

# International Nonproprietary Names for Pharmaceutical Substances

In accordance with article 3 of the Procedure for the Selection of Recommended International Nonproprietary Names for Pharmaceutical Substances,<sup>1</sup> notice is hereby given that the following names are under consideration by the World Health Organization as Proposed International Nonproprietary Names.

Comments on, or formal objections to, the proposed names may be forwarded by any person to the Pharmaceuticals unit of the World Health Organization within four months of the date of their publication in *WHO Drug Information*, e.g., for List 60 Prop. INN not later than 31 May 1989.

*The inclusion of a name in the lists of proposed international nonproprietary names does not imply any recommendation for the use of the substance in medicine or pharmacy.*

## Action and Use

The statements in italics indicating the action and use are based largely on information supplied by the manufacturer. The information is meant to provide an indication of the potential use of new substances at the time they are accorded proposed INNs. WHO is not in a position either to uphold these statements or to comment on the efficacy of the action claimed. Because of their provisional nature these descriptors will not be included in the Cumulative Lists of INNs.

## Proposed International Nonproprietary Names (Prop. INN): List 60<sup>2</sup>

Comprehensive information on the INN programme can be found in: WHO Technical Report Series, No. 581, 1975 (*Nonproprietary Names for Pharmaceutical Substances*. Twentieth Report of the WHO Expert Committee), ISBN 92 4 120581 4 (price: Sw. fr. 6.-); an account of this publication will be found in Annex 2 of the present List. All names from Lists 1-47 of Proposed International Nonproprietary Names, together with a molecular formula index, will be found in: *International Nonproprietary Names (INN) for Pharmaceutical Substances. Cumulative List No. 6*, 1982, World Health Organization, Geneva (ISBN 92 4 056013 0) (price: Sw. fr. 55.-). This publication consists, in the main, of a computer printout which groups together all the proposed and recommended international nonproprietary names (INN)—in Latin, English, French, Russian, and Spanish—published up to April 1982. The printout also indicates in which of the 47 individual lists of proposed names and 21 lists of recommended names each INN was originally published, and gives references to national nonproprietary names, pharmacopoeia monographs, and other sources. In addition, the list contains molecular formulae and Chemical Abstracts Service registry numbers. For easy reference, national nonproprietary names that differ from INN, molecular formulae, and Chemical Abstracts Service registry numbers are indexed in a series of annexes. A final annex describes the procedure for selecting recommended INN and outlines the general principles to be followed in devising these names. All the textual material published in this volume appears in both English and French.

These publications may be obtained, direct or through booksellers, from the sales agents listed on the back cover of *WHO Drug Information*. Orders from countries where sales agents have not yet been appointed may be addressed to: World Health Organization, Distribution and Sales Service, 1211 Geneva 27, Switzerland.

<sup>1</sup> Text adopted by the Executive Board of WHO in resolution EB15.R7 (*Off. Rec. Wld Hlth Org.*, 1955, **60**, 3) and amended by the Board in resolution EB43.R9 (*Off. Rec. Wld. Hlth Org.*, 1969, **173**, 10).

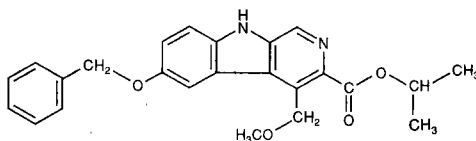
<sup>2</sup> Other lists of proposed and recommended international nonproprietary names can be found in *Cumulative List No. 7*, 1988.

Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

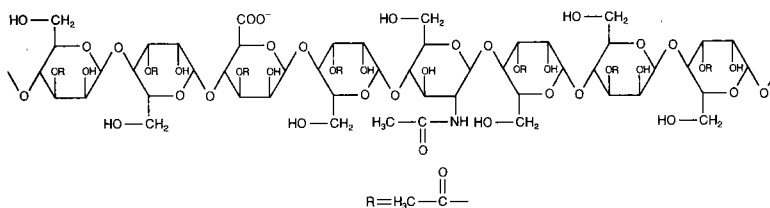
abecarnilum  
abecarnil

isopropyl 6-(benzyloxy)-4-(methoxymethyl)-9H-pyrido[3,4-b]indole-3-carboxylate  
C<sub>24</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub> 111841-85-1 *partial benzodiazepine receptor agonist*



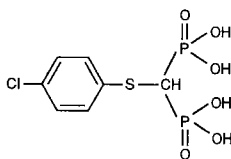
acemannanum  
acemannan

(1→4)-β-D-mannurono-2-acetamido-2-deoxy-β-D-glucopyranosyl-β-D-mannan 3-acetate  
— 110042-95-0 *antiviral, immunomodulator*



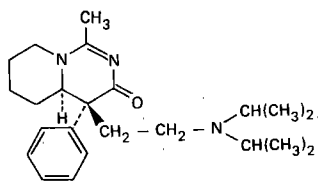
acidum tiludronicum  
tiludronic acid

[(p-chlorophenyl)thio]methylene]diphosphonic acid  
C<sub>7</sub>H<sub>9</sub>ClO<sub>6</sub>P<sub>2</sub>S 89987-06-4 *antiarthritic*



actisomidum  
actisomide

(±)-cis-4-[2-(diisopropylamino)ethyl]-4,4a,5,6,7,8-hexahydro-1-methyl-4-phenyl-3H-pyrido[1,2-c]pyrimidin-3-one  
C<sub>23</sub>H<sub>35</sub>N<sub>3</sub>O 96914-39-5 *antidysrhythmic*

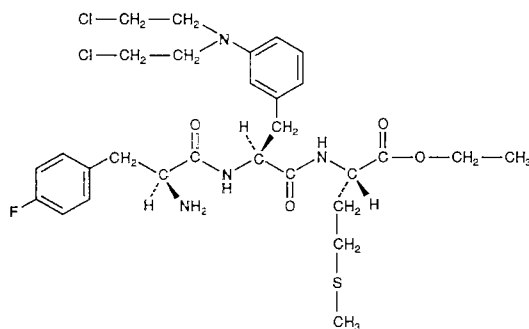


Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

ambamustinum  
ambamustine

*N*-[3-[*m*-[bis(2-chloroethyl)amino]phenyl]-*N*-[3-(*p*-fluorophenyl)-*L*-alanyl]-*L*-alanyl]-*L*-methionine, ethyl ester  
 $C_{29}H_{39}Cl_2FN_4O_4S$  85754-59-2 *antineoplastic*

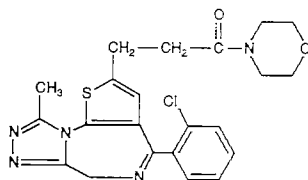


antithrombinum III  
antithrombin III

antithrombin III. The source of the product should be indicated.

