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, 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.

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. I.N.N.): List 29

<table>
<thead>
<tr>
<th>Proposed International Nonproprietary Name (Latin, English)</th>
<th>Chemical Name or Description, Molecular and Graphic Formulae</th>
</tr>
</thead>
<tbody>
<tr>
<td>acidum acerbicicum</td>
<td>4-hydroxybutyric acid acetate</td>
</tr>
<tr>
<td>acetic acid</td>
<td>C₆H₁₂O₄</td>
</tr>
<tr>
<td></td>
<td>H₃C−CO−O−(CH₂)₂−COOH</td>
</tr>
<tr>
<td>acidum furacrinicum</td>
<td>6-methyl-5-(2-methylenebutyryl)-2-benzofurancarboxylic acid</td>
</tr>
<tr>
<td>furacrinic acid</td>
<td>C₇H₁₀N₄O₄</td>
</tr>
<tr>
<td></td>
<td>H₂C=C−CO−N−C₆H₄−COOH</td>
</tr>
<tr>
<td></td>
<td>C₂H₅</td>
</tr>
</tbody>
</table>

1 See Annex, p. 21.


All names from lists 1–25 of proposed international nonproprietary names, together with a molecular formula index, will be found in: World Health Organization (1971) International nonproprietary names for pharmaceutical substances: Cumulative list No. 3, 1971, Geneva, 189 pages (price: £2.40, $6.00, or Sw. fr. 24.—).
<table>
<thead>
<tr>
<th>Proposed International Nonproprietary Name (Latin, English)</th>
<th>Chemical Name or Description, Molecular and Graphic Formulae</th>
</tr>
</thead>
<tbody>
<tr>
<td>acidum prodolicum prodolic acid</td>
<td>1,3,4,9-tetrahydro-1-propylpyran[3,4-b]indole-1-acetic acid</td>
</tr>
<tr>
<td>avoparcinum avoparcin</td>
<td>a glycopeptide antibiotic obtained from cultures of <em>Streptomyces candidus</em>, or the same substance produced by any other means</td>
</tr>
<tr>
<td>batroxobinum batroxobin</td>
<td>a thrombinlike enzyme obtained from the venom of the serpent <em>Bothrops atrox</em></td>
</tr>
<tr>
<td>benfosforminum benfosformin</td>
<td>disodium [(benzylamidino)amidino]phosphoramidate monohydrate</td>
</tr>
<tr>
<td>bisbendazolum bisbendazole</td>
<td>bis[1-(1-methyl-2-benzimidazolyl)ethyl] tetranthio-(\rho)-benzenedicarbamate</td>
</tr>
<tr>
<td>bromoergocryptine</td>
<td>2-bromoergocryptine</td>
</tr>
</tbody>
</table>
Proposed International Nonproprietary Name (Latin, English) Chemical Name or Description, Molecular and Graphic Formulas

brosotamidum brosoamide 5-bromo-2,3-phenetidine

\[
\text{C}_9\text{H}_8\text{BrNO}_2
\]

bunaftinum bunaftine \(N\text{-butyl}-N\text{-[2-(diethylamino)ethyl]}-1\text{-naphthamide} \)

\[
\text{C}_{21}\text{H}_{28}\text{N}_2\text{O}
\]

buprenorphinum buprenorphine \(21\text{-cyclopropyl}-7\alpha\text{-[(S)-1\text{-hydroxy-1,2,2\text{-trimethylpropyl}}]}	ext{-6,14\text{-endo-ethano-6,7,8,14-tetrahydrocrispavine}} \)

\[
\text{C}_{32}\text{H}_{41}\text{NO}_4
\]

butixiramum butixirate \(\alpha\text{-ethyl-4-biphenylacetic acid compound with trans-4-phenylcyclohexylamine (1:1)} \)

