

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 32

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

<i>Recommended International Nonproprietary Name (Latin, English)</i>	<i>Chemical Name or Description and Molecular Formula</i>
acidum aceneuramicum aceneuramic acid	(–)-5-acetamido-3,5-dideoxy- <i>D</i> -glycero- <i>D</i> -galacto-nonulosonic acid $C_{11}H_{19}NO_9$
adapalenum adapalene	6-[3-(1-adamantyl)-4-methoxyphenyl]-2-naphthoic acid $C_{28}H_{28}O_3$
albifyllinum albifylline	1-(5-hydroxy-5-methylhexyl)-3-methylxanthine $C_{13}H_{20}N_4O_3$
alosestronum alosestron	2,3,4,5-tetrahydro-5-methyl-2-[(5-methylimidazol-4-yl)methyl]-1 <i>H</i> -pyrido[4,3- <i>b</i>]indol-1-one $C_{17}H_{18}N_4O$
amrubicinum amrubicin	(+)-(7 <i>S</i> ,9 <i>S</i>)-9-acetyl-9-amino-7-[(2-deoxy- β - <i>D</i> -erythro-pentopyranosyl)oxy]-7,8,9,10-tetrahydro-6,11-dihydroxy-5,12-naphthacenedione $C_{25}H_{25}NO_9$
amtolmetinum guacilum amtolmetin guacil	<i>N</i> -[(1-methyl-5- <i>p</i> -toluoylpyrrol-2-yl)acetyl]glycine <i>o</i> -methoxyphenyl ester $C_{24}H_{24}N_2O_5$
araprofenum araprofen	(\pm)- <i>p</i> -(<i>o</i> -carboxyanilino)hydratropic acid $C_{16}H_{15}NO_4$
atenololum atenolol	2-[<i>p</i> -[2-hydroxy-3-(isopropylamino)propoxy]phenyl]acetamide $C_{14}H_{22}N_2O_3$

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

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atovaquonum atovaquone	2-[<i>trans</i> -4-(<i>p</i> -chlorophenyl)cyclohexyl]-3-hydroxy-1,4-naphthoquinone $C_{22}H_{19}ClO_5$
batebulastum batebulast	<i>p</i> - <i>tert</i> -butylphenyl <i>trans</i> -4-(guanidinomethyl)cyclohexanecarboxylate $C_{19}H_{29}N_3O_2$
becliconazolum becliconazole	(±)-1-[<i>o</i> -chloro- <i>a</i> -(5-chloro-2-benzofuranyl)benzyl]imidazole $C_{18}H_{12}Cl_2N_2O$
befloxatonum befloxatone	(<i>R</i>)-5-(methoxymethyl)-3-[<i>p</i> -[(<i>R</i>)-4,4,4-trifluoro-3-hydroxybutoxy]phenyl]-2-oxazolidinone $C_{15}H_{16}F_3NO_5$
biciromabum biciromab	mouse T2G1s cell anti-human fibrin II β -chain monoclonal immunoglobulin G Fab' fragment
binospironum binospirone	(±)- <i>N</i> -[2-[(1,4-benzodioxan-2-ylmethyl)amino]ethyl]-1,1-cyclopentane-diacetamide $C_{20}H_{28}N_2O_4$
brimonidinum brimonidine	5-bromo-6-(2-imidazolidinylidenamino)quinoxaline $C_{11}H_{10}BrN_5$
calcii levofolinas calcium levofolinate	calcium <i>N</i> -[<i>p</i> -{[(6 <i>S</i>)-2-amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl]methyl]amino]benzoyl]-L-glutamate (1:1) $C_{20}H_{21}CaN_7O_7$
calteridolum calteridol	hydrogen [(±)-10-(2-hydroxypropyl)-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato(3-)]calcate(1-) $C_{17}H_{30}CaN_4O_7$
casokefamidum casokefamide	L-tyrosyl-D-alanyl-L-phenylalanyl-D-alanyl-L-tyrosinamide $C_{33}H_{40}N_6O_7$
cebaracetamum cebaracetam	(±)-4-[4-(<i>p</i> -chlorophenyl)-2-oxo-1-pyrroliidinyl]acetyl]-2-piperazinone $C_{16}H_{18}ClN_5O_3$
cefditorenium cefditoren	(+)-(6 <i>R</i> ,7 <i>R</i>)-7-[2-(2-amino-4-thiazolyl)glyoxylamido]-3-[(<i>Z</i>)-2-(4-methyl-5-thiazolyl)vinyl]-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7 ² -(<i>Z</i>)-(O-methyloxime) $C_{19}H_{18}N_6O_5S_3$
cefzopranum cefzopran	(-)-1-[[[(6 <i>R</i> ,7 <i>R</i>)-7-[2-(5-amino-1,2,4-thiadiazol-3-yl)glyoxylamido]-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-1 <i>H</i> -imidazo[1,2- <i>b</i>]pyridazin-4-ium hydroxide inner salt, 7 ² -(<i>Z</i>)-(O-methyloxime) $C_{19}H_{17}N_9O_5S_2$