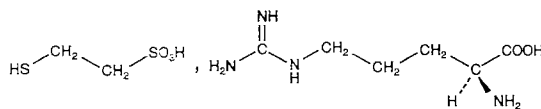
apafantum  
apafant

4-[3-[4-(*o*-chlorophenyl)-9-methyl-6*H*-thieno[3,2-*f*]-*s*-triazolo[4,3-*a*]-[1,4]diazepin-2-yl]propionyl]morpholine  
 $C_{22}H_{22}ClN_5O_2S$  105219-56-5 *platelet-activating factor antagonist*



argimesna  
argimesna

*L*-arginine mono(2-mercaptoethanesulfonate)  
 $C_8H_{20}N_4O_5S_2$  106854-46-0 *antidote*

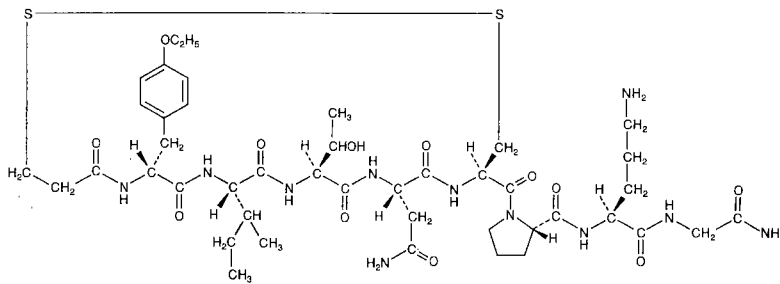


Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

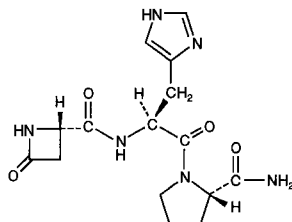
atosibanum  
atosiban

1-(3-mercaptopropionic acid)-2-[3-(*p*-ethoxyphenyl)-*D*-alanine]-4-*L*-threonine-  
8-*L*-ornithineoxycocin  
 $C_{43}H_{67}N_{11}O_{12}S_2$  90779-69-4 *oxytocin antagonist*



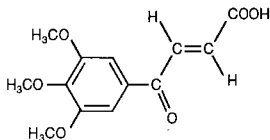
azetirelinum  
azetirelin

(-)-*N*[[*(2S)*-4-oxo-2-azetidiny]carbonyl]-*L*-histidyl-*L*-prolinamide  
 $C_{15}H_{20}N_6O_4$  95729-65-0 *thyrotropin releasing hormone analogue*



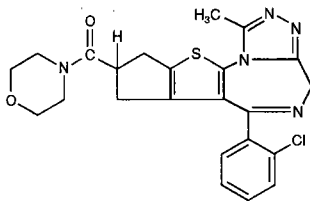
baxitozinum  
baxitozine

(*E*)-3-(3,4,5-trimethoxybenzoyl)acrylic acid  
 $C_{13}H_{14}O_6$  84386-11-8 *antiulcer*



bepafantum  
bepafant

4-[[6-(*o*-chlorophenyl)-8,9-dihydro-1-methyl-4*H*,7*H*-cyclopenta[4,5]thieno-  
[3,2-*f*]-*s*-triazolo[4,3-*a*][1,4]diazepin-8-yl]carbonyl]morpholine  
 $C_{23}H_{22}ClN_5O_2S$  114776-28-2 *platelet-activating factor antagonist*

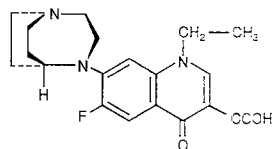


Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

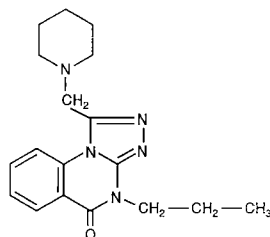
binfloxacinum  
binfloxacin

7-(1,4-diazabicyclo[3.2.2]non-4-yl)-1-ethyl-6-fluoro-1,4-dihydro-4-oxo-3-quinolinecarboxylic acid  
 $C_{19}H_{22}FN_3O_3$  108437-28-1 *antibacterial (vet.)*



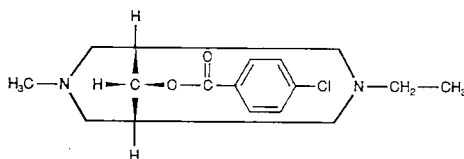
binizolastum  
binizolast

1-(piperidinomethyl)-4-propyl-s-triazolo[4,3-a]quinazolin-5(4H)-one  
 $C_{18}H_{23}N_5O$  86662-54-6 *antiasthmatic*



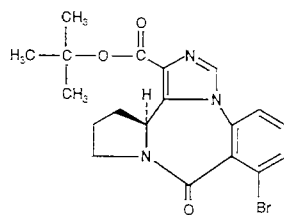
bisaramilum  
bisaramil

*syn*-3-ethyl-7-methyl-3,7-diazabicyclo[3.3.1]non-9-yl *p*-chlorobenzoate  
 $C_{17}H_{23}ClN_2O_2$  89194-77-4 *antidysrhythmic*



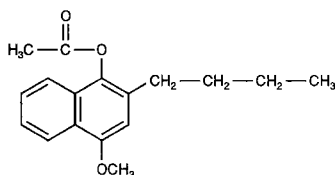
bretazenilum  
bretazenil

*tert*-butyl (*S*)-8-bromo-11,12,13,13a-tetrahydro-9-oxo-9*H*-imidazo[1,5-*a*]pyrrolo[2,1-*c*][1,4]benzodiazepine-1-carboxylate  
 $C_{19}H_{20}BrN_3O_3$  84379-13-5 *partial benzodiazepine receptor agonist*



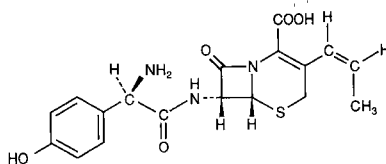
bunaprolastum  
bunaprolast

2-butyl-4-methoxy-1-naphthol acetate  
C<sub>17</sub>H<sub>20</sub>O<sub>3</sub> 99107-52-5 *antiasthmatic*



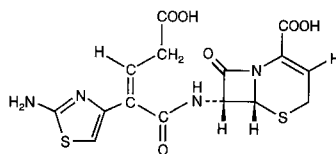
cefprozilum  
cefprozil

(6*R*,7*R*)-7-[(*R*)-2-amino-2-(*p*-hydroxyphenyl)acetamido]-8-oxo-3-[(*Z*)-propenyl]-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid  
C<sub>18</sub>H<sub>19</sub>N<sub>3</sub>O<sub>5</sub>S 92665-29-7 *antibiotic*



