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. INN): List 32

Proposed International Nonproprietary Name (Latin, English) | Chemical Name or Description, Molecular and Graphic Formulae
---|---
acemetacium | 1-(p-chlorobenzoyl)-5-methoxy-2-methylindole-3-acetic acid ester with glycolic acid
acemetacin | 
| C_{27}H_{36}ClNO_{6} |
acemetacin | 3,3'-[oxybis(ethyleneoxy)methylene(1H-imidazol-2-ylmethylene)]bis[2,4,6-triiodobenzoic acid]
| C_{32}H_{16}I_{3}N_{2}O_{9} |

* See Annex, p. 23.


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. 2, 1971. Geneva, 189 pages (price: £3, 57,20, or Sw. fr 24.—). This publication may be obtained from the sales agents listed on the back cover of the WHO Chronicle or from: World Health Organization, Distribution and Sales Service, 1211 Geneva 27, Switzerland.
acidum pipemidicum
pipemidic acid

8-ethyl-5,8-dihydro-5-oxo-2-(1-piperazinyl)pyrido[2,3-d]pyrimidine-6-carboxylic acid
C_{16}H_{17}N_{2}O_{3}

actodiginum
actodigin

38-(β-D-glucopyranosyloxy)-14,23-dihydroxy-24-nor-5,6,14β,cholestan-21-oic acid γ-lactone
C_{28}H_{44}O_{8}

ambroxolum
ambroxol

trans-4-[(2-amino-3,5-dibromobenzyl)amino]cyclohexanol
C_{13}H_{18}Br_{2}N_{2}O

azanatorum
azanator

5-(1-methyl-4-piperidylidene)-5H-[1]benzopyrano[2,3-b]pyridine
C_{16}H_{18}N_{2}O

azoliminium
azolimine

2-imino-3-methyl-1-phenyl-4-imidazolidinone
C₁₀H₁₁N₃O

bacampicillinum
bacampicillin

(25R,6R)-6-{(R)-(2-amino-2-phenylacetamido)}-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid ester with ethyl 1-hydroxyethyl carbonate
C₂₀H₂₃N₃O₇S

benzotriptum
benzotript

N-(p-chlorobenzoyl)-L-tryptophan
C₁₇H₁₅ClN₂O₃

botiacrimum
botiacrine

S-[2-(dimethylamino)ethyl] 9,9-dimethyl-10-acridancarbothioate
C₂₀H₂₅N₂O₂S

brindoximum
brindoxima

C₁₇H₁₅Br₂N₅O₂
<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>butanixinum butanixin</td>
<td>2-(p-butylnilino)nicotinic acid C₁₃H₁₈N₃O₂</td>
</tr>
<tr>
<td>butylbufenum butylbufen</td>
<td>2-(p-isobutylphenyl)butyric acid C₁₃H₂₀O₂</td>
</tr>
<tr>
<td>carboquorum carboquone</td>
<td>2,6-bis(1-aziridinyl)-3-(2-hydroxy-1-methoxyethyl)-6-methyl-p-benzoquinone carbamate (ester) C₁₃H₁₈N₃O₅S</td>
</tr>
<tr>
<td>camidazolum camidazole</td>
<td>O-methyl [2-(2-methyl-5-nitroimidazol-1-yl)ethyl]thiocarbamate CeH₁₂N₄O₄S</td>
</tr>
<tr>
<td>cicloprofenum cicloprofen</td>
<td>α-methylfluorene-2-acetic acid C₁₃H₁₂O₂</td>
</tr>
</tbody>
</table>

4
clazolinum
clazoline

1-(p-chlorophenyl)-2-imino-3-methyl-4-imidazolidinone
C₁₀H₁₀ClN₃O

clenapridum
clenapride

4-amino-N-(1-benzyl-4-piperidyl)-5-chloro-a-aminomde
C₂₀H₂₄ClN₃O₂

clophenenum
clophenen

3-chloro-4-(2-thienyl)hydtrropic acid
C₁₃H₁₄ClO₃S

deprostilum
deprostil

(1R,2S)-2-(3-hydroxy-3-methylcyle)-5-oxocyclopentaneeheptanoic acid
C₂₁H₃₆O₇
**dexamafennum**
**dexamafen**

