

# International Nonproprietary Names for Pharmaceutical Substances

In accordance with paragraph 7 of the Procedure for the Selection of Recommended International Nonproprietary Names for Pharmaceutical Substances,<sup>1</sup> no-

tice is hereby given that the following 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 for the use of the substance in medicine or pharmacy.

## Recommended International Nonproprietary Names (Rec. INN): List 15<sup>2</sup>

<i>Recommended International Nonproprietary Name (Latin, English)</i>	<i>Chemical Name or Description and Molecular Formula</i>
acemetacinum acemetacin	1-( <i>p</i> -chlorobenzoyl)-5-methoxy-2-methylindole-3-acetic acid ester with glycolic acid $C_{21}H_{16}ClNO_6$
acesulfamum acesulfame	6-methyl-1,2,3-oxathiazin-4(3 <i>H</i> )-one 2,2-dioxide $C_4H_6NO_4S$
acidum etodolicum etodolic acid	1,8-diethyl-1,3,4,9-tetrahydropyrano[3,4- <i>b</i> ]indole-1-acetic acid $C_{17}H_{21}NO_3$
acidum loglicicum loglicic acid	5-acetamido-2,4,6-triiodo- <i>N</i> -[(methylcarbamoyl)methyl]isophthalamide acid $C_{13}H_{12}I_3N_3O_5$
acidum iosericum ioseric acid	<i>N</i> -[2-hydroxy-1-(methylcarbamoyl)ethyl]-2,4,6-triiodo-5-(2-methoxyacetamido)isophthalamide acid $C_{15}H_{16}I_3N_3O_7$
acidum iosumeticum iosumetic acid	<i>N</i> -ethyl-2',4',6'-triiodo-3'-(methylamino)succinanilic acid $C_{13}H_{15}I_3N_2O_3$
acidum iotroxicum iotroxic acid	3,3'-[oxybis(ethyleneoxymethylenecarbonylimino)]bis[2,4,6-triiodobenzoic acid] $C_{22}H_{18}I_6N_2O_9$
acidum ioxotrizoicum ioxotrizoic acid	3-acetamido-5-glycolamido-2,4,6-triiodobenzoic acid $C_{11}H_9I_3N_2O_5$
acidum pipemidicum pipemidic acid	8-ethyl-5,8-dihydro-5-oxo-2-(1-piperazinyl)pyrido[2,3- <i>d'</i> ]pyrimidine-6-carboxylic acid $C_{14}H_{17}N_5O_3$
acidum xanoxicum xanoxic acid	7-isopropoxy-9-oxoxanthene-2-carboxylic acid $C_{17}H_{14}O_5$
acipimoxum acipimox	5-methylpyrazinecarboxylic acid 4-oxide $C_6H_6N_2O_3$

<sup>1</sup> *Off. Rec. Wild Hlth Org.*, 1955, 60, 3 (Resolution EB15.R7); 1969, 173, 10 (Resolution EB43.R9).

<sup>2</sup> Other lists of recommended international

nonproprietary names can be found in *Chron. Wild Hlth Org.*, 1955, 9, 185; *WHO Chronicle* 1959, 13, 106, 463; 1962, 16, 101; 1965, 19, 165, 206, 249; 1966, 20, 421, 1967, 21, 538; 1968,

22, 463, 1969, 23, 490; 1970, 24, 526; 1971, 25, 476; 1972, 26, 476; 1973, 27, 453; Supplement to *WHO Chronicle*, 1974, Vol. 28, No. 10.