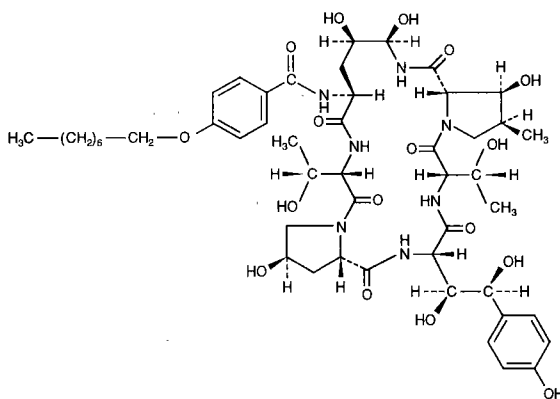
ceftibutenum  
ceftibuten

(+)-(6*R*,7*R*)-7-[(*Z*)-2-(2-amino-4-thiazolyl)-4-carboxycrotonamido]-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid  
C<sub>15</sub>H<sub>14</sub>N<sub>4</sub>O<sub>6</sub>S<sub>2</sub> 97519-39-6 *antibiotic*



cilofunginum  
cilofungin

1-[(4*R*,5*R*)-4,5-dihydroxy-*N*<sup>2</sup>-[*p*-(octyloxy)benzoyl]-L-ornithine]echinocandin B or (4*R*,5*R*)-4,5-dihydroxy-*N*<sup>2</sup>-[*p*-(octyloxy)benzoyl]-L-ornithyl-L-threonyl-*trans*-4-hydroxy-L-prolyl-(*S*)-4-hydroxy-4-(*p*-hydroxyphenyl)-L-threonyl-L-threonyl-(3*S*,4*S*)-3-hydroxy-4-methyl-L-proline cyclic (6→1)-peptide  
C<sub>49</sub>H<sub>71</sub>N<sub>7</sub>O<sub>17</sub> 79404-91-4 *antifungal*



Proposed International  
Nonproprietary Name (Latin, English)

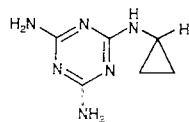
Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

colextranum  
colextran

dextran 2-(diethylamino)ethyl ether  
- 9015-73-0 antihypercholesterolaemic, antihyperlipidaemic

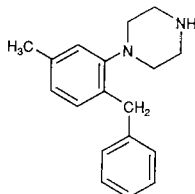
cyromazinum  
cyromazine

cyclopropylmelamine  
C<sub>6</sub>H<sub>10</sub>N<sub>6</sub> 66215-27-8 antiparasitic (vet.)



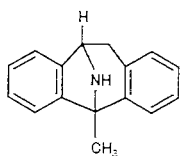
delfaprazinum  
delfaprazine

1-( $\alpha^2$ -phenyl-2,5-xylyl)piperazine  
C<sub>18</sub>H<sub>22</sub>N<sub>2</sub> 117827-81-3 antidepressant



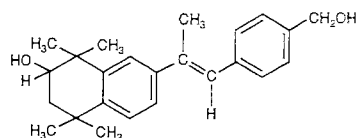
dizocilpinum  
dizocilpine

(+)-10,11-dihydro-5-methyl-5H-dibenzo[*a,d*]cyclohepten-5,10-imine  
C<sub>16</sub>H<sub>15</sub>N 77086-21-6 antiepileptic



doretinelum  
doretinel

( $\pm$ )-*p*-[(*E*)-2-(5,6,7,8-tetrahydro-7-hydroxy-5,5,8,8-tetramethyl-2-naphthyl)-propenyl]benzyl alcohol  
C<sub>24</sub>H<sub>30</sub>O<sub>2</sub> 104561-36-6 keratolytic

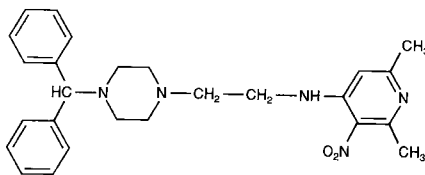


Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

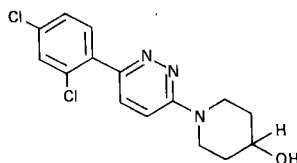
elbanizinum  
elbanizine

1-[2-[(2,6-dimethyl-3-nitro-4-pyridyl)amino]ethyl]-4-(diphenylmethyl)-  
piperazine  
 $C_{26}H_{31}N_5O_2$  110629-41-9 *histamine  $H_1$ -antagonist*



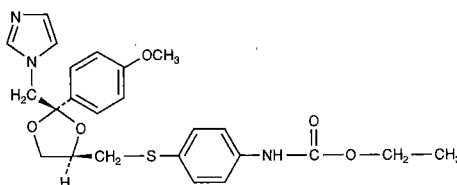
endixaprinum  
endixaprine

1-[6-(2,4-dichlorophenyl)-3-pyridazinyl]-4-piperidinol  
 $C_{15}H_{15}Cl_2N_3O$  93181-85-2 *antiepileptic, hypnotic*



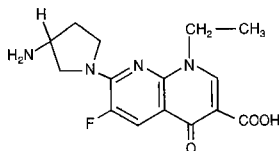
erbulozolum  
erbulozole

ethyl ( $\pm$ )-*cis*-*p*-[[[2-(imidazol-1-ylmethyl)-2-(*p*-methoxyphenyl)-1,3-dioxolan-  
4-yl]methyl]thio]carbanilate  
 $C_{24}H_{27}N_3O_3S$  - *radiosensitizing agent*



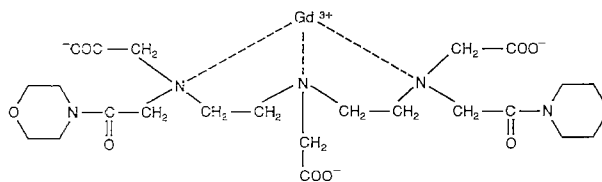
esafloxacinum  
esafloxacin

( $\pm$ )-7-(3-amino-1-pyrrolidinyl)-1-ethyl-6-fluoro-1,4-dihydro-4-oxo-  
1,8-naphthyridine-3-carboxylic acid  
 $C_{15}H_{17}FN_4O_3$  79286-77-4 *antibacterial*



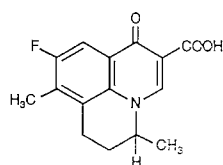
gadopenamidum  
gadopenamide

[*N,N*-bis[2-[(carboxymethyl)[(morpholinocarbonyl)methyl]amino]ethyl]-  
glycinato(3-)]gadolinium  
 $C_{22}H_{34}GdN_5O_{10}$  117827-80-2 *paramagnetic contrast medium*



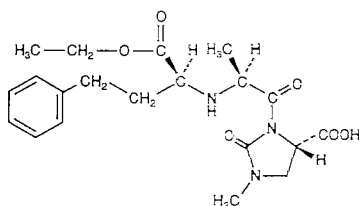
ibafloxacinum  
ibafloxacin

9-fluoro-6,7-dihydro-5,8-dimethyl-1-oxo-1*H*,5*H*-benzo[*ij*]quinolizine-  
2-carboxylic acid  
 $C_{15}H_{14}FNO_3$  91618-36-9 *antibacterial*



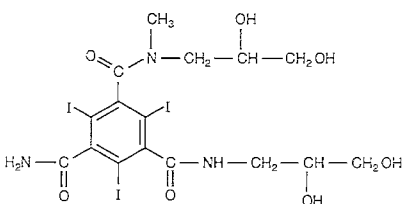
imidaprilum  
imidapril

(4*S*)-3-[(2*S*)-*N*-[(1*S*)-1-carboxy-3-phenylpropyl]alanyl]-1-methyl-2-oxo-  
4-imidazolidinecarboxylic acid, 3-ethyl ester  
 $C_{20}H_{27}N_3O_6$  89371-37-9 *angiotensin-converting enzyme inhibitor*



iotrisidum  
iotriside

(±)-*N,N'*-bis(2,3-dihydroxypropyl)-2,4,6-triiodo-*N*-methyl-1,3,5-benzenetri-  
carboxamide  
 $C_{16}H_{20}I_3N_3O_7$  79211-34-0 *contrast medium*