\[
\text{C}_{25}\text{H}_{26}\text{O}_2 \cdot \text{C}_{12}\text{H}_{17}\text{N} \text{ or } \text{C}_{26}\text{H}_{32}\text{NO}_2
\]
<table>
<thead>
<tr>
<th>Name</th>
<th>Chemical Name or Description, Molecular and Graphic Formulas</th>
</tr>
</thead>
<tbody>
<tr>
<td>calcii natrii ferricias</td>
<td>monocalcium tetrasmium bis(σ-equa-[0-gluconato(4-)]-tetra-μ-hydroxy-dioxotriferato(3-) ) Ca$_2$H$_4$Fe$_2$O$_7$Na$<em>4$O$</em>{18}$</td>
</tr>
<tr>
<td>calcium sodium ferricate</td>
<td></td>
</tr>
<tr>
<td>camoverine</td>
<td>2-phenyl-N-[2-(1-pyrrolidinyl)ethyl]glycine isopentyl ester C$<em>3$sH$</em>{30}$N$_2$O$_2$</td>
</tr>
<tr>
<td>carbelestatum</td>
<td>[5-2-(2-tert-butylamino)-1-hydroxyethyl]-2-hydroxyphenyl]urea C$<em>{3}$sH$</em>{31}$N$_3$O$_3$</td>
</tr>
<tr>
<td>carbelestat</td>
<td></td>
</tr>
<tr>
<td>carindacillin</td>
<td>N-(2-carboxy-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]hept-6-yl)-2-phenylmalonamic acid 1-(5-indany) ester C$<em>{2}$sH$</em>{33}$N$_2$O$_3$S</td>
</tr>
<tr>
<td>carindacillinum</td>
<td></td>
</tr>
</tbody>
</table>
caroxazone
2-oxo-2H-1,3-benzoxazine-3(4H)-acetamide
C₁₀H₁₀N₂O₃

cefoxitinum
3-(hydroxymethyl)-7-methoxy-8-oxo-7-[2-(2-thienyl)acetamido]-
8-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid carbamate (ester)
C₁₆H₁₆N₂O₂S₂

ceruletidum
5-oxo-L-prolyl-L-glutaminyll-L-aspartyl-L-tyrosyl-L-threonylglycyl-
L-tryptophyl-L-methionyl-L-aspartylphenyl-L-alanineamide 4-(hydrogen sulfate)
(ester)
C₉₈H₆₃N₃₀S₃

ceclopraminum
2,3,7,8-tetrahydro-3-(methylamino)-1H-quino[1,8-a6]1benzazepine
C₁₈H₂₀N₂

clazolamum
(+)-2-chloro-5,9,10,14b-tetrahydro-5-methylisoquinol[2,1-d]1,4]-
benzodiazepin-5(7H)-one
C₁₁H₁₁ClN₂O
<table>
<thead>
<tr>
<th>Nonproprietary Name (Latin, English)</th>
<th>Chemical Name or Description, Molecular and Graphic Formulas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloxanfamide</td>
<td>p-chloro-N-(2-hydroxyethyl)-N-[(3-methyl-2-norbaryl)methyl]-benzamide</td>
</tr>
<tr>
<td>Cloxanamide</td>
<td><img src="image" alt="Cloxanamide Structure" /></td>
</tr>
<tr>
<td>Cloridarolum</td>
<td>α-(p-chlorophenyl)-2-benzofuranmethanol</td>
</tr>
<tr>
<td>Cloridarol</td>
<td><img src="image" alt="Cloridarol Structure" /></td>
</tr>
<tr>
<td>Clorotepinum</td>
<td>1-(8-chloro-10,11-dihydrodibenzo[b,f]thiepin-10-yl)-4-methylpiperazine</td>
</tr>
<tr>
<td>Clorotepine</td>
<td><img src="image" alt="Clorotepine Structure" /></td>
</tr>
<tr>
<td>Cloxazolamum</td>
<td>10-chloro-11b-(o-chlorophenyl)-2,3,7,11b-tetrahydro-oxazolo[3,2-d][1,4]benzodiazepin-6(5H)-one</td>
</tr>
<tr>
<td>Cloxazolam</td>
<td><img src="image" alt="Cloxazolam Structure" /></td>
</tr>
<tr>
<td>Proposed International Nonproprietary Name (Latin, English)</td>
<td>Chemical Name or Description, Molecular and Graphic Formulae</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>colfenamatum colfenamate</td>
<td>( N-(\text{a,a,a-trifluoro-m-tolyl})\text{anthranilic acid, } \text{ester with glycolamide} ) ( \text{C}_6\text{H}_1\text{F}_3\text{N}_2\text{O}_3 )</td>
</tr>
</tbody>
</table>
| | \[
| \begin{align*}
| \text{CD} & \text= \text{O} - \text{CH}_2 - \text{CO} - \text{NH}_2 \\
| \text{CF}_3
| \end{align*}
|  |
| cormetasonum cormetasonone | \( 6,6,8\text{-trifluoro-11,\beta,17,21\text{-trihydroxy-16\text{-methylpregna-1,4-diene-3,20-dione}} } \) \( \text{C}_{22}\text{H}_{27}\text{F}_3\text{O}_5 \) |
| | \[
| \begin{align*}
| \text{CH}_2\text{OH} & \\
| \text{HO} & \\
| \text{H}_2\text{C} & \text{H}_2\text{C} & \text{H} & \text{H} & \text{CO} - \text{OH} \\
| \text{CD} & \text{C} & \text{H} & \text{H} & \text{CH}_3 \\
| \text{F} & \text{F} & \text{F} & \text{F}
| \end{align*}
|  |
| dazadrolum dazadrol | \( \omega-(\text{\text{p-chlorophenyl})-\text{a-2-imidazolin-2-yl-2-pyridinemethanol}} \) \( \text{C}_{15}\text{H}_{14}\text{ClN}_3\text{O} \) |
| | \[
| \begin{align*}
| \text{H} & \\
| \text{N} & \\
| \text{C} & \text{OH} \\
| \text{Cl}
| \end{align*}
|  |
| dectaflurum dectafur | \( \text{S-octadecylamine hydrofluoride} \) \( \text{C}_{18}\text{H}_{37}\text{N} \cdot \text{HF} \text{ or } \text{C}_{18}\text{H}_{36}\text{N} \) |
| | \[
| \begin{align*}
| \text{H}_2\text{C} - \text{(CH}_2\text{)}_\text{y} - \text{CH} = \text{CH} - \text{(CH}_2\text{)}_\text{y} - \text{CH}_2 - \text{NH}_2 \cdot \text{HF}
| \end{align*}
|  |
| dipyrfthionum dipyrrthione | \( 2,2\text{'-dithiodipyridine 1,1\text{-dioxide}} \) \( \text{C}_{16}\text{H}_2\text{N}_2\text{O}_2\text{S}_2 \) |
| | \[
| \begin{align*}
| \text{N} & \\
| \text{S} & \text{S}
| \end{align*}
|  |
Proposed International Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae

dobutaminum

\[(\pm)-4-\{2-[[3-(\rho\text{-hydroxyphenyl})-1\text{-methyl}propyl]amino]ethyl\}pyrocatechol\]
\[C_{19}H_{23}NO_3\]

\[\begin{array}{c}
  \text{O} \\
  \text{H} \\
  \{\text{CH}_2\}_2-\text{NH}-\text{CH}-(\text{CH}_2)_2 \\
  \text{H} \\
  \text{O} \\
\end{array}\]

doxazolinum
doxazoline

\[2-(3,6\text{-dimethoxy}-2,4\text{-dimethylbenzyl})-2\text{-imidazoline}\]
\[C_{14}H_{20}N_2O_2\]

\[\begin{array}{c}
  \text{H} \\
  \text{CH}_2 \\
  \text{N} \\
  \text{H}_2\text{CO} \\
  \text{CH}_2 \\
  \text{CH}_3 \\
  \text{CH}_3 \\
  \text{OCH}_3 \\
\end{array}\]

drocinonidum
drocinonide

\[9\text{-fluoro-11\beta,16\alpha,17,21\text{-tetrahydroxy-5α-progesterone-3,20-dione}}\]
\[\text{cyclic 16,17\text{-acetate with acetone}}\]
\[C_{24}H_{36}FO_6\]

\[\begin{array}{c}
  \text{CH}_2\text{OH} \\
  \text{HO} \\
  \text{H}_2\text{C} \\
  \text{C} \quad \text{O} \quad \text{C}(\text{CH}_3)_2 \\
  \text{F} \quad \text{H}\text{C} \\
  \text{D} \quad \text{D}\text{C} \\
\end{array}\]

dlucaicum
dlucaicin

\[\alpha\text{-[(diethylamino)methyl]benzyl alcohol benzoate (ester)}\]
\[C_{18}H_{23}NO_2\]

\[\begin{array}{c}
  \text{CO} - \text{O} - \text{CH} - \text{CH}_2 - \text{N}(\text{C}_2\text{H}_5)_2 \\
\end{array}\]
**Proposed International Chemical Name or Description, Molecular and Graphic Formulae**

