

**The use of common stems  
in the selection of  
International Nonproprietary Names (INN)  
for pharmaceutical substances**

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## **The use of common stems in the selection of International Nonproprietary Names (INN) for pharmaceutical substances**

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## **Preface**

### **WHO'S INN PROGRAMME**

WHO has a constitutional responsibility to "develop, establish and promote international standards with respect to biological, pharmaceutical and similar products". This is the basis for many activities within WHO, such as International Nonproprietary Names (INN), WHO Good Manufacturing Practices, the International Pharmacopoeia, the WHO Certification Scheme and many others. The section of the WHO specifically dealing with selection of International Nonproprietary Names for pharmaceutical substances falls under the Department of Essential Drugs and other Medicines.

### **INN SELECTION PROCEDURE AND CRITERIA**

A request for an INN is usually submitted on a form to the World Health Organization. In certain countries, where national nomenclature commissions exist, this is done through the corresponding national nomenclature authority.

Precise information on the chemistry, pharmacological action and use, as well as suggested nonproprietary names, name and address of the manufacturer are to be provided on the form. Each name proposed by the originator of such a request is then examined and a name selected.

All members of the WHO Expert Panel on the International Pharmacopoeia and Pharmaceutical Preparations designated to select nonproprietary names have to agree to the name which is then first published as a proposed INN. During a four-month period, any person can forward comments, or lodge a formal objection to a name, e.g. on grounds of similarity with a trade-name. If no objection is raised the name will be published a second time as recommended INN.

The primary principles for selection are that an INN should be

- distinctive in sound and spelling,
- not too long,
- not liable to confusion with other names in common use.

INNs for substances belonging to a particular group of pharmacologically related substances show their relationship by the use of common stems, which are listed and defined in this document.

In addition to the above rules, certain rules have been established to allow the use of INNs internationally, i.e. in various languages. For example, the letters "h" and "k" should be avoided; "e" should be used instead of "ae" and "oe", "i" instead of "y" and "t", "f" instead of "th" and "ph".

Further information on the selection procedure and general principles in devising INNs may be found in Annex 2 and 3.

## THIS DOCUMENT

This document lists common stems for which chemical and/or pharmacological categories have been established. These stems and their definitions have been selected by the INN experts and are for use when selecting new international nonproprietary names for pharmaceutical substances that belong to an established series of related compounds.

The list is not exhaustive in that it might not include all stems used by the INN Committee. It is the nature of the nomenclature process that new, potential stems are constantly being created and that definitions of older stems may need to be modified as new information becomes available.

Examples of nonproprietary names have been selected from Lists 1 - 84 of Proposed International Nonproprietary Names. They were compared with:

Stems listed in article 9 of the "General Principles for Guidance in Devising International Nonproprietary Names for Pharmaceutical Substances", Annex to List 81 of proposed INN and some well-established old or new stems not included in article 9 of the general principles. Details on stems are indicated as follows:

- (x) stems that are included in article 9 of the general principles
- (d) stems deleted from article 9 of the general principles

The reference to TRS 581\* indicates that the stem is listed in Annex 3 of the 20th Report of the WHO Expert Committee on Nonproprietary Names for Pharmaceutical Substances.

References to syllables in the British Approved Names (BAN) dictionary and the USP Dictionary of USAN and International Drug Names have also been made wherever applicable. Whenever the BAN or USAN definitions are not identical to the INN definition they are given in brackets under the INN definition.

For each stem, the names have been classified as:

- (a) names in which the preferred stem has been used in accordance with its definition;
- (b) names in which the preferred stem has been used but not in accordance with its definition;
- (c) names which belong to the same group of pharmaceutical substances and in which no preferred stem has been used. (This part of the list is not always complete).

The codes given on the left-hand side under each stem refer to the WHO pharmacological classification used in the WHO Drug Evaluation and Monitoring Programme.

### Note for trade-mark officers:

In line with the WHO World Health Assembly resolution (*WHA46.19\*\**) it would be appreciated if trade-marks were not derived from INNs and if INN stems were not used in trade-marks. This practice endangers the principle that INNs are public property; it can frustrate the rational selection of further INNs for related substances, and it will ultimately compromise the safety of patients by promoting confusion in drug nomenclature.

\*Nonproprietary names for pharmaceutical substances, Twentieth Report of the WHO Expert Committee (1975)

\*\* WHA resolution on nonproprietary names for pharmaceutical substances (1993)

### **Acknowledgements**

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**Reference to the volumes of the *WHO Drug Information* in which the respective proposed lists of INNs have been published:**

**List no. and reference**

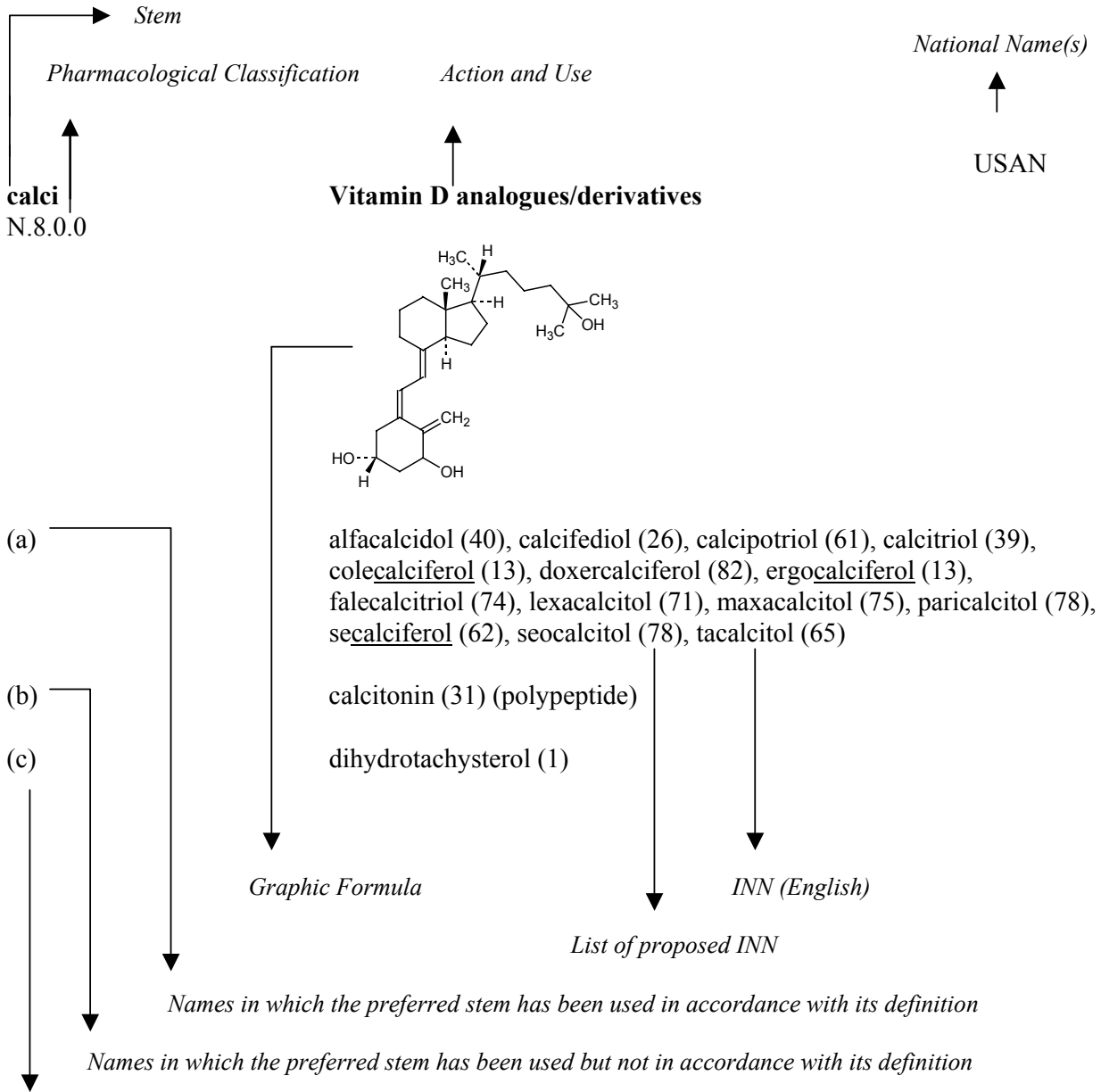
- 1 *Chron. Wld Hlth Org.* **7**: 299 (1953)
- 2 *Chron. Wld Hlth Org.* **8**: 216 (1954)
- 3 *Chron. Wld Hlth Org.* **9**: 313 (1954)
- 4 *Chron. Wld Hlth Org.* **10**: 28 (1956)
- 5 *Chron. Wld Hlth Org.* **11**: 231 (1957)
- 6 *Chron. Wld Hlth Org.* **12**: 102 (1958)
- 7 *WHO chronicle* **13**: 105 (1959)
- 8 *WHO chronicle* **13**: 152 (1959)
- 9 *WHO chronicle* **14**: 168 (1960)
- 10 *WHO chronicle* **14**: 244 (1960)
- 11 *WHO chronicle* **15**: 314 (1961)
- 12 *WHO chronicle* **16**: 385 (1962)
- 13 *WHO chronicle* **17**: 389 (1963)
- 14 *WHO chronicle* **18**: 433 (1964)
- 15 *WHO chronicle* **19**: 446 (1965)
- 16 *WHO chronicle* **20**: 216 (1966)
- 17 *WHO chronicle* **21**: 70 (1967)
- 18 *WHO chronicle* **21**: 478 (1967)
- 19 *WHO chronicle* **22**: 112 (1968)
- 20 *WHO chronicle* **22**: 407 (1968)
- 21 *WHO chronicle* **23**: 183 (1969)
- 22 *WHO chronicle* **23**: 418 (1969)
- 23 *WHO chronicle* **24**: 119 (1970)
- 24 *WHO chronicle* **24**: 413 (1970)
- 25 *WHO chronicle* **25**: 123 (1971)
- 26 *WHO chronicle* **25**: 415 (1971)
- 27 *WHO chronicle* **26**: 121 (1972)
- 28 *WHO chronicle* **26**: 414 (1972)
- 29 *WHO chronicle* **27**: 120 (1973)
- 30 *WHO chronicle* **27**: 380 (1973)
- 31 *WHO chronicle* **28**: 133 (1974)
- 32 *WHO chronicle* **28**: No. 9, suppl. (1974)
- 33 *WHO chronicle* **29**: No. 3, suppl. (1975)
- 34 *WHO chronicle* **29**: No. 9, suppl. (1975)
- 35 *WHO chronicle* **30**: No. 3, suppl. (1976)
- 36 *WHO chronicle* **30**: No. 9, suppl. (1976)
- 37 *WHO chronicle* **31**: No. 3, suppl. (1977)
- 38 *WHO chronicle* **31**: No. 9, suppl. (1977)
- 39 *WHO chronicle* **32**: No. 3, suppl. (1978)
- 40 *WHO chronicle* **32**: No. 9, suppl. (1978)
- 41 *WHO chronicle* **33**: No. 3, suppl. (1979)
- 42 *WHO chronicle* **33**: No. 9, suppl. (1979)
- 43 *WHO chronicle* **34**: No. 3, suppl. (1980)
- 44 *WHO chronicle* **34**: No. 9, suppl. (1980)
- 45 *WHO chronicle* **35**: No. 3, suppl. (1981)
- 46 *WHO chronicle* **35**: No. 5, suppl. (1981)
- 47 *WHO chronicle* **36**: No. 2, suppl. (1982)