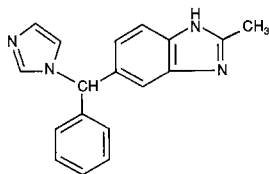


Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

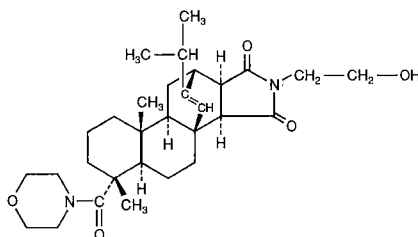
irtemazolum  
irtemazole

(±)-5-( $\alpha$ -imidazol-1-ylbenzyl)-2-methylbenzimidazole  
 $C_{18}H_{16}N_4$  115574-30-6 *uricosuric*



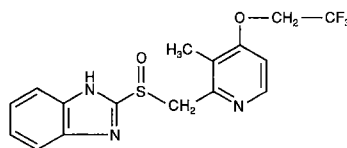
ivarimodum  
ivarimod

4-[[[(3*aR*,3*bS*,5*aR*,6*R*,9*aR*,9*bR*,11*R*,11*aR*)-1,2,3,3*a*,4,5,5*a*,6,7,8,9,9*a*,9*b*,10,11,11*a*-hexadecahydro-2-(2-hydroxyethyl)-12-isopropyl-6,9*a*-dimethyl-1,3-dioxo-3*b*,11-etheno-3*bH*-naphth[2,1-*e*]isoindol-6-yl]carbonyl]morpholine  
 $C_{30}H_{44}N_2O_5$  53003-81-9 *immunomodulator*



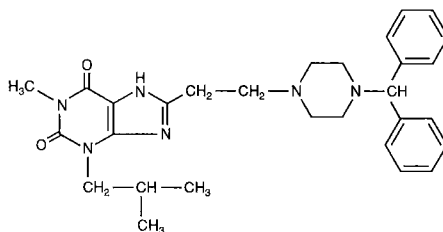
lansoprazolum  
lansoprazole

2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]benzimidazole  
 $C_{16}H_{14}F_3N_3O_2S$  103577-45-3 *antiulcer*



laprafyllinum  
laprafylline

8-[2-[4-(diphenylmethyl)-1-piperazinyl]ethyl]-3-isobutyl-1-methylxanthine  
 $C_{29}H_{36}N_6O_2$  90749-32-9 *antiasthmatic*

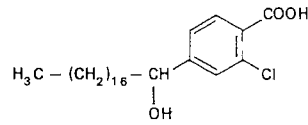


Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

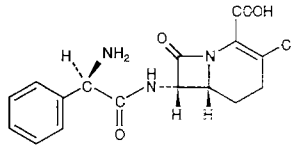
lodelabenum  
lodelaben

(±)-2-chloro-4-(1-hydroxyoctadecyl)benzoic acid  
C<sub>25</sub>H<sub>41</sub>ClO<sub>3</sub> 93105-81-8 *antiarthritic*



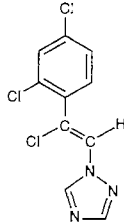
loracarbefum  
loracarbef

(6*R*,7*S*)-7-[(*R*)-2-amino-2-phenylacetamido]-3-chloro-8-oxo-1-azabi-  
cyclo[4.2.0]oct-2-ene-2-carboxylic acid  
C<sub>16</sub>H<sub>16</sub>ClN<sub>3</sub>O<sub>4</sub> 76470-66-1 *antibiotic*



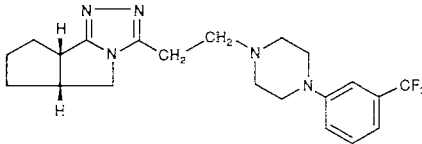
lorelezolum  
lorelezole

(*Z*)-1-(β,2,4-trichlorostyryl)-1*H*-1,2,4-triazole  
C<sub>10</sub>H<sub>6</sub>Cl<sub>3</sub>N<sub>3</sub> 117857-45-1 *antiepileptic*



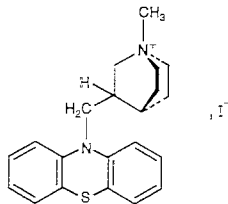
lorpiprazolum  
lorpiprazole

(±)-*cis*-5,5a,6,7,8,8a-hexahydro-3-[2-[4-(α,α,α-trifluoro-*m*-tolyl)-  
1-piperazinyl]ethyl]cyclopenta[3,4]pyrrolo[2,1-*c*]-*s*-triazole  
C<sub>21</sub>H<sub>26</sub>F<sub>3</sub>N<sub>5</sub> 108785-69-9 *anxiolytic*



mequitazii iodidum  
mequitazium iodide

(±)-1-methyl-3-(phenothiazin-10-ylmethyl)quinuclidinium iodide  
C<sub>21</sub>H<sub>25</sub>N<sub>2</sub>S 101396-42-3 *antiasthmatic*

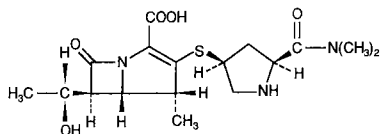


Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

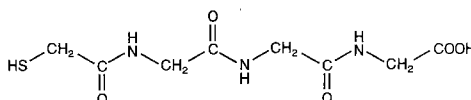
meropenemum  
meropenem

(4*R*,5*S*,6*S*)-3-[[[(3*S*,5*S*)-5-(dimethylcarbamoyl)-3-pyrrolidinyl]thio]-6-[(1*R*)-1-hydroxyethyl]-4-methyl-7-oxo-1-azabicyclo[3.2.0]hept-2-ene-2-carboxylic acid  
C<sub>17</sub>H<sub>25</sub>N<sub>3</sub>O<sub>5</sub>S 96036-03-2 antibiotic



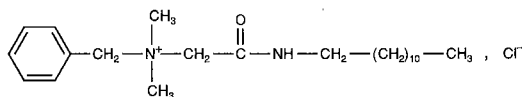
meriatidum  
meriatide

*N*-[*N*-[*N*-(mercaptoacetyl)glycyl]glycyl]glycine  
C<sub>8</sub>H<sub>13</sub>N<sub>3</sub>O<sub>5</sub>S 66516-09-4 diagnostic aid



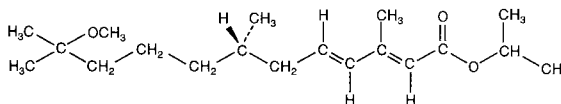
metaikonii chloridum  
metaikonium chloride

benzyl[(dodecylcarbamoyl)methyl]dimethylammonium chloride  
C<sub>23</sub>H<sub>41</sub>ClN<sub>2</sub>O 100-95-8 disinfectant



