Supplement to
WHO Chronicle, 1986
Vol. 40, No. 1 (April)

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,[1] 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 the *WHO Chronicle*, e.g., for List 55 Prop. INN not later than 30 September 1986.

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.

Proposed International Nonproprietary Names (Prop. INN): List 55[2]

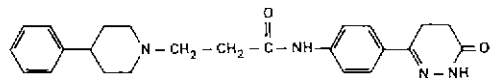
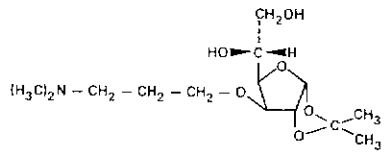
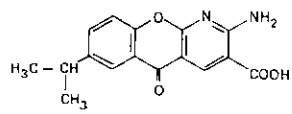
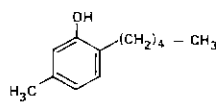
Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
acidum azelaicum azelaic acid	azelaic acid $C_9H_{16}O_4$ 123-99-9 $HOOC-(CH_2)_7-COOH$

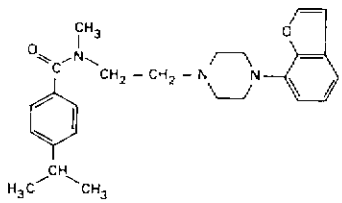
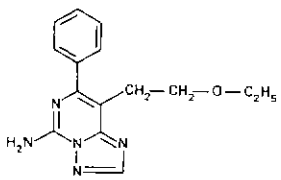
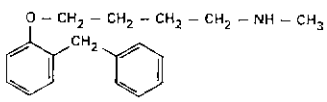
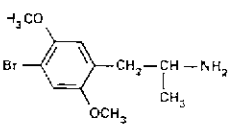
Comprehensive information on the INN programme can be found in: WHO Technical Report Series, No. 581, 1975 (*Nonproprietary Names for Pharmaceutical Substances*. Twentieth Report of the WHO Expert Committee). ISBN 92 4 120581 4 (price Sw. fr. 6.–); an account of this publication will be found on page 27 of this Supplement (Annex 2). 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.

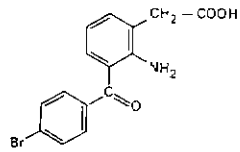
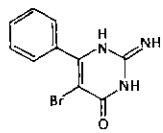
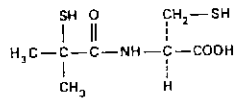
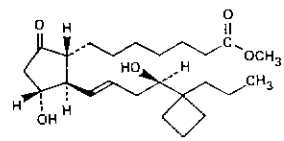
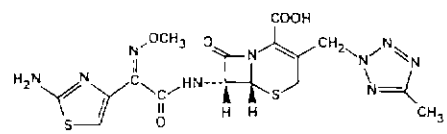
These publications may be obtained, direct or through booksellers, from the sales agents listed on the back cover of the *WHO Chronicle*. Orders from countries where sales agents have not yet been appointed may be addressed to: World Health Organization, Distribution and Sales Service, 1211 Geneva 27,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

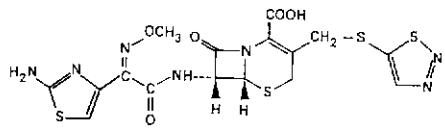
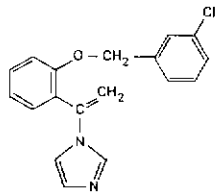
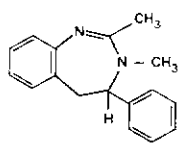
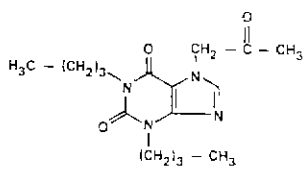
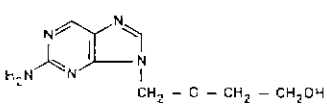
[1] See Annex 1, p. 18

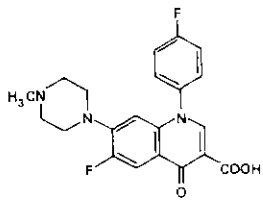
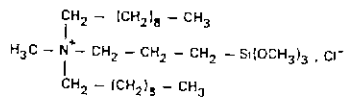
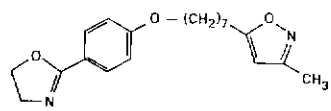
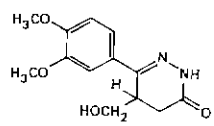
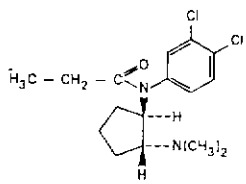
[2] Other lists of proposed and recommended international nonproprietary names can be found in *Cumulative List No. 6*, 1982.

