Reprinted from *WHO Chronicle*, Vol. 22, No. 9, pp. 407-429

International Non-Proprietary Names for Pharmaceutical Preparations

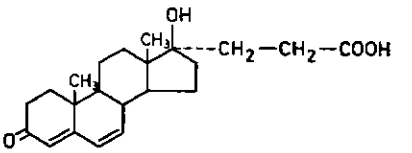
In accordance with article 3 of the Procedure for the Selection of Recommended International Non-Proprietary Names for Pharmaceutical Preparations,[1] notice is hereby given that the following names are under consideration by the World Health Organization as Proposed International Non-Proprietary Names.

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*.

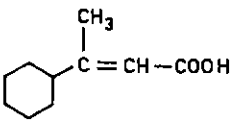
The inclusion of a name in the lists of proposed international non-proprietary names does not imply any recommendation for the use of the substance in medicine or pharmacy.

PROPOSED INTERNATIONAL NON-PROPRIETARY NAMES (*Prop. I.N.N.*): LIST 20 [2]

Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
acidum canrenoicum canrenoic acid	17-hydroxy-3-oxo-17α-pregna-4,6-diene-21-carboxylic acid $C_{22}H_{30}O_4$



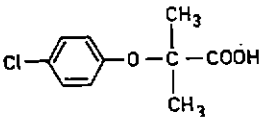
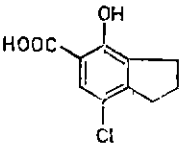
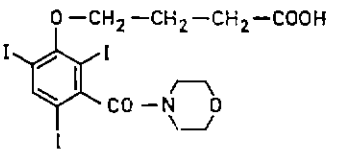
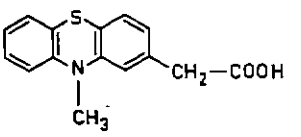
acidum cicrotoicum cicrotoic acid	β-methylcyclohexaneacrylic acid $C_{10}H_{16}O_2$

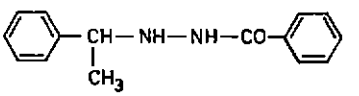
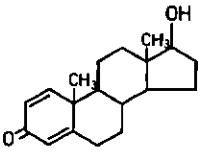
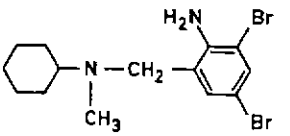
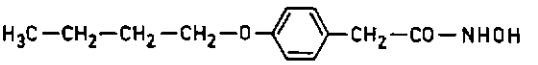


[1] See Annex, p. 427.

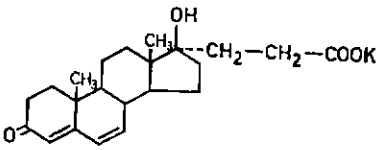
[2] Other lists of proposed international non-proprietary names can be found in *Chron. Wld Hlth Org.*, 1953, 7, 299; 1954, 8, 216, 313; 1956, 10, 28; 1957, 11, 231; 1958, 12, 102; *WHO Chronicle*, 1959, 13, 105, 152; 1960, 14, 168, 244; 1961, 15, 314; 1962, 16, 385; 1963, 17, 389; 1964, 18, 433; 1965, 19, 446; 1966, 20, 216; 1967, 21, 70, 478, 1968, 22, 112.

Lists of recommended international non-proprietary names were published in *Chron. Wld Hlth Org.*, 1955, 9, 185; *WHO Chronicle*, 1959, 13, 106, 463; 1962, 16, 101; 1965, 19, 165, 206, 249; 1966, 20, 421; 1967, 21, 538.

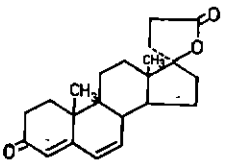
Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
acidum clofibricum clofibric acid	2-(*p*-chlorophenoxy)-2-methylpropionic acid $C_{10}H_{11}ClO_3$ 
acidum clorindanicum clorindanic acid	7-chloro-4-hydroxy-5-indancarboxylic acid $C_{10}H_8ClO_3$ 
acidum iobutoicum iobutoic acid	4-[2,4,6-triiodo-3-(morpholinocarbonyl)phenoxy]butyric acid $C_{15}H_{16}I_3NO_5$ 
acidum metiazinicum metiazinic acid	10-methylphenothiazine-2-acetic acid $C_{15}H_{13}NO_2S$ 

Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
benmoxinum benmoxin	benzoic acid 2-(α-methylbenzyl)hydrazide $C_{15}H_{16}N_2O$
	
boldenonum boldenone	17β-hydroxyandrosta-1,4-dien-3-one $C_{19}H_{26}O_2$
	
bromhexinum bromhexine	3,5-dibromo-N^{α}-cyclohexyl-N^{α}-methyltoluene-α-2-diamine $C_{14}H_{20}Br_2N_2$
	
bufexamacum bufexamac	2-(*p*-butoxyphenyl)-acetohydroxamic acid $C_{12}H_{17}NO_3$
	

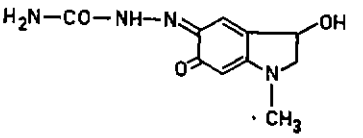
Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
canrenoatum kalium canrenoate potassium	potassium 3-oxo-17α-pregna-4,6-diene-21-carboxylate $C_{22}H_{29}KO_4$



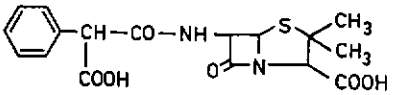
canrenonum canrenone	17-hydroxy-3-oxo-17α-pregna-4,6-diene-21-carboxylic acid γ-lactone $C_{22}H_{28}O_3$



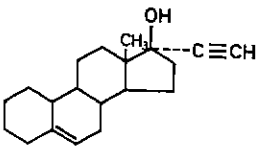
carbazochromum carbazochrome	3-hydroxy-1-methyl-5,6-indolinedione semicarbazone $C_{10}H_{12}N_4O_3$



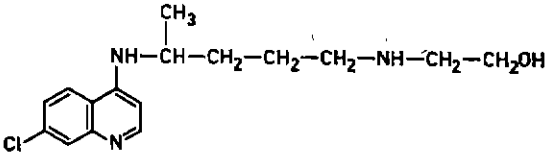
carbenicillinum carbenicillin	*N*-(2-carboxy-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]hept-6-yl)-2-phenylmalonamic acid $C_{17}H_{18}N_2O_6S$



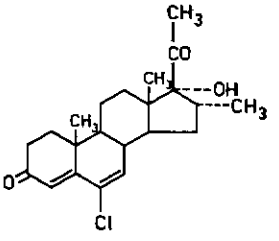
Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
cingestolum cingestol	19-nor-17α-pregn-5-en-20-yn-17-ol $C_{20}H_{28}O$



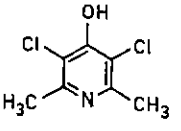
cletoquinum cletoquine	2-{[4-[(7-chloro-4-quinolyl)amino]pentyl]amino}ethanol $C_{18}H_{26}ClN_3O$

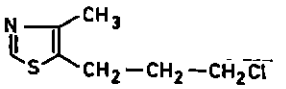
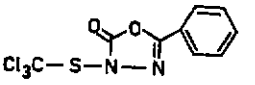
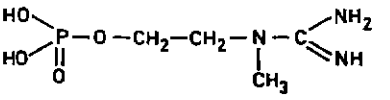
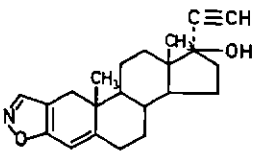


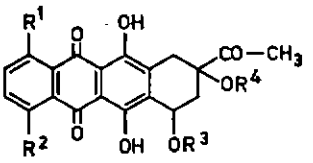
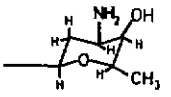
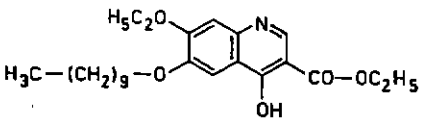
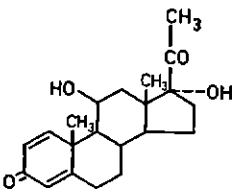
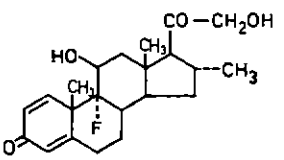
clomegestonum clomegestone	6-chloro-17-hydroxy-16α-methylpregna-4,6-diene-3,20-dione $C_{22}H_{29}ClO_3$



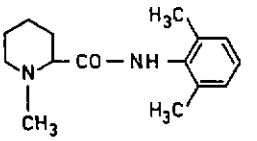
clopidolum clopidol	3,5-dichloro-2,6-dimethyl-4-pyridinol $C_7H_7Cl_2NO$



