Reprinted from *WHO Chronicle*, Vol. 21, No. 2, pp. 70-80

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 preparation in medicine or pharmacy.

PROPOSED INTERNATIONAL NON-PROPRIETARY NAMES (*Prop. I.N.N.*): LIST 17 [2]

Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
acefurtiaminum acefurtiamine	*S*-ester of thio-2-furoic acid with *N*[(4-amino-2-methyl-5-pyrimidinyl)methyl]-*N*-(4-hydroxy-2-mercapto-1-methyl-1-butenyl) formamide *O*-glycolate acetate $C_{21}H_{24}N_4O_7S$
acetorphinum acetorphine	tetrahydro-7α-(1-hydroxy-1-methylbutyl)-6,14-*endo*-ethenooripavine 3-acetate $C_{27}H_{35}NO_5$
acevaltratum acevaltrate	3a,4-dihydro-3,4-dihydroxyspiro[benzofuran-2(3*H*),2′-oxirane]-6-methanol 6-acetate 3(or 4)-isovalerate 4(or 3)-(3-hydroxy-3-methylbutyrate acetate) $C_{24}H_{32}O_{10}$
acidum clamidoxicum clamidoxic acid	3,4-dichloro-α-phenoxyhippuric acid $C_{15}H_{11}Cl_2NO_4$
acidum meclofenamicum meclofenamic acid	*N*-(2,6-dichloro-*m*-tolyl)anthranilic acid $C_{14}H_{11}Cl_2NO_2$
acidum niflumicum niflumic acid	2-[3-(trifluoromethyl)anilino]nicotinic acid $C_{13}H_9F_3N_2O_2$
acidum nixylicum nixylic acid	2-(2,3-xylidino)nicotinic acid $C_{14}H_{14}N_2O_2$
alcuronii chloridum alcuronium chloride	*N,N′*-diallylnortoxiferinium dichloride $C_{44}H_{50}Cl_2N_4O_2$
amantocillinum amantocillin	6-(3-amino-1-adamantanecarboxamido)-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid $C_{19}H_{27}N_3O_4S$

[1] See Annex, p. 77.

[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.

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.

Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Descripti on and Molecular Formula*
amicibonum amicibone	1-[2-(hexahydro-1*H*-azepin-1-yl)ethyl]-2-oxocyclohexanecarboxylate $C_{22}H_{31}NO_3$
amiquinsinum amiquinsin	4-amino-6,7-dimethoxyquinoline $C_{11}H_{12}N_2O_2$
antramycinum antramycin	5,10,11,11a-tetrahydro-9,11-dihydroxy-8-methyl-5-oxo-1*H*-pyrrolo [2,1-*c*][1,4]benzodiazepine-2-acrylamide $C_{16}H_{17}N_3O_4$
antridonii chloridum antridonium chloride	8-[3-(*m*-amidinophenyl)-2-triazeno]-3-amino-5-ethyl-6-phenylphenanthridinium chloride $C_{28}H_{26}ClN_7$
apicyclinum apicycline	α-[4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxamido]-4-(2-hydroxyethyl)-1-piperazineacetic acid $C_{30}H_{38}N_4O_{11}$
beclometasoni dipropionas beclometasone dipropionate	9-chloro-11β,17,21-trihydroxy-16β-methylpregna-1,4-dione-3,20-dione 17,21-dipropionate $C_{28}H_{37}ClO_7$
beclotiaminum beclotiamine	3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-chloroethyl)-4-methylthiazolium chloride $C_{12}H_{15}Cl_2N_4S$
broquinaldolum broquinaldol	5,7-dibromo-2-methyl-8-quinolinol $C_{10}H_7Br_2NO$
bucolomum bucolome	5-butyl-1-cyclohexylbarbituric acid $C_{14}H_{22}N_2O_3$
buforminum buformin	1-butylbiguanide $C_6H_{13}N_5$
bupivacainum bupivacaine	1-butyl-2′,6′-pipecoloxylidide $C_{18}H_{28}N_2O$
butetamatum butetamate	2-(diethylamino)ethyl 2-phenylbutyrate $C_{16}H_{25}NO_2$
candicidinum candicidin	an antibiotic obtained from cultures of *Streptomyces griseus*, or the same substance produced by any other means
carbocloralum carbocloral	ethyl (2,2,2-trichloro-1-hydroxyethyl)carbamate $C_5H_8Cl_3NO_3$
cetotiaminum cetotiamine	the *S*-ester of *O*-ethyl thiocarbonate with *N*-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-*N*-(4-hydroxy-2-mercapto-1-methyl-1-butenyl) formamide ethyl carbonate $C_{18}H_{26}N_4O_5S$
cidoxepinum cidoxepin	*N,N*-dimethyldibenz[*b,e*]oxepin-*cis*-Δ_{11}(6*H*),γ-propylamine $C_{19}H_{21}NO$
cimemoxinum cimemoxin	(cyclohexylmethyl)hydrazine $C_7H_{16}N_2$
cinanserinum cinanserin	2′-{[3-(dimethylamino)propyl]thio}cinnamanilide $C_{20}H_{24}N_2OS$
cinnopentazonum cinnopentazone	2-pentyl-6-phenyl-1*H*-pyrazolo[1,2-*a*]cinnoline-1,3(2*H*)-dione $C_{22}H_{22}N_2O_2$
cinnopropazonum cinnopropazone	5-(dimethylamino)-9-methyl-2-propyl-1*H*-pyrazolo [1,2-*a*][1,2,4] benzotriazine-1,3(2*H*)-dione $C_{16}H_{20}N_4O_2$
citicolinum citicoline	choline cytidine 5′-pyrophosphate ester $C_{14}H_{26}N_4O_{11}P_2$
clinolamidum clinolamide	*N*-cyclohexyllinoleamide $C_{24}H_{43}NO$

Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
clofaziminum clofazimine	3-(*p*-chloroanilino)-10-(*p*-chlorophenyl)-2,10-dihydro-2-(isopropylimino)phenazine $C_{27}H_{22}Cl_2N_4$
clofenciclanum clofenciclan	2-{[1-(*p*-chlorophenyl)cyclohexyl]oxy}triethylamine $C_{18}H_{28}ClNO$
clofezonum clofezone	equimolar combination of clofexamide and phenylbutazone $C_{14}H_{21}ClN_2O_2 . C_{19}H_{20}N_2O_2 . H_2O$
clomipraminum clomipramine	3-chloro-5-[3-(dimethylamino)propyl]-10,11-dihydro-5*H*-dibenz[*b*,*f*]azepine $C_{19}H_{23}ClN_2$
cloperidonum cloperidone	3-{3-[4-(*m*-chlorophenyl)-1-piperazinyl]propyl}-2,4(1*H*,3*H*)-quinazolinedione $C_{21}H_{23}ClN_4O_2$
cloquinozinum cloquinozine	3-(*p*-chlorobenzyl)octahydroquinolizine $C_{16}H_{22}ClN$
clormecainum clormecaine	2-(dimethylamino)ethyl 3-amino-4-chlorobenzoate ester $C_{11}H_{15}ClN_2O_2$
cyclazodonum cyclazodone	2-(cyclopropylamino)-5-phenyl-2-oxazolin-4-one $C_{12}H_{12}N_2O_2$
cyclofenilum cyclofenil	4,4′-(cyclohexylidenemethylene)diphenol diacetate ester $C_{23}H_{24}O_4$
cycotiaminum cycotiamine	*N*-[1-(2-oxo-1,3-oxathian-4-ylidene)ethyl]-*N*-[(4-amino-2-methyl-5-pyrimidinyl)methyl]formamide $C_{13}H_{16}N_4O_3S$
cyheptamidum cyheptamide	10,11-dihydro-5*H*-dibenzo[a,*d*]cycloheptene-5-carboxamide $C_{16}H_{15}NO$
cyprenorphinum cyprenorphine	*N*-(cyclopropylmethyl)tetrahydro-7α-(1-hydroxy-1-methylethyl)-6,14-*endo*-ethenonororipavine $C_{26}H_{33}NO_4$
cyprodenatum cyprodenate	2-(dimethylamino)ethyl cyclohexanepropionate $C_{13}H_{25}NO_2$
dantrolenum dantrolene	1-{[5-(*p*-nitrophenyl)furfurylidene]amino}hydantoin $C_{14}H_{10}N_4O_5$
demelverinum demelverine	*N*-methyldiphenethylamine $C_{17}H_{21}N$
descinolonum descinolone	9-fluoro-11β,16α,17-trihydroxypregna-1,4-diene-3,20-dione $C_{21}H_{27}FO_5$
dextriferronum dextriferron	a colloidal solution of ferric hydroxide in complex with partially hydrolysed dextrin
dibupyronum dibupyrone	sodium (antipyrinylisobutylamino)methanesulfonate $C_{16}H_{22}N_3NaO_4S$
dicarfenum dicarfen	2-(diethylamino)ethyl diphenylcarbamate ester $C_{19}H_{24}N_2O_2$
didrovaltratum didrovaltrate	3a,4,5,6-tetrahydro-3,4-dihydroxyspiro[benzofuran-2(3*H*),2′-oxirane]-6-methanol 6-acetate 3,4-diisovalerate $C_{22}H_{32}O_8$
difemerinum difemerine	2-(dimethylamino)-2-methylpropyl benzilate ester $C_{20}H_{25}NO_3$
dikalii clorazepas dipotassium clorazepate	[(3-carboxy-7-chloro-2,3-dihydro-2-hydroxy-5-phenyl-1*H*-1,4-benzodiazepin-2-yl)oxy]potassium $C_{16}H_{11}ClK_2N_2O_4$

Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
dimetotiazinum dimetotiazine	10-[2-(dimethylamino)propyl]-*N*,*N*-dimethylphenothiazine-2-sulfonamide $C_{19}H_{25}N_3O_2S_2$
dimetridazolum dimetridazole	1,2-dimethyl-5-nitroimidazole $C_5H_7N_3O_2$
dinsedum dinsed	*N*,*N*′-ethylenebis[3-nitrobenzenesulfonamide] $C_{14}H_{14}N_4O_8S_2$
drotaverinum drotaverine	1-(3,4-diethoxybenzylidene)-6,7-diethoxy-1,2,3,4-tetrahydroisoquinoline $C_{24}H_{31}NO_4$
etabenzaronum etabenzarone	*p*-[2-(diethylamino)ethoxy]phenyl-2-ethyl-3-benzofuranyl ketone $C_{23}H_{27}NO_3$
etaqualonum etaqualone	3-(*o*-ethylphenyl)-2-methyl-4(3*H*)-quinazolinone $C_{17}H_{16}N_2O$
ethyneronum ethynerone	21-chloro-17-hydroxy-19-nor-17α-pregna-4,9-dien-20-yn-3-one $C_{20}H_{23}ClO_2$
etorphinum etorphine	tetrahydro-7α-(1-hydroxy-1-methylbutyl)-6,14-*endo*-ethenooripavine $C_{25}H_{33}NO_4$
fenpipramidum fenpipramide	α,α-diphenyl-1-piperidinebutyramide $C_{21}H_{26}N_2O$
fenpipranum fenpiprane	1-(3,3-diphenylpropyl)piperidine $C_{20}H_{25}N$
fenproporexum fenproporex	(±)-3-[α-methylphenethyl)amino]propionitrile $C_{12}H_{16}N_2$
flavaminum flavamine	6-[(diethylamino)methyl]-3-methylflavone $C_{21}H_{23}NO_2$
flucloxacillinum flucloxacillin	6-[3-(2-chloro-6-fluorophenyl)-5-methyl-4-isoxazolecarboxamido]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid $C_{19}H_{17}ClFN_3O_5S$
flumetramidum flumetramide	6-(α,α,α-trifluoro-*p*-tolyl)-3-morpholinone $C_{11}H_{10}F_3NO_2$
ftalofynum ftalofyne	1-ethyl-1-methyl-2-propynyl phthalate $C_{14}H_{14}O_4$
furaltadonum furaltadone	(±)-5-(morpholinomethyl)-3-[(5-nitrofurfurylidene)amino]-2-oxazolidinone $C_{13}H_{16}N_4O_6$
fursultiaminum fursultiamine	*N*-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-*N*-[4-hydroxy-1-methyl-2-[(tetrahydrofurfuryl)dithio]-1-butenyl]formamide $C_{17}H_{28}N_4O_3S_2$
gamfexinum gamfexine	*N*,*N*-dimethyl-γ-phenylcyclohexanepropylamine $C_{17}H_{27}N$
glyclopyramidum glyclopyramide	1-[(*p*-chlorophenyl)sulfonyl]-3-(1-pyrrolidinyl)urea $C_{11}H_{14}ClN_3O_3S$
haloproginum haloprogin	3-iodo-2-propynyl 2,4,5-trichlorophenyl ether $C_9H_4Cl_3IO$
hamycinum hamycin	an antibiotic obtained from cultures of *Streptomyces pimprina*, or the same substance produced by any other means
hexacypronum hexacyprone	1-benzyl-2-oxocyclohexanepropionic acid $C_{16}H_{20}O_3$
hycanthonum hycanthone	1-{[2-(diethylamino)ethyl]amino}-4-(hydroxymethyl)thioxanthen-9-one $C_{20}H_{24}N_2O_2S$

Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
idoxuridinum idoxuridine	2′-deoxy-5-iodouridine $C_9H_{11}IN_2O_5$
indoxolum indoxole	2,3-bis(*p*-methoxyphenyl)indole $C_{22}H_{19}NO_2$
kalii nitrazepas potassium nitrazepate	potassium 2,3-dihydro-7-nitro-2-oxo-5-phenyl-1*H*-1,4-benzodiazepine-3-carboxylate $C_{16}H_{10}KN_3O_5$
ketimipraminum ketimipramine	5-[3-(dimethylamino)propyl]-5,11-dihydro-10*H*-dibenz[*b*,*f*]azepin-10-one $C_{19}H_{22}N_2O$
leptaclinum leptacline	1-(cyclohexylmethyl)piperidine $C_{12}H_{23}N$
leucinocainum leucinocaine	2-(diethylamino)-4-methyl-1-pentanol *p*-aminobenzoate (ester) $C_{17}H_{28}N_2O_2$
levofuraltadonum levofuraltadone	(—)-5-(morpholinomethyl)-3-[(5-nitrofurfurylidene)amino]-2-oxazolidinone $C_{13}H_{16}N_4O_6$
meclastinum meclastine	(+)-2-{2-[(*p*-chloro-α-methyl-α-phenylbenzyl)oxy]ethyl}-1-methylpyrrolidine $C_{21}H_{26}ClNO$
medazomidum medazomide	1,4,5,6-tetrahydro-1-methyl-6-oxo-3-pyridazinecarboxamide $C_6H_9N_3O_2$
menbutonum menbutone	3-[4-methoxy-1-naphthoyl]propionic acid $C_{15}H_{14}O_4$
metomidatum metomidate	methyl 1-(α-methylbenzyl)imidazole-5-carboxylate $C_{13}H_{14}N_2O_2$
metopimazinum metopimazine	1-{3-[2-(methylsulfonyl)phenothiazin-10-yl]propyl}isonipecotamide $C_{22}H_{27}N_3O_3S_2$
metoquizinum metoquizine	3,5-dimethyl-*N*-(4,6,6a,7,8,9,10,10a-octahydro-4,7-dimethylindolo[4,3-*fg*]quinolin-9-yl)pyrazole-1-carboxamide $C_{22}H_{27}N_5O$
metribolonum metribolone	17β-hydroxy-17-methylestra-4,9,11-trien-3-one $C_{19}H_{24}O_2$
mikamycinum mikamycin	an antibiotic obtained from cultures of *Streptomyces mitakaensis*, or the same substance obtained by any other means
mitogillinum mitogillin	an antibiotic obtained from cultures of *Aspergillus restrictus*, or the same substance obtained by any other means
mitopodozidum mitopodozide	podophyllic acid 2-ethylhydrazide $C_{24}H_{30}N_2O_8$
mitotenaminum mitotenamine	5-bromo-*N*-(2-chloroethyl)-*N*-ethylbenzo[*b*]thiophene-3-methylamine $C_{13}H_{15}BrClNS$
myfadolum myfadol	2-[3-(*m*-hydroxyphenyl)-2,3-dimethylpiperidino]acetophenone $C_{21}H_{25}NO_2$
natrii aurotiosulfas sodium aurotiosulfate	sodium dithiosulfatoaurate(I) $AuNa_3O_6S_4$
natrii glucaspaldras sodium glucaspaldrate	sodium bis(acetato)tetrakis[gluconato(2-)]bis[salicylato(2-)] dialuminate dihydrate $C_{42}H_{54}Al_2Na_4O_{38}.2H_2O$
natrii picosulfas sodium picosulfate	4,4′-(2-pyridylmethylene)diphenol bis(hydrogen sulfate) disodium salt $C_{18}H_{13}NNa_2O_8S_2$
natrii stibocaptas sodium stibocaptate	hexasodium salt of the *S*,*S*-diester of the cyclic thioantimonate(III) of 2,3-dimercaptosuccinic acid $C_{12}H_8Na_6O_{12}S_6Sb_2$

Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
nifuraldezonum nifuraldezone	5-nitro-2-furaldehyde semioxamazone $C_7H_6N_4O_5$
nifuratelum nifuratel	5-[(methylthio)methyl]-3-[(5-nitrofurfurylidene)amino]-2-oxazolidinone $C_{10}H_{11}N_3O_5S$
nifurvidinum nifurvidine	2-methyl-6-[2-(5-nitro-2-furyl)vinyl]-4-pyrimidinol $C_{11}H_9N_3O_4$
niridazolum niridazole	1-(5-nitro-2-thiazolyl)-2-imidazolidinone $C_6H_6N_4O_3S$
nitarsonum nitarsone	*p*-nitrobenzenearsonic acid $C_6H_6AsNO_5$
nonoxynolum nonoxynol	poly(ethylene glycol) *p*-nonylphenyl ether
norbudrinum norbudrine	α-[(cyclobutylamino)methyl]-3,4-dihydroxybenzyl alcohol $C_{12}H_{17}NO_3$
norgestrelum norgestrel	13-ethyl-17-hydroxy-18,19-dinor-17α-pregn-4-en-20-yn-3-one $C_{21}H_{28}O_2$
orestratum orestrate	17β(cyclohexen-1-yloxy)-estra-1,3,5(10)-trien-3-ol propionate $C_{27}H_{36}O_3$
oxaflumazinum oxaflumazine	10-{3-[4-(2-*m*-dioxanylethyl)-1-piperazinyl]propyl}-2-(trifluoromethyl) phenothiazine $C_{26}H_{32}F_3N_3O_2S$
oxyridazinum oxyridazine	2-methoxy-10-[2-(1-methyl-2-piperidyl)ethyl]phenothiazine $C_{21}H_{26}N_2OS$
pipamperonum pipamperone	1′-[3-(*p*-fluorobenzoyl)propyl][1,4′-bipiperidine]-4′-carboxamide $C_{21}H_{30}FN_3O_2$
poloxalenum poloxalene	liquid nonionic surfactant polymer of the polyoxypropylene polyoxyethylene type, having a molecular weight of approximately 3000, of which approximately 67 % is polyoxypropylene
primaperonum primaperone	4′-fluoro-4-piperidinobutyrophenone $C_{15}H_{20}FNO$
proclonolum proclonol	bis(*p*-chlorophenyl)cyclopropylmethanol $C_{16}H_{14}Cl_2O$
proquinolatum proquinolate	methyl-4-hydroxy-6,7-diisopropoxy-3-quinolinecarboxylate $C_{17}H_{21}NO_5$
proscillaridinum proscillaridin	14-hydroxy-3β-(rhamnosyloxy)bufa-4,20,22-trienolide $C_{30}H_{42}O_8$
pyrantelum pyrantel	1,4,5,6-tetrahydro-1-methyl-2-[*trans*-2-(2-thienyl)vinyl]pyrimidine $C_{11}H_{14}N_2S$
pyrrolnitrinum pyrrolnitrin	3-chloro-4-(3-chloro-2-nitrophenyl)pyrrole $C_{10}H_6Cl_2N_2O_2$
quinaldinum coeruleum quinaldine blue	1-ethyl-2-[3-(1-ethyl-2(1*H*)-quinolylidene)propenyl]quinolinium chloride $C_{25}H_{25}ClN_2$
quinazosinum quinazosin	2-(4-allyl-1-piperazinyl)-4-amino-6,7-dimethoxyquinazoline $C_{17}H_{23}N_5O_2$
quinprenalinum quinprenaline	8-hydroxy-α-[(isopropylamino)methyl]-5-quinolinemethanol $C_{14}H_{18}N_2O_2$
quipazinum quipazine	2-(1-piperazinyl)quinoline $C_{13}H_{15}N_3$