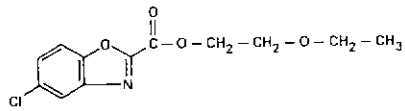
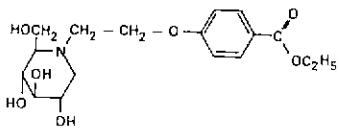
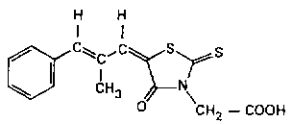
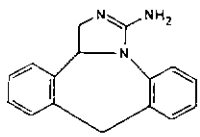
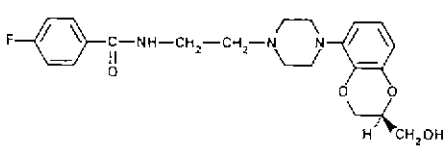
Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
altapizonum altapizone	4-phenyl-4′-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-1-piperidinepropionanilide $C_{24}H_{28}N_4O_2$ 93277-96-4 
amiprilosum amiprilose	3-*O*-[3-(dimethylamino)propyl]-1,2-*O*-isopropylidene-α-D-glucofuranose $C_{14}H_{27}NO_6$ 56824-20-5 
amlexanoxum amlexanox	2-amino-7-isopropyl-5-oxo-5*H*-[1]benzopyrano[2,3-*b*]pyridine-3-carboxylic acid $C_{16}H_{14}N_2O_4$ 68302-57-8 
amylmetacresolum amylmetacresol	6-pentyl-*m*-cresol $C_{12}H_{18}O$ 1300-94-3 
ardacinum ardacin	A mixture of aridicin A, aridicin B, aridicin C and aridicin C_2; the latter are glucopeptide antibiotics derived from a new species of the genus *Kibdelosporangium aridum*, strain ATCC 39323. They contain a mannose and a glycolipid group attached at as yet undetermined sites to the aglycone shown below. The glycolipid group differentiates the different components. Glycolipid structures of the four major components are shown below. A: $C_{81}H_{82}Cl_4N_8O_{30}$ B: $C_{82}H_{84}Cl_4N_8O_{30}$ C: $C_{83}H_{86}Cl_4N_8O_{30}$ C_2 $C_{83}H_{88}Cl_4N_8O_{30}$

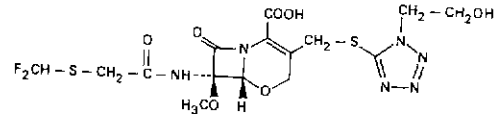
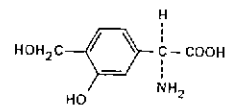
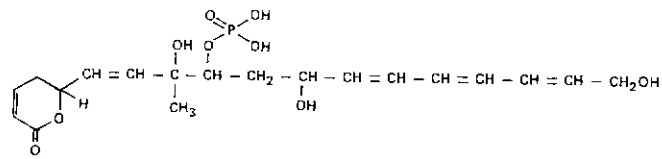
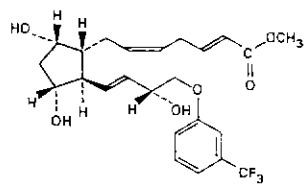
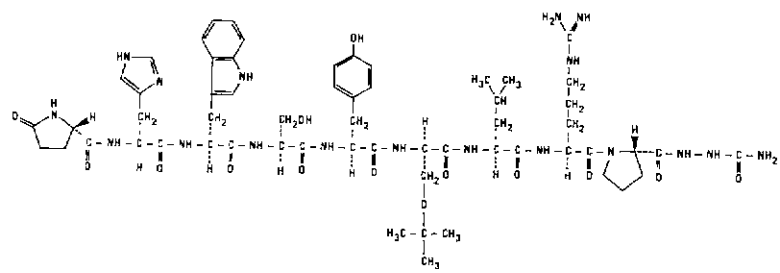
Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
befiperidum befiperide	*N*-[2-[4-(7-benzofuranoyl)-1-piperazinyl]ethyl]-*p*-isopropyl-*N*-methylbenzamide $C_{25}H_{31}N_3O_2$ 100927-14-8 
bemitradinum bemitradine	5-amino-8-(2-ethoxyethyl)-7-phenyl-*s*-triazolo[1,5-*c*]pyrimidine $C_{15}H_{17}N_5O$ 88133-11-3 
bifemelanum bifemelane	*N*-methyl-4-[(α-phenyl-*o*-tolyl)oxy]butylamine $C_{18}H_{23}NO$ 90293-01-9 
brolamfetaminum brolamfetamine	(±)-4-bromo-2,5-dimethoxy-α-methylphenethylamine $C_{11}H_{16}BrNO_2$ 64638-07-9 

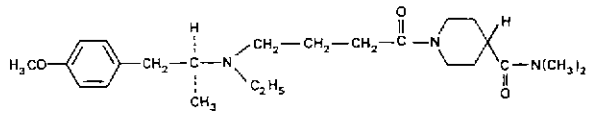
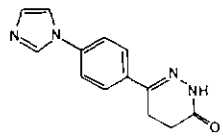
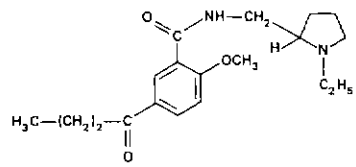
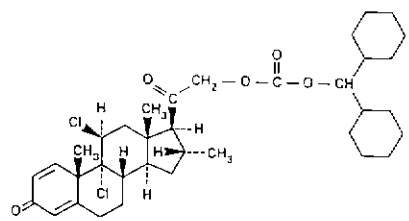
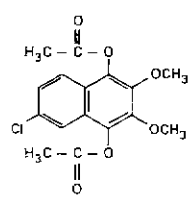
Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
bromfenacum bromfenac	[2-amino-3-(*p*-bromobenzoyl)phenyl]acetic acid $C_{15}H_{12}BrNO_3$ 91714-94-2 
bropiriminum bropirimine	5-bromo-2,3-dihydro-2-imino-6-phenyl-4(1*H*)-pyrimidinone $C_{10}H_8BrN_3O$ 56741-95-8 
bucillaminum bucillamine	*N*-(2-mercapto-2-methylpropionyl)-L-cysteine $C_7H_{13}NO_3S_2$ 65002-17-7 
butaprostum butaprost	methyl (1*R*,2*R*,3*R*)-3-hydroxy-2-[(1*E*,4*R*)-4-hydroxy-4-(1-propylcyclobutyl)-1-butenyl]-5-oxocyclopentaneheptanoate $C_{24}H_{40}O_5$ 69648-38-0 
cefteramum cefteram	(+)-(6*R*,7*R*)-7-[2-(2-amino-4-thiazolyl)glyoxylamido]-3-[(5-methyl-2*H*-tetrazol-2-yl)methyl]-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7²-(*Z*)-(*O*-methyloxime) $C_{16}H_{17}N_9O_5S_2$ 82547-58-8 