\((\pm)-2,3,5,6\text{-tetrahydro-5-phenyl-1H-imidazo}[1,2-a]\text{imidazole}\)
\(\text{C}_{11}\text{H}_{12}\text{N}_{2}\)

**dibuprofen**
**dibuprol**

1,3-dibutoxy-2-propanol
\(\text{C}_{11}\text{H}_{24}\text{O}_{3}\)

\(\text{H}_2\text{C}-(\text{CH}_2)_3-0-\text{CH}_2-\text{CH}2-0-(\text{CH}_2)_3-\text{CH}_3\)

**difenoximidum**
**difenoximide**

\(N-[(1-(3\text{-cyano-3,3\text{-diphenylpropyl}})-4\text{-phenylsopropionatoxy})\text{succinimide}\)
\(\text{C}_{32}\text{H}_{21}\text{N}_{5}\text{O}_{4}\)

**eterobarbium**
**eterobarb**

6-ethyl-1,3-bis(methoxymethyl)-5-phenylbarbituric acid
\(\text{C}_{16}\text{H}_{20}\text{N}_{2}\text{O}_{8}\)

\(\text{H}_2\text{C}-(\text{CH}_2)_3-0-\text{CH}_2-\text{O-CH}_3\)
Exaproclum
Exaprolol

1-(o-cyclohexyloxy)-3-(isopropylamino)-2-propanol
C_{18}H_{32}NO_{2}

Fazadinium bromide
Fazadinium bromide

1,1'-azo(bis[3-methyl-2-phenyl-1H-imidazo[1,2-a]pyridin-4-i]um) dibromide
C_{28}H_{24}Br_{6}N_{6}

Febuprolum
Febuprol

1-butoxy-3-phenoxy-2-propanol
C_{18}H_{35}O_{3}

Flumizolum
Flumitzole

4,5-bis(p-methoxyphenyl)-2-(trifluoromethyl)imidazole
C_{19}H_{15}F_{3}N_{2}O_{2}

<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>flutazolamum, flutazolam</td>
<td>10-chloro-11b-(o-fluorophenyl)-2,3,7,11b-tetrahydro-7-(2-hydroxyethyl)-oxazolo[3,2-d][1,4]benzodiazepin-6(5H)-one</td>
</tr>
<tr>
<td></td>
<td>C₁₅H₁₅ClFN₅O₃</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Flutazolam Diagram" /></td>
</tr>
<tr>
<td>ftaxilidum, ftaxilide</td>
<td>2',6'-dimethylphthalanilic acid</td>
</tr>
<tr>
<td></td>
<td>C₁₅H₁₅NO₃</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Ftaxilidum Diagram" /></td>
</tr>
<tr>
<td>galosemidum, galosemid</td>
<td>N-[(4-ethyl-5,5-dimethyl-1H-imidazol-2-yl)sulfonyl]propionamide</td>
</tr>
<tr>
<td></td>
<td>C₁₅H₁₄F₄N₇O₢</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Galosemidum Diagram" /></td>
</tr>
<tr>
<td>glucametacindum, glucametacin</td>
<td>2-[2-[(1-p-chlorobenzoyl)-5-methoxy-2-methylindol-3-yl]acetamido]-2-deoxy-D-glucose</td>
</tr>
<tr>
<td></td>
<td>C₁₅H₁₄ClFN₇O₇</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Glucametacin Diagram" /></td>
</tr>
</tbody>
</table>
gonadorelin (nonproprietary name: LHRH analogs)
gonadorelin (Latin, English: luteinizing hormone releasing factor (pig); 5-oxo-L-prolyl-L-histidyln-L-trypotophyl-L-seryl-L-tyrosyl-L-glycyln-L-leucyl-L-arginyl-L-prolylglycinamide)

\[
\text{H}_2\text{N} = \text{C} = \text{NH}
\]

guabenzxanum (nonproprietary name: benzodiazapine)
guabenzxan (Latin, English: (1,4-benzodioxan-6-ylmethyl)guanidine)

\[
\text{C}_{10}\text{H}_{13}\text{N}_{3}\text{O}_{2}
\]