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celmoleukinum celmoleukin	interleukin 2 (human clone pTIL2-21a, protein moiety) $C_{693}H_{1118}N_{174}O_{203}S_7$
cilnidipinum cilnidipine	(\pm)-(<i>E</i>)-cinnamyl 2-methoxyethyl 1,4-dihydro-2,6-dimethyl-4-(<i>m</i> -nitrophenyl)- 3,5-pyridinedicarboxylate $C_{27}H_{28}N_2O_7$
cioteronelum cioteronel	(\pm)-hexahydro-4-(5-methoxyheptyl)-2(1 <i>H</i>)-pentalenone $C_{16}H_{28}O_2$
dapoxetinum dapoxetine	(+)-(<i>S</i>)- <i>N,N</i> -dimethyl- α -[2-(1-naphthyloxy)ethyl]benzylamine $C_{21}H_{23}NO$
deramciclanum deramciclane	<i>N,N</i> -dimethyl-2-[[[(1 <i>R</i> ,2 <i>S</i> ,4 <i>R</i>)-2-phenyl-2-bornyl]oxy]ethylamine $C_{20}H_{31}NO$
derigidolum derigidole	(+)-1,2,4,5-tetrahydro-2-(2-imidazolin-2-yl)-2-propylpyrrolo[3,2,1- <i>h</i>]indole $C_{16}H_{21}N_3$
dexfosfoserinum dexfosfoserine	L-serine dihydrogen phosphate (ester) $C_3H_8NO_6P$
dexloxiglumidum dexloxiglumide	(<i>R</i>)-4-(3,4-dichlorobenzamido)- <i>N</i> -(3-methoxypropyl)- <i>N</i> -pentylglutaramic acid $C_{21}H_{30}Cl_2N_2O_5$
dexnafenodonum dexnafenodone	(+)-(<i>S</i>)-2-[2-(dimethylamino)ethyl]-3,4-dihydro-2-phenyl-1(2 <i>H</i>)-naphthalenone $C_{20}H_{23}NO$
dexverapamilum dexverapamil	(+)-(<i>R</i>)-5-[(3,4-dimethoxyphenethyl)methylamino]-2-(3,4-dimethoxyphenyl)-2- isopropylvaleronitrile $C_{27}H_{38}N_2O_4$
dolasetronum dolantrone	indole-3-carboxylic acid, ester with (8 <i>r</i>)-hexahydro-8-hydroxy-2,6-methano- 2 <i>H</i> -quinolizin-3(4 <i>H</i>)-one $C_{19}H_{20}N_2O_3$
dorlimomab aritoxum dorlimomab aritox	ricin A chain-antibody ST 1 F(ab') ₂ fragment immunotoxin
efonidipinum efonidipine	2-(<i>N</i> -benzylamino)ethyl (\pm)-1,4-dihydro-2,6-dimethyl-4-(<i>m</i> -nitrophenyl)-5- phosphononcontinate, cyclic 2,2-dimethyltrimethylene ester $C_{34}H_{38}N_3O_7P$
egualenum egualen	3-ethyl-7-isopropyl-1-azulenesulfonic acid $C_{15}H_{18}O_3S$