**List no. and reference**

- 48 *WHO chronicle* **36**: No. 5, suppl. (1982)
- 49 *WHO chronicle* **37**: No. 2, suppl. (1983)
- 50 *WHO chronicle* **37**: No. 5, suppl. (1983)
- 51 *WHO chronicle* **38**: No. 2, suppl. (1984)
- 52 *WHO chronicle* **38**: No. 4, suppl. (1984)
- 53 *WHO chronicle* **39**: No. 1, suppl. (1985)
- 54 *WHO chronicle* **39**: No. 4, suppl. (1985)
- 55 *WHO chronicle* **40**: No. 1, suppl. (1986)
- 56 *WHO chronicle* **40**: No. 5, suppl. (1986)
- 57 *WHO drug information* **1**: No. 2 (1987)
- 58 *WHO drug information* **1**: No. 3 (1987)
- 59 *WHO drug information* **2**: No. 2 (1988)
- 60 *WHO drug information* **2**: No. 4 (1988)
- 61 *WHO drug information* **3**: No. 2 (1989)
- 62 *WHO drug information* **3**: No. 4 (1989)
- 63 *WHO drug information* **4**: No. 2 (1990)
- 64 *WHO drug information* **4**: No. 4 (1990)
- 65 *WHO drug information* **5**: No. 2 (1991)
- 66 *WHO drug information* **5**: No. 4 (1991)
- 67 *WHO drug information* **6**: No. 2 (1992)
- 68 *WHO drug information* **6**: No. 4 (1992)
- 69 *WHO drug information* **7**: No. 2 (1993)
- 70 *WHO drug information* **7**: No. 4 (1993)
- 71 *WHO drug information* **8**: No. 2 (1994)
- 72 *WHO drug information* **8**: No. 4 (1994)
- 73 *WHO drug information* **9**: No. 2 (1995)
- 74 *WHO drug information* **9**: No. 4 (1995)
- 75 *WHO drug information* **10**: No. 2 (1996)
- 76 *WHO drug information* **10**: No. 4 (1996)
- 77 *WHO drug information* **11**: No. 2 (1997)
- 78 *WHO drug information* **11**: No. 4 (1997)
- 79 *WHO drug information* **12**: No. 2 (1998)
- 80 *WHO drug information* **12**: No. 4 (1998)
- 81 *WHO drug information* **13**: No. 2 (1999)
- 82 *WHO drug information* **13**: No. 4 (2000)
- 83 *WHO drug information* **14**: No. 2 (2000)
- 84 *WHO drug information* **14**: No. 4 (2000)
- 85 *WHO drug information* **15**: No. 2 (2001)
- 86 *WHO drug information* **16**: No. 1 (2002)
- 87 *WHO drug information* **16**: No. 2 (2002)

Lists 1-85 of proposed INN are included in *Cumulative List* No. 10, WHO, Geneva, 2002 (available in CD-ROM only)

## Layout of information



*Names which belong to the same group of pharmaceutical substances and in which no preferred stem has been used (this part of the list is not always complete)*



## Pharmacological classification with corresponding examples of common stems and their definitions

<b>A000</b>	<b>CNS DEPRESSANTS</b>		
<b>A100</b>	<b>General anaesthetics</b>		
<b>A110</b>	<b>General anaesthetics, volatile</b>	<i>-flurane</i>	general inhalation anaesthetics, halogenated alkane derivatives
<b>A120</b>	<b>General anaesthetics, other</b>		
<b>A200</b>	<b>Hypnotics - sedatives</b>		
<b>A210</b>	<b>Barbiturates</b>	<i>barb</i>	hypnotics, barbituric acid derivatives
<b>A220</b>	<b>Hypnotic sedatives, other</b>	<i>-clone</i>	hypnotic tranquillizers
<b>A220</b>		<i>-plon</i>	pyrazolo[.]pyrimidine derivatives, used as anxiolytics, sedatives, hypnotics
<b>A230</b>	<b>Monoureids, hypnotic sedatives</b>		
<b>A240</b>	<b>Chloral derivatives, hypnotic sedatives</b>		
<b>A300</b>	<b>Centrally acting voluntary muscle tone modifying drugs</b>		
<b>A310</b>	<b>Anticonvulsants</b>		
<b>A311</b>	<b>Hydantoins, anticonvulsants</b>	<i>-toin</i>	antiepileptics, hydantoin derivatives
<b>A312</b>	<b>Acetylureas, anticonvulsants</b>		
<b>A313</b>	<b>Oxazolidinediones, anticonvulsants</b>		
<b>A314</b>	<b>Succinimides, anticonvulsants</b>		
<b>A315</b>	<b>Barbiturates, anticonvulsants</b>		

<b>A316</b>	<b>Anticonvulsants, other</b>		
<b>A320</b>	<b>Central anticholinergics</b>		
<b>A330</b>	<b>Centrally acting voluntary-muscle relaxants</b>		
<b>A400</b>	<b>Analgesics</b>		
<b>A410</b>	<b>Narcotic analgesics</b>	<i>-adol</i> or <i>-adol-</i>	analgesics
<b>A410</b>		<i>-azocine</i>	narcotic antagonists/agonists related to 6,7-benzomorphan
<b>A410</b>		<i>-eridine</i>	analgesics, pethidine derivatives
<b>A410</b>		<i>-ethidine</i>	see <i>-eridine</i>
<b>A410</b>		<i>-fentanil</i>	narcotic analgesics, fentanil derivatives
<b>A410</b>		<i>nal-</i>	narcotic antagonists/agonists related to normorphine
<b>A410</b>		<i>orphan</i>	narcotic antagonists/agonists, morphinan derivatives; <i>-orphine, -orphinol,</i> <i>-orphone</i>
<b>A420</b>	<b>Analgesics - Antipyretics</b>	<i>-ac</i>	anti-inflammatory agents, ibufenac derivatives
<b>A420</b>		<i>-adol</i> or <i>-adol-</i>	analgesics
<b>A420</b>		<i>-arit</i>	antiarthritic substances, acting like clobuzarit and lobenzarit (mechanism different from anti-inflammatory type substances, e.g. <i>-fenamates</i> or <i>-profens</i> )