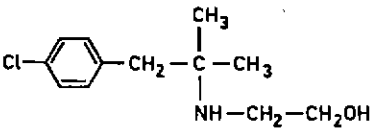
Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
cloprothiazolum cloprothiazole	5-(3-chloropropyl)-4-methylthiazole $C_7H_{10}ClNS$
	
clotioxonum clotioxone	2-phenyl-4-[(trichloromethyl)thio]-Δ^2-1,3,4-oxadiazolin-5-one $C_9H_5Cl_3N_2O_2S$
	
creatinolfosfatum creatinolfosfate	1-(2-hydroxyethyl)-1-methylguanidine dihydrogen phosphate (ester) $C_4H_{12}N_3O_4P$
	
danazolum danazol	17α-pregna-2,4-dien-20-yno[2,3-*d*]isoxazol-17-ol $C_{22}H_{27}NO_2$
	

Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
daunorubicinum daunorubicin	a glucosidic antibiotic obtained from cultures of *Streptomyces peucetius* or *Streptomyces coeruleorubidus*, or the same substance obtained by any other means $C_{27}H_{29}NO_{10}$  R^1 or R^2: $-OCH_3$ R^3 or R^4: 
decoquinatum decoquinate	ethyl 6-(decyloxy)-7-ethoxy-4-hydroxy-3-quinoline-carboxylate $C_{24}H_{35}NO_5$ 
deprodonum deprodone	11β,17-dihydroxypregna-1,4-diene-3,20-dione $C_{21}H_{28}O_4$ 
desoximetasonum desoximetasone	9-fluoro-11β, 21-dihydroxy-16α-methylpregna-1,4-diene-3,20-dione $C_{22}H_{29}FO_4$ 

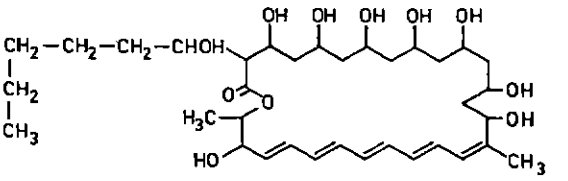
Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
dexivacainum dexivacaine	(+)-1-methyl-2′,6′-pipecoloxylidide $C_{15}H_{22}N_2O$



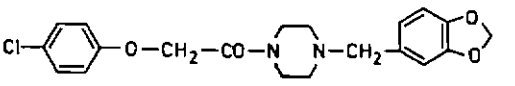
etolorexum etolorex	2-[(*p*-chloro-α,α-dimethylphenethyl)amino]ethanol $C_{12}H_{18}ClNO$



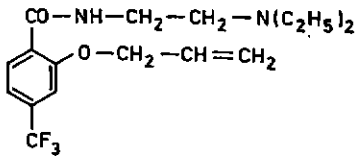
filipinum filipin	3,5,7,9,11,13,15,26,27-nonahydroxy-2-(1-hydroxyhexyl)-16-methyl-16,18,20,22,24-octacosapentaenoic acid 1,27-lactone $C_{35}H_{58}O_{11}$



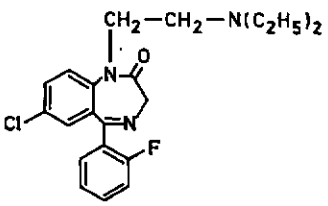
fipexidum fipexide	1-[(*p*-chlorophenoxy)acetyl]-4-piperonylpiperazine $C_{20}H_{21}ClN_2O_4$



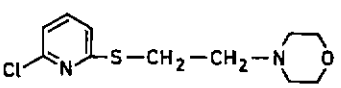
Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
flualamidum flualamide	2-(allyloxy)-*N*-[2-(diethylamino)ethyl]-α,α,α-trifluoro-*p*-tolua mide $C_{17}H_{23}F_3N_2O_2$



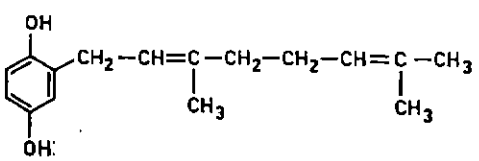
flurazepamum flurazepam	7-chloro-1-[2-(diethylamino)ethyl]-5-(*o*-fluorophenyl)-1,3-dihydro-2*H*-1,4-benzodiazepin-2-one $C_{21}H_{23}ClFN_3O$

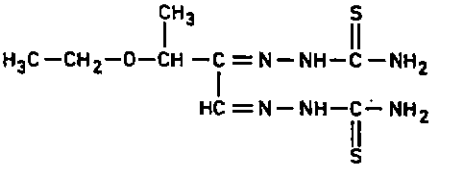
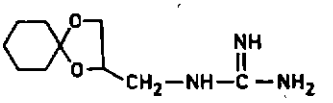
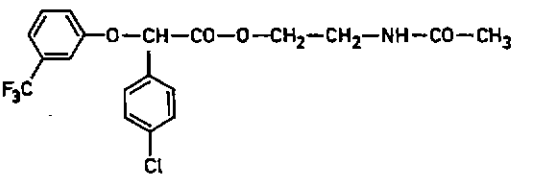
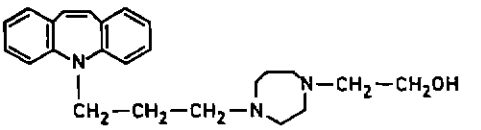