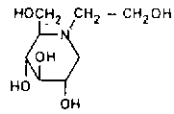
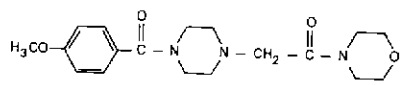
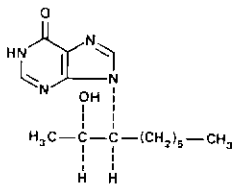
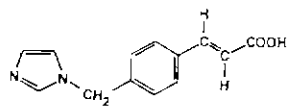
Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
cefuzonamum cefuzonam	(−)-(6*R*,7*R*)-7-[2-(2-amino-4-thiazolyl)glyoxylamido]-8-oxo-3-[(1,2,3-thiadiazol-5-ylthio)methyl]-5-thia-1-azabicyclo[4 2.0]oct-2-ene-2-carboxylic acid, 7²-(*Z*)-(*O*-methyloxime) $C_{16}H_{15}N_7O_5S_4$ 82219-78-1 
·onazolum c. conazole	1-[1-[*o*-[(*m*-chlorobenzyl)oxy]phenyl]vinyl]imidazole $C_{18}H_{15}ClN_2O$ 77175-51-0 
dazepinilum dazepinil	(±)-4,5-dihydro-2,3-dimethyl-4-phenyl-3*H*-1,3-benzodiazepine $C_{17}H_{18}N_2$ 75991-50-3 
denbufyllinum denbufylline	7-acetonyl-1,3-dibutylxanthine $C_{16}H_{24}N_4O_3$ 57076-71-8 
desciclovirum desciclovir	2-[(2-amino-9*H*-purin-9-yl)methoxy]ethanol $C_8H_{11}N_5O_2$ 84408-37-7 

Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
difloxacinum difloxacin	6-fluoro-1-(*p*-fluorophenyl)-1,4-dihydro-7-(4-methyl-1-piperazinyl)-4-oxo-3-quinolinecarboxylic acid $C_{21}H_{19}F_2N_3O_3$ 98106-17-3 
disiquonii chloridum disiquonium chloride	didecylmethyl[3-(trimethoxysilyl)propyl]ammonium chloride $C_{27}H_{60}ClNO_3Si$ 68959-20-6 
disoxarilum disoxaril	3-methyl-5-[7-(*p*-2-oxazolin-2-ylphenoxy)heptyl]isoxazole $C_{20}H_{26}N_2O_3$ 87495-31-6 
domipizonum domipizone	(±)-6-(3,4-dimethoxyphenyl)-4,5-dihydro-5-(hydroxymethyl)-3(2*H*)-pyridazinone $C_{13}H_{16}N_2O_4$ 95355-10-5 
eclanaminum eclanamine	(±)-*trans*-3′,4′-dichloro-*N*-[2-(dimethylamino)cyclopentyl]propionanilide $C_{16}H_{22}Cl_2N_2O$ 71027-13-9 

Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
eclazolastum eclazolast	2-ethoxyethyl 5-chloro-2-benzoxazolecarboxylate $C_{12}H_{12}ClNO_4$ 80263-73-6 
emiglitatum emiglitate	ethyl *p*-[2-[(2*R*,3*R*,4*R*,5*S*)-3,4,5-trihydroxy-2-(hydroxymethyl)piperidino]ethoxy]benzoate $C_{17}H_{25}NO_7$ 80879-63-6 
epalrestatum epalrestat	5-[(*E*,*E*)-*β*-methylcinnamylidene]-4-oxo-2-thioxo-3-thiazolidineacetic acid $C_{15}H_{13}NO_3S_2$ 82159-09-9 
epinastinum epinastine	3-amino-9,13b-dihydro-1*H*-dibenz[*c*,*f*]imidazo[1,5-*a*]azepine $C_{16}H_{15}N_3$ 80012-43-7 
flesinoxanum flesinoxan	(+)-(*S*)-*p*-fluoro-*N*-[2-[4-[2-(hydroxymethyl)-1,4-benzodioxan-5-yl]-1-piperazinyl]ethyl]benzamide $C_{22}H_{26}FN_3O_4$ 98206-10-1 