**Nonproprietary Name (Latin, English)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Molecular Formula</th>
<th>Formula Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>endrisonum</td>
<td>11β-hydroxy-6α-methylpregna-1,4-diene-3,20-dione</td>
<td>C_{22}H_{33}O_{3}</td>
</tr>
<tr>
<td>endrione</td>
<td></td>
<td></td>
</tr>
<tr>
<td>etidocainum</td>
<td>(±)-2-[(N-ethylpropylamino)-2',6'-butoxy]lidide</td>
<td>C_{17}H_{26}N_{2}O</td>
</tr>
<tr>
<td>etidocaine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>etofenamatum</td>
<td>2-(2-hydroxyethoxy)ethyl-N-(e,e',e'-trifluoro-m-toly)anthranilate</td>
<td>C_{18}H_{16}F_{3}NO_{4}</td>
</tr>
<tr>
<td>etofenamate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>etoloxaminum</td>
<td>2-[[α-phenyl-α-toly]oxy]triethylamine</td>
<td>C_{18}H_{20}NO</td>
</tr>
<tr>
<td>etoloxamine</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
fenalcominum
fenalcome

\[
\alpha\text{-ethyl-p-}(2\text{-[(\alpha\text{-methylphenethyl)amino]ethoxy}})\text{benzyl alcohol}
\]
\[
C_{20}H_{22}NO_2
\]

\[
\begin{array}{c}
\text{H}_2\text{C-CH}_2\text{-CHOH}\\
\text{O-CH}_2\text{-CH}_2\text{-NH}\\
\text{CH}_3\text{-CH}_3\\
\text{CH}_2
\end{array}
\]

fenbendazolum
fenibendazole

methyl 5-(phenylthio)-2-benzimidazolcarbamate
\[
C_{11}H_{13}N_3O_2S
\]

\[
\begin{array}{c}
\text{H}\\
\text{N}\\
\text{N}\\
\text{NH-CO-O-CH}_3\\
\text{N}
\end{array}
\]

fenipentium
fenipentol

\[
\alpha\text{-butylbenzyl alcohol}
\]
\[
C_{11}H_{13}O
\]

\[
\begin{array}{c}
\text{CHOH-(CH}_2)_3\text{-CH}_3
\end{array}
\]

fenisorexum
fenisorex

cis-7-fluoro-1-phenyl-3-isochromanmethylamine
\[
C_{16}H_{16}FNO
\]

\[
\begin{array}{c}
\text{F}\\
\text{CH}_2\text{-NH}_2
\end{array}
\]
**Proposed International Nonproprietary Name (Latin, English)**

**Chemical Name or Description, Molecular and Graphic Formulas**

**Fentoni bromidum**
Fentonium bromide

3α-hydroxy-8-(p-phenylphenacyl)-1αH,5αH-tropanium bromide (−)-tropate

**Fluazacortum**
Fluazacort

9-fluoro-11β,21-dihydroxy-2'-methyl-5βH-pregna-
1,4-dieno[17,16-d]oxazole-3,20-dione 21-acetate

**Gemazocinum**
Gemazocine

3-(cyclopropylmethyl)-6-ethyl-1,2,3,4,5,6-hexahydro-11,11-dimethyl-
2,6-methano-3-benzazocin-8-ol

**Glutaratum**
Glutaral

Pentanediaic or glutaraldehyde

**Halazepamum**
Halazepam

7-chloro-1,3-dihydro-5-phenyl-1-(2,2,2-trifluoroethyl)-
2H-1,4-benzodiazepin-2-one

---

11
Proposed International Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae

halcinonidum
halcinonide

21-chloro-9-fluoro-11β,16α,17-trihydroxypregn-4-ene-3,20-dione
cyclic 16,17-acetal with acetone
C₂₄H₃₂ClF₄O₆

\[
\text{O} \quad \text{C} \quad \text{H} \quad \text{Cl}
\]

hexadecylamine hydrofluoride
C₆₄H₃₃N*·HF or C₆₅H₃₅FN

\[
\text{H}_₂\text{C}-(\text{CH}_₂)₁₄-\text{CH}_₂-\text{NH}_₂*\cdot\text{HF}
\]