<b>A420</b>		<i>-butazone</i>	<i>-buzone</i> : anti-inflammatory analgesics, phenylbutazone derivatives
<b>A420</b>		<i>-buzone</i>	anti-inflammatory analgesics, phenylbutazone derivatives
<b>A420</b>		<i>-fenamate</i>	" <i>-fenamic acid</i> " derivatives
<b>A420</b>		<i>-fenamic acid</i>	anti-inflammatory, anthranilic acid derivatives
<b>A420</b>		<i>-icam</i>	anti-inflammatory, isoxicam derivatives
<b>A420</b>		<i>-metacin</i>	anti-inflammatory, indometacin derivatives
<b>A420</b>		<i>-nixin</i>	anti-inflammatory, anilinicnicotinic acid derivatives
<b>A420</b>		<i>-profen</i>	anti-inflammatory agents, ibuprofen derivatives
<b>A430</b>	<b>Analgesics, other</b>	<i>-adom</i>	analgesics, tifleudom derivatives
<b>A430</b>		<i>-fenine, phenine</i>	analgesics, glafenine derivatives - (subgroup of fenamic acid group)
<b>A440</b>	<b>Central antiemetics</b>		
<b>A500</b>	<b>Antivertigo drugs</b>		
<b>B000</b>	<b>CNS STIMULANTS</b>		
<b>B100</b>	<b>Analeptics</b>	<i>-fylline</i>	<i>N</i> -methylated xanthine derivatives
<b>B100</b>		<i>-racetam</i>	amide type nootrope agents, piracetam derivatives
<b>B100</b>		<i>-vin-</i> (and <i>-vin-</i> )	vinca alkaloids

<b>B200</b>	<b>Opioid receptor antagonists</b>	<i>-nal-</i>	narcotic antagonists/agonists related to normorphine
<b>B200</b>		<i>orphan</i>	narcotic antagonists/agonists, morphinan derivatives
<b>B300</b>	<b>Benzodiazepine receptor antagonists</b>		
<b>C000</b>	<b>PSYCHOPHARMACOLOGICS</b>	<i>-piprazole</i>	psychotropics, phenylpiperazine derivatives (see also <i>-prazole</i> )
<b>C000</b>		<i>-racetam</i>	amide type nootrope agents, piracetam derivatives
<b>C100</b>	<b>Anxiolytic sedatives</b>	<i>-azenil</i>	benzodiazepine receptor antagonists/agonists (benzodiazepine derivatives)
<b>C100</b>		<i>-azepam</i>	diazepam derivatives
<b>C100</b>		<i>-bamate</i>	tranquillizers, propanediol and pentanediol derivatives
<b>C100</b>		<i>-carnil</i>	benzodiazepine receptor antagonists/agonists (carboline derivatives)
<b>C100</b>		<i>-peridone</i>	see <i>-perone</i> : antipsychotics, risperidone derivatives
<b>C100</b>		<i>-perone</i>	tranquillizers, neuroleptics, 4'-fluoro-4-piperidinobutyrophenone derivatives
<b>C100</b>		<i>-pidem</i>	hypnotics/sedatives, zolpidem derivatives
<b>C100</b>		<i>-plon</i>	pyrazolo[.]pyrimidine derivatives, used as anxiolytics, sedatives, hypnotics
<b>C100</b>		<i>-pride</i>	sulpiride derivatives

<b>C100</b>		<i>-quinil</i>	benzodiazepine receptor partial agonists (quinoline derivatives), see <i>-azenil</i>
<b>C100</b>		<i>-spirone</i>	anxiolytics, buspirone derivatives
<b>C100</b>		<i>-zafone</i>	alozafone derivatives
<b>C200</b>	<b>Antipsychotics (neuroleptics)</b>	<i>-perone</i>	tranquillizers, neuroleptics, 4'-fluoro-4-piperidinobutyrophenone derivatives; <i>-peridol</i> : antipsychotics, haloperidol derivatives; <i>-peridone</i> : antipsychotics, risperidone derivatives
<b>C210</b>	<b>Brain amine depleters</b>		
<b>C220</b>	<b>Central adrenoreceptor antagonists</b>		
<b>C300</b>	<b>Antidepressants</b>	<i>-oxetine</i>	antidepressants, fluoxetine derivatives
<b>C310</b>	<b>MAO inhibitors</b>	<i>-giline</i>	MAO-inhibitors type B
<b>C310</b>		<i>-moxin</i>	monoamine oxidase inhibitors, hydrazine derivatives**not part of definition
<b>C320</b>	<b>Tricyclic antidepressants</b>	<i>-pin(e)</i>	tricyclic compounds; <i>dipine</i> : see <i>-zepine</i> : antidepressant/neuroleptic; C.0.0.0 <i>-apine</i> : psychoactive; A.3.1.0 <i>cilpine</i> : antiepileptic; <i>-oxepin</i> , <i>-oxopine</i> , <i>-sopine</i> , <i>-tepin(e)s</i>
<b>C320</b>		<i>-pramine</i>	substances of the imipramine group
<b>C320</b>		<i>-trityline</i>	antidepressants, dibenzo[a,d]cycloheptane or cycloheptene derivatives
<b>C330</b>	<b>Tetracyclic antidepressants</b>		
<b>C340</b>	<b>Bicyclic antidepressants</b>		



<b>C400</b>	<b>Indirect releasers of catecholamines</b>		
<b>C500</b>	<b>Psychodysleptics (hallucinogens)</b>		
<b>C600</b>	<b>CNS metabolites</b>		
<b>C700</b>	<b>Serotonin receptor antagonists</b>	<i>-anserin</i>	serotonin receptor antagonists (mostly 5-HT <sub>2</sub> )
<b>C700</b>		<i>erg</i>	ergot alkaloid derivatives
<b>C700</b>		<i>-setron</i>	serotonin receptor antagonists (5-HT <sub>3</sub> ) not fitting into other established groups of serotonin receptor antagonists, see <i>-anserin</i>
<b>D000</b>	<b>PERIPHERAL NERVOUS SYSTEM DRUGS</b>		
<b>D100</b>	<b>Local anaesthetics</b>	<i>-caine</i>	local anaesthetics
<b>E000</b>	<b>DRUGS ACTING AT SYNAPTIC AND NEUROEFFECTOR JUNCTIONAL SITES</b>	<i>gab</i>	gabamimetic agents
<b>E100</b>	<b>Cholinergic agents</b>	<i>-meline</i>	cholinergic agents, arecoline derivatives
<b>E110</b>	<b>Cholinergic receptor agonists</b>	<i>-dopa</i>	dopamine receptor agonists, dopamine derivatives, used as antiparkinsonism/prolactin inhibitors
<b>E110</b>		<i>-golide</i>	dopamine receptor agonists, ergoline derivatives
<b>E111</b>	<b>Muscarinic receptor agonists</b>		
<b>E112</b>	<b>Nicotinic receptor agonists</b>		
<b>E120</b>	<b>Anticholinesterase agents</b>	<i>-stigmine</i>	anticholinesterases (deleted from General Principles in List 24 prop. INN)

<b>E200</b>	<b>Cholinergic antagonists</b>	<i>trop</i>	atropine derivatives
<b>E210</b>	<b>Peripheral cholinergic antagonists</b>		
<b>E220</b>	<b>Ganglionic antagonists</b>		
<b>E300</b>	<b>Neuromuscular blocking agents</b>	<i>-curium</i>	curare-like substance; see <i>-ium</i>
<b>E300</b>		<i>-ium</i>	quarternary ammonium compounds; <i>-curium</i> : curare-like substances; <i>-onium</i>
<b>E400</b>	<b>Adrenergic agents</b>	<i>-azoline</i>	antihistaminics or local vasoconstrictors, antazoline derivatives
<b>E400</b>		<i>-drine</i>	sympathomimetics; <i>-frine</i> : sympathomimetic, phenethyl derivatives
<b>E400</b>		<i>-frine</i>	sympathomimetic, phenethyl derivatives
<b>E400</b>		<i>-terol</i>	bronchodilators, phenethylamine derivatives [previously <i>-prenaline</i> or <i>-terenol</i> ]
<b>E410</b>	<b>Beta adrenoreceptor agonists</b>		
<b>E420</b>	<b>Alpha adrenoreceptor agonists</b>		
<b>E500</b>	<b>Adrenoreceptor antagonists</b>		
<b>E510</b>	<b>Alpha adrenoreceptor antagonists</b>	<i>-oxan(e)</i>	benzodioxane derivatives (USAN: alpha-adrenoreceptor antagonists; benzodioxane derivatives)
<b>E520</b>	<b>Beta adrenoreceptor antagonists</b>	<i>-alol</i>	aromatic ring -CHOH-CH <sub>2</sub> -NH-R related to -olols
<b>E520</b>		<i>-olol</i>	beta-adrenoreceptor antagonists; <i>-alol</i> : aromatic ring -CH-CH <sub>2</sub> -NH-R related to -olols (USAN: combined alpha and beta blockers)