Proposed International Non-Proprietary Name (Latin, English)	*Chemical Name or Description and Molecular Formula*
rifampicinum rifampicin	3-[[(4-methyl-1-piperazinyl)imino]methyl]rifamycin SV $C_{43}H_{58}N_4O_{12}$
rimantadinum rimantadine	α-methyl-1-adamantanemethylamine $C_{12}H_{21}N$
roletamidum roletamide	3′,4′, 5′-trimethoxy-3-(3-pyrrolin-1-yl)acrylophenone $C_{16}H_{19}NO_4$
roxarsonum roxarsone	4-hydroxy-3-nitrobenzenearsonic acid $C_6H_6AsNO_5$
roxoperonum roxoperone	8-[3-(*p*-fluorobenzoyl)propyl]-2-methyl-2,8-diazaspiro[4.5]-1,3-dione $C_{19}H_{23}FN_2O_3$
simetridum simetride	1,4-bis[(2-methoxy-4-propylphenoxy)acetyl]piperazine $C_{28}H_{38}N_2O_6$
spiperonum spiperone	8-[3-(*p*-fluorobenzoyl)propyl]-1-phenyl-1,3,8-triazaspiro[4.5] decan-4-one $C_{23}H_{26}FN_3O_2$
stenbolonum stenbolone	17β-hydroxy-2-methyl-5α-androst-1-en-3-one $C_{20}H_{30}O_2$
sulfabenzum sulfabenz	sulfanilanilide $C_{12}H_{12}N_2O_2S$
sulfaclomidum sulfaclomide	*N*¹-(5-chloro-2,6-dimethyl-4-pyrimidinyl)sulfanilamide $C_{12}H_{13}ClN_4O_2S$
talbutalum talbutal	5-allyl-5-*sec*-butylbarbituric acid $C_{11}H_{16}N_2O_3$
teroxalenum teroxalene	1-(3-chloro-*p*-tolyl)-4-[6-(*p*-*tert*-pentylphenoxy)hexyl]piperazine $C_{28}H_{41}ClN_2O$
tetrazepamum tetrazepam	7-chloro-5-(cyclohexen-1-yl)-1,3-dihydro-1-methyl-2*H*-1,4-benzodiazepin-2-one $C_{16}H_{17}ClN_2O$
tetroquinonum tetroquinone	tetrahydroxy-*p*-benzoquinone $C_6H_4O_6$
tiazesimum tiazesim	5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-phenyl-1,5-benzothiazepin-4(5*H*)-one $C_{19}H_{22}N_2OS$
toloconii methylsulfas toloconium methylsulfate	trimethyl(1-*p*-tolyldodecyl)ammonium methyl sulfate $C_{23}H_{43}NO_4S$
toquizinum toquizine	N-(4-ethyl-4,6,6a,7,8,9,10,10a-octahydro-7-methylindolo [4,3-*fg*] quinolin-9-yl)-3,5-dimethylpyrazole-1-carboxamide $C_{23}H_{29}N_5O$
trimoxaminum trimoxamine	α-allyl-3,4,5-trimethoxy-*N*-methylphenethylamine $C_{15}H_{23}NO_3$
troxerutinum troxerutin	3′,4′,7-tris(hydroxyethyl)rutin $C_{33}H_{42}O_{19}$
valtratum valtrate	3a,4-dihydro-3,4-dihydroxyspiro[benzofuran-2(3*H*),2′-oxirane]-6-methanol 6-acetate 3,4-diisovalerate $C_{22}H_{30}O_8$
xylamidini tosylas xylamidine tosylate	*N*-[2-(3-methoxyphenoxy)propyl]-2-*m*-tolylacetamidine *p*-toluenesulfonate $C_{19}H_{24}N_2O_2 . C_7H_8O_3S$
zinci pyrithionum zinc pyrithione	bis(1-hydroxy-2(1*H*)-pyridinethionato)zinc $C_{10}H_8N_2O_2S_2Zn$
zolertinum zolertine	1-phenyl-4-(2-tetrazol-5-ylethyl)piperazine $C_{13}H_{18}N_6$