halofuginonum (nonproprietary name: acetylcholinesterase inhibitor)
halofuginone (Latin, English: (±)-trans-7-bromo-6-chloro-3-[3-(3-hydroxy-2-piperidyl)acetyl]-4(3H)-quinazolinone)

\[
\text{C}_{18}\text{H}_{17}\text{BrClN}_{3}\text{O}_{3}
\]

indoproferum (nonproprietary name: nonsteroidal anti-inflammatory drug)
indoprofen (Latin, English: \(p\)-(1-oxo-2-indolyl)hydratropic acid)

\[
\text{C}_{19}\text{H}_{19}\text{NO}_{3}
\]

ketocainolum (nonproprietary name: vasoconstrictor)
ketocainol (Latin, English: \(\alpha\)-[2-((dimethylamino)ethoxy)-\(e\)-propylbenzyl alcohol)

\[
\text{C}_{23}\text{H}_{34}\text{NO}
\]

lergotritium (nonproprietary name: 2-chloro-6-methyl-8-\(\beta\)-acetoxyester)
lergotriene (Latin, English: 2-chloro-6-methyl-8-\(\beta\)-acetoxyester)

\[
\text{C}_{17}\text{H}_{16}\text{ClN}_{2}\text{O}_{3}
\]
Proposed International
Nonproprietary Name (Latin, English)  Chemical Name or Description, Molecular and Graphic Formulae

levomenolum
levomenol

(-)-6-methyl-2-(4-methyl-3-cyclohexen-1-yl)-5-hepten-2-ol
C_{16}H_{26}O

\[
\begin{align*}
H_3C\text{-}C\equiv CH\text{-}CH\text{-}C\text{-}CH\text{-}C\text{-}CH\text{-}CH\text{-}CH\text{-}CH_3 & \\
\text{OH} & \\
\end{align*}
\]

lividomycinum
lividomycin

lividomycin A; 0-2-amino-2,3-dideoxy-α-D-ribo-hexopyranosyl-(1→4)-O-
[O-α-D-mannopyranosyl-(1→4)-O-2,6-diamino-2,6-dideoxy-β-L-idopyranosyl (1→3)-β-D-ribofuranosyl-(1→6)]-2-deoxy-D-streptamine
C_{20}H_{33}N_{16}O_{10}

\[
\begin{align*}
\text{HO} & \\
\text{HO} & \\
\text{HO} & \\
\text{NH}_2 & \\
\text{NH}_2 & \\
\text{OH} & \\
\text{HO} & \\
\text{H}_2\text{NCH}_3 & \\
\text{OH} & \\
\end{align*}
\]

maridomycinum
maridomycin

10-(formylmethyl)-7,13-dihydroxy-8-methoxy-3,12-dimethyl-6-oxo-
4,17-dioxabicyclo[14.1.0]heptadec-14-en-9-y1 3,6-dideoxy-4-O-(2,3-
dideoxy-3-(α-methyl-α-L-ribo-hexopyranosyl)-3-(dimethylamino)-β-D-
glucopyranoside 4',7'-dipropionate (ester)
C_{24}H_{27}NO_{18}

\[
\begin{align*}
\text{CH}_3 & \\
\text{CH}\text{-CH}_2\text{-CH}\text{-CH}_2\text{-CH}\text{-CH}_2\text{-CH}\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-CH}_3 & \\
\text{O} & \\
\text{O} & \\
\text{CH}_3 & \\
\text{CH}_3 & \\
\text{CH}_3 & \\
\text{CH}_3 & \\
\text{CH}_3 & \\
\text{N(CH}_3)_2 & \\
\end{align*}
\]

mazipredonum
mazipredone

11β,17-dihydroxy-21-(4-methyl-1-piperazinyl)pregna-1,4-diene-3,20-dione
C_{25}H_{31}N_{2}O_{4}