<b>E530</b>	<b>Catecholamines false transmitters</b>		
<b>E540</b>	<b>Adrenergic neurone blocking agents</b>	<i>-serpine</i>	derivatives of Rauwolfia & alkaloids
<b>E600</b>	<b>Stimulant cathartics</b>		
<b>F000</b>	<b>AGENTS ACTING ON SMOOTH MUSCLES</b>		
<b>F100</b>	<b>Spasmolytics, general</b>	<i>-verine</i>	spasmolytics with a papaverine-like action
<b>F200</b>	<b>Vasodilators</b>	<i>-dil</i>	vasodilators
<b>F200</b>		<i>-entan</i>	endothelin receptor antagonists
<b>F210</b>	<b>Coronary vasodilators, also calcium channel blockers</b>	<i>-dipine</i>	calcium channel blockers, nifedipine derivatives
<b>F210</b>		<i>-fradil</i>	calcium channel blockers acting as vasodilators
<b>F210</b>		<i>-pamil</i>	coronary vasodilators, verapamil derivatives
<b>F210</b>		<i>-tiazem</i>	calcium channel blockers, diltiazem derivatives
<b>F220</b>	<b>Peripheral vasodilators</b>	<i>-nicate</i>	antihypercholesterolaemic and/or vasodilating nicotinic acid esters
<b>F300</b>	<b>Smooth muscle stimulants</b>		
<b>F310</b>	<b>Vasoconstrictor agents</b>		
<b>F400</b>	<b>Agents acting on the uterus</b>	<i>erg</i>	ergot alkaloid derivatives
<b>G000</b>	<b>HISTAMINE AND ANTIHISTAMINICS</b>		
<b>G100</b>	<b>Histamine and histamine-like drugs</b>		
<b>G200</b>	<b>Antihistaminics</b>	<i>-astine</i>	antihistaminics

<b>G200</b>		<i>-tidine</i>	histamine-H <sub>2</sub> -receptor antagonists, cimetidine derivatives
<b>G220</b>	<b>Histamine H<sub>2</sub>-receptor antagonists</b>		
<b>G230</b>	<b>Histamine H<sub>3</sub>-receptor antagonists</b>		
<b>G300</b>	<b>Histamine metabolism agents</b>		
<b>H000</b>	<b>CARDIOVASCULAR AGENTS</b>	<i>-bradine</i>	bradycardic agents
<b>H100</b>	<b>Cardiac glycosides and drugs with similar action</b>	<i>-dan</i>	cardiac stimulants, pimobendan derivatives
<b>H100</b>		<i>-rinone</i>	cardiac stimulants, amrinone derivatives
<b>H200</b>	<b>Agents influencing heart muscle excitability and conductivity</b>	<i>-afenone</i>	antiarrhythmics, propafenone derivatives
<b>H200</b>		<i>-aj-</i>	antiarrhythmics, ajmaline derivatives
<b>H200</b>		<i>-cain-</i>	Class I antiarrhythmics, procainamide and lidocaine derivatives (antifibrillants with local anaesthetic activity)
<b>H200</b>		<i>-ilide</i>	Class III antiarrhythmics, sematilide derivatives
<b>H200</b>		<i>-isomide</i>	antiarrhythmics, disopyramide derivatives
<b>H200</b>		<i>-kalant</i>	potassium channel blockers
<b>H300</b>	<b>Antihypertensives</b>	<i>-azosin</i>	antihypertensive substances, prazosin derivatives
<b>H300</b>		<i>-dralazine</i>	antihypertensives, hydrazinephthalazine derivatives
<b>H300</b>		<i>guan-</i>	antihypertensives, guanidine derivatives

<b>H300</b>		<i>-kalim</i>	potassium channel activators, antihypertensive
<b>H300</b>		<i>-kiren</i>	renin inhibitors
<b>H300</b>		<i>-(o)nidine</i>	antihypertensives, clonidine derivatives
<b>H300</b>		<i>-pril(at)</i>	angiotensin-converting enzyme inhibitors
<b>H300</b>		<i>-sartan</i>	angiotensin II receptor antagonists, antihypertensive (non-peptidic)
<b>H400</b>	<b>Antihyperlipidaemic drugs</b>	<i>-fibrate</i>	clofibrate derivatives (USAN: clofibrate type compounds)
<b>H400</b>		<i>-nicate</i>	antihypercholesterolaemic and/or vasodilating nicotinic acid esters
<b>H400</b>		<i>-vastatin</i>	see <i>-stat</i> ; antilipidemic substances, HMG CoA reductase inhibitors
<b>H500</b>	<b>Antivaricose drugs</b>		
<b>H510</b>	<b>Sclerosing drugs</b>		
<b>H600</b>	<b>Capillary-active drugs, haemostyptics</b>		
<b>H700</b>	<b>Calcium channel blockers</b>		
<b>H800</b>	<b>Agents influencing the renin-angiotensin system</b>		
<b>H810</b>	<b>Angiotensin converting enzyme inhibitors</b>		
<b>H820</b>	<b>Angiotensin receptor antagonists</b>		
<b>I000</b>	<b>BLOOD AND AGENTS ACTING ON THE HAEMOPOIETIC SYSTEM (EXCL. CYTOSTATICS)</b>		
<b>I100</b>	<b>Antianaemic agents</b>		

<b>I110</b>	<b>Iron preparations</b>		
<b>I120</b>	<b>Haematinics, other (Vit. B-12, folic acid, etc.)</b>		
<b>I130</b>	<b>Miscellaneous antianaemic agents</b>		
<b>I200</b>	<b>Agents influencing blood coagulation</b>	<i>-cog</i>	<i>(-)eptacog blood coagulation VII, (-)octocog blood factor VIII, (-)nonacog blood factor IX</i>
<b>I200</b>		<i>-fiban</i>	fibrinogen receptor antagonists (glycoprotein IIb/IIIa receptor antagonists)
<b>I200</b>		<i>-gatran</i>	thrombin inhibitor, antithrombotic agents
<b>I200</b>		<i>-parin</i>	heparin derivatives including low molecular mass heparins
<b>I210</b>	<b>Anticoagulants</b>	<i>-arol</i>	anticoagulants, dicoumarol derivatives
<b>I210</b>		<i>-grel-</i> or <i>-grel</i>	platelet aggregation inhibitors
<b>I210</b>		<i>-irudin</i>	hirudin derivatives
<b>I210</b>		<i>-pafant</i>	platelet-activating factor antagonists
<b>I210</b>		<i>-troban</i>	thromboxane A <sub>2</sub> -receptor antagonists; antithrombotic agents
<b>I220</b>	<b>Prothrombin inhibitors</b>		
<b>I230</b>	<b>Prothrombin synthesis inhibitors</b>		
<b>I240</b>	<b>Anticoagulant inhibitors</b>		
<b>I250</b>	<b>Agents affecting fibrinolysis</b>		
<b>I260</b>	<b>Coagulation promoting agents</b>		
<b>I261</b>	<b>Blood clotting factors</b>		

<b>I300</b>	<b>Blood proteins and their fractions</b>	<i>-poetin</i>	erythropoietin type blood factors
<b>I310</b>	<b>Blood substitutes (macromolecular)</b>		
<b>I400</b>	<b>Platelet-function regulators</b>		
<b>I500</b>	<b>Colony stimulating factors</b>	<i>-stim</i>	colony stimulating factors: <i>-grastim</i> : granulocyte colony stimulatory factor (G-CSF) type substances; <i>-gramostim</i> : granulocyte macrophage colony stimulating factor (GM-CSF) type substances; <i>-mostim</i> : macrophage stimulating factors (M-CSF) type substances; <i>plestim</i>
<b>I510</b>	<b>Granulocyte stimulating factors</b>	<i>-grastim</i>	see <i>-stim</i>
<b>I520</b>	<b>Macrophage stimulating factor</b>	<i>-mostim</i>	macrophage stimulating factors (M-CSF) type substances; see <i>-stim</i>
<b>J000</b>	<b>AGENTS INFLUENCING THE GASTROINTESTINAL TRACT</b>	<i>-prazole</i>	antiulcer, benzimidazole derivatives
<b>J000</b>		<i>-pride</i>	sulpiride derivatives
<b>J100</b>	<b>Digestives</b>	<i>-azepide</i>	cholecystokinin receptor antagonist
<b>J110</b>	<b>Stomachics</b>		
<b>J120</b>	<b>Choleretics (and hepatoprotective agents)</b>	<i>-cic</i>	hepatoprotective substances with a carboxylic acid group
<b>J130</b>	<b>Digestive enzymes</b>		
<b>J200</b>	<b>Emetics</b>		
<b>J300</b>	<b>Hepato-protective agents</b>		
<b>J400</b>	<b>Gastro-intestinal anti-infectives (see S000)</b>		
<b>J500</b>	<b>Antidiarrhoeals</b>		