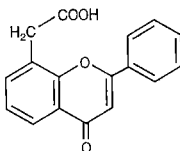
methoprenum  
methoprene

isopropyl (2*E*,4*E*)-(7*S*)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate  
C<sub>19</sub>H<sub>34</sub>O<sub>3</sub> 40596-69-8 lenticide, ovicide



mitoflaxonom  
mitoflaxone

4-oxo-2-phenyl-4*H*-1-benzopyran-8-acetic acid  
C<sub>17</sub>H<sub>12</sub>O<sub>4</sub> 87626-55-9 cytostatic

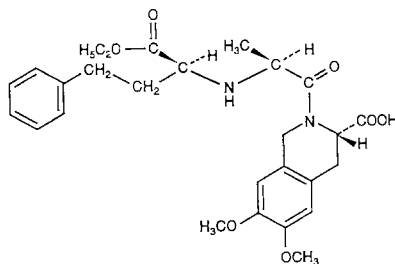


Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

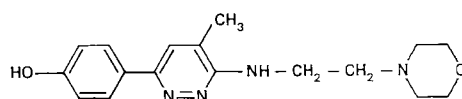
moexiprilum  
moexipril

(3S)-2-[(2S)-N-[(1S)-1-carboxy-3-phenylpropyl]alanyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-3-isoquinolinecarboxylic acid, 2-ethyl ester  
C<sub>27</sub>H<sub>34</sub>N<sub>2</sub>O<sub>7</sub> 103775-10-6 *angiotensin-converting enzyme inhibitor*



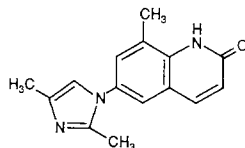
moxiraprinum  
moxiraprine

*p*-[5-methyl-6-[(2-morpholinoethyl)amino]-3-pyridazinyl]phenol  
C<sub>17</sub>H<sub>22</sub>N<sub>4</sub>O<sub>2</sub> 82239-52-9 *antiparkinson, antidepressant*



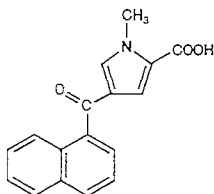
nanterinonum  
nanterinone

6-(2,4-dimethylimidazol-1-yl)-8-methylcarbostyryl  
C<sub>15</sub>H<sub>15</sub>N<sub>3</sub>O 102791-47-9 *positive inotropic agent*



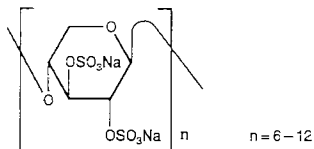
napirimumum  
napirimum

1-methyl-4-(1-naphthoyl)pyrrole-2-carboxylic acid  
C<sub>17</sub>H<sub>13</sub>NO<sub>3</sub> 70696-66-1 *immunosuppressive agent*



natrii pentosani polysulfas  
pentosan polysulfate sodium

(1→4)-β-D-xylan 2,3-bis(hydrogen sulfate), sodium salt  
(C<sub>5</sub>H<sub>6</sub>Na<sub>2</sub>O<sub>10</sub>S<sub>2</sub>)<sub>n</sub> - *anticoagulant*

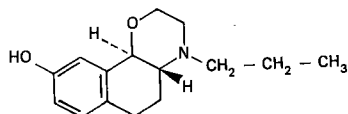


Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

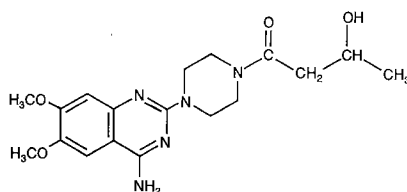
naxagolidum  
naxagolide

(+)-(4*aR*,10*bF*)-3,4,4*a*,5,6,10*b*-hexahydro-4-propyl-2*H*-naphth[1,2-*b*]-  
1,4-oxazin-9-ol  
C<sub>15</sub>H<sub>21</sub>NO<sub>2</sub> 88058-88-2 *dopamine receptor agonist*



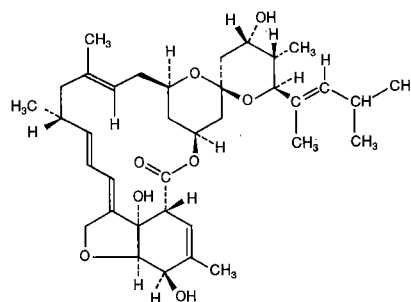
neldazosinum  
neldazosin

(±)-1-(4-amino-6,7-dimethoxy-2-quinazoliny)-4-(3-hydroxybutyryl)piperazine  
C<sub>18</sub>H<sub>25</sub>N<sub>3</sub>O<sub>4</sub> 109713-79-3 *α<sub>1</sub>-adrenoreceptor antagonist*



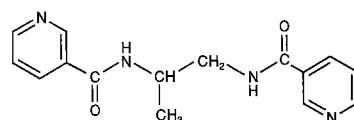
nemadectinum  
nemadectin

(6*R*,23*S*,25*S*)-5-*O*-demethyl-28-deoxy-25-[(*E*)-1,3-dimethyl-1-butenyl]-  
6,28-epoxy-23-hydroxymilbemycin B  
C<sub>36</sub>H<sub>52</sub>O<sub>8</sub> 102130-84-7 *antiparasitic (vet.)*



nicaravenum  
nicaraven

(±)-*N,N'*-propylenebis[nicotinamide]  
C<sub>15</sub>H<sub>16</sub>N<sub>4</sub>O<sub>2</sub> 79455-30-4 *cerebral vasodilator*

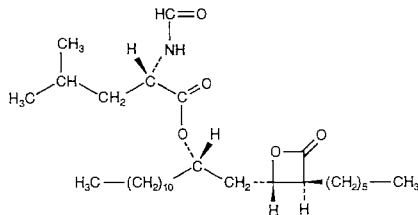


Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

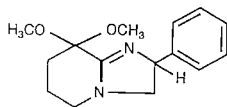
orlipastatum  
orlipastat

*N*-formyl-L-leucine, ester with (3*S*,4*S*)-3-hexyl-4-[(2*S*)-2-hydroxytridecyl]-  
2-oxetanone  
 $C_{29}H_{53}NO_5$  96829-58-2 *pancreatic lipase inhibitor*



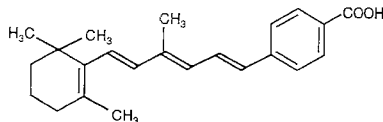
oxamisolum  
oxamisole

(±)-2,3,6,7-tetrahydro-2-phenylimidazo[1,2-*a*]pyridin-8(5*H*)-one, dimethyl  
acetal  
 $C_{15}H_{20}N_2O_2$  99258-56-7 *immunomodulator*



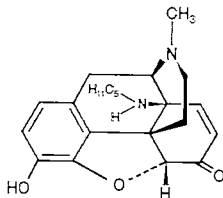
pelretinum  
pelretin

(*E,E,E*)-*p*-[4-methyl-6-(2,6,6-trimethyl-1-cyclohexen-1-yl)-1,3,5-hexa-  
trienyl]benzoic acid  
 $C_{23}H_{28}O_2$  91587-01-8 *keratolytic*