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.

---

* Text adopted by the Executive Board of WHO in resolution EB15.R7 (*Off. Rec. World 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 for a substance belonging to a group of pharmacologically related substances should show this relationship. The name should be free from any anatomical, physiological, pathological or therapeutic suggestion.

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" and "chlor" should preferably be abbreviated (to "medro" and "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" and "e" instead of "ae" or "oe".

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.

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.

---

* Text adopted by the Executive Board of WHO in resolution EB.37R9 (*Off. Rec. Wld Hlth Org.*, 1966, 148, 9)

Latin	*English*	*French*	
-andr-	-andr-	-andr-	steroids, androgenic
or -stan-	or -stan-	or -stan-	
or -ster-	or -ster-	or -ster-	
-apol-	-apol-	-apol-	polysulfonic anticoagulants
-arolum	-arol	-arol	anticoagulants
-bamatum	-bamate	-bamate	tranquillizers of the propanediol and pentanediol series
barb	barb	barb	barbituric acids
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, antimicrobial
-curinum	-curine	-curine	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
gly-	gly-	gly-	antidiabetics, oral
io-	io-	io-	iodine-containing contrast media
iod	iod	iod	iodine-containing compounds not used as contrast media
or -io-	or -io-	or -io-	
-mer-	-mer-	-mer-	mercury-containing drugs, antimicrobial or diuretic
mito-	mito-	mito-	nucleotoxic, antineoplastic agents
-moxinum	-moxin	-moxine	monoamine, oxidase inhibitors
-mycinum	-mycin	-mycine	antibiotics, produced by *Streptomyces* strains
nifur-	nifur-	nifur-	5-nitrofuran derivatives
-orexum	-orex	-orex	anorexigenic agents
-praminum	-pramine	-pramine	dibenzepine, 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	-verine	spasmolytics with a papaverine-like action
-inum	-ine	-ine	alkaloids and organic bases
-onum	-one	-one	ketones
-onium	-onium	-onium	quaternary amines

CORRIGENDA

INTERNATIONAL NON-PROPRIETARY NAMES FOR PHARMACEUTICAL PREPARATIONS

Vol. 17, No. 10, p. 394

delete	
menotrophinum menotrophin	human menopausal gonadotrophin

Vol. 18, No. 11, p. 440

delete	*insert*
sulfametinum	sulfametoxydiazinum
sulfametin	sulfametoxydiazine

Vol. 19, No. 11, p. 450

delete	
follotropinum (humanum) follotropin (human)	purified, standardized extract of post-menopausal urine containing primarily the follicle stimulating hormone (FSH) with only a mere trace of luteinizing hormone (LH)

Vol. 20, No. 6

p. 216

delete	*insert*
acidum hydroxytoluinicum	acidum hydroxytoluicum
hydroxytoluinic acid	hydroxytoluic acid

p. 223

delete	*insert*
racemelfalanum	sarcolysinum
racemelfalan	sarcolysin