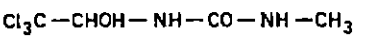
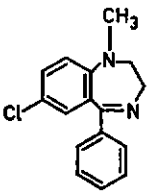
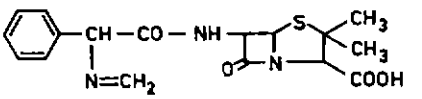
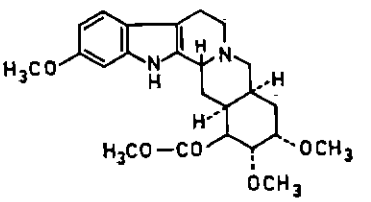
fopirtolinum fopirtoline	4-{2-[(6-chloro-2-pyridyl)thio]ethyl}morpholine $C_{11}H_{15}ClN_2OS$

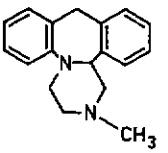
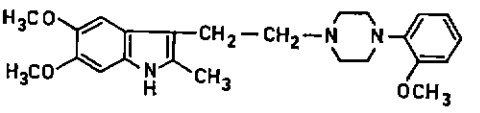
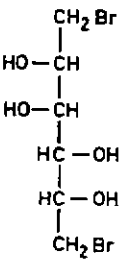
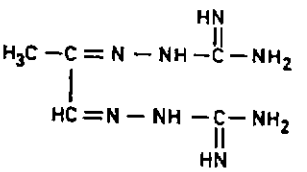


geroquinolum geroquinol	2-geranylhydroquinone $C_{16}H_{22}O_2$

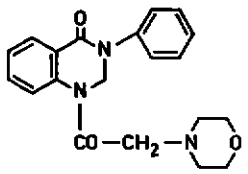


Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
gloxazonum gloxazone	3-ethoxy-2-oxobutyraldehyde bis(thiosemicarbazone) $C_8H_{16}N_6OS_2$ 
guanadrelum guanadrel	(1,4-dioxaspiro[4.5]dec-2-ylmethyl)guanidine $C_{10}H_{19}N_3O_2$ 
halofenatum halofenate	(p-chlorophenyl)[(α,α,α-trifluoro-*m*-tolyl)oxy]acetic acid ester with *N*-(2-hydroxyethyl)acetamide $C_{19}H_{17}ClF_3NO_4$ 
homopipramolum homopipramol	4-[3-(5*H*-dibenz[*b*,*f*]azepin-5-yl)propyl]hexahydro-1*H*-1,4-diazepine-1-ethanol $C_{24}H_{31}N_3O$ 
kalafunginum kalafungin	an antibiotic obtained from cultures of *Streptomyces tanashiensis* strain *kala*, or the same substance obtained by any other means
lidimycinum lidimycin	an antibiotic obtained from cultures of *Streptomyces lydicus*, or the same substance obtained by any other means

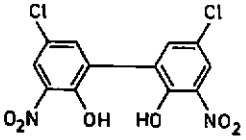
Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
mecloralurea mecloralurea	1-methyl-3-(2,2,2-trichloro-1-hydroxyethyl)urea $C_4H_7Cl_3N_2O_2$ 
medazepamum medazepam	7-chloro-2,3-dihydro-1-methyl-5-phenyl-1*H*-1,4-benzodiazepine $C_{16}H_{15}ClN_2$ 
metampicillinum metampicillin	3,3-dimethyl-6-[2-(methyleneamino)-2-phenylacetamido]-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid $C_{17}H_{19}N_3O_4S$ 
metoserpatum metoserpate	methyl *O*-methyl-18-epireserpate $C_{24}H_{32}N_2O_5$ 

Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
mianserinum mianserin	1,2,3,4,10,14b-hexahydro-2-methyldibenzo[*c*,*f*]pyrazino[1,2-*a*]azepine $C_{18}H_{20}N_2$ 
milipertinum milipertine	5,6-dimethoxy-3-{2-[4-(*o*-methoxyphenyl)-1-piperazinyl]ethyl}-2-methylindole $C_{24}H_{31}N_3O_3$ 
mitobronitolum mitobronitol	1,6-dibromo-1,6-dideoxy-D-mannitol $C_6H_{12}Br_2O_4$ 
mitoguazonum mitoguazone	1,1′-[(methylethanediylidene)dinitrilo]diguanidine $C_5H_{12}N_8$ 

