic acid, acetate $C_{15}H_{18}O_5$
remifentanilum remifentanil	4-carboxy-4-(*N*-phenylpropionamido)1-piperidinepropionic acid, dimethyl ester $C_{20}H_{28}N_2O_5$
revizinonum revizinone	(*E*)-*N*-cyclohexyl-*N*-methyl-2-[[[α-(1,2,3,5-tetrahydro-2-oxoimidazo[2,1-*b*]=quinazolin-7-yl)benzylidene]amino]oxy]acetamide $C_{26}H_{29}N_5O_3$
rifamexilum rifamexil	(9*S*,12*E*,14*S*,15*R*,16*S*,17*R*,18*R*,19*R*,20*S*,21*S*,22*E*,24*Z*)-2-(diethylamino)-5,6,16,18,20-pentahydroxy-14-methoxy-7,9,15,17,19,21,25-heptamethyl-9,4-(epoxypentadeca[1,11,13]trienimino)furo[2',3':7,8]naphtho[1,2-*d*]thiazole-10,26(9*H*)-dione, 16-acetate $C_{42}H_{55}N_3O_{11}S$
ritipenemum ritipenem	(5*R*,6*S*)-6-[(1*R*)-1-hydroxyethyl]-3-(hydroxymethyl)-7-oxo-4-thia-1-aza=bicyclo[3.2.0]hept-2-ene-2-carboxylic acid, 3-carbamate $C_{10}H_{12}N_2O_6S$
safironilum safironil	*N*,*N*'-bis(3-methoxypropyl)-2,4-pyridinedicarboxamide $C_{15}H_{23}N_3O_4$
sanguinarii chloridum sanguinarium chloride	sanguinarine chloride *or* 13-methyl[1,3]benzodioxolo[5,6-*c*]-1,3-dioxolo[4,5-*i*]=phenanthridinium chloride $C_{20}H_{14}ClNO_4$
saripidemum saripidem	*N*-[[2-(*p*-chlorophenyl)imidazo[1,2-*a*]pyridin-3-yl]methyl]-*N*-methylbutyramide $C_{19}H_{20}ClN_3O$
satigrelum satigrel	4-cyano-5,5-bis(*p*-methoxyphenyl)-4-pentenoic acid $C_{20}H_{19}NO_4$
satumomabum satumomab	immunoglobulin G 1 (mouse monoclonal B72.3 anti-human glycoprotein TAG-72), disulfide with mouse monoclonal B72.3 light chain, dimer
sebriplatinum sebriplatin	(+)-*cis*-(1,1-cyclobutanedicarboxylato)[(2*R*)-2-methyl-1,4-butanediamine-*N*,*N*']platinum $C_{11}H_{20}N_2O_4Pt$
semorphonum semorphone	(–)-4,5α-epoxy-3,14-dihydroxy-17-(2-methoxyethyl)morphinan-6-one $C_{19}H_{23}NO_5$

Recommended International Nonproprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
sepimostatum sepimostat	6-amidino-2-naphthyl *p*-(2-imidazolin-2-ylamino)benzoate $C_{21}H_{19}N_5O_2$
siratiazemum siratiazem	(+)-(2*S*,3*S*)-2,3-dihydro-3-hydroxy-5-[2-(isopropylmethylamino)ethyl]-2-(*p*-methoxyphenyl)-1,5-benzothiazepin-4(5*H*)-one acetate (ester) $C_{24}H_{30}N_2O_4S$
sonerminum sonermin	3-157-tumor necrosis factor (human) $C_{767}H_{1204}N_{210}O_{229}S_2$
sulopenemum sulopenem	(5*R*,6*S*)-6-[(1*R*)-1-hydroxyethyl]-7-oxo-3-[[(3*S*)-tetrahydro-3-thienyl]thio]-4-thia-1-azabicyclo[3.2.0]hept-2-ene-2-carboxylic acid, (*R*)-*S*-oxide $C_{12}H_{15}NO_5S_3$
tallimustinum tallimustine	*N*''-(2-amidinoethyl)-4-[*p*-[bis(2-chloroethyl)amino]benzamido]-1,1',1''-trimethyl-*N*,4':*N*',4''-ter[pyrrole-2-carboxamide] $C_{32}H_{38}Cl_2N_{10}O_4$
tarazepidum tarazepide	(−)-*N*-[(*S*)-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1*H*-1,4-benzodiazepin-3-yl]-5,6-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline-2-carboxamide $C_{28}H_{24}N_4O_2$
teloxantronum teloxantrone	7,10-dihydroxy-2-[2-[(2-hydroxyethyl)amino]ethyl]-5-[[2-(methylamino)ethyl]amino]anthra[1,9-*cd*]pyrazol-6(2*H*)-one $C_{21}H_{25}N_5O_4$
tetrazolastum tetrazolast	4-(1*H*-tetrazol-5-yl)tetrazolo[1,5-*a*]quinoline $C_{10}H_6N_8$
thymoctonanum thymoctonan	*N*-[*N*-[*N*^{2}-[1-[*N*-[*N*-(*N*-L-leucyl-L-α-glutamyl)-L-α-aspartyl]glycyl]-L-prolyl]-L-lysyl]-L-phenylalanyl]-L-leucine $C_{43}H_{67}N_9O_{13}$
tiotropii bromidum tiotropium bromide	6β,7β-epoxy-3β-hydroxy-8-methyl-1α*H*,5α*H*-tropanium bromide, di-2-thienylglycolate $C_{19}H_{22}BrNO_4S_2$
tiquesidum tiqueside	(25*R*)-5α-spirostan-3β-yl 4-*O*-β-D-glucopyranosyl-β-D-glucopyranoside $C_{39}H_{64}O_{13}$
tirapazaminum tirapazamine	3-amino-1,2,4-benzotriazine 1,4-dioxide $C_7H_6N_4O_2$
trefentanilum trefentanil	*N*-[1-[2-(4-ethyl-5-oxo-Δ^2-tetrazolin-1-yl)ethyl]-4-phenyl-4-piperidyl]-2'-fluoropropionanilide $C_{25}H_{31}FN_6O_2$
tripalmitinum tripalmitin	tripalmitin *or* 1,2,3-propanetriyl trihexadecanoate $C_{51}H_{98}O_6$
troglitazonum troglitazone	(±)-*all-rac*-5-[*p*-[(6-hydroxy-2,5,7,8-tetramethyl-2-chromanyl)methoxy]benzyl]-2,4-thiazolidinedione $C_{24}H_{27}NO_5S$