<b>K000</b>	<b>AGENTS INFLUENCING THE RESPIRATORY TRACT</b>	<i>-ast</i>	antiasthmatic, antiallergics, not acting primarily as antihistaminics; <i>-lukast</i> : leukotriene receptor antagonist; <i>-trodast</i> : thromboxane A2 receptor antagonists, antiasthmatics
<b>K000</b>		<i>-cromil</i>	antiallergics, cromoglicic acid derivatives
<b>K000</b>		<i>-exine</i>	mucolytic, bromhexine derivatives
<b>K000</b>		<i>-lukast</i>	leukotriene receptor antagonists, see <i>-ast</i>
<b>K000</b>		<i>-steine</i>	mucolytics, other than bromhexine derivatives
<b>K000</b>		<i>-trodast</i>	see <i>-ast</i>
<b>K000</b>		<i>-xanox</i>	antiallergic respiratory tract drugs, xanoxic acid derivatives
<b>K100</b>	<b>Antitussives</b>		
<b>K110</b>	<b>Antitussives - central</b>		
<b>K120</b>	<b>Antitussives - peripheral</b>		
<b>K200</b>	<b>Expectorants</b>		
<b>L000</b>	<b>ANTINEOPLASTICS</b>	<i>-(ar)abine</i>	arabinofuranosyl derivatives
<b>L000</b>		<i>-mestane</i>	aromatase inhibitors
<b>L000</b>		<i>mito-</i>	antineoplastics, nucleotoxic agents (deleted from General Principles in List 24 prop. INN)
<b>L000</b>		<i>-platin</i>	antineoplastic agents, platinum derivatives
<b>L000</b>		<i>-ribine</i>	ribofuranil-derivatives of the "pyrazofurin" type
<b>L000</b>		<i>-rozole</i>	aromatase inhibitors, imidazole-triazole derivatives



<b>L000</b>		<i>-tecan</i>	antineoplastics, topoisomerase I inhibitors
<b>L100</b>	<b>Immunosuppressants</b>		
<b>L200</b>	<b>Alkylating agents</b>	<i>-mustine</i>	antineoplastic, alkylating agents, (beta-chloroethyl)amine derivatives
<b>L200</b>		<i>-sulfan</i>	antineoplastic, alkylating agents, methanesulfonates
<b>L200</b>		<i>-tepa</i>	antineoplastics, thiotepa derivatives
<b>L300</b>	<b>Radioisotopes (except diagnostics)</b>		
<b>L310</b>	<b>Radioisotopes - systemic</b>		
<b>L320</b>	<b>Radioisotopes - locally applied</b>		
<b>L400</b>	<b>Antineoplastics - antimetabolites</b>	<i>-abine</i>	see <i>-arabine</i> , <i>-citabine</i>
<b>L400</b>		<i>-citabine</i>	nucleoside antiviral or antineoplastic agents, cytarabine or azarabine derivatives
<b>L400</b>		<i>-fur</i>	
<b>L400</b>		<i>-trexate</i>	folic acid analogues
<b>L400</b>		<i>-uridine</i>	uridine derivatives used as antiviral agents and as antineoplastics; also <i>-udine</i>
<b>L410</b>	<b>Ornithine decarboxylase inhibitors</b>		
<b>L500</b>	<b>Antineoplastics - natural products (incl. antibiotics)</b>	<i>-rubicin</i>	antineoplastic antibiotics, daunorubicin derivatives
<b>L500</b>		<i>vin-</i> or <i>-vin-</i>	vinca alkaloids
<b>L600</b>	<b>Antineoplastics - sex hormone analogues and inhibitors</b>		
<b>L610</b>	<b>Aromatase inhibitors</b>		

<b>L620</b>	<b>Luteinizing hormone-releasing hormone agonists</b>		
<b>M000</b>	<b>METABOLISM AND NUTRITION (EXCL. WATER AND MINERAL METABOLISM)</b>	<i>-stat</i> (or <i>-stat-</i> )	enzyme inhibitors; <i>-lipastat</i> : pancreatic lipase inhibitors; <i>-restat</i> or <i>-restat-</i> : aldose-reducing inhibitors; <i>-vastatin</i> : antilipidemic substances, HMG CoA reductase inhibitors
<b>M100</b>	<b>Anoretics</b>	<i>-orex</i>	anoretics
<b>M200</b>	<b>Dietetics and antiadipositas drugs</b>		
<b>M210</b>	<b>Bulk forming drugs</b>		
<b>M300</b>	<b>Agents influencing lipid and fat metabolism</b>	<i>-lipastat</i>	see <i>-stat</i>
<b>M300</b>		<i>-vastatin</i>	see <i>-stat</i> ; antilipidemic substances, HMGCoA reductase inhibitors
<b>M310</b>	<b>Antiatherosclerosis agents</b>		
<b>M320</b>	<b>Lipotropic agents</b>		
<b>M330</b>	<b>Lipogenesis inducing agents</b>		
<b>M400</b>	<b>Agents influencing protein metabolism</b>		
<b>M410</b>	<b>Anabolic steroids</b>	<i>bol</i>	steroids
<b>M420</b>	<b>Catabolic agents</b>		
<b>M430</b>	<b>Amino acids</b>		
<b>M500</b>	<b>Agents influencing carbohydrate metabolism</b>	<i>-restat</i> (or <i>-restat-</i> )	see <i>-stat</i> ; aldose-reducing inhibitors
<b>M510</b>	<b>Insulins</b>		
<b>M520</b>	<b>Oral antidiabetics - islet mediated</b>	<i>-formin</i>	antihyperglycaemics, phenformin derivatives

<b>M520</b>		<i>gli-, -gli-</i>	previously <i>gly-</i> ; antihyperglycaemics, sulfonamide derivatives
<b>M530</b>	<b>Oral antidiabetics - extra pancreatic</b>	<i>gli</i>	antihyperglycaemics, sulfonamide derivatives
<b>M540</b>	<b>Gluconeogenesis influencing agents</b>		
<b>M600</b>	<b>Agents influencing uric acid metabolism</b>		
<b>M610</b>	<b>Uricosurics</b>		
<b>M620</b>	<b>Uric acid synthesis inhibitors</b>		
<b>M630</b>	<b>Agents influencing oxalic acid metabolism</b>		
<b>M700</b>	<b>Thyroid and antithyroids</b>		
<b>M710</b>	<b>Thyroid and thyroid hormones</b>		
<b>M720</b>	<b>Thyroid stimulators</b>		
<b>M730</b>	<b>Antithyroids</b>		
<b>M740</b>	<b>Radioactive iodine agents (for therapy)</b>		
<b>M800</b>	<b>Enzymes</b>		
<b>M810</b>	<b>Enzyme inhibitors</b>		
<b>M820</b>	<b>Enzyme stimulators</b>		
<b>N000</b>	<b>AGENTS INFLUENCING WATER AND MINERAL METABOLISM</b>		
<b>N100</b>	<b>Diuretics</b>		
<b>N110</b>	<b>Carbonic anhydrase inhibitors</b>	<i>-semide</i>	diuretics, furosemide derivatives

<b>N120</b>	<b>Saluretics</b>	<i>-anide</i>	N.1.2.0 <i>-etanide</i> : diuretics, piretanide derivatives; S.3.0.0 <i>-oxanide</i> : antiparasitic, salicylanilides and analogues
<b>N120</b>		<i>-etanide</i>	diuretics, piretanide derivatives; see <i>-anide</i>
<b>N120</b>		<i>-pamide</i>	diuretics, sulfamoylbenzoic acid derivatives (could be sulfamoylbenzamide)
<b>N121</b>	<b>Thiazide derivatives</b>	<i>-tizide</i>	diuretics, chlorothiazide derivatives
<b>N122</b>	<b>Ethacrynic acid derivatives</b>	<i>-crinat</i>	diuretics, etacrynic acid derivatives
<b>N123</b>	<b>Chlortalidone derivatives</b>		
<b>N129</b>	<b>Saluretics, other</b>		
<b>N130</b>	<b>Mercurial diuretics</b>	<i>-mer-</i> (or <i>-mer-</i> )	mercury-containing drugs, antimicrobial or diuretic (deleted from General Principles in List 28 prop. INN) [ <i>mer-</i> and <i>-mer-</i> can be used for any type of substances and are no longer restricted to use in INNs for mercury-containing drugs; <i>-mer</i> : polymers
<b>N170</b>	<b>Purines and other diuretics</b>		
<b>N180</b>	<b>Aldosterone inhibitors</b>	<i>-renone</i>	aldosterone antagonists, spironolactone derivatives
<b>N200</b>	<b>Acidifiers</b>		
<b>N400</b>	<b>Saline cathartics</b>		
<b>N500</b>	<b>Alkalizers</b>		
<b>N510</b>	<b>Parenteral alkalizer solutions</b>		
<b>N520</b>	<b>Oral antacids</b>	<i>-aldrate</i>	antacids, aluminium salts
<b>N520</b>		<i>-alox</i>	see <i>-ox</i>