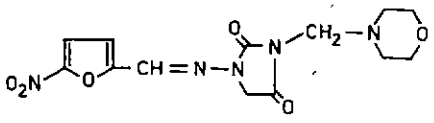
Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
moquizonum moquizone	2,3-dihydro-1-(morpholinoacetyl)-3-phenyl-4(1*H*)-quinazolinone $C_{20}H_{21}N_3O_3$



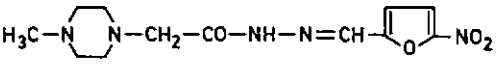
niclofolanum niclofolan	4,4′-dichloro-6,6′-dinitro-*o*,*o*-biphenol $C_{12}H_6Cl_2N_2O_6$

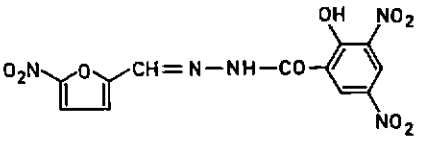
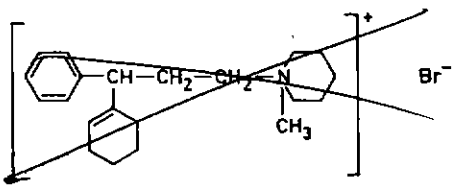
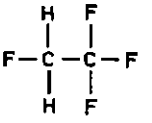
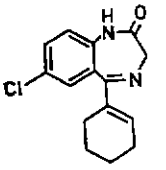


nifurfolinum nifurfoline	3-morpholinomethyl)-1-[(5-nitrofurfurylidene)amino]-hydantoin $C_{13}H_{15}N_5O_6$

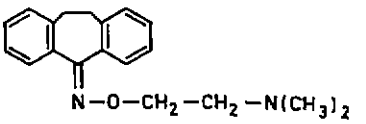


nifurpiponum nifurpipone	4-methyl-1-piperazineacetic acid (5-nitrofurfurylidene)hydrazide $C_{12}H_{17}N_5O_4$

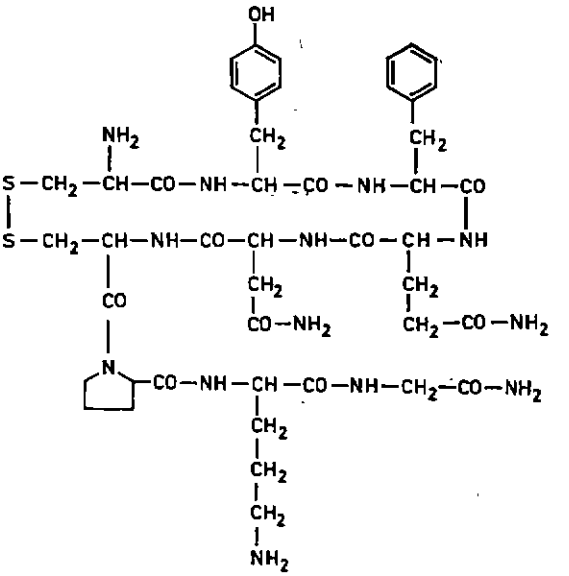


Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
nifursolum nifursol	3,5-dinitrosalicylic acid (5-nitrofurfurylidene)hydrazide $C_{12}H_7N_5O_8$ 
nimazonum nimazone	3-(*p*-chlorophenyl)-4-imino-2-oxo-1-imidazolidineacetonitrile $C_{11}H_9ClN_4O$ 
norfluranum norflurane	1,1,1,2-tetrafluoroethane $C_2H_2F_4$ 
nortetrazepamum nortetrazepam	7-chloro-5-(1-cyclohexen-1-yl)-1,3-dihydro-2*H*-1,4-benzodiazepin-2-one $C_{15}H_{15}ClN_2O$ 

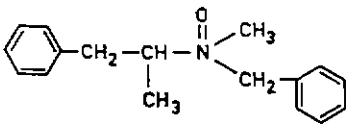
Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
noxiptilinum noxiptiline	10,11-dihydro-5*H*-dibenzo[*a*,*d*]cyclohepten-5-one *O*-[2-(dimethylamino)ethyl]oxime $C_{19}H_{22}N_2O$



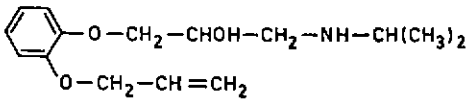
orpressinum orpressin	8-ornithinevasopressin $C_{43}H_{63}N_{13}O_{12}S_2$