\[
\begin{align*}
\text{CH}_2\text{-N} & \\
\text{N}\text{-CH}_3 & \\
\text{N} & \\
\text{H} & \\
\text{C} & \\
\text{C} & \\
\text{H} & \\
\text{H} & \\
\text{H} & \\
\text{H} & \\
\text{H} & \\
\text{O} & \\
\end{align*}
\]
<table>
<thead>
<tr>
<th>Chemical Name or Description, Molecular and Graphic Formulae</th>
</tr>
</thead>
</table>
| mebanosidum  
| mebenoside  
| methyl 3,5,6-tri-O-benzyl-d-glucofuranoside  
| C_{20}H_{20}O_{8} |
| mecillinamum  
| mecillinam  
| (2S,5R,6R)-6-[[hexahydro-1H-azepin-1-yl)methyl]amino]-3,3-dimethyl-7-oxo-4-thia-1-acycloc[3.2.0]heptane-2-carboxylic acid  
| C_{15}H_{22}N_{2}O_{3}S |
| melizamum  
| melizame  
| m- (1H-tetrazol-5-yloxy)phenol  
| C_{8}H_{10}N_{2}O_{2} |
| mequitazinum  
| mequitazine  
| 10-(3-quinoclidinylmethyl)phenothiazine  
| C_{26}H_{22}N_{3}S |
monoxerutinum
monoxerutin
3,3',4',5-tetrahydroxy-7-(2-hydroxyethoxy)flavone 3-[6-O-\((\beta-D-glucopyranosyl)(\beta-D-glucopyranosyl)\)]
\(C_{21}H_{25}O_{17}\)

morocromen
morocromen
4-methyl-7-\((4\text{-morpholinecarboxamido})-3\text{-((2\text{-morpholinoethyl})-coumarin}\)
\(C_{21}H_{37}N_{2}O_{5}\)

nilestriolum
nilestriol
3-(cyclopentyl oxy)-19-nor-17\(\alpha\)-pregna-1,3,5(10)-trien-20-yno-16\(\alpha\),17-diol
\(C_{26}H_{32}O_{5}\)

nordinonum
nordinone
11\(\alpha\)-hydroxy-17,17-dimethyl-18-norandrosta-4,13-dien-3-one
\(C_{29}H_{32}O_{2}\)
<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>norgestometum norgestomet</td>
<td>17-hydroxy-11β-methyl-19-norpregn-4-ene-3,20-dione acetate</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Chemical Structure" /></td>
</tr>
<tr>
<td>octopaminum octopamine</td>
<td>α-(aminomethyl)-p-hydroxybenzyl alcohol</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Chemical Structure" /></td>
</tr>
<tr>
<td>parsalimidum parsalimide</td>
<td>5-amino-N-butyl-2-(2-propynyl)oxy)benzamide</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Chemical Structure" /></td>
</tr>
<tr>
<td>perisoxalum perisoxal</td>
<td>α-(5-phenyl-3-isoxazolyl)-1-pipidineethanol</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Chemical Structure" /></td>
</tr>
<tr>
<td>pinaveri bromidum pinaverium bromide</td>
<td>4-(6-bromoveratryl)-4-[2-[2-(6,6-dimethyl-2-norpinyl)ethoxy]ethyl]-morpholinium bromide</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Chemical Structure" /></td>
</tr>
<tr>
<td>Proposed International Nonproprietary Name (Latin, English)</td>
<td>Chemical Name or Description, Molecular and Graphic Formulas</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>pinazepamum</td>
<td>7-chloro-1,3-dihydro-5-phenyl-1-(2-propynyl)-2H-1,4-benzodiazepin-2-one</td>
</tr>
<tr>
<td>pinazepam</td>
<td>C_{19}H_{25}ClN_{2}O</td>
</tr>
<tr>
<td></td>
<td>![Image of pinazepam molecule]</td>
</tr>
<tr>
<td>pinolcainum</td>
<td>0-[(+)-1-methyl-1-(1-methyl-2-piperidyl)ethyl diphenylacetate]</td>
</tr>
<tr>
<td>pinolcaïne</td>
<td>C_{22}H_{22}NO_{2}</td>
</tr>
<tr>
<td></td>
<td>![Image of pinolcainum molecule]</td>
</tr>
<tr>
<td>pipootanum</td>
<td>4'-octyl-3-piperidinopropiophenone</td>
</tr>
<tr>
<td>pipootacine</td>
<td>C_{22}H_{33}NO</td>
</tr>
<tr>
<td></td>
<td>![Image of pipootanum molecule]</td>
</tr>
<tr>
<td>pipoxizinum</td>
<td>2-{2-[2-[(4-diphenylmethylenepiperidino)ethoxy]ethoxy]ethoxy}ethanol</td>
</tr>
<tr>
<td>pipoxazine</td>
<td>C_{24}H_{31}N_{2}O</td>
</tr>
<tr>
<td></td>
<td>![Image of pipoxizinum molecule]</td>
</tr>
</tbody>
</table>
Proposed International Nonproprietary Name (Latin, English)