<b>N600</b>	<b>Fluid and electrolyte replacement therapy</b>		
<b>N610</b>	<b>Electrolyte and carbohydrate solutions</b>		
<b>N700</b>	<b>Mineral salts</b>		
<b>N710</b>	<b>Ion exchange resins</b>		
<b>N800</b>	<b>Vitamin D group and calcium metabolism drugs</b>	<i>calci</i>	Vitamin D analogues/derivatives
<b>N800</b>		<i>-dronic acid</i>	calcium metabolism regulator, pharmaceutical aid
<b>P000</b>	<b>VITAMINS</b>		
<b>P100</b>	<b>Vitamin A</b>	<i>retin</i>	retinol derivatives
<b>P200</b>	<b>Vitamin B1</b>		
<b>P300</b>	<b>Vitamin B2</b>		
<b>P400</b>	<b>Vitamin B6</b>		
<b>P500</b>	<b>Vitamin C</b>		
<b>P600</b>	<b>Vitamin E</b>		
<b>P700</b>	<b>Nicotinic acid derivatives</b>	<i>-nic</i>	nicotinic acid or nicotinoyl alcohol derivatives
<b>P800</b>	<b>Vitamins, other</b>		
<b>Q000</b>	<b>HORMONES OR HORMONE RELEASE-STIMULATING PEPTIDES</b>	<i>-morelin</i>	see <i>-relin</i> ; growth hormone release-stimulating peptides
<b>Q000</b>		<i>prost</i>	prostaglandins; <i>-prostil</i> : prostaglandins, anti-ulcer
<b>Q000</b>		<i>-relin</i>	prehormones or hormone-release stimulating peptides: <i>-morelin</i> : growth hormone release-stimulating peptides; <i>-tirelin</i> : thyrotropin releasing hormone analogues

Q000		<i>som-</i>	growth hormone derivatives
Q000		<i>-tirelin</i>	see <i>-relin</i> ; thyrotropin releasing hormone analogues
Q100	<b>Hypophysis hormones</b>		
Q110	<b>Hypophysis anterior lobe</b>		
Q111	<b>Hypophysis anterior lobe hormones</b>	<i>-actide</i>	synthetic polypeptides with a corticotropin-like action
Q112	<b>Hypophysis anterior lobe inhibitors</b>		
Q120	<b>Hypophysis posterior lobe (incl. other oxytocics)</b>	<i>-pressin</i>	vasoconstrictors, vasopressin derivatives
Q120		<i>-tocin</i>	oxytocin derivatives
Q200	<b>Sex hormones and analogues</b>		
Q210	<b>Estrogens, also interceptive contraceptive agents e.g. epostane (51)</b>	<i>estr</i>	estrogens
Q210		<i>-ifene</i>	antiestrogens, <i>clomifene</i> and <i>tamoxifen</i> derivatives
Q220	<b>Progestogens</b>	<i>gest</i>	steroids, progestogens
Q230	<b>Androgens</b>	<i>andr</i> or <i>-stan-</i> or <i>-ster-</i>	steroids, androgens
Q230		<i>-ster-</i>	androgens/anabolic steroids: <i>-testosterone</i> , <i>-sterone</i> , <i>-ster-</i> , <i>-gesterone</i> , <i>-sterone</i> , <i>sterol</i> , <i>ster</i> , <i>-(a)steride</i>
Q231	<b>Androgens</b>	<i>-terone</i>	antiandrogens
Q240	<b>Gonadotrophins and gonadotrophin secretion stimulating drugs</b>		
Q241	<b>Antigonadotrophins</b>		

<b>Q300</b>	<b>Adrenocortical hormones and analogues</b>	<i>cort</i>	corticosteroids, except prednisolone derivatives
<b>Q300</b>		<i>-olone</i>	steroids other than prednisolone derivatives
<b>Q300</b>		<i>-onide</i>	steroids for topical use, acetal derivatives
<b>Q310</b>	<b>Mineralosteroids</b>		
<b>Q320</b>	<b>Mineralosteroid antagonists</b>		
<b>Q330</b>	<b>Glucosteroids</b>	<i>pred</i>	prednisone and prednisolone derivatives; <i>-methasone</i> or <i>-metasone</i> , <i>-betasol</i> , <i>-olone</i>
<b>Q340</b>	<b>Glucosteroids antagonists</b>		
<b>R000</b>	<b>IMMUNOLOGICALS</b>		
<b>R100</b>	<b>Sera and immunoglobulins</b>		
<b>R200</b>	<b>Vaccines</b>		
<b>R210</b>	<b>Vaccines, live</b>		
<b>R220</b>	<b>Vaccines, activated</b>		
<b>R300</b>	<b>Immunostimulants</b>		
<b>R310</b>	<b>Biological response modifier</b>		
<b>S000</b>	<b>ANTI-INFECTIVES</b>		
<b>S100</b>	<b>Ectoparasiticides</b>		
<b>S200</b>	<b>Antiseptics and disinfectants</b>		
<b>S210</b>	<b>Antiseptics (excl. heavy metal antiseptics)</b>	<i>-nifur-</i>	5-nitrofuranyl derivatives

<b>S220</b>	<b>Heavy metal antiseptics</b>	<i>-mer-</i>	mercury-containing drugs, antimicrobial or diuretic (deleted from General Principles in List 28 prop. INN) [ <i>mer-</i> and <i>-mer-</i> can be used for any type of substances and are no longer restricted to use in INNs for mercury-containing drugs
<b>S230</b>	<b>Detergent antiseptics</b>		
<b>S300</b>	<b>Chemotherapeutics of parasitic diseases</b>	<i>-ectin</i>	antiparasitics, ivermectin derivatives
<b>S300</b>		<i>-oxanide</i>	antiparasitics, salicylanides and analogues; see <i>-anide</i>
<b>S310</b>	<b>Anthelmintics (excl. antinematode agents)</b>	<i>-antel</i>	anthelmintics (undefined group)
<b>S310</b>		<i>-bendazole</i>	anthelmintics, tiabendazole derivatives
<b>S310</b>		<i>-fos (-vos)</i>	insecticides, anthelmintics, pesticides etc., phosphorous derivatives
<b>S310</b>		<i>-fos-</i> or <i>fos-</i>	various pharmacological categories belonging to <i>-fos</i> (other than above)
<b>S320</b>	<b>Antinematode agents</b>		
<b>S330</b>	<b>Antiprotozoal agents (incl. all arsphenamines)</b>	<i>arte-</i>	antimalarial agents, artemisinin related compounds
<b>S330</b>		<i>-nidazole</i>	antiprotozoals, metronidazole derivatives
<b>S400</b>	<b>Chemotherapeutics of fungal diseases</b>	<i>-conazole</i>	systemic antifungal agents, miconazole derivatives
<b>S410</b>	<b>Antifungal agents</b>		
<b>S420</b>	<b>Fungicides</b>		
<b>S430</b>	<b>Antifungal antibiotics</b>		



<b>S500</b>	<b>Antibiotics, antibacterial and antiviral agents</b>	<i>-planin</i>	antibacterials ( <i>Actinoplanes</i> strains)
<b>S510</b>	<b>Sulfonamides</b>	<i>sulfa-</i>	anti-infectives, sulfonamides
<b>S520</b>	<b>Antimycobacterials</b>	<i>-dapson</i>	antimycobacterials, diaminodiphenylsulfone derivatives
<b>S520</b>		<i>-pirox</i>	see <i>-ox</i>
<b>S530</b>	<b>Antiviral</b>	<i>-arabine</i>	arabinofuranosyl derivatives
<b>S530</b>		<i>-motine</i>	antivirals, quinoline derivatives
<b>S530</b>		<i>-ribine</i>	ribofuranil-derivatives of the <i>pyrazofurin</i> type
<b>S530</b>		<i>-uridine</i>	uridine derivatives used as antiviral agents and as antineoplastics; <i>-udine</i>
<b>S530</b>		<i>vir</i>	antivirals (undefined group): <i>-amivir</i> : neuraminidase inhibitors, <i>-cavir</i> : carbocyclic nucleosides, <i>-virsen</i> : antisense oligonucleotides
<b>S550</b>	<b>Antibacterial/other</b>	<i>-citabine</i>	nucleoside antiviral or antineoplastic agents, cytarabine or azarabine derivatives
<b>S550</b>		<i>-oxacin</i>	antibacterials, nalidixic acid derivatives
<b>S550</b>		<i>-prim</i>	antibacterials, trimethoprim derivatives
<b>S600</b>	<b>Antibiotics (except antineoplastic antibiotics)</b>	<i>-cidin</i>	naturally occurring antibiotics (undefined group)
<b>S600</b>		<i>-fungin</i>	antifungal antibiotics; USAN: antifungal antibiotics (undefined group)
<b>S600</b>		<i>-gillin</i>	antibiotics produced by <i>Aspergillus</i> strains
<b>S600</b>		<i>-monam</i>	monobactam antibiotics