actodiginum actodigin	3 $\beta$ -( $\beta$ -D-glucopyranosyloxy)-14,23-dihydroxy-24-nor-5 $\beta$ ,14 $\beta$ -chol-20(22)-en-21-oic acid $\gamma$ -lactone C <sub>29</sub> H <sub>44</sub> O <sub>9</sub>
ambroxolum ambroxol	<i>trans</i> -4-[(2-amino-3,5-dibromobenzyl)amino]cyclohexanol C <sub>13</sub> H <sub>18</sub> Br <sub>2</sub> N <sub>2</sub> O
amcinonidum amcinonide	9-fluoro-11 $\beta$ ,16 $\alpha$ ,17,21-tetrahydroxypregna-1,4-diene-3,20-dione cyclic 16,17-acetal with cyclopentanone, 21-acetate C <sub>28</sub> H <sub>35</sub> FO <sub>7</sub>
azanatorum azanator	5-(1-methyl-4-piperidylidene)-5 <i>H</i> -[1]benzopyrano[2,3- <i>b</i> ]pyridine C <sub>18</sub> H <sub>16</sub> N <sub>2</sub> O
azoliminum azolimine	2-imino-3-methyl-1-phenyl-4-imidazolidinone C <sub>10</sub> H <sub>11</sub> N <sub>3</sub> O
bacampicillinum bacampicillin	(2 <i>S</i> ,5 <i>R</i> ,6 <i>R</i> )-6-[( <i>R</i> )-(2-amino-2-phenylacetamido)]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid ester with ethyl 1-hydroxyethyl carbonate C <sub>21</sub> H <sub>27</sub> N <sub>3</sub> O <sub>7</sub> S
bentazepamum bentazepam	1,3,6,7,8,9-hexahydro-5-phenyl-2 <i>H</i> -[1]benzothieno[2,3- <i>e</i> ]-1,4-diazepin-2-one C <sub>17</sub> H <sub>16</sub> N <sub>2</sub> OS
bifluranolum bifluranol	<i>erythro</i> -4,4'-(1-ethyl-2-methylethylene)bis[2-fluorophenol] C <sub>17</sub> H <sub>18</sub> F <sub>2</sub> O <sub>2</sub>
bisfenazonum bisfenazone	3-[[[(2,3-dimethyl-5-oxo-1-phenyl-3-pyrazolin-4-yl)amino]methyl]-4-isopropyl-2-methyl-1-phenyl-3-pyrazolin-5-one C <sub>25</sub> H <sub>29</sub> N <sub>5</sub> O <sub>2</sub>
botiacrinum botiacrine	<i>S</i> -[2-(dimethylamino)ethyl] 9,9-dimethyl-10-acridancarbothioate C <sub>20</sub> H <sub>24</sub> N <sub>2</sub> OS
brindoximum brindoxime	2-[[[(6,8-dibromo-9 <i>H</i> -indeno[2,1- <i>d'</i> ]pyrimidin-9-ylidene)amino]oxy]- <i>N</i> [2-(dimethylamino)ethyl]propionamide C <sub>18</sub> H <sub>19</sub> Br <sub>2</sub> N <sub>5</sub> O <sub>2</sub>
bromperidolum bromperidol	4-[4-( <i>p</i> -bromophenyl)-4-hydroxypiperidino]-4'-fluorobutyrophenone C <sub>21</sub> H <sub>23</sub> BrFO <sub>2</sub>
budralazinum budralazine	4-methyl-3-penten-2-one (1-phthalazinyl)hydrazone C <sub>14</sub> H <sub>16</sub> N <sub>4</sub>
buflomedilum buflomedil	2',4',6'-trimethoxy-4-(1-pyrrolidinyl)butyrophenone C <sub>17</sub> H <sub>25</sub> NO <sub>4</sub>
butanixinum butanixin	2-( <i>p</i> -butylanilino)nicotinic acid C <sub>16</sub> H <sub>18</sub> N <sub>2</sub> O <sub>2</sub>
butibufenum butibufen	2-( <i>p</i> -isobutylphenyl)butyric acid C <sub>14</sub> H <sub>20</sub> O <sub>2</sub>
carboquonum carboquone	2,5-bis(1-aziridinyl)-3-(2-hydroxy-1-methoxyethyl)-6-methyl- <i>p</i> -benzoquinone carbamate (ester) C <sub>15</sub> H <sub>19</sub> N <sub>3</sub> O <sub>5</sub>
cartazolatum cartazolate	ethyl 4-(butylamino)-1-ethyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate C <sub>15</sub> H <sub>22</sub> N <sub>4</sub> O <sub>2</sub>
ciclafrinum ciclafrine	<i>m</i> -1-oxa-4-azaspiro[4,6]undec-2-ylphenol C <sub>15</sub> H <sub>21</sub> NO <sub>2</sub>
ciclonicatum ciclonicate	<i>trans</i> -3,3,5-trimethylcyclohexyl nicotinate C <sub>15</sub> H <sub>21</sub> NO <sub>2</sub>
cicloprofenum cicloprofen	$\alpha$ -methylfluorene-2-acetic acid C <sub>16</sub> H <sub>14</sub> O <sub>2</sub>

cicloxololum cicloxolone	3 $\beta$ -hydroxy-11-oxoolean-12-en-30-oic acid hydrogen <i>cis</i> -1,2-cyclohexanedi-carboxylate C <sub>38</sub> H <sub>56</sub> O <sub>7</sub>
cimetidinum cimetidine	1-cyano-2-methyl-3-[2-[[5-methylimidazol-4-yl)methyl]thio]ethyl)-guanidine C <sub>10</sub> H <sub>16</sub> N <sub>6</sub> S
cinoxacinum cinoxacin	1-ethyl-1,4-dihydro-4-oxo[1,3]dioxolo[4,5- <i>g</i> ]cinnoline-3-carboxylic acid C <sub>12</sub> H <sub>10</sub> N <sub>2</sub> O <sub>5</sub>
cinoxololum cinoxolone	cinnamyl 3 $\beta$ -hydroxy-11-oxoolean-12-en-30-oate acetate C <sub>41</sub> H <sub>56</sub> O <sub>5</sub>
clazolimimum clazolimine	1-( <i>p</i> -chlorophenyl)-2-imino-3-methyl-4-imidazolidinone C <sub>10</sub> H <sub>10</sub> ClN <sub>3</sub> O
clebopridum clebopride	4-amino- <i>N</i> -(1-benzyl-4-piperidyl)-5-chloro- <i>o</i> -anisamide C <sub>20</sub> H <sub>24</sub> ClN <sub>3</sub> O <sub>2</sub>
climiqualinum climiqualine	3-chloro-1-imidazol-1-yl-4-phenylisoquinoline C <sub>18</sub> H <sub>12</sub> ClN <sub>3</sub>
cliprofenum cliprofen	3-chloro-4-(2-thenoyl)hydratropic acid C <sub>14</sub> H <sub>11</sub> ClO <sub>3</sub> S
clopimozidum clopimozide	1-[1-[4,4-bis( <i>p</i> -fluorophenyl)butyl]-4-piperidyl]-5-chloro-2-benzimidazo-linone C <sub>28</sub> H <sub>28</sub> ClF <sub>2</sub> N <sub>3</sub> O
cloprostenolum cloprostenol	( $\pm$ )-(Z)-7-[(1 <i>R</i> *,2 <i>R</i> *,3 <i>R</i> *,5 <i>S</i> *)-2-[( <i>E</i> )-(3 <i>R</i> *)-4-( <i>m</i> -chlorophenoxy)-3-hydroxy-1-butanyl]-3,5-dihydroxycyclopentyl]-5-heptenoic acid C <sub>22</sub> H <sub>29</sub> ClO <sub>6</sub>
colimecycinum colimecycine	reaction product of one molecule of colistin with three molecules of oxytetra-cycline in presence of formaldehyde <i>N,N',N''</i> -tris[4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,6,10,12,12a-hexahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxa-mido]methyl]polymyxin E (nominal) C <sub>122</sub> H <sub>172</sub> N <sub>22</sub> O <sub>40</sub> (nominal)
deprostitum deprostil	(1 <i>R</i> ,2 <i>S</i> )-2-(3-hydroxy-3-methyloctyl)-5-oxocyclopentaneheptanoic acid C <sub>21</sub> H <sub>38</sub> O <sub>4</sub>
desmopressinum desmopressin	1-(3-mercaptopropionic acid)-8-D-argininevasopressin C <sub>46</sub> H <sub>64</sub> N <sub>14</sub> O <sub>12</sub> S <sub>2</sub>
dexclamolum dexclamol	(+)-2,3,4,4a $\beta$ ,8,9,13ba,14-octahydro-3a-isopropyl-1 <i>H</i> -benzo[6,7]cyclohepta-[1,2,3- <i>de</i> ]pyrido[2,1- <i>a</i> ]isoquinolin-3-ol C <sub>24</sub> H <sub>29</sub> NO
deximafenum deximafen	(+)-2,3,5,6-tetrahydro-5-phenyl-1 <i>H</i> -imidazo[1,2- <i>a</i> ]imidazole C <sub>11</sub> H <sub>13</sub> N <sub>3</sub>
dextranomerum dextranomer	dextran reaction product with epichlorohydrin
dibekacinum dibekacin	O-3-amino-3-deoxy- $\alpha$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O-[2,6-diamino-2,3,4,6-tetradecy- $\alpha$ -D- <i>erythro</i> -hexopyranosyl-(1 $\rightarrow$ 6)]-2-deoxy-L-streptamine C <sub>18</sub> H <sub>37</sub> N <sub>5</sub> O <sub>8</sub>
dibuprolum dibuprol	1,3-dibutoxy-2-propanol C <sub>11</sub> H <sub>24</sub> O <sub>3</sub>
difenoximidum difenoximide	<i>N</i> -[[1-(3-cyano-3,3-diphenylpropyl)-4-phenylisonipecotoyl]oxy]succinimide C <sub>32</sub> H <sub>31</sub> N <sub>3</sub> O <sub>4</sub>