Chemical Name or Description, Molecular and Graphic Formulae

pirandaminum
pirandamine
1,3,4,9-tetrahydro-N,N,1-trimethylindenol[2,1-c]pyran-1-ethylamine
C<sub>1</sub>H<sub>1</sub>NO

pirnidazolum
pirnidazole
2-[(1-methyl-5-nitroimidazol-2-yl)methyl]thio]pyridine
C<sub>1</sub>H<sub>1</sub>N<sub>4</sub>O<sub>2</sub>S

piroxacamum
piroxican
4-hydroxy-2-methyl-N-2-pyridyl-2H-1,2-benzoxazine-3-carboxamide 1,1-dioxide
C<sub>1</sub>H<sub>1</sub>N<sub>3</sub>O<sub>4</sub>S

pirprofenum
pirprofen
3-chloro-4-(3-pyridin-1-yl)hydratropic acid
C<sub>1</sub>H<sub>1</sub>CINO<sub>2</sub>

pivmecillinamum
pivmecillinam
hydroxymethyl (2S,5R,6R)-6-[(hexahydro-1H-azepin-1-yl)methylene]-amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylate pivalate (ester)
C<sub>1</sub>H<sub>3</sub>N<sub>3</sub>O<sub>4</sub>S

15
polidexidum
polidexide

dextran 2-(diethylamino)ethyl 2-[[2-(diethylamino)ethyl]diethylammonium]-
ethyl ether chloride, hydrochloride, epichlorohydrin crosslinked

pranoll chloridum
pranolium chloride

[2-hydroxy-3-(1-naphthoxy)propyl]isopropylmethylammonium chloride
C_{16}H_{35}ClNO

pribeainum
pribeacine

3-piperidinopropyl m-anisate
C_{14}H_{23}NO

16
prote calmly
prothalone

protecalum kalicem
protecal potassium

quinupramine
quinupramine

razoxane
razoxane

\[
\text{C}_{12}\text{H}_{16}\text{N}_{2}\text{O}_{3}
\]

\[
\text{C}_{23}\text{H}_{36}\text{KO}_{4}
\]

\[
\text{C}_{21}\text{H}_{24}\text{N}_{2}
\]