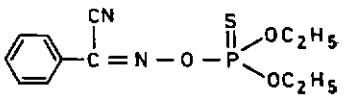
oxifentorexum oxifentorex	*N*-benzyl-*N*,α-dimethylphenethylamine *N*-oxide $C_{17}N_{21}NO$



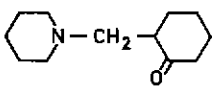
Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
oxprenololum oxprenolol	1-(*o*-allyloxyphenoxy)-3-(isopropylamino)-2-propanol $C_{15}H_{23}NO_3$



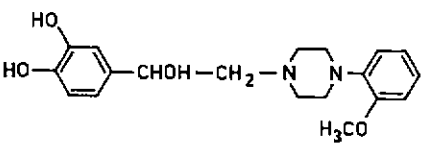
phoximum phoxim	phenylglyoxylnitrile oxime *O,O*-diethyl phosphorothioate $C_{12}H_{15}N_2O_3PS$



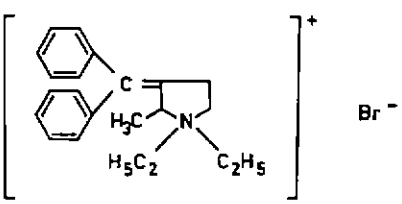
pimeclonum pimeclone	2-(piperidinomethyl)cyclohexanone $C_{12}H_{21}NO$



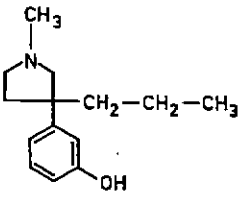
pipratecolum pipratecol	α-(3,4-dihydroxyphenyl)-4-(2-methoxyphenyl)-1-piperazineethanol $C_{19}H_{24}N_2O_4$



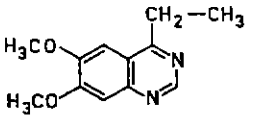
prifinii bromidum prifinium bromide	3-(diphenylmethylene)-1,1-diethyl-2-methylpyrrolidinium bromide $C_{22}H_{28}BrN$



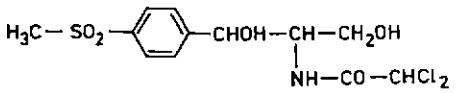
Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
profadolum profadol	*m*-(1-methyl-3-propyl-3-pyrrolidinyl)phenol $C_{14}H_{21}NO$



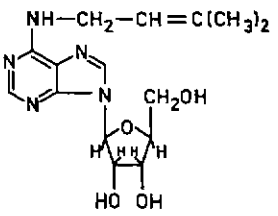
quazodinum quazodine	4-ethyl-6,7-dimethoxyquinazoline $C_{12}H_{14}N_2O_2$

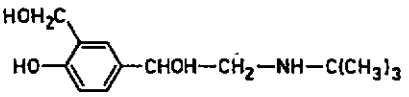
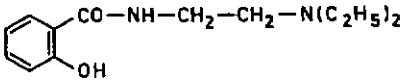
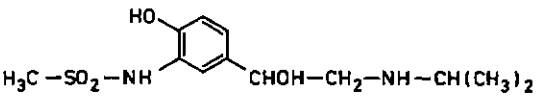
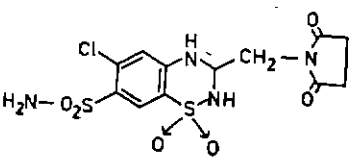


racefenicolum racefenicol	(±)-*threo*-2,2-dichloro-*N*-[β-hydroxy-α-(hydroxymethyl)-*p*-(methylsulfonyl)phenethyl]acetamide $C_{12}H_{13}Cl_2NO_5S$

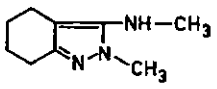


ranimycinum ranimycin	an antibiotic obtained from cultures of *Streptomyces lincolnensis*, or the same substance obtained by any other means $C_{12}H_{18}O_6$
riboprinum riboprine	*N*-(3-methyl-2-butenyl)adenosine $C_{15}H_{21}N_5O_4$