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eliprodiolum eliprodil	(±)- <i>α</i> -(<i>p</i> -chlorophenyl)-4-(<i>p</i> -fluorobenzyl)-1-piperidineethanol C ₂₀ H ₂₃ ClFNO
eltanolonum eltanolone	3 α -hydroxy-5 β -pregnan-20-one C ₂₁ H ₃₄ O ₂
emakalimum emakalim	(-)-(3 <i>S</i> ,4 <i>R</i>)-3-hydroxy-2,2-dimethyl-4-(2-oxo-1(2 <i>H</i>)-pyridyl)-6-chromancarbonitrile C ₁₇ H ₁₆ N ₂ O ₃
emitefurum emitefur	<i>m</i> -[[3-(ethoxymethyl)-5-fluoro-3,6-dihydro-2,6-dioxo-1(2 <i>H</i>)-pyrimidinyl]-carbonyl]benzoic acid, 2-ester with 2,6-dihydroxynicotinonitrile, benzoate (ester) C ₂₈ H ₁₉ FN ₄ O ₆
entacaponum entacapone	(<i>E</i>)- α -cyano- <i>N,N</i> -diethyl-3,4-dihydroxy-5-nitrocinnamamide C ₁₄ H ₁₅ N ₃ O ₅
ersoferminum ersofermin	<i>N</i> -(<i>N</i> -glycyl-L-threonyl)basic fibroblast growth factor (human clone λ KB7/ λ HFL1 precursor reduced) C ₇₇₅ H ₁₂₂₀ N ₂₂₀ O ₂₂₃ S ₇
espatropatum espatropate	(<i>R</i>)-3-quinuclidinyl (<i>R</i>)- α -(hydroxymethyl)- α -phenylimidazole-1-acetate C ₁₉ H ₂₃ N ₃ O ₃
etonogestrelum etonogestrel	13-ethyl-17-hydroxy-11-methylene-18,19-dinor-17 α -pregn-4-en-20-yn-3-one C ₂₂ H ₂₈ O ₂
exemestanium exemestane	6-methyleneandrost-1,4-diene-3,17-dione C ₂₀ H ₂₄ O ₂
fluazuronum fluazuron	1-[4-chloro-3-[[3-chloro-5-(trifluoromethyl)-2-pyridyl]oxy]phenyl]-3-(2,6-difluorobenzoyl)urea C ₂₀ H ₁₀ Cl ₂ F ₃ N ₃ O ₃
formestanium formestane	4-hydroxyandrost-4-ene-3,17-dione C ₁₉ H ₂₆ O ₃
gadobutrolum gadobutrol	[10-[(1 <i>RS</i> ,2 <i>SR</i>)-2,3-dihydroxy-1-(hydroxymethyl)propyl]-1,4,7,10-tetra = azacyclododecane-1,4,7-triacetato(3-)]gadolinium C ₁₈ H ₃₁ GdN ₄ O ₉
galocitabinum galocitabine	<i>N</i> -[1-(5-deoxy- β -D-ribofuranosyl)-5-fluoro-1,2-dihydro-2-oxo-4-pyrimidinyl]-3,4,5-trimethoxybenzamide C ₁₉ H ₂₂ FN ₃ O ₈
ganirelixum ganirelix	<i>N</i> -acetyl-3-(2-naphthyl)-D-alanyl- <i>p</i> -chloro-D-phenylalanyl-3-(3-pyridyl)-D-alanyl-L-seryl-L-tyrosyl- <i>N</i> ⁶ -(<i>N,N'</i> -diethylamidino)-D-lysyl-L-leucyl- <i>N</i> ⁶ -(<i>N,N'</i> -diethylamidino)-L-lysyl-L-prolyl-D-alaninamide C ₈₀ H ₁₁₃ ClN ₁₈ O ₁₃

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idraprilum idrapril	(1 <i>S</i> ,2 <i>R</i>)-2-[[[(hydroxycarbamoyl)methyl]methyl]carbamoyl]cyclohexane = carboxylic acid C ₁₁ H ₁₈ N ₂ O ₅
ilatreatidum ilatreatide	<i>N</i> -(1-deoxy-4- <i>O</i> - α -D-glucopyranosyl-D-fructopyranos-1-yl)-D-phenylalanyl- L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl- <i>N</i> -[(1 <i>R</i> ,2 <i>R</i>)- 2-hydroxy-1-(hydroxymethyl)propyl]-L-cysteinamide cyclic (2 \rightarrow 7)-disulfide C ₆₁ H ₈₆ N ₁₀ O ₂₀ S ₂
imciromabum imciromab	mouse R11D10 cell monoclonal α -chain containing immunoglobulin G2a, anti-human cardiac myosin heavy chain
imiquimodum imiquimod	4-amino-1-isobutyl-1 <i>H</i> -imidazo[4,5- <i>c</i>]quinoline C ₁₄ H ₁₆ N ₄
iomazenilum (¹²³ I) iomazenil (¹²³ I)	ethyl 5,6-dihydro-7-iodo- ¹²³ I-5-methyl-6-oxo-4 <i>H</i> -imidazo[1,5- <i>a</i>][1,4]benzo = diazepine-3-carboxylate C ₁₅ H ₁₄ ¹²³ IN ₃ O ₃
isomolpanum isomolpan	(\pm)- <i>trans</i> -1,3,4,4a,5,10b-hexahydro-4-propyl-2 <i>H</i> -[1]benzopyrano = [3,4- <i>b</i>]pyridin-9-ol C ₁₅ H ₂₁ NO ₂
itopridum itopride	<i>N</i> -[<i>p</i> -(2-(dimethylamino)ethoxy)benzyl]veratramide C ₂₀ H ₂₆ N ₂ O ₄
ketaminum ketamine	2-(<i>o</i> -chlorophenyl)-2-(methylamino)cyclohexanone C ₁₃ H ₁₈ ClNO
lamivudinum lamivudine	(-)-1-[(2 <i>R</i> ,5 <i>S</i>)-2-(hydroxymethyl)-1,3-oxathiolan-5-yl]cytosine C ₈ H ₁₁ N ₃ O ₃ S
lanoconazolum lanoconazole	(\pm)- <i>a</i> -[(<i>E</i>)-4-(<i>o</i> -chlorophenyl)-1,3-dithiolan-2-ylidene]imidazole-1-acetonitrile C ₁₄ H ₁₀ ClN ₃ S ₂
lazabemidum lazabemide	<i>N</i> -(2-aminoethyl)-5-chloropicolinamide C ₈ H ₁₀ ClN ₃ O
lesopitronum lesopitron	2-[4-[4-(4-chloropyrazol-1-yl)butyl]-1-piperazinyl]pyrimidine C ₁₅ H ₂₁ ClN ₆
levcromakalimum levcromakalim	(3 <i>S</i> ,4 <i>R</i>)-3-hydroxy-2,2-dimethyl-4-(2-oxo-1-pyrrolidinyl)-6-chromancarbonitrile C ₁₆ H ₁₈ N ₂ O ₃
levcycloserinum levcycloserine	(<i>S</i>)-4-amino-3-isoxazolidinone C ₃ H ₆ N ₂ O ₂
levdobutaminum levdobutamine	4-[2-[[(<i>S</i>)-3-(<i>p</i> -hydroxyphenyl)-1-methylpropyl]amino]ethyl]pyrocatechol C ₁₈ H ₂₃ NO ₃