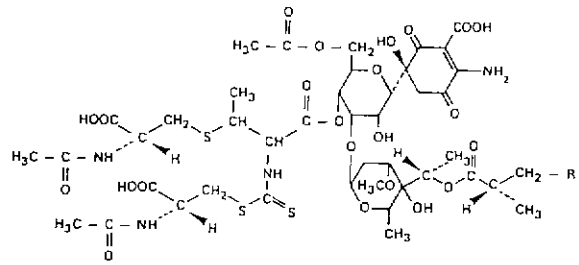
Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
flomoxefum flomoxef	(−)-(6*R*,7*R*)-7-[2-[(difluoromethyl)thio]acetamido]-3-[[[1-(2-hydroxyethyl)-1*H*-tetrazol-5-yl]thio]methyl]-7-methoxy-8-oxo-5-oxa-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid $C_{15}H_{18}F_2N_6O_7S_2$ 99665-00-6 
forfenimexum forfenimex	(+)-(*S*)-2-(α,3-dihydroxy-*p*-tolyl)glycine $C_9H_{11}NO_4$ 72973-11-6 
fostriecinum fostriecin	5,6-dihydro-6-[3,4,6,13-tetrahydroxy-3-methyl-1,7,9,11-tridecatetraenyl]-2*H*-pyran-2-one 4-(dihydrogen phosphate) $C_{19}H_{27}O_9P$ 87810-56-8 
froxiprostum froxiprost	methyl (2*E*,5*Z*)-7-[(1*R*,2*R*,3*R*,5*S*)-3,5-dihydroxy-2-[(*E*)-(3*R*)-3-hydroxy-4-[(α,α,α-trifluoro-*m*-tolyl)oxy]-1-butenyl]cyclopentyl]-2,5-heptadienoate $C_{24}H_{29}F_3O_6$ 62559-74-4 
goserelinum goserelin	1-(5-oxo-L-prolyl-L-histidyl-L-tryptophyl-L-seryl-L-tyrosyl-*O*-*tert*-butyl-D-seryl-L-leucyl-L-arginyl-L-prolyl)semicarbazide $C_{59}H_{84}N_{18}O_{14}$ 65807-02-5 

Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
idaverinum idaverine	(+)-1-[4-[ethyl(*p*-methoxy-*α*-methylphenethyl)amino]butyryl]-*N*,*N*-dimethylisonipecotamide $C_{24}H_{39}N_3O_3$ 100927-13-7 
imazodanum imazodan	4,5-dihydro-6-(*p*-imidazol-1-ylphenyl)-3(2*H*)-pyridazinone $C_{13}H_{12}N_4O$ 84243-58-3 
irolapridum irolapride	(±)-5-butyryl-*N*-[(1-ethyl-2-pyrrolidinyl)methyl]-*o*-anisamide $C_{18}H_{28}N_2O_3$ 64779-98-2 
locicortonum locicortone	9,11*β*-dichloro-21-hydroxy-16*α*-methylpregna-1,4-diene-3,20-dione dicyclohexylmethyl carbonate $C_{36}H_{50}Cl_2O_5$ 78467-68-2 
lonapalenum lonapalene	6-chloro-2,3-dimethoxy-1,4-naphthalenediol diacetate $C_{16}H_{15}ClO_6$ 91431-42-4 

Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
miglitolum miglitol	(2*R*,3*R*,4*R*,5*S*)-1-(2-hydroxyethyl)-2-(hydroxymethyl)-3,4,5-piperidinetriol $C_8H_{17}NO_5$ 72432-03-2 
molracetamum molracetam	4-[(4-*p*-anisoyl-1-piperazinyl)acetyl]morpholine $C_{18}H_{25}N_3O_4$ 94746-78-8 
nosantinum nosantine	*erythro*-9-[1-(1-hydroxyethyl)heptyl]hypoxanthine $C_{14}H_{22}N_4O_2$ 76600-30-1 
ozagrelum ozagrel	(*E*)-*p*-(imidazol-1-ylmethyl)cinnamic acid $C_{13}H_{12}N_2O_2$ 82571-53-7 
paldimycinum paldimycin	Antibiotic produced by *Streptomyces* organism. Paldimycin consists of two compounds paldimycin A and paldimycin B, in approximately a 1:1 ratio 94554-99-1 paldimycin A R = CH_3 2-amino-5-[3-*O*-[2,6-dideoxy-4-*C*-[(1*S*)-1-hydroxyethyl]-3-*O*-methyl-α-L-*lyxo*-hexopyranosyl]-β-D-allopyranosyl]-5-hydroxy-3,6-dioxo-1-cyclohexene-1-carboxylic acid, 4′-[3-[[(2*R*)-2-acetamido-2-carboxyethyl]thio]-2-[(dithiocarboxy)amino]butyrate], 6′-acetate, 4″-*C*-[(2*S*)-2-methylbutyrate], *S*-ester with *N*-acetyl-L-cysteine. $C_{44}H_{64}N_4O_{23}S_3$ 94555-00-7

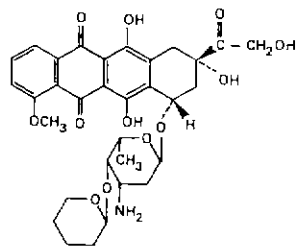
paldimycin B: R = H

2-amino-5-[3-*O*-[2,6-dideoxy-4-*C*-[(1*S*)-1-hydroxyethyl]-3-*O*-methyl-α-L-*lyxo*-hexopyranosyl]-β-D-allopyranosyl]-5-hydroxy-3,6-dioxo-1-cyclohexene-1-carboxylic acid, 4′-[3-[[(2*R*)-2-acetamido-2-carboxyethyl]thio]-2-[(dithiocarboxy)amino]butyrate], 6′-acetate, 4″-*C*-isobutyrate, *S*-ester with *N*-acetyl-L-cysteine.
$C_{43}H_{62}N_4O_{23}S_3$ 94555-01-8