\[
\text{C}_{11}\text{H}_{16}\text{N}_{4}\text{O}_{6}
\]
<table>
<thead>
<tr>
<th>Proposed International Nonproprietary Name (Latin, English)</th>
<th>Chemical Name or Description, Molecular and Graphic Formulæ</th>
</tr>
</thead>
<tbody>
<tr>
<td>sincalidum sincalide</td>
<td>L-aspargyl-L-tyrosyl-L-methionylglycyl-L-trytophyll-L-methionyl-L-asparagylphenyl-l-alaninamide hydrogen sulfate (ester) or L-de(5-oxo-L-proline)-2-de-L-glutamine-5-L-methioninecarulein</td>
</tr>
<tr>
<td></td>
<td>C₄₅H₇₂N₁₀O₁₈S₅</td>
</tr>
<tr>
<td></td>
<td>S₀₃H</td>
</tr>
<tr>
<td></td>
<td>H-L-Asp-L-Tyr-L-Met-Gly-L-Trp-L-Met-L-Asp-L-Phe-NH₂</td>
</tr>
<tr>
<td>sitofibratum sitofibrate</td>
<td>stigmasi-5-en-3β-ol 2-(p-chlorophenoxy)-2-methylpropionate</td>
</tr>
<tr>
<td></td>
<td>C₃₈H₅₅ClO₃</td>
</tr>
<tr>
<td></td>
<td>[Image: Chemical structure of sitofibrate]</td>
</tr>
<tr>
<td>spiroxepinum spiroxepin</td>
<td>N,N-dimethylyspiro[dibenzo[b,e]oxepin-11(6H),2'-[1,3]dioxolane]-4'-methylamine</td>
</tr>
<tr>
<td></td>
<td>C₁₉H₂₁N₂O₆</td>
</tr>
<tr>
<td></td>
<td>[Image: Chemical structure of spiroxepin]</td>
</tr>
<tr>
<td>stiltoni iodidum stiltonium iodide</td>
<td>triethyl[2-(p-styrylphenoxy)ethyl]ammonium iodide</td>
</tr>
<tr>
<td></td>
<td>C₂₂H₃₉I NO</td>
</tr>
<tr>
<td></td>
<td>[Image: Chemical structure of stiltoni iodide]</td>
</tr>
<tr>
<td>sulmarinum sulmarin</td>
<td>6,7-dihydroxy-4-methylcoumarin bis(hydrogensulfate)</td>
</tr>
<tr>
<td></td>
<td>C₁₈H₁₈O₁₁S₂</td>
</tr>
<tr>
<td></td>
<td>[Image: Chemical structure of sulmarinum]</td>
</tr>
</tbody>
</table>
Proposed International
Nonproprietary Name (Latin, English)  Chemical Name or Description, Molecular and Graphic Formulae

tandamimine  1-[2-(dimethylamino)ethyl]-9-ethyl-1,3,4,9-tetrahydro-1-methylthiopyrano-
[3,4-b]indole  C_{16}H_{23}N_{2}S

4-fluoro-2-(trifluoromethyl)thioxanthene-9-y1propyl]-1-
piperazineethanol  C_{22}H_{32}F_{4}N_{3}O_{5}

torbutrolum  1-tert-butoxy-3-methoxy-2-propanol  C_{9}H_{18}O_{3}

terfenadimun  o-(p-tert-butylphenyl)-4-(hydroxydiphenylmethyl)-1-piperidinebutanol
C_{32}H_{44}NO_{2}

terofenamatum  ethoxymethyl N-(2,6-dichloro-m-tolyl)anthranilate  C_{17}H_{16}Cl_{2}NO_{3}

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

tibezonil iodide  
tibezonium iodide  
diethylmethyl[2-[[4-[p-(phenylthio)phenyl]-3H-1,5-benzodiazepin-2-yl]thio]ethyl]ammonium iodide  
C₂₆H₂₅N₆S₂

[Chemical Structure Image]

tinofedrinum  
tinofedrine  
=⁻[1-[[3,3-di-3-thienylethyl]amino]ethyl]benzyl alcohol  
C₂₁H₂₈N₂O₂

[Chemical Structure Image]

trocininium  
trocinine  
octahydro-1-(3,4,5-trimethoxybenzoyl)azocine  
C₁₇H₂₃NO₄

[Chemical Structure Image]
AMENDMENTS
TO PREVIOUS LISTS

Vol. 25, No. 3

Proposed International Nonproprietary Names (Prop. INN): List 25

p. 129 delete
clofibrinol

insert
triclosanum
triclosan  

Vol. 26, No. 9

Proposed International Nonproprietary Names (Prop. INN): List 28

p. 427 delete
oxaprazinum

oxaprazine

10-[(3-[4-(2-m-dioxan-2-yethyl)-1-piperazinyl]propyl)]phenothiazine
C₂₅H₂₅N₂O₂S

Vol. 27, No. 3

Proposed International Nonproprietary Names (Prop. INN): List 29

p. 131 delete
lisocilidum

lisocilide

insert
libecilidum

libecilide

p. 138 replace molecular formula by the following:
timolol

C₁₃H₁₈N₄O₂S

Vol. 27, No. 9

Proposed International Nonproprietary Names (Prop. INN): List 30

p. 380 delete
acidum azolinicum

azolinic acid

insert
cinoxacinum

cinoxacin

p. 388 replace chemical name by the following:
dexnorgestrel

D-13-ethyl-17-hydroxy-18,19-dimethoxy-17α-pregn-4-en-20-yn-3-one

Vol. 28, No. 3

Proposed International Nonproprietary Names (Prop. INN): List 31

p. 144 replace graphic formula by the following:

\[ \text{Idropranolol} \]

\[
\begin{align*}
& \text{O} - \text{CH}_2 - \text{CH(OH)} - \text{CH}_2 - \text{NH} - \text{CH}_2 - \text{(CH}_3)_2
\end{align*}
\]
International Nonproprietary Names for Pharmaceutical Substances: Cumulative List No. 3, 1971

p. 121 delete the following entries
- sorbimacroglö laurase 300  sorbimacroglö steare 300
- sorbimacroglö laurate 300  sorbimacroglö stearate 300
- sorbimacroglö olate 100  sorbimacroglö trioleate 300
- sorbimacroglö oleate 100  sorbimacroglö trioleate 300
- sorbimacroglö olease 300  sorbimacroglö tristearase 300
- sorbimacroglö oleate 300  sorbimacroglö tristearate 300
- sorbimacroglö palmitase 300
- sorbimacroglö palmitate 300

p. 110 insert after the entry "polynxylinum"

/ polysorbate / polysorbate

polyoxyethylene derivative of cyclic sorbitol

anhydrides partially esterified with a fatty acid.

The numbered polysorbates indicated below refer to the following compounds: e.g.
polysorbate 20: polyethylene 20 sorbitan* monolaurate  
C_{58}H_{114}O_{26} (nominal)

polysorbate 40: polyethylene 20 sorbitan* monopalmitate  
C_{62}H_{122}O_{26} (nominal)

polysorbate 60: polyethylene 20 sorbitan* monostearate  
C_{64}H_{126}O_{26} (nominal)

polysorbate 65: polyethylene 20 sorbitan* tristearate  
C_{100}H_{214}O_{26} (nominal)

polysorbate 80: polyethylene 20 sorbitan* mono-oleate  
C_{54}H_{124}O_{26} (nominal)

polysorbate 85: polyethylene 20 sorbitan* trioleate  
C_{100}H_{198}O_{26} (nominal)

* polyoxyethylene 20 sorbitan corresponds to tri(polyethylene glycol 300) sorbitan ethers.
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 WHA31.11:

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 to the Director-General of the World Health Organization to the members of the Expert Advisory Panel on the International Pharmacopoeia and Pharmacetical 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 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 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 unnecessarily 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 anatom-

* Text adopted by the Executive Board of WHO in resolution EB18.17 (Rev. Rec. Whl Hth Org., 1965, 80. 3) and amended by the Board in resolution 1973.6 (Off., Rec. Whl Hth Org., 1966, 173, 10).

* Text revised by the Expert Committee on Nonproprietary Names for Pharmaceutical Substances (unpublished reports WHO/Pharm.66.447, WHO/Pharm.66.448, and WHO/Pharm.70.458).

23
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 “methylene”, “methoxy”, and “chlor” should preferably be abbreviated, for example, to “metro”, “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”, “ibufenac” and “ibufenac 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 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.

Subsidiary group relationships should be shown by devising names which show similarities to and 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.