diflunisalum diflunisal	2',4'-difluoro-4-hydroxy-3-biphenylcarboxylic acid C <sub>13</sub> H <sub>8</sub> F <sub>2</sub> O <sub>3</sub>
dilimefonum dilimefone	2',4'-dimethoxy-3-(4-pyridyl)acrylophenone C <sub>16</sub> H <sub>15</sub> NO <sub>3</sub>
diproleandomycinum diproleandomycin	oleandomycin 4',11-dipropionate C <sub>41</sub> H <sub>69</sub> NO <sub>14</sub>
droclidinii bromidum droclidinium bromide	3-hydroxy-1-methylquinuclidinium bromide α-phenylcyclohexaneglycolate C <sub>22</sub> H <sub>32</sub> BrNO <sub>3</sub>
enbucrilatum enbucrilate	butyl 2-cyanoacrylate C <sub>8</sub> H <sub>11</sub> NO <sub>2</sub>
etazolatium etazolate	ethyl 1-ethyl-4-(isopropylidenehydrazino)-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate C <sub>14</sub> H <sub>19</sub> N <sub>5</sub> O <sub>2</sub>
eterobarbium eterobarb	5-ethyl-1,3-bis(methoxymethyl)-5-phenylbarbituric acid C <sub>16</sub> H <sub>20</sub> N <sub>2</sub> O <sub>5</sub>
exaprololum exaprolol	1-( <i>o</i> -cyclohexylphenoxy)-3-(isopropylamino)-2-propanol C <sub>18</sub> H <sub>29</sub> NO <sub>2</sub>
fazadinii bromidum fazadinium bromide	1,1'-azobis[3-methyl-2-phenyl-1 <i>H</i> -imidazo[1,2- <i>a</i> ]pyridin-4-ium] dibromide C <sub>26</sub> H <sub>24</sub> Br <sub>2</sub> N <sub>6</sub>
febuprolum febuprol	1-butoxy-3-phenoxy-2-propanol C <sub>13</sub> H <sub>20</sub> O <sub>3</sub>
fencloracum fenclorac	chloro(3-chloro-4-cyclohexylphenyl)acetic acid C <sub>14</sub> H <sub>16</sub> Cl <sub>2</sub> O <sub>2</sub>
fenperatum fenperate	2-piperidinoethyl α-benzyl-α-hydroxyhydrocinnamate acetate (ester) C <sub>25</sub> H <sub>31</sub> NO <sub>4</sub>
fentiazacum fentiazac	4-( <i>p</i> -chlorophenyl)-2-phenyl-5-thiazoleacetic acid C <sub>17</sub> H <sub>12</sub> ClNO <sub>2</sub> S
fludazonii chloridum fludazonium chloride	1-[2,4-dichloro-β-[(2,4-dichlorobenzyl)oxy]phenethyl]-3-( <i>p</i> -fluoro-phenacyl)imidazolium chloride C <sub>26</sub> H <sub>20</sub> Cl <sub>5</sub> FN <sub>2</sub> O <sub>2</sub>
flumizolum flumizole	4,5-bis( <i>p</i> -methoxyphenyl)-2-(trifluoromethyl)imidazole C <sub>18</sub> H <sub>15</sub> F <sub>3</sub> N <sub>2</sub> O <sub>2</sub>
fluprostenolum fluprostenol	(±)-(Z)-7-[(1 <i>R</i> *,2 <i>R</i> *,3 <i>R</i> *,5 <i>S</i> *)-3,5-dihydroxy-2-[( <i>E</i> )-(3 <i>R</i> *)-3-hydroxy-4-[(α,α,α-trifluoro- <i>m</i> -tolyl)oxy]-1-butenyl]cyclopentyl]-5-heptenoic acid C <sub>23</sub> H <sub>29</sub> F <sub>3</sub> O <sub>6</sub>
flutamidum flutamide	α,α,α-trifluoro-2-methyl-4'-nitro- <i>m</i> -propionotoluidide C <sub>11</sub> H <sub>11</sub> F <sub>3</sub> N <sub>2</sub> O <sub>3</sub>
flutazolamum flutazolam	10-chloro-11b-( <i>p</i> -fluorophenyl)-2,3,7,11b-tetrahydro-7-(2-hydroxyethyl)-oxazolo[3,2- <i>d'</i> ][1,4]benzodiazepin-6(5 <i>H</i> )-one C <sub>19</sub> H <sub>18</sub> ClFN <sub>2</sub> O <sub>3</sub>
ftaxilidum ftaxilide	2',6'-dimethylphthalanilic acid C <sub>16</sub> H <sub>15</sub> NO <sub>3</sub>
gallii ( <sup>67</sup> Ga) citras gallium ( <sup>67</sup> Ga) citrate	gallium - <sup>67</sup> Ga citrate (1:1)
galosemidum galosemide	<i>N</i> -[4-(α,α,α-trifluoro- <i>m</i> -toluidino)-3-pyridyl]sulfonylpropionamide C <sub>15</sub> H <sub>14</sub> F <sub>3</sub> N <sub>3</sub> O <sub>3</sub> S
gliamilidum gliamilide	<i>endo</i> -1-[4-[2-(2-methoxynicotinamido)ethyl]piperidino]sulfonyl-3-(5-norbornen-2-ylmethyl)urea C <sub>23</sub> H <sub>33</sub> N <sub>5</sub> O <sub>5</sub> S