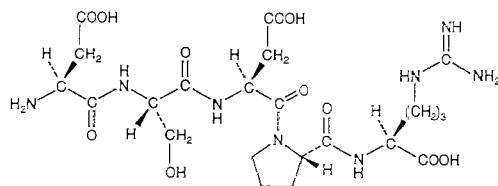
pentamorphonum  
pentamorphone

7,8-didehydro-4,5*a*-epoxy-3-hydroxy-17-methyl-14-(pentylamino)morphinan-  
6-one  
 $C_{22}H_{28}N_2O_3$  68616-83-1 *narcotic analgesic*



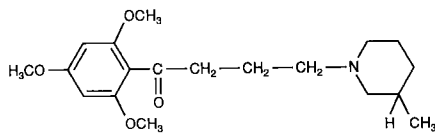
pentigetidum  
pentigetide

*N*<sup>2</sup>-[1-[*N*-(*N*-L-*α*-aspartyl-L-seryl)-L-*α*-aspartyl]-L-prolyl]-L-arginine  
 $C_{22}H_{36}N_8O_{11}$  62087-72-3 *immunomodulator*



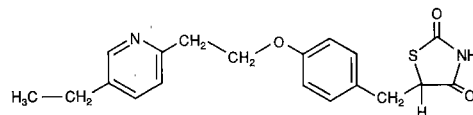
perfromedilum  
performedil

(±)-2',4',6'-trimethoxy-4-(3-methylpiperidino)butyrophenone  
C<sub>19</sub>H<sub>29</sub>NO<sub>4</sub> 92268-40-1 *peripheral vasodilator*



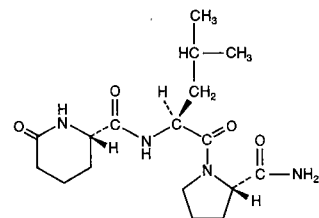
pioglitazonum  
pioglitazone

(±)-5-[p-[2-(5-ethyl-2-pyridyl)ethoxy]benzyl]-2,4-thiazolidinedione  
C<sub>19</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub>S 111025-46-8 *antidiabetic*



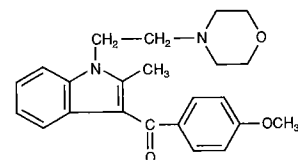
posatirelinum  
posatirelin

(2S)-N-[(1S)-1-[[[(2S)-2-carbamoyl-1-pyrrolidiny]carbonyl]-3-methylbutyl]-6-oxopipercolamide  
C<sub>17</sub>H<sub>26</sub>N<sub>4</sub>O<sub>4</sub> 78664-73-0 *thyrotropin releasing hormone analogue*



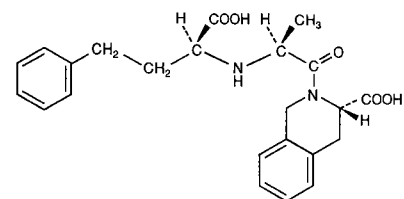
pravadolinum  
pravadoline

p-methoxyphenyl 2-methyl-1-(2-morpholinoethyl)indol-3-yl ketone  
C<sub>23</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub> 92623-83-1 *analgesic*



quinaprilatum  
quinaprilat

(3S)-2-[(S)-N-[(S)-1-carboxy-3-phenylpropyl]alanyl]-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid  
C<sub>23</sub>H<sub>26</sub>N<sub>2</sub>O<sub>5</sub> 85441-60-7 *angiotensin-converting enzyme inhibitor*

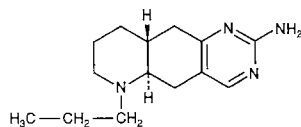


Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

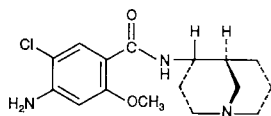
quineloranum  
quinelorane

(-)-(5*aR*,9*aR*)-2-amino-5,5*a*,6,7,8,9,9*a*,10-octahydro-  
6-propylpyrido[2,3-*g*]quinazoline  
C<sub>14</sub>H<sub>22</sub>N<sub>4</sub> 97466-90-5 D<sub>2</sub>-dopamine receptor agonist



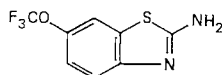
renzapridum  
renzapride

(±)-endo-4-amino-N-1-azabicyclo[3.3.1]non-4-yl-5-chloro-o-anisamide  
C<sub>16</sub>H<sub>22</sub>ClN<sub>3</sub>O<sub>2</sub> 112727-80-7 antiemetic



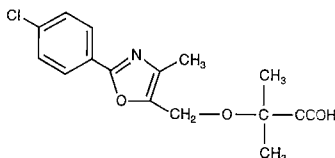
riluzolum  
riluzole

2-amino-6-(trifluoromethoxy)benzothiazole  
C<sub>8</sub>H<sub>5</sub>F<sub>3</sub>N<sub>2</sub>OS 1744-22-5 antiepileptic



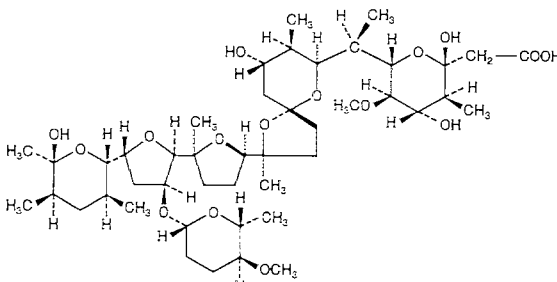
romazaritum  
romazarit

2-[[2-(*p*-chlorophenyl)-4-methyl-5-oxazolyl]methoxy]-2-methylpropionic acid  
C<sub>15</sub>H<sub>16</sub>ClNO<sub>4</sub> 109543-76-2 nonsteroidal anti-inflammatory



semduramicinum  
semduramicin

(3*R*,4*S*,5*S*,6*R*,7*S*,22*S*)-23,27-didemethoxy-2,6,22-tridemethyl-5,11-di-  
O-demethyl-6-methoxy-22-[[[(2*S*,5*S*,6*R*)-tetrahydro-5-methoxy-6-methyl-  
2*H*-pyran-2-yl]oxy]lonomycin A or  
(2*R*,3*S*,4*S*,5*R*,6*S*)-tetrahydro-2,4-dihydroxy-6-[(1*R*)-1-[(2*S*,5*R*,7*S*,8*R*,9*S*)-  
9-hydroxy-2,8-dimethyl-2-[(2*R*,5*S*)-tetrahydro-5-methyl-5-[(2*R*,3*S*,5*R*)-tetra-  
hydro-5-[(2*S*,3*S*,5*R*,6*S*)-tetrahydro-6-hydroxy-3,5,6-trimethyl-2*H*-pyran-2-yl]-  
3-[(2*S*,5*S*,6*R*)-tetrahydro-5-methoxy-6-methyl-2*H*-pyran-2-yl]oxy]-2-furyl]-  
2-furyl]-1,6-dioxaspiro[4.5]dec-7-yl]ethyl]-5-methoxy-3-methyl-2*H*-pyran-  
2-acetic acid  
C<sub>45</sub>H<sub>76</sub>O<sub>16</sub> 113378-31-7 coccidiostatic