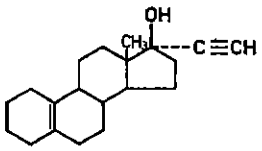


Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
salbutamolum **salbutamol**	α-[(*tert*-butylamino)methyl]-4-hydroxy-*m*-xylene-α,α′-diol $C_{13}H_{21}NO_3$ 
saletamidum **saletamide**	*N*-[2-(diethylamino)ethyl]salicylamide $C_{13}H_{20}N_2O_2$ 
soterenolum **soterenol**	2′-hydroxy-5′-[1-hydroxy-2-(isopropylamino)ethyl]methanesulfonanilide $C_{12}H_{20}N_2O_4S$ 
steffimycinum **steffimycin**	an antibiotic obtained from cultures of *Streptomyces steffisburgensis* var. *steffisburgensis* sp. n., or the same substance obtained by any other means
sumetizidum **sumetizide**	6-chloro-3,4-dihydro-3-succinimidomethyl-2*H*-1,2,4-benzothiadiazine-7-sulfonamide 1,1-dioxide $C_{12}H_{13}ClN_4O_6S_2$ 

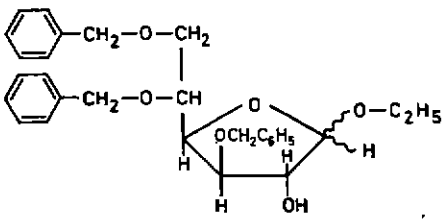
Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description, Molecular and Graphic Formulae*
tetridaminum tetridamine	4,5,6,7-tetrahydro-2-methyl-3-(methylamino)-2*H*-indazole $C_9H_{15}N_3$



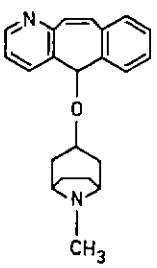
tigestolum tigestol	19-nor-17α-pregn-5(10)-en-20-yn-17-ol $C_{20}H_{28}O$



tribenosidum tribenoside	ethyl 3,5,6-tri-*O*-benzyl-D-glucofuranoside $C_{29}H_{34}O_5$



tropirinum tropirine	3α-[(5*H*-benzo[4,5]cyclohepta[1,2-*b*]pyridyl)-5-oxy]tropane $C_{22}H_{24}N_2O$



CORRIGENDA

Vol. 20, No. 6

PROPOSED INTERNATIONAL NON-PROPRIETARY NAMES (*Prop. I.N.N.*): LIST 16

p. 223:

delete	*insert*
sulformetoxinum	sulfadoxinum
sulformetoxine	sulfadoxine

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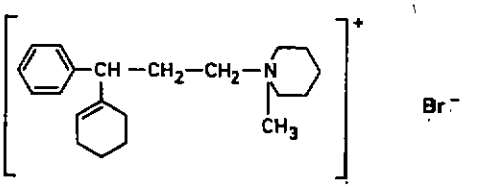
PROPOSED INTERNATIONAL NON-PROPRIETARY NAMES (*Prop. I.N.N.*): LIST 19

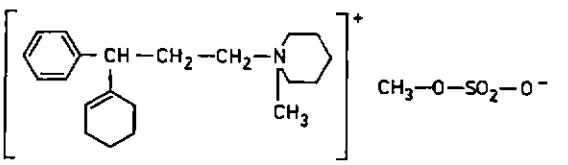
p. 117: *delete*

fenclexonii bromidum	1-(3,3-diphenylpropyl)-1-methylpiperidinium bromide
fenclexonium bromide	$C_{21}H_{32}BrN$



insert

fenclexonii metilsulfas	1-[3-(1-cyclohexenyl)-3-phenylpropyl]-1-methylpiperidinium methyl-sulfate
fenclexonium metilsulfate	$C_{22}H_{35}NO_4S$



p. 122: *delete*

penoctonii bromidum	diethyl(2-hydroxyethyl)octyl ammonium bromide diphenylacetate
penoctonium bromide	$C_{26}H_{53}BrNO_2$

insert

penoctonii bromidum	diethyl(2-hydroxyethyl)octyl ammonium bromide dicyclopentylacetate
penoctonium bromide	$C_{26}H_{50}BrNO_2$

Annex

PROCEDURE FOR THE SELECTION OF RECOMMENDED INTERNATIONAL NON-PROPRIETARY NAMES FOR PHARMACEUTICAL PREPARATIONS *

The following procedure shall be followed by the World Health Organization in the selection of recommended international non-proprietary names for pharmaceutical preparations, in accordance with the World Health Assembly resolution WHA3.11:

1. Proposals for recommended international non-proprietary 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 Non-proprietary Names ", appended to this procedure. The name used by the person discovering or first developing and marketing a pharmaceutical preparation 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 non-proprietary 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*.

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*.

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 substitute name or names, a name shall not be selected by the World Health Organization as a recommended international non-proprietary name while there exists a formal objection thereto filed under article 5 which has not been withdrawn.

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* Text adopted by the Executive Board of WHO in resolution EB15.R7 (*Off. Rec. Wld Hlth Org.*, 1955, 60, 3).