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lexithromycinum lexithromycin	erythromycin 9-(<i>O</i> -methyloxime) $C_{34}H_{70}N_2O_{13}$
lifarizinum lifarizine	1-(diphenylmethyl)-4-[(5-methyl-2- <i>p</i> -tolylimidazol-4-yl)methyl]piperazine $C_{29}H_{32}N_4$
linarotenum linarotene	5',6',7',8'-tetrahydro-5',5',8',8'-tetramethyl-2'-acetophenone (<i>E</i>)-[<i>p</i> -(methylsulfonyl)phenyl]hydrazone $C_{23}H_{30}N_2O_2S$
lintopridum lintopride	4-amino-5-chloro- <i>N</i> -[(1-ethyl-2-imidazolin-2-yl)methyl]- <i>o</i> -anisamide $C_{14}H_{19}ClN_4O_2$
lobaplatinum lobaplatin	<i>cis</i> -[<i>trans</i> -1,2-cyclobutanebis(methylamine)][(<i>S</i>)-lactato- <i>O</i> ¹ , <i>O</i> ¹]platinum $C_9H_{18}N_2O_3Pt$
losartanum losartan	2-butyl-4-chloro-1-[<i>p</i> -(<i>o</i> -1- <i>H</i> -tetrazol-5-yl)phenyl]benzyl]imidazole-5-methanol $C_{22}H_{23}ClN_6O$
lufenuronum lufenuron	1-[2,5-dichloro-4-(1,1,2,3,3,3-hexafluoropropoxy)phenyl]-3-(2,6-difluorobenzoyl)urea $C_{17}H_8Cl_2F_6N_2O_3$
marbofloxacinum marbofloxacin	9-fluoro-2,3-dihydro-3-methyl-10-(4-methyl-1-piperazinyl)-7-oxo-7- <i>H</i> -pyrido[3,2,1- <i>ij</i>][4,1,2]benzoxadiazine-6-carboxylic acid $C_{17}H_{18}FN_4O_4$
maslimomabum maslimomab	mouse monoclonal immunoglobulin G2b, anti-human T-cell receptor α/β chain
mecaserminum mecasermin	insulin-like growth factor I (human) $C_{331}H_{512}N_{94}O_{101}S_7$
miboplatinum miboplatin	(-)- <i>cis</i> -[(<i>R</i>)-2-(aminomethyl)pyrrolidine](1,1-cyclobutanedicarboxylato)=platinum $C_{11}H_{16}N_2O_4Pt$
mirimostimum mirimostim	1-214-colony-stimulating factor 1 (human clone p3ACSF-69 protein moiety reduced), homodimer $C_{1058}H_{1651}N_{277}O_{341}S_{14}$ (for non-glycosylated protein)
modipafantum modipafant	ethyl (+)-(<i>R</i>)-4-(<i>o</i> -chlorophenyl)-1,4-dihydro-6-methyl-2-[<i>p</i> -(2-methyl-1- <i>H</i> -imidazo[4,5- <i>c</i>]pyridin-1-yl)phenyl]-5-(2-pyridylcarbamoyl)nicotinate $C_{34}H_{29}ClN_6O_3$
mosapridum mosapride	(±)-4-amino-5-chloro-2-ethoxy- <i>N</i> -[[4-(<i>p</i> -fluorobenzyl)-2-morpholinyl]=methyl]benzamide $C_{21}H_{25}ClFN_3O_3$