indapamidum
indapamide

4-chloro-N'-(2-methyl-1-indolyl)-3-sulfamoylbenzamide
C₆₈H₅₃ClN₂O₅S

\[
\begin{align*}
\text{CO} & - \text{NH} \\
\text{Cl} & - \text{SO₂} \quad \text{NH₂} \\
& \text{C} - \text{NH}_₂
\end{align*}
\]

laurogudinum
laurogudine

1,1'-[4-(dodecyloxy)-m-phenylene]diguanidine
C₂₀H₃₅N₂O

\[
\begin{align*}
\text{NH} \\
\text{NH-C-NH}_₂ \\
\text{NH} \\
\text{O-(CH}_₂)₁₁-\text{CH}_₃
\end{align*}
\]

lissocillidum
lissocilide

2-[[5-carboxy-5-formamidopentyl] carbamoyl] (2-phenylacetamido)-
methyl)-5,5-dimethyl-4-thiazolidinecarboxylic acid
C₂₀H₂₄N₂O₅S

\[
\begin{align*}
\text{H}_₂\text{C} & - \text{S} - \text{CH-CO} \\
\text{H}_₂\text{C} & - \text{CH-C-NH} \\
& \text{HN-(CH}_₂)₄-\text{CH-COOH} \\
& \text{HN-CHO}
\end{align*}
\]

12
mazaticolum  
mazaticol

6,6,8-trimethyl-9-azabicyclo[3.3.1]non-3β-yl dl-2-thienylglycolate  
C$_{21}$H$_{27}$NO$_3$S$_2$

\[
\begin{array}{c}
\text{H}_2\text{C} \quad \text{CH} \quad \text{CH}_2 \\
\text{H}_2\text{C} \quad \text{N-CH}_3 \\
\text{H}_2\text{C} \quad \text{C} \quad \text{O-CO} \quad \text{S} \\
\text{CH}_3 \\
\end{array}
\]

mebiquinum  
biquine

dihydroxy(6-methyl-8-quinolinolate)bismuth  
C$_{30}$H$_{10}$BiNO$_3$

\[
\begin{array}{c}
\text{O-Bi(OH)$_2$} \\
\text{H}_2\text{C} \\
\end{array}
\]

mosabolonum  
mosaboline

17β-[(1-methoxycyclohexyl)oxy]-5α-androst-1-en-3-one  
C$_{25}$H$_{30}$O$_3$

\[
\begin{array}{c}
\text{H}_2\text{C} \quad \text{O-CH}_3 \\
\text{H} \quad \text{H} \\
\text{H} \quad \text{H} \\
\text{H} \quad \text{H} \\
\text{H} \quad \text{H} \\
\end{array}
\]

metergotaminum  
metergotamine

1-methylergotamine  
C$_{34}$H$_{37}$N$_2$O$_5$

\[
\begin{array}{c}
\text{H}_2\text{C} \quad \text{N-CH}_3 \\
\text{H} \quad \text{H} \\
\text{H} \quad \text{H} \\
\text{H} \quad \text{H} \\
\text{H} \quad \text{H} \\
\end{array}
\]
Naltrexonum
Naltrexone

(-)-17-(cyclopropylmethyl)-4,8α-epoxy-3,14-dihydroxy morphinan-6-one
C_{20}H_{23}NO_{4}

Nicoconatum
Nicoconate

p-chloro-o-isopropylbenzyl nicotinate
C_{16}H_{14}ClNO_{2}

Niprofazonum
Niprofzone

N-[(antipyrinylisopropylamino)methyl]nicotinamide
C_{21}H_{18}N_{6}O_{2}

Olaflurum
Olaflur

2,2'-[3-[(2-hydroxyethyl)octadecy lamino]propyl]iminodiethanol dihydrofluoride
C_{27}H_{56}N_{2}O_{3}·2HF or C_{27}H_{56}F_{2}N_{2}O_{3}
oxisopredum  
oxisopred