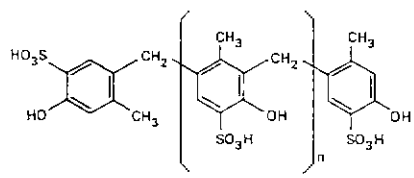
pirarubicinum
pirarubicin

(8*S*,10*S*)-10-[[3-amino-2,3,6-trideoxy-4-*O*-(tetrahydro-2*H*-pyran-2-yl)-α-L-*lyxo*-hexopyranosyl]oxy]-8-glycoloyl-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-5,12-naphthacenedione
$C_{32}H_{37}NO_{12}$ 72496-41-4



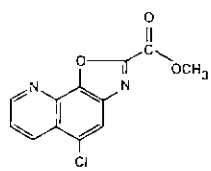
policresulenum
policresulen

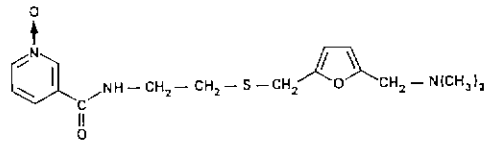
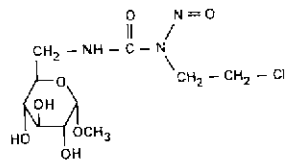
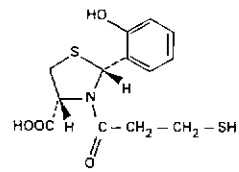
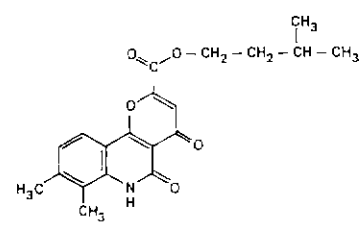
2-hydroxy-*p*-toluenesulfonic acid, polymer with formaldehyde
$(C_8H_8O_4S)(C_8H_8O_4S)n(C_7H_7O_4S)$ 101418-00-2

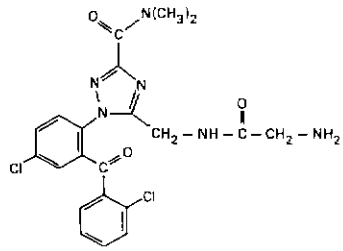
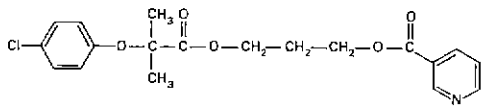
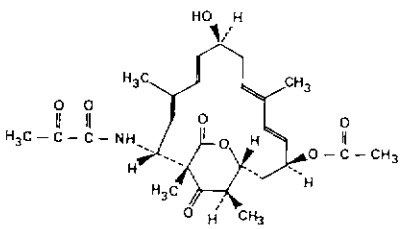
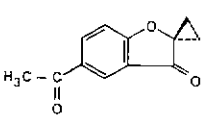


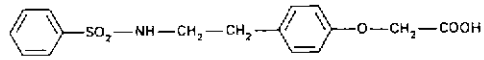
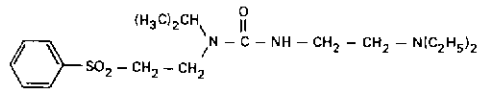
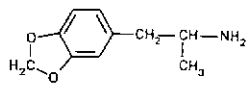
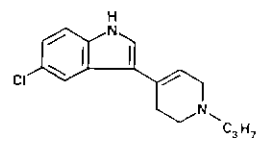
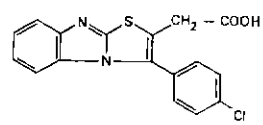
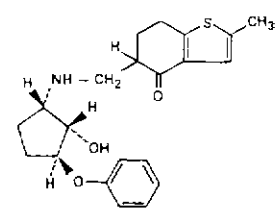
quazolastum
quazolast

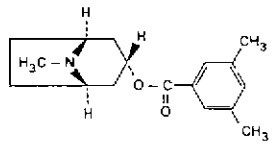
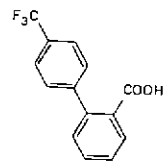
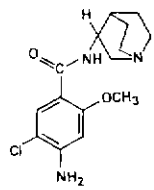
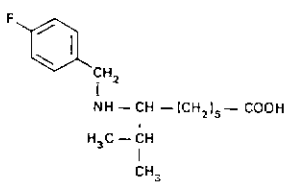
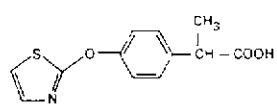
methyl 5-chlorooxazolo[4,5-*h*]quinoline-2-carboxylate
$C_{12}H_7ClN_2O_3$ 86048-40-0



Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
ramixotidinum ramixotidine	*N*-[2-[[5-[(dimethylamino)methyl]furfuryl]thio]ethyl]nicotinamide 1-oxide $C_{18}H_{21}N_3O_3S$ 84071-15-8 
ranimustinum ranimustine	methyl 6-[3-(2-chloroethyl)-3-nitrosoureido]-6-deoxy-α-D-glucopyranoside $C_{10}H_{18}ClN_3O_7$ 58994-96-0 
rentiaprilum rentiapril	(2*R*,4*R*)-2-(*o*-hydroxyphenyl)-3-(3-mercaptopropionyl)-4-thiazolidinecarboxylic acid $C_{13}H_{15}NO_4S_2$ 80830-42-8 
repirinastum repirinast	isopentyl 5,6-dihydro-7,8-dimethyl-4,5-dioxo-4*H*-pyrano[3,2-*c*]quinoline-2-carboxylate $C_{20}H_{21}NO_5$ 73080-51-0 

Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
rilmazafonum rilmazafone	5-[(2-aminoacetamido)methyl]-1-[4-chloro-2-(*o*-chlorobenzoyl)phenyl]-*N*,*N*-dimethyl-1*H*-1,2,4-triazole-3-carboxamide $C_{21}H_{20}Cl_2N_6O_3$ 99593-25-6 
ronifibratum ronifibrate	3-hydroxypropyl nicotinate, 2-(*p*-chlorophenoxy)-2-methylpropionate (ester) $C_{19}H_{20}ClNO_5$ 42597-57-9 
sedecamycinum sedecamycin	(−)-*N*-[(1*S*,2*R*,3*E*,5*E*,7*S*,9*E*,11*E*,13*S*,15*R*,19*R*)-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 13-acetate $C_{27}H_{35}NO_8$ 23477-98-7 
sometriporum sometripor	methionyl growth hormone (pig)
spizofuronum spizofurone	5-acetylspiro[benzofuran-2(3*H*),1′-cyclopropan]-3-one $C_{12}H_{10}O_3$ 72492-12-7 

Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
sulotrobanum sulotroban	[*p*-(2-benzenesulfonamidoethyl)phenoxy]acetic acid $C_{16}H_{17}NO_5S$ 72131-33-0 
suricainidum suricainide	3-[2-(diethylamino)ethyl]-1-isopropyl-1-[2-(phenylsulfonyl)ethyl]urea $C_{18}H_{31}N_3O_3S$ 85053-46-9 
tenamfetaminum tenamfetamine	(±)-α-methyl-3,4-(methylenedioxy)phenethylamine $C_{10}H_{13}NO_2$ 51497-09-7 
tepirindolum tepirindole	5-chloro-3-(1,2,3,6-tetrahydro-1-propyl-4-pyridyl)indole $C_{15}H_{15}ClN_2$ 72808-81-2 
tilomisolum tilomisole	3-(*p*-chlorophenyl)thiazolo[3,2-*a*]benzimidazole-2-acetic acid $C_{17}H_{11}ClN_2O_2S$ 58433-11-7 
tipentosinum tipentosin	(±)-6,7-dihydro-5-[[[(1*R**,2*R**,3*R**)-2-hydroxy-3-phenoxycyclopentyl]-amino]methyl]-2-methylbenzo[*b*]thiophen-4(5*H*)-one $C_{21}H_{25}NO_3S$ 95588-08-2 

Proposed International Nonproprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae Chemical Abstracts Service (CAS) registry number*
tropanserinum tropanserin	1α_H,5α_H-tropan-3α-yl 3,5-dimethylbenzoate $C_{17}H_{23}NO_2$ 85181-40-4 
xenalipinum xenalipin	4′-(trifluoromethyl)-2-biphenylcarboxylic acid $C_{14}H_9F_3O_2$ 84392-17-6 
zacopridum zacopride	4-amino-5-chloro-*N*-3-quinuclidinyl-*o*-anisamide $C_{15}H_{20}ClN_3O_2$ 90182-92-6 
zafuleptinum zafuleptine	(±)-7-[(*p*-fluorobenzyl)amino]-8-methylnonanoic acid $C_{17}H_{26}FNO_2$ 59209-97-1 
zoliprofenum zoliprofen	(±)-*p*-(2-thiazolyloxy)hydratropic acid $C_{12}H_{11}NO_3S$ 56355-17-0 

AMENDMENTS TO PREVIOUS LISTS

Cumulative List N° 6, 1982

International Nonproprietary Names (INN) for Pharmaceutical Substances

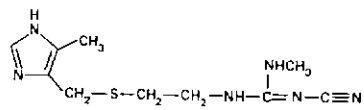
	delete	*insert*
p. 23	amphetaminum amphetamine	amfetaminum amfetamine
p. 37	benzphetaminum benzphetamine	benzfetaminum benzfetamine
p. 95	dexamphetaminum dexamphetamine	dexamfetaminum dexamfetamine
p 157	hydroxyamphetaminum hydroxyamphetamine	hydroxyamfetaminum hydroxyamfetamine
p. 190	methamphetaminum methamphetamine	metamfetaminum metamfetamine
p 270	salazosulfapyridinum salazosulfapyridine	sulfasalazinum sulfasalazine

Supplement to Vol. 29, N° 3, 1975

Proposed International Nonproprietary Names (Prop. INN): List 33

p 7 cimetidinum
cimetidine

replace graphic formula by the following:



Supplement to Vol. 37, N° 2, 1983

Proposed International Nonproprietary Names (Prop. INN): List 49

	delete	*insert*
p. 10	flumazepilum flumazepil	flumazenilum flumazenil

Supplement to Vol. 38, N° 4, 1984

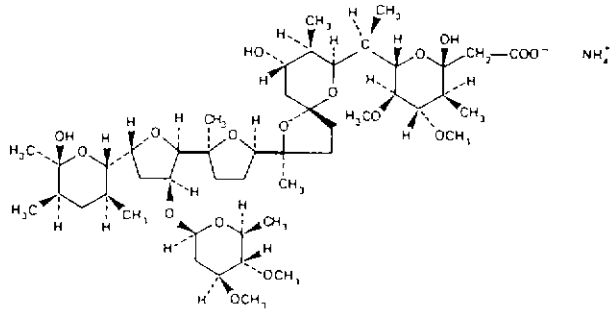
Proposed International Nonproprietary Names (Prop. INN): Liste 52