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nafamostat nafamostat	6-amidino-2-naphthyl <i>p</i> -guanidinobenzoate or <i>p</i> -guanidinobenzoic acid, ester with 6-hydroxy-2-naphthamidine $C_{19}H_{17}N_5O_2$
naglivanum naglivan	bis[2-amino-3-mercapto- <i>N</i> -octylpropionamidato(1-)- <i>S</i>]oxovanadium $C_{22}H_{48}N_4O_3S_2V$
nartograstimum nartograstim	<i>N</i> -L-methionyl-1-L-alanine-3-L-threonine-4-L-tyrosine-5-L-arginine-17-L-serine = colony-stimulating factor (human clone 1034) $C_{850}H_{1344}N_{228}O_{245}S_8$ (for non-glycosylated protein)
nebacumabum nebacumab	immunoglobulin M (human monoclonal HA-1A anti-endotoxin), disulfide with human monoclonal HA-1A α -chain, pentameric dimer
neecopidemum neecopidem	<i>N</i> -[2-(<i>p</i> -ethylphenyl)-6-methylimidazo[1,2- <i>a</i>]pyridin-3-yl]methyl]- <i>N</i> ,3-dimethylbutyramide $C_{23}H_{29}N_3O$
nefiracetamum nefiracetam	2-oxo-1-pyrrolidineaceto-2',6'-xylidide $C_{14}H_{18}N_2O_2$
nevirapinum nevirapine	11-cyclopropyl-5,11-dihydro-4-methyl-6 <i>H</i> -dipyrido[3,2- <i>b</i> :2',3'- <i>e</i>][1,4]diazepin-6-one $C_{15}H_{14}N_4O$
orlistatum orlistat	<i>N</i> -formyl-L-leucine, ester with (3 <i>S</i> ,4 <i>S</i>)-3-hexyl-4-[(2 <i>S</i>)-2-hydroxytridecyl]-2-oxetanone $C_{29}H_{53}NO_5$
panadiplonum panadiplon	3-(5-cyclopropyl-1,2,4-oxadiazol-3-yl)-5-isopropylimidazo[1,5- <i>a</i>]quinoxalin-4(5 <i>H</i>)-one $C_{18}H_{17}N_5O_2$
parcetasalum parcetasal	(\pm)-4'-[(2-methyl-4-oxo-1,3-benzodioxan-2-yl)oxy]acetanilide $C_{17}H_{15}NO_5$
pentetreotidum pentetreotide	<i>N</i> -[2-[[2-[bis(carboxymethyl)amino]ethyl](carboxymethyl)amino]ethyl]- <i>N</i> -(carboxymethyl)glycyl-D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl- <i>N</i> -[(1 <i>R</i> ,2 <i>R</i>)-2-hydroxy-1-(hydroxymethyl)propyl]-L-cysteinamide cyclic (3→8)-disulfide $C_{53}H_{67}N_{13}O_{19}S_2$
perflubronum perflubron	1-bromoheptadecafluorooctane C_8BrF_{17}
perfosfamidum perfosfamide	(\pm)- <i>cis</i> -2-[bis(2-chloroethyl)amino]tetrahydro-2 <i>H</i> -1,3,2-oxazaphosphorin-4-yl hydroperoxide, <i>P</i> -oxide $C_7H_{13}Cl_2N_2O_4P$