11β,17,21-trihydroxy-β-homo-1α-norpregn-1-ene-3,6,20-trione  
C21H32O6

averolium  
papaveroline

1-(3,4-dihydroxybenzyl)-6,7-isoquinolinediol  
C19H18NO4

pentfluizidum  
pentfluizide

3,4-dihydro-3-pentyl-6-(trifluoromethyl)-2H-1,2,4-benzothiadiazine- 
7-sulfonamide 1,1-dioxide  
C12H18F3N3O4S2

pentifylinum  
pentifyline

1-hexyltheobromine  
C19H20N4O2
Proposed International Nonproprietary Name (Latin, English)  Chemical Name or Description, Molecular and Graphic Formulae

pentoxifyllinum  1-(6-oxohexyl) theobromine  C_{13}H_{18}N_{4}O_{3}

pentoxifylline  

pentrintritolum  pentaserythritol trinitrate  C_{2}H_{5}N_{3}O_{10}

pentrinitol  

peraquinsinum  6,7-dimethoxy-2-[2-4-(6-methoxyphenyl)-1-piperazinyl]ethyl]-4(3H)-quinazolione  C_{29}H_{25}N_{4}O_{4}

peraquinsin  

pretamazil iodidum  4-(4-biphenylyl)-3-ethyl-2-(p-1-pyrrolidinylstyryl)thiazolium iodide  C_{28}H_{23}N_{2}S

pretamazium iodide  

16
propium
propium

1-isopropyl-4,4-diphenylpiperidine
C$_{20}$H$_{25}$N

propafenonum
propafenone

2′-[2-hydroxy-3-{(propylamino)proplyoxy}-3-phenylpropiophenone
C$_{21}$H$_{27}$NO$_3$

propetamidum
propetamide

2-p-phenetidino-N-propylpropionamide
C$_{24}$H$_{22}$N$_2$O$_2$

rosaminin
rosamine

3-ethyl-7-hydroxy-2,8,12,16-tetramethyl-5,13-dioxo-9-
[[3,4,6-trideoxy-3-(dimethylamino)-β-D-xyo-hexopyranosyl]oxy]-
4,17-dioxabicyclo[14.1.0]heptadec-14-ene-10-acetaldehyde
C$_{31}$H$_{33}$NO$_9$
**Proposed International Nonproprietary Name (Latin, English)**

<table>
<thead>
<tr>
<th>Chemical Name or Description, Molecular and Graphic Formulas</th>
</tr>
</thead>
<tbody>
<tr>
<td>salantelum</td>
</tr>
<tr>
<td>salantel</td>
</tr>
<tr>
<td>3'-chloro-4'-(p-chlorobenzoyl)-3,5-dilodosalicilamidide</td>
</tr>
<tr>
<td>C_{20}H_{11}Cl_{2}I_{2}NO_{3}</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>salfluverinum</td>
</tr>
<tr>
<td>salfluverine</td>
</tr>
<tr>
<td>a,a,a-trifluoro-m-salicyl toluidide</td>
</tr>
<tr>
<td>C_{14}H_{10}F_{3}NO_{2}</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>sulfatroxazolum</td>
</tr>
<tr>
<td>sulfatroxazole</td>
</tr>
<tr>
<td>N'-[(4,5-dimethyl-3-isoxazoly1)sulfanilamide</td>
</tr>
<tr>
<td>C_{11}H_{13}N_{3}S_{2}O_{5}</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>sulglicotidum</td>
</tr>
<tr>
<td>sulglicotide</td>
</tr>
<tr>
<td>the sulfuric polyester of a glycopeptide isolated from pig duodenum</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>tetriprofenum</td>
</tr>
<tr>
<td>tetriprofen</td>
</tr>
<tr>
<td>p-1-cyclohexen-1-ylhydratropic acid</td>
</tr>
<tr>
<td>C_{15}H_{18}O_{2}</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
ticarcillinum
ticarclin

$N$-(2-carboxy-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]-hept-6-yl)-3-thiophenemalonamic acid
C₁₆H₁₆N₂O₅S₂

timipidil bromidum
timipidium bromide

3-[(di-2-thienylmethylene)-5-methoxy-1,1-dimethyl-piperidinium] bromide
C₁₅H₂₂BrNOS₂

timololum
timolol

(−)-1-[(tert-buty lamino)-3-[[4-morpholino-1,2,5-thiadiazol-3-yl]oxyl]-2-propanol
C₁₅H₂₁N₄O₂S

tofamololum
to lamolol

C₂₃H₂₅N₂O₆S

trapidilium
trapidil

7-[(diethylamino)-5-methyl-s-triazolo[1,5-a]pyrimidine
C₁₆H₁₆N₅
Names for Radicals and Groups