S600		<i>-mycin</i>	antibiotics, produced by <i>Streptomyces strains</i> (see also <i>-kacin</i> )
S600		<i>-parcin</i>	for glycopeptide antibiotics
S600		<i>-penem</i>	analogues of penicillanic acid antibiotics modified in the five-membered ring
S610	<b>Antibiotics acting on the bacterial cell wall</b>	<i>-carbep</i>	antibiotics, carbacepham derivatives
S610		<i>cef-</i>	antibiotics, cephalosporanic acid derivatives
S610		<i>-cillin</i>	antibiotics, 6-aminopenicillanic acid derivatives
S610		<i>-oxef</i>	see <i>cef-</i> ; antibiotics, oxacefalosporanic acid derivatives
S620	<b>Antibiotics affecting cell membrane and with detergent effect</b>	<i>-tricin</i>	antibiotics, polyene derivatives
S630	<b>Antibiotics affecting protein synthesis</b>	<i>-cycline</i>	antibiotics, tetracycline derivatives
S630		<i>-kacin</i>	antibiotics, kanamycin and bekanamycin derivatives (obtained from <i>Streptomyces kanamyceticus</i> ); S.6.5.0: <i>-micin</i> : antibiotics obtained from various <i>Micromonospora</i>
S640	<b>Antibiotics affecting nucleic acid metabolism</b>	<i>rifa-</i>	antibiotics, rifamycin derivatives
S650	<b>Antibiotics-action unclassified (including beta-lactamase inhibitors)</b>	<i>-bactam</i>	beta-lactamase inhibitors
S650		<i>-micin</i>	see <i>-kacin</i> ; antibiotics obtained from various <i>Micromonospora</i>

<b>S700</b>	<b>Immunomodulators and immunostimulants (incl. gamma globulins)</b>	<i>-imex</i>	immunostimulants
<b>S700</b>		<i>-imod</i>	immunomodulators, both stimulant/suppressive and stimulant
<b>S700</b>		<i>-imus</i>	immunosuppressants (other than antineoplastics)
<b>S700</b>		<i>-kin</i>	interleukin type substances: <i>-nakin, -leukin, -plestim, -exakin, -kinra, -nakinra</i>
<b>S700</b>		<i>-leukin</i>	interleukin type substances
<b>S700</b>		<i>-mab</i>	monoclonal antibodies (see also Annex)
<b>S700</b>		<i>-stim</i>	colony stimulating factors
<b>S710</b>	<b>Interferons and immunomodulators</b>		
<b>T000</b>	<b>LOCALLY ACTING AGENTS (INCL. DERMATOLOGIC AND INTERNALLY USED DRUGS)</b>		
<b>T100</b>	<b>Locally acting externally-applied agents</b>		
<b>T110</b>	<b>Vasodilators (external) - rubefaciens</b>		
<b>T200</b>	<b>Locally acting internally-applied agents</b>		
<b>T210</b>	<b>Adsorbents, astringents</b>		
<b>T220</b>	<b>Lubricant cathartics</b>		
<b>T230</b>	<b>Irritant cathartics</b>		
<b>T240</b>	<b>Gastro-intestinal anti-infectives, non-resorbed</b>		
<b>T250</b>	<b>Saponins</b>		

<b>T260</b>	<b>Detergents</b>		
<b>T300</b>	<b>Intravaginal contraceptives</b>		
<b>U000</b>	<b>MISCELLANEOUS DRUGS</b>		<i>-ermin</i> : growth factors; <i>-dermin</i> : epidermal growth factors; <i>-fermin</i> : fibrino-blast growth factors; <i>-nermin</i> : tumour necrosis factor; <i>-sermin</i> : insulin-like growth factors
<b>U000</b>		<i>gado-</i>	diagnostic agents, gadolinium derivatives
<b>U100</b>	<b>Diagnostic aids</b>	<i>-fenin</i>	diagnostic aids; (phenyl-carbamoyl)methyl iminodiacetic acid derivatives
<b>U110</b>	<b>Radiocontrast media</b>	<i>io-</i>	iodine-containing contrast media
<b>U110</b>		<i>-io or iod-</i>	iodine-containing compounds other than contrast media
<b>U120</b>	<b>Diagnostic aids, other</b>		
<b>U130</b>	<b>Diagnostic radioisotopes</b>		
<b>U200</b>	<b>Chelating agents, detoxicants, etc.</b>		
<b>U210</b>	<b>Alcohol deterrents</b>		
<b>U300</b>	<b>Anti-inflammatory agents</b>		
<b>U310</b>	<b>Non-antipyretic antirheumatics</b>		
<b>U320</b>	<b>Anti-inflammatory agents, other</b>		
<b>U400</b>	<b>Pharmaceutical adjuncts</b>	<i>cell- or cel-</i>	cellulose derivatives; ( <i>cell-ate</i> and <i>-cellose</i> )
<b>U400</b>		<i>-dronic acid</i>	calcium metabolism regulator, pharmaceutical aid
<b>V000</b>	<b>UNCLASSIFIED PHARMACOLOGICAL MECHANISMS</b>		

<b>V100</b>	<b>Intrauterine contraceptive device</b>		
<b>V200</b>	<b>Medicinal plants</b>		
<b>V300</b>	<b>Homoeopathic preparations</b>		
<b>W000</b>	<b>ENZYMES AND VARIOUS</b>	<i>-ase</i>	enzymes; <i>-dismase, -teplase, -uplase</i>
<b>W000</b>		<i>-stat</i>	enzyme inhibitors
<b>Y000</b>	<b>VETERINARY DRUGS</b>	<i>-nidazole</i>	antiprotozoals, metronidazole derivatives

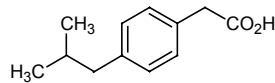
## ALPHABETICAL LIST OF STEMS TOGETHER WITH CORRESPONDING INNS

**-abine**      **see -arabine, -citabine**

USAN

**-ac (x)**      **anti-inflammatory agents, ibufenac derivatives**

A.4.2.0      (USAN: anti-inflammatory agents (acetic acid derivatives))



(a)      aceclofenac (52), alclofenac (23), amfenac (38), anirolac (52), bendazac (22), bromfenac (55), cinfoenoac (41), clidanac (39), clofurac (42), clopirac (30), dexpemedolac (71), diclofenac (28), eltenac (53), etodolac (45), felbinac (54), fenclofenac (30), fenclorac (33), fentiazac (32), furofenac (40), ibuufenac (14), isoxepac (37), ketorolac (51), lexofenac (38), nepafenac (78), oxepinac (36), oxindanac (54), pemedolac (58), (quinclorac, ISO name for a herbicide), sulindac (33), tianafac (31), tifurac (57), tiopinac (40), zomepirac (37)

-zolac: bufezolac (39), isofezolac (39), lonazolac (34), mofezolac (64), pirazolac (43), trifezolac (34)

(b)      amtolmetin guacil (65), bufexamac (20) (anti-inflammatory; acetohydroxamic acid group instead of acetic acid group)

(c)      clamidoxic acid (17), fenclozic acid (22), metiazinic acid (20), prodolic acid (29), tolmetin (23)

TRS 581

**-acetam**      **see -racetam**

USAN

**-actide (x)**      **synthetic polypeptides with a corticotropin-like action**

Q.1.1.1      (USAN: synthetic corticotropins)

(a)      alsactide (45), codactide (24), giractide (29), norleusactide (18), seractide (31), tetracosactide (18), tosactide (24), tricosactide (44)

TRS 581

BAN, USAN

**-adol (x)  
or -adol-**      **analgesics (14th Report, 1967)**A.4.1.0  
A.4.2/3.0

(USAN: analgesics (undefined group))

- (a) A.4.1.0: acetylmethadol (5), alimadol (39), alphacetylmethadol (5), alphamethadol (5), axomadol (87), betacetylmethadol (5), betamethadol (5), levacetylmethadol (27), noracetylmethadol (12), tapentadol (87)

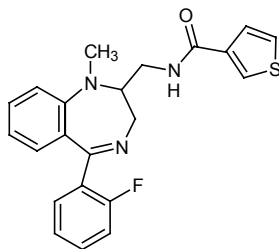
A.4.2/3.0: apadoline (74), asimadoline (74), bromadoline (49), ciprofadol (41), ciramadol (39), cloracetadol (16), dibusadol (24), dimenoxadol (7), diproxadol (34), enadoline (68), filenadol (47), flumexadol (36), fluradoline (48), gaboxadol (48), levonantradol (43), lorcinadol (57), moxadolene (45), (deleted in List 48: moxifadol (47)), myfadol (17), nafoxadol (50), nantradol (42), nerbacadol (56), oxapadol (40), picenadol (47), pinadoline (50), pipradimadol (42), pipramadol (42), prayadoline (60), vadoline (60), profadol (20), radolmidine (82), ruzadolane (71), spiradoline (53), tazadolene (52), tolpadol (48), tramadol (22), veradoline (47)