gliflumidum gliflumide	(-)-(S)-N-(5-fluoro-2-methoxy- $\alpha$ -methylbenzyl)-2-[p-[(5-isobutyl-2-pyrimidinyl)sulfamoyl]phenyl]acetamide C <sub>25</sub> H <sub>29</sub> FN <sub>4</sub> O <sub>4</sub> S
glucametacinum glucametacin	2-[2-[1-(p-chlorobenzoyl)-5-methoxy-2-methylindol-3-yl]acetamido]-2-deoxy-D-glucose C <sub>25</sub> H <sub>27</sub> ClN <sub>2</sub> O <sub>6</sub>
gonadorelinum gonadorelin	luteinizing hormone-releasing factor (pig) ; 5-oxo-L-prolyl-L-histidyl-L-tryptophyl-L-seryl-L-tyrosylglycyl-L-leucyl-L-arginyl-L-prolylglycinamide C <sub>55</sub> H <sub>75</sub> N <sub>17</sub> O <sub>13</sub>
guabenxanum guabenxan	(1,4-benzodioxan-6-ylmethyl)guanidine C <sub>10</sub> H <sub>13</sub> N <sub>3</sub> O <sub>2</sub>
halofuginonum halofuginone	( $\pm$ )-trans-7-bromo-6-chloro-3-[3-(3-hydroxy-2-piperidyl)acetyl]-4(3H)-quinazolinone C <sub>16</sub> H <sub>17</sub> BrClN <sub>3</sub> O <sub>3</sub>
indoprofenum indoprofen	p-(1-oxo-2-isoindolinyl)hydratropic acid C <sub>17</sub> H <sub>15</sub> NO <sub>3</sub>
inicaroneum inicarone	2-isopropyl-3-benzofuranyl 4-pyridyl ketone C <sub>17</sub> H <sub>15</sub> NO <sub>2</sub>
ketocainolum ketocainol	$\alpha$ -[2-(diisopropylamino)ethoxy]- $\alpha$ -propylbenzyl alcohol C <sub>18</sub> H <sub>31</sub> NO <sub>2</sub>
lergotrilum lergotrile	2-chloro-6-methylergoline-8 $\beta$ -acetonitrile C <sub>17</sub> H <sub>18</sub> ClN <sub>3</sub>
levomenolum levomenol	(-)-6-methyl-2-(4-methyl-3-cyclohexen-1-yl)-5-hepten-2-ol C <sub>15</sub> H <sub>26</sub> O
libecillidum libecillide	2-[[[(5-carboxy-5-formamidopentyl)carbamoyl](2-phenylacetamido)-methyl]-5,5-dimethyl-4-thiazolidinecarboxylic acid C <sub>23</sub> H <sub>32</sub> N <sub>4</sub> O <sub>7</sub> S
lividomycinum lividomycin	lividomycin A: 2-O-2-amino-2,3-dideoxy- $\alpha$ -D-ribo-hexopyranosyl-(1 $\rightarrow$ 4)-O-[O- $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 4)-O-2,6-diamino-2,6-dideoxy- $\beta$ -D-ido-pyranosyl (1 $\rightarrow$ 3)- $\beta$ -D-ribofuranosyl-(1 $\rightarrow$ 5)]-2-deoxy-D-streptamine C <sub>29</sub> H <sub>55</sub> N <sub>5</sub> O <sub>18</sub>
lofexidinum lofexidine	2-[1-(2,6-dichlorophenoxy)ethyl]-2-imidazoline C <sub>11</sub> H <sub>12</sub> Cl <sub>2</sub> N <sub>2</sub> O
macrosalbum (**mTc) macrosalb (**mTc)	technetium- <sup>99m</sup> Tc labelled macroaggregated human serum albumin
maridomycinum maridomycin	10-(formylmethyl)-7,13-dihydroxy-8-methoxy-3,12-dimethyl-5-oxo-4,17-dioxabicyclo[14.1.0] heptadec-14-en-9-yl 3,6-dideoxy-4-O-(2,6-dideoxy-3-C-methyl- $\alpha$ -L-ribo-hexopyranosyl)-3-(dimethylamino)- $\beta$ -D-glucopyranoside 4',7'-dipropionate (ester) C <sub>41</sub> H <sub>67</sub> NO <sub>16</sub>
mazindolum mazindol	5-(p-chlorophenyl)-2,5-dihydro-3H-imidazo[2,1-a]isoindol-5-ol C <sub>16</sub> H <sub>13</sub> ClN <sub>2</sub> O
mazipredonum mazipredone	11 $\beta$ ,17-dihydroxy-21-(4-methyl-1-piperazinyl)pregna-1,4-diene-3,20-dione C <sub>26</sub> H <sub>38</sub> N <sub>2</sub> O <sub>4</sub>
mebenosidum mebenoside	methyl 3,5,6-tri-O-benzyl-D-glucofuranoside C <sub>28</sub> H <sub>32</sub> O <sub>6</sub>
mecillinamum mecillinam	(2S,5R,6R)-6-[[[hexahydro-1H-azepin-1-yl]methylene]amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid C <sub>15</sub> H <sub>23</sub> N <sub>3</sub> O <sub>3</sub> S
medifoxaminum medifoxamine	(dimethylamino)acetaldehyde diphenyl acetal C <sub>16</sub> H <sub>19</sub> NO <sub>2</sub>