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pirisidominum pirisidomine	<i>N</i> - <i>p</i> -anisoyl-3-(<i>cis</i> -2,6-dimethylpiperidino)sydnone imine $C_{17}H_{22}N_4O_3$
pivagabinum pivagabine	4-pivalamidobutyric acid $C_9H_{17}NO_3$
piomestanium piomestane	10-(2-propynyl)estr-4-ene-3,17-dione $C_{21}H_{26}O_2$
polaprezincum polaprezinc	<i>catena</i> -poly[zinc- μ -[β -alanyl-L-histidinato(2-)- <i>N,N'</i> , <i>O:N'</i>]] $(C_9H_{12}N_4O_3Zn)_n$
polifeprosanum polifeprosan	4,4'-(trimethylenedioxy)dibenzoic acid, polymer with sebacic acid "m" and "n" are the numerical values representing the mass percentages of the monomers. The value of "m" should be given as a figure after the INN, e.g. "polifeprosan 20", which means "m = 20" and "n = 80" $(C_{17}H_{16}O_6)_m \cdot (C_{10}H_{18}O_4)_n$
poliglecaponum poliglecaprone	2-oxepanone polymer with <i>p</i> -dioxane-2,5-dione "m" and "n" are the numerical values representing the mol percentages of the monomers. The value of "m" should be given as a figure after the INN, e.g. "poliglecaprone 90", which means "m = 90" and "n = 10". $(C_8H_{10}O_2)_m (C_4H_4O_4)_n$
poliglusamum poliglusam	chitosan
pranidipinum pranidipine	(<i>E</i>)-cinnamyl methyl (\pm)-1,4-dihydro-2,6-dimethyl-4-(<i>m</i> -nitrophenyl)-3,5-pyridinedicarboxylate $C_{25}H_{24}N_2O_6$
racephedrinum racephedrine	(\pm)-ephedrine $C_{10}H_{15}NO$
remikirenum remikiren	(αS)- α -[(αS)- α -[(<i>tert</i> -butylsulfonyl)methyl]hydrocinnamamido]- <i>N</i> -[(1 <i>S</i> ,2 <i>R</i> ,3 <i>S</i>)-1-(cyclohexylmethyl)-3-cyclopropyl-2,3-dihydroxypropyl]imidazole-4-propionamide $C_{33}H_{50}N_4O_6S$
remiprostolum remiprostol	(\pm)-methyl (<i>Z</i>)-7-[(1 <i>R</i> ,2 <i>R</i> ,3 <i>R</i>)-2-[(1 <i>E</i> ,5 <i>E</i>)-(4 <i>RS</i>)-6-(1-cyclopenten-1-yl)-4-hydroxy-4-methyl-1,5-hexadienyl]-3-hydroxy-5-oxocyclopentyl]-4-heptenoate $C_{25}H_{36}O_5$
repaglinidum repaglinide	(+)-2-ethoxy- α -[(<i>S</i>)- α -isobutyl- <i>o</i> -piperidinobenzyl]carbamoyl]- <i>p</i> -toluic acid $C_{27}H_{36}N_2O_4$
rilmakalimum rilmakalim	(+)-1-[(3 <i>S</i> ,4 <i>R</i>)-3-hydroxy-2,2-dimethyl-6-(phenylsulfonyl)-4-chromanyl]-2-pyrrolidinone $C_{21}H_{23}NO_5S$

*Recommended International
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Chemical Name or Description and Molecular Formula

rocuronii bromidum rocuronium bromide	1-allyl-1-(3 α ,17 β -dihydroxy-2 β -morpholino-5 α -androstan-16 β -yl)pyrrolidinium bromide, 17-acetate $C_{32}H_{53}BrN_2O_4$
rogletimidum rogletimide	(\pm)-2-ethyl-2-(4-pyridyl)glutarimide $C_{12}H_{14}N_2O_2$
rolafagrelum rolafagrel	5,6-dihydro-7-imidazol-1-yl-2-naphthoic acid $C_{14}H_{12}N_2O_2$
romergolinum romergoline	4-[(9,10-didehydro-6-methylergolin-8 β -yl)methyl]-2,6-piperazinedione $C_{20}H_{22}N_4O_2$
sargamostimum sargamostim	23-L-leucinecolony-stimulating factor 2 (human clone pHG25 protein moiety) $C_{839}H_{1002}N_{168}O_{196}S_8$ (for non-glycosylated protein)
seproxetinum seproxetine	(S)-3-phenyl-3-[(α,α,α -trifluoro- <i>p</i> -tolyl)oxy]propylamine $C_{16}H_{16}F_3NO$
sevirumabum sevirumab	human monoclonal immunoglobulin G1, κ -chain, anti-cytomegavirus
sifaprazinum sifaprazine	1-methyl-4-(α -phenyl- <i>o</i> -tolyl)piperazine $C_{18}H_{22}N_2$
silteplasmum silteplase	<i>N</i> -[<i>N</i> -(<i>N</i> -glycyl-L-alanyl)-L-arginyl]plasminogen activator (human tissue-type protein moiety reduced), glycoform $C_{2580}H_{3948}N_{752}O_{784}S_{40}$ (for non-glycosylated protein)
simendanum simendan	mesoxalonitrile (\pm)-[<i>p</i> -(1,4,5,6-tetrahydro-4-methyl-6-oxo-3- pyridazinyl)phenyl]hydrazone $C_{14}H_{12}N_6O$
somfaseporum somfasepor	8-190 growth hormone (pig) $C_{938}H_{1465}N_{257}O_{278}S_6$
tacalcitolum tacalcitol	(+)-(5 <i>Z</i> ,7 <i>E</i> ,24 <i>R</i>)-9,10-secocholesta-5,7,10(19)-triene-1 α ,3 β ,24-triol $C_{27}H_{44}O_3$
tacrolimusum tacrolimus	(-)-(3 <i>S</i> ,4 <i>R</i> ,5 <i>S</i> ,8 <i>R</i> ,9 <i>E</i> ,12 <i>S</i> ,14 <i>S</i> ,15 <i>R</i> ,16 <i>S</i> ,18 <i>R</i> ,19 <i>R</i> ,26 <i>aS</i>)-8-allyl- 5,6,8,11,12,13,14,15,16,17,18,19,24,25,26,26 <i>a</i> -hexadecahydro-5,19-dihydroxy-3- [(<i>E</i>)-2-[(1 <i>R</i> ,3 <i>R</i> ,4 <i>R</i>)-4-hydroxy-3-methoxycyclohexyl]-1-methylvinyl]-14,16- dimethoxy-4,10,12,18-tetramethyl-15,19-epoxy-3 <i>H</i> -pyrido[2,1- <i>c</i>][1,4]oxa = azacyclotricosine-1,7,20,21(4 <i>H</i> ,23 <i>H</i>)-tetrone $C_{44}H_{69}NO_{12}$
tamolarizinium tamolarizine	(\pm)- α -(3,4-dimethoxyphenyl)-4-(diphenylmethyl)-1-piperazineethanol $C_{27}H_{32}N_2O_3$