Some substances for which a proposed international nonproprietary name has been established may be used in the form of salts or esters. The radicals or groups involved may be of complex composition and it is then inconvenient to refer to them in systematic chemical nomenclature. Consequently, shorter non-proprietary names for some radicals and groups have been devised or selected, and they are suggested for use with the proposed international nonproprietary names.

\[
\text{1,2,3,6-tetrahydro-1,3-dimethyl-2,6-dioxopurine-7-propanesulfonate}
\]

\[
\text{teprosilate}
\]

AMENDMENTS TO PREVIOUS LISTS

Vol. 26, No. 9

Proposed International Nonproprietary Names (Prop. I.N.N.): List 28

- p.420 delete
difamizolium
difenizole

- p.429 delete
renactidum
renactide

- insert
difenamizolium
difenizole
giractidum
giractide
Annex

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 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 such comments and objections shall 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 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.

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

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, where appropriate, show this relationship. Names that are likely to convey to a patient an anatomically

* Text adapted by the Executive Board of WHO in resolution EB113.R7 (8th Rev. WHA, 1985, 60.5) and amended by the Board in resolution EB43.R9 (9th Rev. WHA, 1989, 68.10)

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

* Text revised by the Expert Committee on Nonproprietary Names for Pharmaceutical Substances (unpublished reports WHO/Pharm/67.443, WHO/Pharm/68.447, and WHO/Pharm/70.450)
ical, 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. In devising a name from the systematic chemical name of a substance, syllables such as "methoxy", "methyle", and "chloro" should preferably be abbreviated, for example, to "medro", "meto", and "clo"; the derived name should not be chemically misleading.

5. In devising names for acids, one-word names are preferred; their salts should be named without modifying the acid name, e.g., "oxacillin" and "oxacillin sodium", "flufenac" and "flufenac sodium". The salts of acids having two-word names such as "nicotinic acid" should be named in the usual style, e.g., "sodium nicotinate".

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 amines-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, "st" should preferably be used 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.

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

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

Latin | English | French

-actidum | -actide | -actide
-andr- | -andr- | -andr-
-or-stan- | -or-stan- | -or-stan-
-or-ster- | -or-ster- | -or-ster-
-arolum | -arol | -arol
-bamatum | -bamate | -bamate
-barb | barb | barb
-bol | bol | bol
-caimun | -caine | -caine
-cem | cef- | cef-
-quinolium | -cilin | -ciline
cort | cort | cort
-crinum | -crine | -crine
-crynum | -curium | -curium
-cyclonum | -cycline | -cycline
-estr- | -estr- | -estr-
-forminum | -formine | -formine
-gasti | gest | gest
-gli | gli | gli
-jo- | jo | jo
-moxinum | -moxin | -moxine
-myclinum | -mycin | -mycine
-nifur- | -nifur- | -nifur-
-nulide | -nulide | -nulide
-oroxen | -orex | -orex
-praminum | -pramino | -pramino
-prostat | prost | prost
-serpum | -serpine | -serpine
-sulfa- | -sulfa- | -sulfa-
-torolium | -tolrol | -toral
-tizidum | -tizide | -tizide
-tolin | -toin | -toin
-verum | -verine | -verine
-inum | -ine | -ine
-ium | -ium | -ium

synthetic polypeptides with a corticotrophin-like action

steroids, androgenic

anticoagulants of the coumarin type

tranquilizers of the propanediol and pentamedial series

barbituric acids, hypnotic activity

anabolic steroids

local anaesthetics

antibiotics with cephalosporanic acid nucleus

penicillin derivatives: derivatives of 6-aminopenicillanic acid

steroids, glucocorticoids and mineralocorticoids, other than prednisolone derivatives

acidine derivatives

curare-like drugs

antibiotics, tetracycline derivatives

estrogenic drugs

guanidine oral antidiabetics

steroids, progesterative

sulfonamide oral antidiabetics

iodine-containing contrast media

monoamine oxidase inhibitors

antimicrobial antibiotics, produced by Streptomyces strains

5-nitrofuran derivatives

steroids for topical use: acetal derivatives

anorexogenic agents

dibenzazepine, compounds of the imipramine type

prostaglandins

derivatives of Arachidonic acid

sulfonamides, used as antimicrobials

bronchodilators: phenothiazine derivatives

diuretics which are thiazide derivatives

antiepileptics which are hydantoin derivatives

spasmolytics with a papaverine-like action

alkaloids and organic bases

ketones

quaternary ammonium compounds