mefloquinum mefloquine	DL- <i>erythro</i> - $\alpha$ -2-piperidyl-2,8-bis(trifluoromethyl)-4-quinolinemethanol C <sub>17</sub> H <sub>16</sub> F <sub>6</sub> N <sub>2</sub> O
melizamum melizame	<i>m</i> -(1 <i>H</i> -tetrazol-5-yloxy)phenol C <sub>7</sub> H <sub>5</sub> N <sub>4</sub> O <sub>2</sub>
metogestum metogest	17 $\beta$ -hydroxy-16,16-dimethylestr-4-en-3-one C <sub>20</sub> H <sub>30</sub> O <sub>2</sub>
metoxepinum metoxepin	1-(8-methoxydibenz[ <i>b,f</i> ]oxepin-10-yl)-4-methylpiperazine C <sub>20</sub> H <sub>22</sub> N <sub>2</sub> O <sub>2</sub>
metrafazolinum metrafazoline	2-[(1,2,3,4-tetrahydro-7-methyl-1,4-ethanonaphthalen-6-yl)methyl]-2-imidazoline C <sub>17</sub> H <sub>22</sub> N <sub>2</sub>
mexoprofenum mexoprofen	<i>p</i> -( <i>trans</i> -2-methylcyclohexyl)hydratropic acid C <sub>16</sub> H <sub>22</sub> O <sub>2</sub>
mexrenoatum kalicum mexrenoate potassium	7-methyl 21-potassium 17-hydroxy-3-oxo-17 $\alpha$ -pregn-4-ene-7 $\alpha$ ,21-dicarboxylate dihydrate C <sub>24</sub> H <sub>33</sub> KO <sub>6</sub> ·2H <sub>2</sub> O
midodrinum midodrine	2-amino- <i>N</i> -(2,5-dimethoxy- $\beta$ -hydroxyphenethyl)acetamide C <sub>12</sub> H <sub>18</sub> N <sub>2</sub> O <sub>4</sub>
morocromenum morocromen	4-methyl-7-(4-morpholinecarboxamido)-3-(2-morpholinoethyl)coumarin C <sub>21</sub> H <sub>27</sub> N <sub>3</sub> O <sub>5</sub>
moxnidazolium moxnidazole	3-[[[1-methyl-5-nitroimidazol-2-yl)methylene]amino]-5-(morpholinomethyl)-2-oxazolidinone C <sub>13</sub> H <sub>18</sub> N <sub>6</sub> O <sub>5</sub>
nilestriolum nilestriol	3-(cyclopentyloxy)-19-nor-17 $\alpha$ -pregna-1,3,5(10)-trien-20-yne-16 $\alpha$ ,17-diol C <sub>25</sub> H <sub>32</sub> O <sub>3</sub>
niometacinum niometacin	5-methoxy-2-methyl-1-nicotinoylindole-3-acetic acid C <sub>18</sub> H <sub>16</sub> N <sub>2</sub> O <sub>4</sub>
nitramisolum nitramisole	( $\pm$ )-2,3,5,6-tetrahydro-6-( <i>m</i> -nitrophenyl)imidazo[2,1- <i>b</i> ]thiazole C <sub>11</sub> H <sub>11</sub> N <sub>3</sub> O <sub>2</sub> S
nitromifenum nitromifene	1-[2-[ <i>p</i> -( $\alpha$ -( <i>p</i> -methoxyphenyl)- $\beta$ -nitrostyryl)phenoxy]ethyl]pyrrolidine C <sub>27</sub> H <sub>28</sub> N <sub>2</sub> O <sub>4</sub>
nitroscanatum nitroscanate	<i>p</i> -( <i>p</i> -nitrophenoxy)phenyl isothiocyanate C <sub>13</sub> H <sub>8</sub> N <sub>2</sub> O <sub>3</sub> S
nordinonum nordinone	11 $\alpha$ -hydroxy-17,17-dimethyl-18-norandrosta-4,13-dien-3-one C <sub>26</sub> H <sub>26</sub> O <sub>2</sub>
norgestometum norgestomet	17-hydroxy-11 $\beta$ -methyl-19-norpregn-4-ene-3,20-dione acetate C <sub>23</sub> H <sub>32</sub> O <sub>4</sub>
octopaminum octopamine	$\alpha$ -(aminomethyl)- <i>p</i> -hydroxybenzyl alcohol C <sub>8</sub> H <sub>11</sub> NO <sub>2</sub>
octriptylinum octriptyline	1 <i>a</i> ,10 <i>b</i> -dihydro- <i>N</i> -methyldibenzo[ <i>a,e</i> ]cyclopropano[cycloheptene- $\Delta^{6(11),7}$ -propylamine C <sub>20</sub> H <sub>21</sub> N
oxetacillinum oxetacillin	(2 <i>S</i> ,5 <i>R</i> ,6 <i>R</i> )-6-[( <i>R</i> )-[4-( <i>p</i> -hydroxyphenyl)-2,2-dimethyl-5-oxo-1-imidazolidinyl]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid C <sub>19</sub> H <sub>23</sub> N <sub>2</sub> O <sub>5</sub> S
oxiramidum oxiramide	<i>N</i> -[4-(2,6-dimethylpiperidino)butyl]-2-phenoxy-2-phenylacetamide C <sub>25</sub> H <sub>34</sub> N <sub>2</sub> O <sub>2</sub>
parsalmidum parsalimide	5-amino- <i>N</i> -butyl-2-(2-propynyloxy)benzamide C <sub>12</sub> H <sub>18</sub> N <sub>2</sub> O <sub>2</sub>