Recommended International Nonproprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
turosteridum turosteride	1,3-diisopropyl-1-[(4-methyl-3-oxo-4-aza-5α-androstan-17β-yl)carbonyl]urea $C_{27}H_{45}N_3O_3$
valsartanum valsartan	*N*-[*p*-(*o*-1*H*-tetrazol-5-ylphenyl)benzyl]-*N*-valeryl-L-valine $C_{24}H_{29}N_5O_3$
venritidinum venritidine	(±)-(*Z*)-*N*-methyl-2-nitro-*N*'-[2-[[5-[(tricyclo[2.2.1.$O^{2,6}$]hept-3-ylamino)=methyl]furfuryl]thio]ethyl]-1,1-ethenediamine $C_{18}H_{26}N_4O_3S$
zamifenacinum zamifenacin	(*R*)-3-(diphenylmethoxy)-1-[3,4-(methylenedioxy)phenetyl]piperidene $C_{27}H_{29}NO_3$
zanoteronum zanoterone	1'-(methylsulfonyl)-1'*H*-5α,17α-pregn-20-yno[3,2-*c*]pyrazol-17-ol $C_{23}H_{32}N_2O_3S$

AMENDMENTS TO PREVIOUS LISTS

Chronicle of the World Health Organization, Vol. 9, 1955

Recommended International Nonproprietary Names (Rec. INN): List 1

p. 187	*delete*	*insert*
	corticotrophinum corticotrophin	corticotropinum corticotropin

Supplement to WHO Chronicle Vol. 33, No. 10, 1979

Recommended International Nonproprietary Names (Rec. INN): List 19

p. 6	pipecuronii bromidum pipecuronium bromide	*replace the chemical name by the folowing:* 4,4'-(3α-17β-dihydroxy-5α-androstan-2β,16β-ylene)bis[1,1-dimethylpiperazinium] dibromide, diacetate (ester) $C_{35}H_{62}Br_2N_4O_4$

Supplement to WHO Chronicle Vol. 38, No. 6, 1984

Recommended International Nonproprietary Names (Rec. INN): List 24

p. 5	icospiramidum icospiramide	*replace the chemical name by the following:* 8-[*cis*-4-cyano-4-(*p*-fluorophenyl)cyclohexyl]-1-(*p*-fluorophenyl)-4-oxo-1,3,8-triazaspiro[4.5]decane-3-acetamide

Supplement to WHO Chronicle Vol. 40, No. 6, 1986

Recommended International Nonproprietary Names (Rec. INN): List 26

p. 2	bropiriminum bropirimine	*replace the chemical name by the following:* 2-amino-5-bromo-6-phenyl-4(3*H*)-pyrimidinone

WHO Drug Information, Vol. 1, No. 4, 1987

Recommended International Nonproprietary Names (Rec. INN): List 27

p. 5	fosinoprilum fosinopril	*replace the chemical name by the following:* (4*S*)-4-cyclohexyl-1-[[(*R*)-[(*S*)-1-hydroxy-2-methylpropoxy](4-phenylbutyl)= phosphinyl]acetyl]-L-proline propionate (ester)

WHO Drug Information, Vol. 5, No. 3, 1991

Recommended International Nonproprietary Names (Rec. INN): List 31

p. 7	leuciglumerum leuciglumer	*replace the molecular formula by the following:* $(C_6H_{13}NO_2 \cdot C_6H_{11}NO_4)_n$

WHO Drug Information, Vol. 6, No. 3, 1992

Recommended International Nonproprietary Names (Rec. INN): List 32

p. 3	dexfosfoserinum dexfosfoserine	*replace the chemical name by the following:* (+)-L-serine dihydrogen phosphate (ester)