telimomabum aritoxum telimomab aritox	ricin A chain-antibody T 101 Fab fragment immunotoxin
terdecamycinum terdecamycin	4-methyl-1-piperazinecarboxylic acid, 7-ester with (–)-N-[1S,2R,3E,5E,7S,9E,11E,13S,15R,19R]-7,13-dihydroxy-1,4,10,19-tetramethyl-17,18-dioxo-16-oxabicyclo[13.2.2]nonadeca-3,5,9,11-tetraen-2-yl]pyruvamide or (–)-N-[(1S,2R,3E,5E,7S,9E,11E,13S,15R,19R)-7,13-dihydroxy-1,4,10,19-tetramethyl-17,18-dioxo-16-oxabicyclo[13.2.2]nonadeca-3,5,9,11-tetraen-2-yl]pyruvamide 7-(4-methyl-1-piperazinecarboxylate) C ₃₁ H ₄₃ N ₃ O ₈
terlakirenum terlakiren	isopropyl (αR,βS)-α-hydroxy-β-[(R)-3-(methylthio)-2-[(S)-α-4-morpholinecarboxamidohydrocinnamamido]propionamido]=cyclohexanebutyrate C ₃₁ H ₄₆ N ₄ O ₇ S
tetrofosminum tetrofosmin	ethylenebis[bis(2-ethoxyethyl)phosphine] C ₁₈ H ₄₀ O ₄ P ₂
tinzaparinum natricum tinzaparin sodium	Sodium salt of depolymerized heparin obtained by heparinase from <i>Flavobacterium heparinum</i> (heparin lyase: EC 4.2.2.7) degradation of heparin from pork intestinal mucosa; the majority of the components have a 2-O-sulfo-4-enepyranosuronic acid structure at the non-reducing end and a 2-N,6-O-disulfo-α-glucosamine structure at the reducing end of their chain; the relative molecular mass is 4500 ± 1500, 70 per cent of which ranging between 1500 and 10 000, the degree of sulfation is 2 to 2.5 per disaccharidic unit.
tolcaponum tolcapone	3,4-dihydroxy-4'-methyl-5-nitrobenzophenone C ₁₄ H ₁₁ NO ₅
tolterodinum tolterodine	(+)-(R)-2-[α-[2-(diisopropylamino)ethyl]benzyl]-p-cresol C ₂₂ H ₃₁ NO
tretinoinum tocoferilum tretinoin tocoferil	(±)-(2R*)-2,5,7,8-tetramethyl-2-[(4R*,8R*)-4,8,12-trimethyltridecyl]-6-chromanyl retinoate C ₄₉ H ₇₆ O ₃
trimegestonum trimegestone	17β-(S)-lactoyl-17-methylestra-4,9-dien-3-one C ₂₂ H ₃₀ O ₃
tucaresolium tucaresol	α-(2-formyl-3-hydroxyphenoxy)-p-toluic acid C ₁₅ H ₁₂ O ₅
tuvirumabum tuvirumab	human monoclonal immunoglobulin G1. λ-chain, anti-hepatitis B virus surface antigen
unoprostonum unoprostone	(+)-(Z)-7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-5-heptenoic acid C ₂₂ H ₃₄ O ₅
utibaprilatum utibaprilat	(S)-2-tert-butyl-4-[(S)-N-[(S)-1-carboxy-3-phenylpropyl]alanyl-Δ ² -1,3,4-thiadiazoline-5-carboxylic acid C ₂₀ H ₂₇ N ₃ O ₅ S