pinaverii bromidum pinaverium bromide	4-(6-bromoveratryl)-4-[2-[2-(6,6-dimethyl-2-norpinyloxy)ethyl]-morpholinium bromide C <sub>26</sub> H <sub>41</sub> BrN <sub>2</sub> O <sub>4</sub>
pinazepamum pinazepam	7-chloro-1,3-dihydro-5-phenyl-1-(2-propynyl)-2H-1,4-benzodiazepin-2-one C <sub>18</sub> H <sub>13</sub> ClN <sub>2</sub> O
pindololum pindolol	1-(indol-4-yloxy)-3-(isopropylamino)-2-propanol C <sub>14</sub> H <sub>20</sub> N <sub>2</sub> O <sub>2</sub>
pinolcainum pinolcaine	D-(+)-1-methyl-1-(1-methyl-2-piperidyl)ethyl diphenylacetate C <sub>23</sub> H <sub>29</sub> N <sub>2</sub> O <sub>2</sub>
pipoctanonum pipoctanone	4'-octyl-3-piperidinopropiophenone C <sub>22</sub> H <sub>35</sub> NO
pipoxizinium pipoxizine	2-[2-[2-[4-(diphenylmethylene)piperidino]ethoxy]ethoxy]ethanol C <sub>24</sub> H <sub>31</sub> N <sub>2</sub> O <sub>3</sub>
pirandaminum pirandamine	1,3,4,9-tetrahydro-N,N,1-trimethylindeno[2,1-c]pyran-1-ethylamine C <sub>17</sub> H <sub>23</sub> NO
piretanidum piretanide	4-phenoxy-3-(1-pyrrolidinyl)-5-sulfamoylbenzoic acid C <sub>17</sub> H <sub>18</sub> N <sub>2</sub> O <sub>5</sub> S
pirfenidonum pirfenidone	5-methyl-1-phenyl-2(1H)-pyridone C <sub>12</sub> H <sub>11</sub> NO
pirinidazolium pirinidazole	2-[[[1-methyl-5-nitroimidazol-2-yl)methyl]thio]pyridine C <sub>10</sub> H <sub>10</sub> N <sub>4</sub> O <sub>2</sub> S
pirolazamidum pirolazamide	hexahydro- $\alpha,\alpha$ -diphenylpyrrolo[1,2-a]pyrazine-2(1H)-butyramide C <sub>23</sub> H <sub>29</sub> N <sub>3</sub> O
piroxicamum piroxicam	4-hydroxy-2-methyl-N-2-pyridyl-2H-1,2-benzothiazine-3-carboxamide 1,1-dioxide C <sub>15</sub> H <sub>13</sub> N <sub>3</sub> O <sub>4</sub> S
pirozadilum pirozadil	2,6-pyridinediyl dimethylene bis(3,4,5-trimethoxybenzoate) C <sub>27</sub> H <sub>29</sub> NO <sub>10</sub>
pirprofenum pirprofen	3-chloro-4-(3-pyrrolin-1-yl)hydratropic acid C <sub>13</sub> H <sub>14</sub> ClNO <sub>2</sub>
pivmecillinamum pivmecillinam	hydroxymethyl (2S,5R,6R)-6-[[[hexahydro-1H-azepin-1-yl)methylene]-amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylate pivalate (ester) C <sub>21</sub> H <sub>33</sub> N <sub>3</sub> O <sub>5</sub> S
polidexidum polidexide	dextran 2-(diethylamino)ethyl 2-[[2-(diethylamino)ethyl]diethylammonio]-ethyl ether chloride, hydrochloride, epichlorohydrin crosslinked
pranolii chloridum pranolium chloride	[2-hydroxy-3-(1-naphthyloxy)propyl]isopropyl dimethylammonium chloride C <sub>18</sub> H <sub>26</sub> ClNO <sub>2</sub>
praxadinum praxadine	pyrazole-1-carboximidine C <sub>4</sub> H <sub>6</sub> N <sub>4</sub>
pribecainum pribecaine	3-piperidinopropyl m-anisate C <sub>16</sub> H <sub>23</sub> NO <sub>3</sub>
profexalonum profexalone	2-oxo-5-phenyl-N-propyl-3-oxazolidinecarboxamide C <sub>13</sub> H <sub>16</sub> N <sub>2</sub> O <sub>3</sub>
proquazonum proquazone	1-isopropyl-7-methyl-4-phenyl-2(1H)-quinazolinone C <sub>16</sub> H <sub>18</sub> N <sub>2</sub> O
prorenoatum kalicum prorenoate potassium	potassium 6,7-dihydro-17-hydroxy-3-oxo-3'H-cyclopropa[6,7]-17 $\alpha$ -pregna-4,6-diene-21-carboxylate C <sub>23</sub> H <sub>31</sub> KO <sub>4</sub>