<table>
<thead>
<tr>
<th>Latin</th>
<th>English</th>
<th>French</th>
</tr>
</thead>
<tbody>
<tr>
<td>-acidum</td>
<td>-acide</td>
<td>-acide</td>
</tr>
<tr>
<td>-andr-</td>
<td>-andr-</td>
<td>-andr-</td>
</tr>
<tr>
<td>or -stan</td>
<td>or -stan</td>
<td>or -stan</td>
</tr>
<tr>
<td>or -ster</td>
<td>or -ster</td>
<td>or -ster</td>
</tr>
<tr>
<td>-arolum</td>
<td>-arol</td>
<td>-arol</td>
</tr>
<tr>
<td>-bamatium</td>
<td>-bamate</td>
<td>-bamate</td>
</tr>
<tr>
<td>barb</td>
<td>barb</td>
<td>barb</td>
</tr>
<tr>
<td>bol</td>
<td>bol</td>
<td>bol</td>
</tr>
<tr>
<td>-calium</td>
<td>-caine</td>
<td>-caine</td>
</tr>
<tr>
<td>cef-</td>
<td>cef-</td>
<td>cef-</td>
</tr>
<tr>
<td>-clilium</td>
<td>-clilin</td>
<td>-clilin</td>
</tr>
<tr>
<td>cort</td>
<td>cort</td>
<td>cort</td>
</tr>
<tr>
<td>-crinum</td>
<td>-crine</td>
<td>-crine</td>
</tr>
<tr>
<td>-curium</td>
<td>-curium</td>
<td>-curium</td>
</tr>
<tr>
<td>-cyclinum</td>
<td>-cycline</td>
<td>-cycline</td>
</tr>
<tr>
<td>-est-</td>
<td>-estr</td>
<td>-estr</td>
</tr>
<tr>
<td>-forminum</td>
<td>-formine</td>
<td>-formine</td>
</tr>
<tr>
<td>gest</td>
<td>gest</td>
<td>gest</td>
</tr>
<tr>
<td>gil-</td>
<td>gil-</td>
<td>gil-</td>
</tr>
<tr>
<td>lo-</td>
<td>lo-</td>
<td>lo-</td>
</tr>
<tr>
<td>-maxinum</td>
<td>-maxine</td>
<td>-maxine</td>
</tr>
<tr>
<td>-mycinum</td>
<td>-mycin</td>
<td>-mycin</td>
</tr>
<tr>
<td>-nifur-</td>
<td>-nifur</td>
<td>-nifur</td>
</tr>
<tr>
<td>-nlonidum</td>
<td>-nlide</td>
<td>-nlide</td>
</tr>
<tr>
<td>-orexum</td>
<td>-orex</td>
<td>-orex</td>
</tr>
<tr>
<td>-pramium</td>
<td>-pramine</td>
<td>-pramine</td>
</tr>
<tr>
<td>prost</td>
<td>prost</td>
<td>prost</td>
</tr>
<tr>
<td>-serpinum</td>
<td>-serpine</td>
<td>-serpine</td>
</tr>
<tr>
<td>sufa-</td>
<td>sufa-</td>
<td>sufa-</td>
</tr>
<tr>
<td>-terum</td>
<td>-terol</td>
<td>-terol</td>
</tr>
<tr>
<td>-tizidum</td>
<td>-tizide</td>
<td>-tizide</td>
</tr>
<tr>
<td>-tolun</td>
<td>-tolne</td>
<td>-tolne</td>
</tr>
<tr>
<td>-verium</td>
<td>-verine</td>
<td>-verine</td>
</tr>
<tr>
<td>-inum</td>
<td>-ine</td>
<td>-ine</td>
</tr>
<tr>
<td>-onum</td>
<td>-one</td>
<td>-one</td>
</tr>
<tr>
<td>-ium</td>
<td>-ium</td>
<td>-ium</td>
</tr>
</tbody>
</table>

- synthetic polypeptides with a corticotrophin-like action
- steroids, androgenic
- anticoagulants of the coumarin type
- tranquilizers of the propadiol and pentanediol series
- barbituric acids, hypnotic activity
- anabolic steroids
- local anaesthetics
- antibiotics with cephalosporonic acid nucleus
- penicillins: derivatives of 6-aminopenicillanic acid
- steroids, glucocorticoids and mineralocorticoids, other than prednisolone derivatives
- acridine derivatives
- curare-like drugs
- antibiotics, tetracycline derivatives
- estrogenic drugs
- guanidine oral anti-diabetics
- steroids, progestative
- sulfonamide oral anti-diabetics
- iodine-containing contrast media
- monoamine oxidase inhibitors
- antimicrobial antibiotics, produced by Streptomyces strains
- 5-nitrofuril derivatives
- steroids for topical use: acetate derivatives
- anorexigenic agents
- dibenzazepine, compounds of the imipramine type
- prostaglandins
- derivatives of Reauvilia alkaloids
- sulfonylamides, used as antimicrobials
- bronchodilators: phenethylamine derivatives
- diuretics which are thiazide derivatives
- antiepileptics which are hydantoin derivatives
- spasmyotics with a papaverine-like action
- alkaloids and organic bases
- ketones

quaternary ammonium compounds