p. 7 darenzepinum
darenzepine

replace CAS registry number by: 90274-22-9

p. 13 maduramicinum
maduramicin

replace graphic formula by the following:



p. 19

delete	*insert*
salmaterolum salmaterol	salmeterolum salmeterol

p. 20 tazadolenum
tazadolene

replace CAS registry number by: 87936-75-2

Supplement to Vol. 39 (May), 1985

Proposed International Nonproprietary Names (Prop. INN): List 53

p. 13

delete	*insert*
isrodipinum isrodipine	isradipinum isradipine

Supplement to Vol. 39, N° 4, 1985

Proposed International Nonproprietary Names (Prop. INN): Liste 54

p. 1 acitematum
acitemate

replace CAS registry number by: 101197-99-3

p. 8

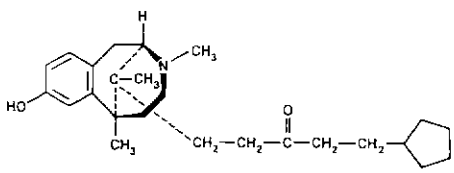
delete	*insert*
formidacillinum formidacillin	fomidacillinum fomidacillin

p. 18 sopecainolum
sopecainol

solpecainolum
solpecainol

p. 15 quadazocinum
quadazocin

replace graphic formula by

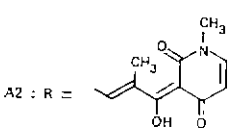


p. 16 reboxetinum
reboxetine

replace the CAS registry number by 98769-81-4

p. 23 efrotomycinum
efrotomycin

replace structure of A2:R *by*



Annex 1
PROCEDURE FOR THE SELECTION OF RECOMMENDED INTERNATIONAL NONPROPRIETARY NAMES FOR PHARMACEUTICAL SUBSTANCES*

The following procedure shall be followed by the World Health Organization in the selection of recommended international nonproprietary names for pharmaceutical substances, in accordance with the World Health Assembly resolution WHA3 11:

1. Proposals for recommended international nonproprietary names shall be submitted to the World Health Organization on the form provided therefor.

2. Such proposals shall be submitted by the Director-General of the World Health Organization to the members of the Expert Advisory Panel on the International Pharmacopoeia and Pharmaceutical Preparations designated for this purpose, for consideration in accordance with the "General principles for guidance in devising International Nonproprietary Names", appended to this procedure. The name used by the person discovering or first developing and marketing a pharmaceutical substance shall be accepted, unless there are compelling reasons to the contrary.

3. Subsequent to the examination provided for in article 2, the Director-General of the World Health Organization shall give notice that a proposed international nonproprietary name is being considered.

A. Such notice shall be given by publication in the *Chronicle of the World Health Organization*[1] and by letter to Member States and to national pharmacopoeia commissions or other bodies designated by Member States

(i) Notice may also be sent to specific persons known to be concerned with a name under consideration.

B Such notice shall:

(i) set forth the name under consideration,

(ii) identify the person who submitted a proposal for naming the substance, if so requested by such person,

(iii) identify the substance for which a name is being considered;

(iv) set forth the time within which comments and objections will be received and the person and place to whom they should be directed;

(v) state the authority under which the World Health Organization is acting and refer to these rules of procedure.

C. In forwarding the notice, the Director-General of the World Health Organization shall request that Member States take such steps as are necessary to prevent the acquisition of proprietary rights in the proposed name during the period it is under consideration by the World Health Organization.

4. Comments on the proposed name may be forwarded by any person to the World Health Organization within four months of the date of publication, under article 3, of the name in the *Chronicle of the World Health Organization*.[1]

5 A formal objection to a proposed name may be filed by any interested person within four months of the date of publication, under article 3, of the name in the *Chronicle of the World Health Organization*.[1]

A Such objection shall

(i) identify the person objecting;

(ii) state his interest in the name;

(iii) set forth the reasons for his objection to the name proposed.

6. Where there is a formal objection under article 5, the World Health Organization may either reconsider the proposed name or use its good offices to attempt to obtain withdrawal of the objection Without prejudice to the consideration by the World Health Organization of a substitut name or names, a name shall not be selected by the World Health Organization as a recommended international nonproprietary name while there exists a formal objection thereto filed under article 5 which has not been withdrawn.

7 Where no objection has been filed under article 5, or all objections previously filed have been withdrawn, the Director-General of the World Health Organization shall give notice in accordance with subsection A of article 3 that the name has been selected by the World Health Organization as a recommended international nonproprietary name.

8 In forwarding a recommended international nonproprietary name to Member States under article 7, the Director-General of the World Health Organization shall:

A. request that it be recognized as the nonproprietary name for the substance; and

B request that Member States take such steps as are necessary to prevent the acquisition of proprietary rights in the name, including prohibiting registration of the name as a trade-mark or trade-name.

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

[1] The title of this publication was changed to *WHO Chronicle* in January 1959

GENERAL PRINCIPLES FOR GUIDANCE IN DEVISING INTERNATIONAL NONPROPRIETARY NAMES FOR PHARMACEUTICAL SUBSTANCES

1 International Nonproprietary Names (INN) should be distinctive in sound and spelling. They should not be inconveniently long and should not be liable to confusion with names in common use

2. The INN for a substance belonging to a group of pharmacologically related substances should, where appropriate, show this relationship Names that are likely to convey to a patient an anatomical, physiological, pathological or therapeutic suggestion should be avoided

These primary principles are to be implemented by using the following secondary principles

3. In devising the INN of the first substance in a new pharmacological group, consideration should be given to the possibility of devising suitable INN for related substances, belonging to the new group.