proxibarbalum proxibarbal	5-allyl-5-(2-hydroxypropyl)barbituric acid $C_{10}H_{14}N_2O_4$
quinupraminum quinupramine	10,11-dihydro-5-(3-quinuclidinyl)-5H-dibenz[ <i>b,f</i> ]azepine $C_{21}H_{24}N_2$
razoxanum razoxane	4,4'-propylenedi-2,6-piperazinedione $C_{11}H_{16}N_4O_4$
ripazepamum ripazepam	1-ethyl-4,6-dihydro-3-methyl-8-phenylpyrazolo[4,3- <i>e</i> ][1,4]diazepin-5(1 <i>H</i> )-one $C_{15}H_{16}N_4O$
ritropirronii bromidum ritropirronium bromide	<i>erythro</i> -3-hydroxy-1,1-dimethylpyrrolidinium bromide $\alpha$ -cyclopentylmandelate $C_{19}H_{28}BrNO_3$
ritrosulfanum ritrosulfan	1,4-dideoxy-1,4-bis[(2-hydroxyethyl)amino]erythritol 1,4-dimethanesulfonate (ester) $C_{10}H_{24}N_2O_8S_2$
rociverinum rociverine	2-(diethylamino)-1-methylethyl <i>cis</i> -1-hydroxy[bicyclohexyl]-2-carboxylate $C_{20}H_{37}NO_3$
roxolonii metilsulfas roxolonium metilsulfate	2-(hydroxymethyl)-1,1-dimethylpyrrolidinium methyl sulfate 3 $\beta$ -hydroxy-11-oxoolean-12-en-30-oate $C_{38}H_{63}NO_8S$
sincalidum sincalide	L-aspartyl-L-tyrosyl-L-methionylglycyl-L-tryptophyl-L-methionyl-L-aspartylphenyl-L-alaninamide hydrogen sulfate (ester) or 1-de(5-oxo-L-proline)-2-de-L-glutamine-5-L-methioninecaerulein $C_{49}H_{62}N_{10}O_{16}S_3$
sitifibratum sitofibrate	stigmast-5-en-3 $\beta$ -ol 2-( <i>p</i> -chlorophenoxy)-2-methylpropionate $C_{39}H_{59}ClO_3$
sorbinicatum sorbinicate	D-glucitol hexanicotinate $C_{42}H_{32}N_6O_{12}$
spiroxepinum spiroxepin	<i>N,N</i> -dimethylspiro[dibenz[ <i>b,e</i> ]oxepin-11(6 <i>H</i> ),2'-[1,3]dioxolane]-4'-methylamine $C_{19}H_{21}NO_3$
stilonii iodidum stilonium iodide	triethyl[2-( <i>p</i> -styrylphenoxy)ethyl]ammonium iodide $C_{22}H_{30}INO$
stiripentolum stiripentol	4,4-dimethyl-1-[(3,4-methylenedioxy)phenyl]-1-penten-3-ol $C_{14}H_{18}O_3$
streptozocinum streptozocin	2-deoxy-2-(3-methyl-3-nitrosoureido)-D-glucopyranose $C_8H_{15}N_3O_7$
sulindacum sulindac	( <i>Z</i> )-5-fluoro-2-methyl-1-[ <i>p</i> -(methylsulfinyl)benzylidene]indene-3-acetic acid $C_{20}H_{17}FO_3S$
sulnidazolum sulnidazole	<i>O</i> -methyl [2-(2-ethyl-5-nitroimidazol-1-yl)ethyl]thiocarbamate $C_9H_{14}N_4O_3S$
taleranolium taleranol	(3 <i>S</i> ,7 <i>S</i> )-3,4,5,6,7,8,9,10,11,12-decahydro-7,14,16-trihydroxy-3-methyl-1 <i>H</i> -2-benzoxacyclotetradecin-1-one $C_{18}H_{26}O_5$
teflutixolium teflutixol	4-[3-[6-fluoro-2-(trifluoromethyl)thioxanthen-9-yl]propyl]-1-piperazineethanol $C_{29}H_{26}F_4N_2OS$



terbuprolum terbuprol	1- <i>tert</i> -butoxy-3-methoxy-2-propanol $C_8H_{18}O_3$
terfenadinum terfenadine	$\alpha$ -( <i>p</i> - <i>tert</i> -butylphenyl)-4-(hydroxydiphenylmethyl)-1-piperidinebutanol $C_{32}H_{41}NO_2$
terofenamatum terofenamate	ethoxymethyl <i>N</i> -(2,6-dichloro- <i>m</i> -tolyl)anthranilate $C_{17}H_{17}Cl_2NO_3$
tetroxoprimum tetroxoprim	2,4-diamino-5-[3,5-dimethoxy-4-(2-methoxyethoxy)benzyl]pyrimidine $C_{16}H_{22}N_4O_4$
tiafibratum tiafibrate	2-( <i>p</i> -chlorophenoxy)-2-methylpropionic acid diester with 2,2'-(decamethylene)dithio)diethanol $C_{34}H_{48}Cl_2O_6S_2$
tibezonii iodidum tibezonium iodide	diethylmethyl [2-[[4-( <i>p</i> -(phenylthio)phenyl)-3 <i>H</i> -1,5-benzodiazepin-2-yl]thio]ethyl]ammonium iodide $C_{28}H_{32}IN_3S_2$
tidiacicum tidiacic	2,4-thiazolidinedicarboxylic acid $C_5H_7NO_4S$
tifemoxonum tifemoxone	tetrahydro-6-(phenoxyethyl)-2 <i>H</i> -1,3-oxazine-2-thione $C_{11}H_{13}NO_2S$
timonacicum timonacic	4-thiazolidinecarboxylic acid $C_4H_7NO_2S$
tinofedrinum tinofedrine	$\alpha$ -[1-[(3,3-di-3-thienylallyl)amino]ethyl]benzyl alcohol $C_{20}H_{21}NOS_2$
tiopramidum tiopramide	D,L- $\alpha$ -benzamido- <i>p</i> -[2-(diethylamino)ethoxy]- <i>N,N</i> -dipropylhydrocinnamamide $C_{28}H_{41}N_3O_3$
tobramycinum tobramycin	an antibiotic obtained from cultures of <i>Streptomyces tenebrarius</i> or the same substance obtained by any other means; <i>O</i> -3-amino-3-deoxy- $\alpha$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- <i>O</i> -[2,6-diamino-2,3,6-trideoxy- $\alpha$ -D-ribohexopyranosyl-(1 $\rightarrow$ 6)]-2-deoxystreptamine $C_{18}H_{37}N_5O_9$
tocofibratum tocofibrate	2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-6-chromanyl 2-( <i>p</i> -chlorophenoxy)-2-methylpropionate $C_{39}H_{59}ClO_4$
tolciciatum tolciclate	<i>O</i> -(1,2,3,4-tetrahydro-1,4-methanonaphthalen-6-yl) <i>m,N</i> -dimethylthiocarbamate $C_{20}H_{21}NOS$
trifluomeprazinum trifluomeprazine	10-[3-(dimethylamino)-2-methylpropyl]-2-(trifluoromethyl)phenothiazine $C_{19}H_{21}F_3N_2S$
xantocillinum xantocillin	an antibiotic obtained from cultures of <i>Penicillium notatum</i> or the same substance produced by any other means
zeranolum zeranol	(3 <i>S</i> ,7 <i>R</i> )-3,4,5,6,7,8,9,10,11,12-decahydro-7,14,16-trihydroxy-3-methyl-1 <i>H</i> -2-benzoxacyclotetradecin-1-one $C_{18}H_{26}O_5$
zilantelum zilantel	phosphonodithioimidocarbonic acid ethylene dibenzyl <i>P,P,P',P'</i> -tetraethyl ester $C_{26}H_{38}N_2O_6P_2S_4$