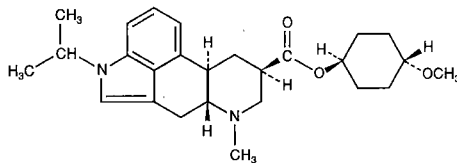


Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

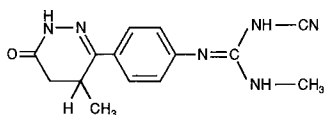
sergolexolum  
sergolexole

*trans*-4-methoxycyclohexyl 1-isopropyl-6-methylergoline-8 $\beta$ -carboxylate  
C<sub>26</sub>H<sub>36</sub>N<sub>2</sub>O<sub>3</sub> 108674-86-8 *antimigraine*



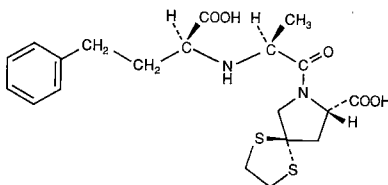
siguazodanum  
siguazodan

2-cyano-1-methyl-3-[*p*-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)phenyl]guanidine  
C<sub>14</sub>H<sub>16</sub>N<sub>6</sub>O 99591-83-0 *positive inotropic agent*



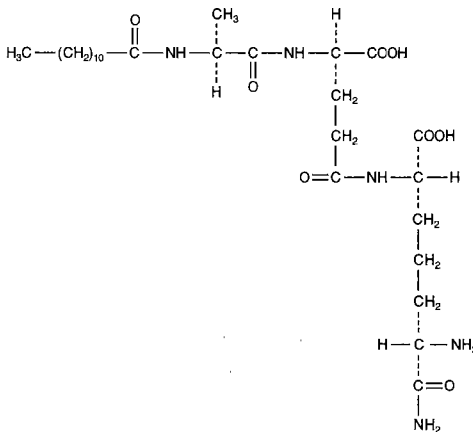
spiraprilatum  
spiraprilat

(8*S*)-7-[(*S*)-*N*[(*S*)-1-carboxy-3-phenylpropyl]alanyl]-1,4-dithia-7-azaspiro[4.4]nonane-8-carboxylic acid  
C<sub>20</sub>H<sub>26</sub>N<sub>2</sub>O<sub>5</sub>S<sub>2</sub> 83602-05-5 *angiotensin-converting enzyme inhibitor*



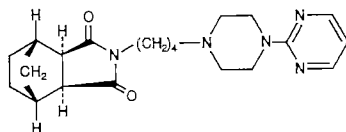
tabilautidum  
tabilautide

*threo*-6-carbamoyl-*N*<sup>2</sup>-[*N*-(*N*-lauroyl-L-alanyl)-*D*- $\gamma$ -glutamyl]-L-lysine  
C<sub>27</sub>H<sub>49</sub>N<sub>5</sub>O<sub>8</sub> 78088-46-7 *immunomodulator*



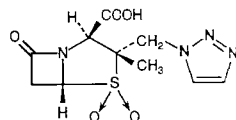
tandospironum  
tandospirone

(1*R*\*,2*S*\*,3*R*\*,4*S*\*)-*N*-[4-[4-(2-pyrimidinyl)-1-piperazinyl]butyl]-  
2,3-norbornanedicarboximide  
C<sub>21</sub>H<sub>29</sub>N<sub>5</sub>O<sub>2</sub> 87760-53-0 *anxiolytic*



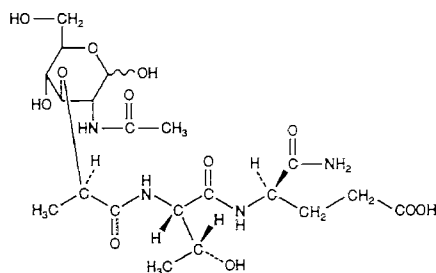
tazobactamum  
tazobactam

(2*S*,3*S*,5*R*)-3-methyl-7-oxo-3-(1*H*-1,2,3-triazol-1-ylmethyl)-4-thia-  
1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 4,4-dioxide  
C<sub>10</sub>H<sub>12</sub>N<sub>4</sub>O<sub>5</sub>S 89786-04-9 *antibiotic*



temurtidum  
temurtide

2-acetamido-3-*O*-[[[(1*R*)-1-[(1*S*,2*R*)-1-[[[(1*R*)-1-carbamoyl-3-carboxypropyl]-  
carbamoyl]-2-hydroxypropyl]carbamoyl]ethyl]-2-deoxy-  
D-glucopyranose  
C<sub>20</sub>H<sub>34</sub>N<sub>4</sub>O<sub>12</sub> 66112-59-2 *immunomodulator*

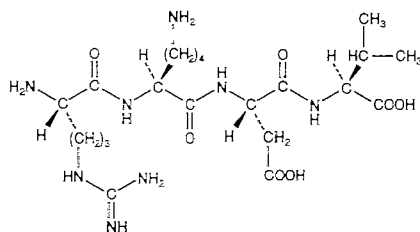


thrombinum  
thrombin

thrombin or E.C. 3.4.21.5. The source of the product should be indicated.

thymocartinum  
thymocartin

*N*-[*N*-(*N*<sup>2</sup>-*L*-arginyl-*L*-lysyl)-*L*-α-aspartyl]-*L*-valine  
C<sub>21</sub>H<sub>40</sub>N<sub>8</sub>O<sub>7</sub> 85466-18-8 *immunomodulator*

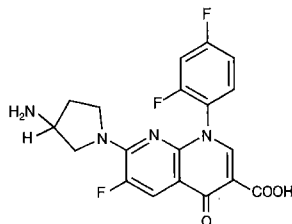


Proposed International  
Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae  
Chemical Abstracts Service (CAS) registry number  
Action and use

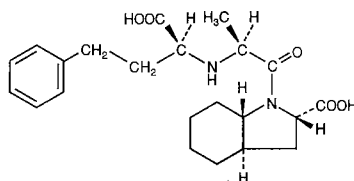
tosufloxacinum  
tosufloxacin

(±)-7-(3-amino-1-pyrrolidinyl)-1-(2,4-difluorophenyl)-6-fluoro-1,4-dihydro-4-oxo-1,8-naphthyridine-3-carboxylic acid  
C<sub>19</sub>H<sub>15</sub>F<sub>3</sub>N<sub>4</sub>O<sub>3</sub> 108138-46-1 *antibacterial*



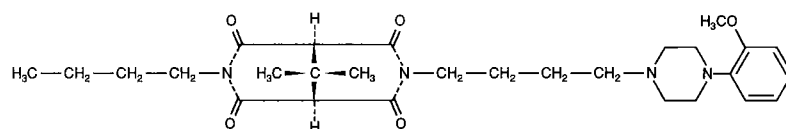
trandolaprilatum  
trandolaprilat

(2*S*,3*aR*,7*aS*)-1-[(*S*)-*N*-[(*S*)-1-carboxy-3-phenylpropyl]alanyl]hexahydro-2-indolinecarboxylic acid  
C<sub>22</sub>H<sub>30</sub>N<sub>2</sub>O<sub>5</sub> 87679-71-8 *angiotensin-converting enzyme inhibitor*