4. In devising INN for acids, one-word names are preferred; their salts should be named without modifying the acid name, e.g "oxacillin" and "oxacillin sodium", "ibufenac" and "ibufenac sodium".

5. INN for substances which are used as salts should in general apply to the active base or the active acid. Names for different salts or esters of the same active substance should differ

only in respect of the name of the inactive acid or the inactive base.

For quaternary ammonium substances, the cation and anion should be named appropriately as separate components of a quaternary substance and not in the amine-salt style.

6 The use of an isolated letter or number should be avoided, hyphenated construction is also undesirable.

7. To facilitate the translation and pronunciation of INN, "f" should be used instead of "ph", "t" instead of "th", "e" instead of "ae" or "oe", and "i" instead of "y", the use of the letters "h" and "k" should be avoided

8. Provided that the names suggested are in accordance with these principles, names proposed by the person discovering or first developing and marketing a pharmaceutical preparation, or names already officially in use in any country, should receive preferential consideration.

9. Group relationship in INN (see Guiding Principle 2) should if possible be shown by using a common stem. The following list contains examples of stems for groups of substances, particularly for new groups. There are many other stems in active use.[1] Where a stem is shown without any hyphens it may be used anywhere in the name

Latin	*English*	
-acum	-ac	anti-inflammatory agents of the ibufenac group
-actidum	-actide	synthetic polypeptides with a corticotrophin-like action
-adolum	-adol	analgesics
-adol-	-adol-	
-astum	-ast	anti-asthmatic, anti-allergic substances not acting primarily as antihistaminics
-astinum	-astine	antihistaminics
-azepamum	-azepam	substances of the diazepam group
-bactamum	-bactam	β-lactamase inhibitors
bol	bol	steroids, anabolic
-buzonum	-buzone	anti-inflammatory analgesics of the phenylbutazone group
-cain-	-cain-	antifibrillant substances with local anaesthetic activity
-cainum	-caine	local anaesthetics
cef-	cef-	antibiotics, derivatives of cefalosporanic acid
-cillinum	-cillin	antibiotics, derivatives of 6-aminopenicillanic acid
-conazolum	-conazole	systematic antifungal agents of the miconazole group
cort	cort	corticosteroids, except those of the prednisolone group
-dipinum	-dipine	calcium antagonists of the nifedipine group
-fibratum	-fibrate	substances of the clofibrate group
gest	gest	steroids, progestogens
gli-	gli-	sulfonamide hypoglycemics
io-	io-	iodine-containing contrast media
-ium	-ium	quaternary ammonium compounds
-metacinum	-metacin	anti-inflammatory substances of the indometacin group
-mycinum	-mycin	antibiotics, produced by *Streptomyces* strains
-nidazolum	-nidazole	antiprotozoal substances of the metronidazole group
-ololum	-olol	β-adrenergic blocking agents
-oxacinum	-oxacin	antibacterial agents of the nalidix acid group
-pridum	-pride	sulpiride derivatives
-pril(at)um	-pril(at)	angiotensin-converting enzyme inhibitors
-profenum	-profen	anti-inflammatory substances of the ibuprofen group
prost	prost	prostaglandins
-relinum	-relin	hypophyseal hormone release-stimulating peptides
-terolum	-terol	bronchodilators, phenethylamine derivates
-tidinum	-tidine	H_2-receptor antagonists
-trexatum	-trexate	folic acid antagonists
-verinum	-verine	spasmolytics with a papaverine-like action
vin-	vin-	vinca type alkaloids
-vin-	-vin-	

[1] A more extensive listing of stems is contained in the working document Pharm S/Nom 15 which is regularly updated and can be requested from Pharmaceuticals, WHO, Geneva

Annex 2
NONPROPRIETARY NAMES FOR PHARMACEUTICAL SUBSTANCES: TWENTIETH REPORT OF THE WHO EXPERT COMMITTEE

In its twentieth report[1] the WHO Expert Committee on Nonproprietary Names for Pharmaceutical Substances reviewed the general principles for devising, and the procedures for selecting, international nonproprietary names (INN) in the light of developments in pharmaceutical compounds in recent years. The most significant recent change has been the extension to the naming of synthetic chemical substances of the practice previously used for substances originating in or derived from natural products. This practice involves employing a characteristic "stem" indicative of a common property of the members of a group. The reasons for, and the implications of, the change are fully discussed. Also reported is the intention to change the practice with regard to the nomenclature of individual members of polymeric series.

Other sections of the report concern instructions to be followed by bodies making application for international nonproprietary names, the availability of computer-printed cumulative lists of international nonproprietary names, information supplied by WHO Member States concerning their official use of national or international names for pharmaceutical products, and proposals relative to the withdrawal of international nonproprietary names allocated to substances that are no longer in use.

The official texts relating to the procedures for selecting, and general guidance for devising, international nonproprietary names are reproduced in two annexes to the report. Other annexes give examples of international nonproprietary names that incorporate selected stems, the most frequently used initial groups of letters in international nonproprietary names, a historical review of the programme of selecting international nonproprietary names, some useful literature references, and a model of the form to be used in all applications for international nonproprietary names.

[1] WHO Technical Report Series, No 581, 1976 (*Nonproprietary Names for Pharmaceutical Substances* Twentieth Report of the WHO Expert Committee), ISBN 92 4 120581 4 Price Sw. fr 6.–