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

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 non-proprietary name.

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

A. request that it be recognized as the non-proprietary 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.

GENERAL PRINCIPLES FOR GUIDANCE IN DEVISING INTERNATIONAL NON-PROPRIETARY NAMES FOR PHARMACEUTICAL PREPARATIONS *

1. Names should be distinctive in sound and spelling. They should not be inconveniently long and should not be liable to confusion with names already in common use.

2. The name of 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.

The above primary principles are to be implemented by utilization of the following secondary principles.

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

4. Syllables such as "methylhydro", "methoxy" and "chlor" should preferably be abbreviated (to "medro", "meto", "clo", etc.).

5. In the naming of substances which are acids, existing names generally used in chemistry which include the word "acidum" ("acid") should be used, if the name is adequate for practical use in therapy and pharmacy. In other circumstances, the substance should be named by a single word and not by a name which includes the word "acid". Where the word "acid" is not used in the name, as is customary in the penicillin series, a salt should preferably be named without modification of the parent acid name, e.g., "oxacillin" and "oxacillin sodium".

6. Names 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). Exceptions may have to be made for those cases in which pharmacological activity may reside in both parts of the salt or ester.
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.

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

8. To facilitate translation and pronunciation "f" should preferably be used instead of "ph", "t" instead of "th", "e" instead of "ae" or "oe", and "i" instead of "y".

9. 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.

10. Group relationship in names (see item 2) should preferably be shown by using common syllables in the following list. Where a syllable or a group of syllables is shown without any hyphens it may be used anywhere in the name. The syllable, or group of syllables, should, if possible, be used only for such substances.

* Text revised by the Expert Committee on Non-Proprietary Names for Pharmaceutical Preparations (unpublished reports WHO/Pharm/67.443 and WHO/Pharm/68.447).

Subsidiary group relationships should be shown by devising names which show similarities to and are analogous with a previously named substance, the parent substance.

At the end of the list are general chemical syllables. Should they come into conflict with other suggested syllables, the suffix conveying the best information should be used.

Latin	*English*	*French*	
-andr- or -stan- or -ster-	-andr- or -stan- or -ster-	-andr- or -stan- or -ster-	steroids, androgenic
-apol-	-apol-	-apol-	polysulfonic anticoagulants
-arolum	-arol	-arol	anticoagulants
-bamatum	-bamate	-bamate	tranquillizers of the propanediol and pentanediol series
barb	barb	barb	barbituric acids, hypnotic activity
bol	bol	bol	anabolic steroids
-cainum	-caine	-caïne	local anaesthetics
cef-	cef-	cef-	antibiotics with cefalosporanic acid nucleus
-cillinum	-cillin	-cilline	penicillins: derivatives of carboxy-6-amino-penicillanic acid
-cort-	-cort-	-cort-	steroids, glucocorticoids and mineralocorticoids, other than prednisolone derivatives
crinum	-crine	-crine	acridine derivatives
-curonium	-curonium	-curonium	curare-like drugs
-cyclinum	-cycline	-cycline	antibiotics, tetracycline derivatives
-dionum	-dione	-dione	antiepileptics derived from oxazolidinedione
-estr-	-estr-	-estr-	estrogenic drugs.
-gest-	-gest-	-gest-	steroids, progestative
gli-	gli-	gli-	sulfonamide oral antidiabetics
io-	io-	io-	iodine-containing contrast media
-mer-	-mer-	-mer-	mercury-containing drugs, antimicrobial or diuretic
mito-	mito-	mito-	nucleotoxic, antineoplastic agents
-moxinum	-moxin	-moxine	monoamine oxidase inhibitors
-mycinum	-mycin	-mycine	antimicrobial antibiotics, produced by *Streptomyces* strains
nifur-	nifur-	nifur-	5-nitrofuran derivatives
-orexum	-orex	-orex	anorexigenic agents
-praminum	-pramine	-pramine	dibenzazepine, compounds of the imipramine type
-quinum	-quine	-quine	quinoline derivatives
-serpinum	-serpine	-serpine	derivatives of *Rauwolfia* alkaloids
-stigminum	-stigmine	-stigmine	anticholinesterases
sulfa-	sulfa-	sulfa-	sulfonamides, used as antimicrobials
-tizidum	-tizide	-tizide	diuretics which are thiazide derivatives
-toinum	-toin	-toïne	antiepileptics which are hydantoin derivatives
-verinum	-verine	-vérine	spasmolytics with a papaverine-like action
-inum	-ine	-ine	alkaloids and organic bases
-onum	-one	-one	ketones
-ium	-ium	-ium	quaternary amines