# AMENDMENTS TO PREVIOUS LISTS

Vol. 13, No. 12

## Recommended International Nonproprietary Names (Rec. INN): List 3

p. 472 *delete the following entry*

sorbimacrogoli oleas 100  
sorbimacrogol oleate 100

*insert*

polysorbatum  
polysorbate

p. 473 *delete the following entry*

sorbimacrogoli oleas 300  
sorbimacrogol oleate 300

polyoxyethylene derivative of cyclic sorbital  
anhydrides partially esterified with a fatty acid.

The numbered polysorbates indicated below refer to the following compounds: e.g.

polysorbate 20: polyoxyethylene 20 sorbitan\* monolaurate  $C_{58}H_{114}O_{26}$  (nominal)

polysorbate 40: polyoxyethylene 20 sorbitan\* monopalmitate  $C_{62}H_{122}O_{28}$  (nominal)

polysorbate 60: polyoxyethylene 20 sorbitan\* monostearate  $C_{64}H_{126}O_{28}$  (nominal)

polysorbate 65: polyoxyethylene 20 sorbitan\* tristearate  $C_{100}H_{194}O_{28}$  (nominal)

polysorbate 80: polyoxyethylene 20 sorbitan\* mono-oleate  $C_{64}H_{124}O_{26}$  (nominal)

polysorbate 85: polyoxyethylene 20 sorbitan\* trioleate  $C_{100}H_{188}O_{28}$  (nominal)

\* polyoxyethylene 20 sorbitan corresponds to tris(polyethylene glycol 300) sorbitan ethers

Vol. 19, No. 6

## Recommended International Nonproprietary Names (Rec. INN): List 5

p. 253 rufocromomycinum  
rufocromomycin

*replace the present definition by the following:*

antibiotic obtained from cultures of *Streptomyces rufochromogenus* or *Streptomyces flocculus*, or the same substance produced by any other means  
5-amino-6-(7-amino-5,8-dihydro-6-methoxy-5,8-dioxo-2-quinolyl)-4-(2-hydroxy-3,4-dimethoxyphenyl)-3-methylpicolinic acid  
 $C_{25}H_{22}N_4O_8$

Vol. 22, No. 10

## Recommended International Nonproprietary Names (Rec. INN): List 8

p. 64 *delete*

cisclomifenum  
cisclomifene

2-[p-(2-chloro-*cis*-1,2-diphenylvinyl)phenoxy]triethylamine  
 $C_{26}H_{28}ClNO$

*insert*

enclomifenum  
enclomifene

2-[p-(2-chloro-*trans*-1,2-diphenylvinyl)phenoxy]triethylamine  
or (*E*)-2-[p-(2-chloro-1,2-diphenylvinyl)phenoxy]triethylamine  
(previous INN: cisclomifene)  
 $C_{26}H_{28}ClNO$

p. 69	<i>delete</i>	
	transclomifenum transclomifene	2- [ <i>p</i> -(2-chloro- <i>trans</i> -1,2-diphenylvinyl)phenoxy]triethylamine C <sub>26</sub> H <sub>28</sub> ClNO
	<i>insert</i>	
	zuclofenum zuclofenone	2- [ <i>p</i> -(2-chloro- <i>cis</i> -1,2-diphenylvinyl)phenoxy]triethylamine or ( <i>Z</i> )-2- [ <i>p</i> -(2-chloro-1,2-diphenylvinyl)phenoxy]triethylamine (previous INN : transclomifene) C <sub>26</sub> H <sub>28</sub> ClNO

Vol. 25, No. 10

### Recommended International Nonproprietary Names (Rec. INN): List 11

p. 478	<i>delete</i>	<i>insert</i>
	cloxifenolum cloxifenol	triclosanum triclosan

Vol. 27, No. 10

### Recommended International Nonproprietary Names (Rec. INN): List 13

p. 454	ceruletum ceruleide	<i>replace chemical name by the following :</i> 5-oxo- L-prolyl- L-glutamyl- L-aspartyl- L-tyrosyl- L-threonylglycyl- L-methionyl- L-aspartyl- L-phenylalaninamide 4- (hydrogen sulfate) (ester)
p. 457	<i>delete</i>	<i>insert</i>
	macrisalbum ( <sup>131</sup> I) macrisalb ( <sup>131</sup> I)	macrosalbum ( <sup>131</sup> I) macrosalb ( <sup>131</sup> I)
p. 458	<i>delete</i>	
	oxaprazinum oxaprazine	10- [3- [4- (2- <i>m</i> -dioxan-2-ylethyl)-1-piperazinyl]propyl]phenothiazine C <sub>26</sub> H <sub>33</sub> N <sub>3</sub> O <sub>2</sub> S

Supplement to Vol. 28, No. 10

### Recommended International Nonproprietary Names (Rec. INN): List 14

p. 1	acidum tibricum tibric acid	<i>replace chemical name by the following :</i> 2-chloro-5- [( <i>cis</i> -3,5-dimethylpiperidino)sulfonyl]benzoic acid
p. 2	butorphanolum butorphanol	<i>replace chemical name by the following :</i> (-)-17-(cyclobutylmethyl)morphinan-3,14-diol
p. 3	<i>delete</i>	
	dexnorgestrelum dexnorgestrel	D-13-ethyl-17-hydroxy-18,19-dinor-17 $\alpha$ -pregn-4-en-20-yn-3-one C <sub>21</sub> H <sub>28</sub> O <sub>2</sub>
p. 7	oxilorphanum oxilorphan	<i>replace chemical name by the following :</i> (-)-17-(cyclopropylmethyl)morphinan-3,14-diol