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Chemical Name or Description and Molecular Formula

velaresolum velaresol	5-(2-formyl-3-hydroxyphenoxy)valeric acid $C_{12}H_{14}O_5$
verlukastum verlukast	3-[[(αR) - m -[(E)-2-(7-chloro-2-quinolyl)vinyl]- α -[[2-(dimethylcarbamoyl)ethyl]thio]benzyl]thio]propionic acid $C_{26}H_{27}ClN_2O_3S_2$
voglibosum voglibose	3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2- C -(hydroxymethyl)- D -epi-inositol $C_{10}H_{21}NO_7$
zalcitabinum zalcitabine	2',3'-dideoxycytidine $C_9H_{13}N_3O_3$
zaldaridum zaldaride	(\pm)-1-[1-[(4-methyl-4 H ,6 H -pyrrolo[1,2- a][4,1]benzoxazepin-4-yl)methyl]-4-piperidyl]-2-benzimidazolinone $C_{26}H_{28}N_4O_2$
zoniclezolum zoniclezole	5-chloro-3-(1-imidazol-1-ylethyl)-1,2-benzisoxazole $C_{12}H_{10}ClN_3O$

AMENDMENTS TO PREVIOUS LISTS

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Recommended International Nonproprietary Names (Rec. INN): List 21

p. 5	felodipinum felodipine	replace the chemical name by the following: (\pm)-ethyl methyl 4-(2,3-dichlorophenyl)-1,4-dihydro-2,6-dimethyl-3,5-pyridinedicarboxylate
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Recommended International Nonproprietary Names (Rec. INN): List 25

p. 7	glimepiridum glimepiride	replace the chemical name by the following: 1-[[p -[2-(3-ethyl-4-methyl-2-oxo-3-pyrroline-1-carboxamido) = ethyl]phenyl]sulfonyl]-3-(<i>trans</i> -4-methylcyclohexyl)urea
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Recommended International Nonproprietary Names (Rec. INN): List 26

p. 10	teceleukinum teceleukin	replace the chemical name and the molecular formula N-L-methionylinterleukin 2 (human) $C_{699}H_{1127}N_{179}O_{204}S_8$
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Recommended International Nonproprietary Names (Rec. INN): List 27

p. 6	limaprostum limaprost	replace the chemical name by the following: (E)-7-[(1R,2R,3R)-3-hydroxy-2-[(E)-(3S,5S)-3-hydroxyoxocyclopentyl]-2-heptenoic acid
p. 8	ramoplaninum ramoplanin	replace the description and the molecular formula glycopeptide antibiotic produced by <i>actinoplanes</i> : Ramoplanin is a complex antibiotic consisting of a designated as ramoplanin A ₂ and a small amount ramoplanin A ₁ and A ₃ . $C_{1112-120}H_{1442-156}ClN_{21}O_{35-40}$

Recommended International Nonproprietary Names (Rec. INN): List 29

p. 14	niguldipinum niguldipine	replace the chemical name by the following: (-)-(S)-3-(4,4-diphenylpiperidino)propyl methyl 1,4-(m-nitrophenyl)-3,5-pyridinedicarboxylate
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Recommended International Nonproprietary Names (Rec. INN): List 31

p. 4	cilobradinum cilobradine	replace the chemical name by the following: (+)-(S)-3-[[1-(3,4-dimethoxyphenethyl)-3-piperidyl]dimethoxy-2H-3-benzazepin-2-one
p. 4	dalfopristinum dalfopristin	replace the chemical name by the following: (3R,4R,5E,10E,12E,14S,26R,26aS)-26-[[2-(diethylamino)-8,9,14,15,24,25,26a-octahydro-14-hydroxy-3-isopropyl-21,18-nitrilo-1H,22H-pyrrolo[2,1c][1,8,4,19]dioxadiazole-1,7,16,22(4H,17H)-tetrone
p. 6	fantofaronum fantofarone	replace the molecular formula by the following: $C_{31}H_{38}N_2O_5S$
p. 14	terikalantum terikalant	replace the chemical name by the following: (-)-(S)-1-[2-(4-chromanyl)ethyl]-4-(3,4-dimethoxyphenyl)-3,5-pyridinedicarboxylate