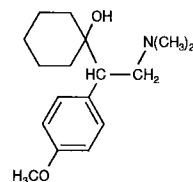
umespironum  
umespirone

*N*-butyl-*N'*-[4-[4-(*o*-methoxyphenyl)-1-piperazinyl]butyl]-2,2-dimethyl-1,1,3,3-propanetetracarboxylic 1,3 : 1,3-dimide  
C<sub>28</sub>H<sub>40</sub>N<sub>4</sub>O<sub>5</sub> 107736-98-1 *anxiolytic*



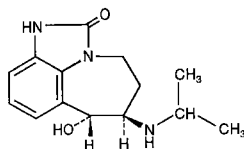
venlafaxinum  
venlafaxine

(±)-1-[α-[(dimethylamino)methyl]-*p*-methoxybenzyl]cyclohexanol  
C<sub>17</sub>H<sub>27</sub>NO<sub>2</sub> 93413-69-5 *antidepressant*



zilpaterolum  
zilpaterol

(±)-*trans*-4,5,6,7-tetrahydro-7-hydroxy-6-(isopropylamino)imidazo[4,5,1-*jk*][1]benzazepin-2(*1H*)-one  
C<sub>14</sub>H<sub>19</sub>N<sub>3</sub>O<sub>2</sub> 117827-79-9 *β<sub>2</sub>-adrenoreceptor agonist*





**Proposed International Nonproprietary Names (Prop. INN): List 50**

- p. 12 esmololum  
esmolol
- replace the chemical name and the CAS-registry number by the following:*  
(±)-methyl *p*-[2-hydroxy-3-(isopropylamino)propoxy]hydrocinnamate  
103598-03-4

**Proposed International Nonproprietary Names (Prop. INN): List 51**

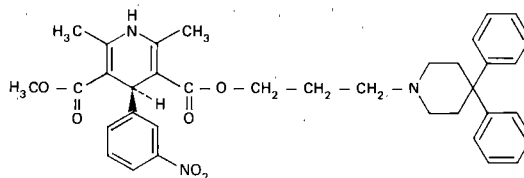
- p. 6 eldexomerum  
eldexomer
- replace the definition by the following:*  
Microspheres produced by reaction of partially hydrolysed starch with epichlorhydrin, slowly degradable by amylase (with a half-life of more than 120 minutes).  
Each eldexomer name is followed by a number referring to the mean diameter in µm of the microspheres e.g. *eldexomer 60*. The method of determining this parameter is approved by the competent national authority.

**Proposed International Nonproprietary Names (Prop. INN): List 55**

- p. 9 *delete*
- locicortonum  
locicortone
- insert*  
locicortoloni dicibas  
locicortolone dicibate

**Proposed International Nonproprietary Names (Prop. INN): List 57**

- p. 103 niguldipinum  
niguldipine
- replace the chemical name, the graphic formula and the CAS-registry number by the following:*  
(+)-(S)-3-(4,4-diphenylpiperidino)propyl methyl 1,4-dihydro-2,6-dimethyl-4-(*m*-nitrophenyl)-3,5-pyridinedicarboxylate  
113165-32-5



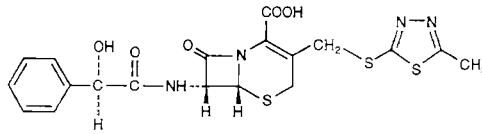
**Proposed International Nonproprietary Names (Prop. INN): List 58**

- p. 182 levdropropizinum  
levdropropizine
- replace the CAS registry number by the following:*  
99291-25-5

**Proposed International Nonproprietary Names (Prop. INN): List 59**

p. 4 cefcanelum  
cefcaneI

*replace the graphic formula by the following:*



p. 7 *delete*  
fronedipilum  
fronedipil

*insert*  
fronepidilum  
fronepidil

p. 11 *delete*  
rosterolonum  
rosterolone

*insert*  
rosterolonum  
rosterolone

**Procedure and Guiding Principles**

The text of the *Procedures for the Selection of Recommended International Nonproprietary Names for Pharmaceutical Substances and General Principles for Guidance in Devising International Nonproprietary Names for Pharmaceutical Substances* will from now on be reproduced in uneven numbers of proposed INN-lists only.

**CORRIGENDUM**

WHO Drug Information, Vol. 2, No. 3, 1988

**Recommended International Nonproprietary Names (Rec. INN): List 28**

Owing to modifications in list 59 of proposed INNs (published in *WHO Drug Information*, Vol. 2, No. 2, 1988) the following corrections have to be made.

p. 164 bendacololum  
bendacolol

*delete whole entry*

p. 164 clipoxaminum  
clipoxamine

*delete whole entry*



# NEW BOOK ANNOUNCEMENT

## International Nonproprietary Names (INN) for Pharmaceutical Substances Cumulative List No. 7

World Health Organization 1988  
xviii + 617 pages (English and French)  
ISBN 92 4 056014 9  
Sw.fr. 65.—/US \$52.00  
Order no. 0150312

This book provides a cumulative list covering all currently proposed and recommended international nonproprietary names (INN) for pharmaceutical substances. The list, which is compiled periodically, is intended as an aid for all drug manufacturers, prescribers, and regulatory authorities who must work with generic names and need an authoritative reference that helps them keep track of newly introduced names or trace information on existing names. The list also represents part of WHO's efforts to reduce confusion by making certain that each pharmaceutical substance is distinguished by a unique and universally recognized name.

The seventh cumulative list features generic names presented in alphabetical order by Latin name. Each entry includes equivalent nonproprietary names in English, French, Russian and Spanish; a reference to the INN list in which the name was originally proposed or recommended; and a reference to other generic names, such as national nonproprietary names, pharmacopoeial monographs, and names issued by the International Organization for Standardization (IOS). Each entry also includes the molecular formula for the substance and its Chemical Abstracts Service (CAS) registry number.

The inclusion of three separate indexes makes it possible to retrieve the INN equivalent of a national nonproprietary name, to trace the name of a substance from knowledge of its formula, or to locate a name by its CAS registry number.

Newly proposed and recommended INNs are now regularly featured in the new quarterly journal, *WHO Drug Information*, which was inaugurated in 1987. Sample copies of this journal are available on request.

---

## ORDER FORM

- Please send me \_\_\_\_\_ copy/ies of **International Nonproprietary Names (INN) for Pharmaceutical Substances, Cumulative List No. 7** at Sw.fr. 65.—/US \$52.00 per copy (order no. 0150312)
- Please enter my 1989 subscription to **WHO Drug Information** at Sw.fr. 50.—/US \$40.00
- Please send me a free sample copy of **WHO Drug Information**
- Payment enclosed
- Please charge to my credit card
- Visa       American Express
- Eurocard/Mastercard/Access
- Card number \_\_\_\_\_
- Expiry date \_\_\_\_\_ Date of order \_\_\_\_\_
- Signature \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Return to:  
World Health Organization  
Distribution and Sales  
1211 Geneva 27  
Switzerland