- (b) alfadolone (27), hexapradol (12) (CNS stimulant), nadolol (34), quinestradol (15) (estrogenic)

- (c) A.4.1.0: dimepheptanol (5)

**-adom**      **analgesics, tifluadom derivatives**

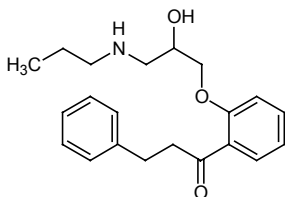
A.4.3.0



- (a) lufuradom (50), tifluadom (48)

**-afenone**      **antiarrhythmics, propafenone derivatives**

H.2.0.0

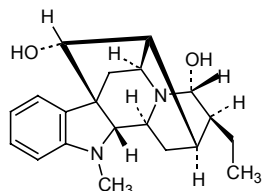


- (a) alprafenone (62), berlafenone (63), diprafenone (48), etafenone (19), propafenone (29)

USAN

**-aj-**      **antiarrhythmics, ajmaline derivatives**

H.2.0.0



(a)      detajmium bitartrate (34), lorajmine (34), prajmalium bitartrate (23)

**-al (d)**      **aldehydes**  
(deleted from General Principles in 14th Report)

USAN

**-aldrate**      **antacids, aluminium salts**

N.5.2.0

(a)      carbaldrate (53), potassium glucaldrate (14), sodium glucaspaldrate (17), magaldrate (49), simaldrate (15)

USAN

**-alol**      **see -olol****-alox**      **see -ox**

USAN

**andr (d)**      **steroids, androgens**

Q.2.3.0      (USAN: -andr- androgens)

(a)      i. andr: androstanolone (4), methandriol (1), nandrolone (22), norethandrolone (6), ovandrotone albumin (52), silandrone (18)ii. -stan- (d): androstanolone (4), drostanolone (13), epitiostanol (31), mestanolone (10), stanozolol (18), epostane (51) (contraceptive)iii. -ster- (d): calusterone (23), cloxotestosterone (12), fluoxymesterone (6), mesterolone (15), methyltestosterone (4), oxymesterone (12), penmesterol (14), prasterone (23), testosterone (4), testosterone ketolaurate (16), tiomesterone (14)(b)      i. andr: oxandrolone (12), propetandrol (13)



iii. ster: aldosterone (6), bolasterone (13), dihydrotachysterol (1), dimethisterone (8), ethisterone (4), norethisterone (6), norvinisterone (6), stercuronium iodide (21) (neuromuscular blocking agent)

(c) metandienone (12), oxymetholone (11), trestolone (25) (antineoplastic androgen)

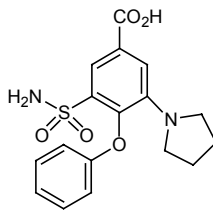
TRS 581

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**-anide**

*-etanide* diuretics, piretanide derivatives

N.1.2.0 (USAN: diuretics (piretanide group))

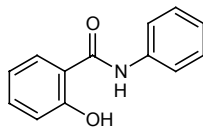


(a) bumetanide (24), piretanide (33)

(c) besunide (30)

*-oxanide* antiparasitic, salicylanilides and analogues

S.3.0.0



(a) bromoxanide (31), clioxanide (19), rafoxanide (24)

thioanalogues: brotianide (24)

related: diloxanide (8), nitazoxanide (45)

(b) closantel (36), flurantel (25), niclosamide (13), resorantel (23), salantel (29)

(c) oxyclozanide (16)

other -anides: aurothioglycanide (1) (anti-arthritic; gout-remedy), ceforanide (39) (antibiotic), oglufanide (86) (immunomodulator), polihexanide (24) (antibacterial), tiprostanide (48) (antihypertonic)

BAN, USAN

**-anserin      serotonin receptor antagonists (mostly 5-HT<sub>2</sub>)**

C.7.0.0      (USAN: serotonin receptor antagonists (undefined group))

- (a)      adatsanserin (70), altanserin (50), blonsanserin (76), butanserin (51), eplivanserin (80), fananserin (69), flibanserin (75), ketanserin (46), lidanserin (62), pelanserin (57), seganserin (56), tropanserin (55)
- (b)      serotonin receptor antagonists, psychoactive: cinanserin (17), glemanserin (68), mianserin (20), ritanserin (51)

USAN

**-antel      anthelmintics (undefined group)**

S.3.1.0

- (a)      amidantel (40), carbantel (35), closantel (36), epsiprantel (57), febantel (38), flurantel (25), morantel (22), oxantel (31), pexantel (22), praziquantel (34), pyrantel (17), resorantel (23), salantel (29), zilantel (33), antelmocin (15)

TRS 581

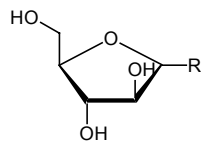
**-apine      see -pine**

USAN

**-(ar)abine      arabinofuranosyl derivatives**

L.4.0.0/

S.5.3.0      (USAN: -arabine: antineoplastic arabinofuranosyl derivatives)



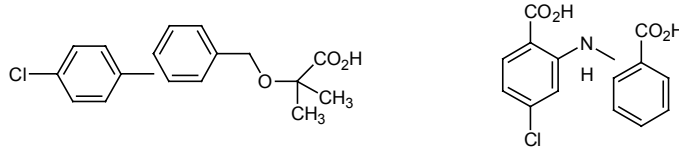
- (a)      ancitabine (36), capecitabine (73), cytarabine (14), decitabine (61), emtricitabine (80), enocitabine (46), fazarabine (56), fiacitabine (59), fludarabine (48), flurocitabine (38), galocitabine (65), gemcitabine (62), ibacitabine (57), nelarabine (80), vidarabine (23), zalcitabine (66)
- (c)      S.5.3.0: ribavirin (31)

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USAN

**-arit**      **antiarthritic substances, acting like clobuzarit and lobenzarit, (mechanism different from anti-inflammatory type substances, e.g. -fenamates or -profens)**

A.4.2.0      (USAN: antirheumatic substances, acting similarly to lobenzarit)



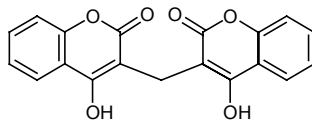
(a)      actarit (62), bindarit (64), clobuzarit (44), lobenzarit (46), romazarit (60)

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USAN

**-arol (d)**      **anticoagulants, dicoumarol derivatives**

I.2.1.0      (USAN: anticoagulants (dicoumarol type))



- (a)      acenocoumarol (6), clocoumarol (31), coumetarol (13), dicoumarol (23), tiocloamarol (31), xylocoumarol (15)
- (b)      cloridarol (29) (coron. vasodil.), fluindarol (16) (anticoag. of indonedione-type)
- (c)      diarbarone (15), ethyl biscoumacetate (4), phenprocoumon (11), warfarin (23)

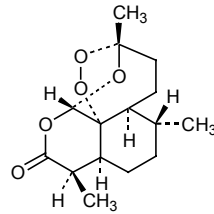
TRS 58I

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**-arone**      amiodarone (16) (anti-arrhythmic), benzarone (13), benzbromarone (13) (uricosuric), benziodarone (11), brinazarone (64) (calcium channel blocker), bucromarone (48) (antiarrhythmic), diarbarone (15), dronedarone (75) (anti-anginal, antiarrhythmic), etabenzarone (17), fantofarone (65) (calcium channel blocker), furidarone (19), inicarone (27), mecinarone (30), pyridarone (16), rilozarone (58)

**arte- antimalarial agents, artemisinin related compounds**

S.3.3.0



- (a) artemether (61), artemisinin (56), artemotil (80), artemimol (81), artesunate (61), arteflene (70)

USAN

**-ase enzymes**

W.0.0.0

- (a) agalsidase alfa (84), agalsidase beta (84), alglucerase (68), brinase (22), cocarboxylase (1), dornase alfa (70), eufausease (84), hyalosidase (50), hyaluronidase (1), idusulfase (87), kallidinogenase (22), ocrase (28), pegaspargase (64), penicillinase (10), promelase (47), rizolipase (22), serrapeptase (31), sfericase (40), streptodornase (6), streptokinase (6), tilactase (50), urokinase (48)
- (c) batroxobin (29), bromelains (18), chymopapain (26), chymotrypsin (10), defibrotide (44), orgotein (31), sutilains (18), ubidecarenone (48)

Classification of enzymes

I proteinase

- (a) with -ase suffix:

<u>(INN)</u>	<u>(origin)</u>	<u>(use, action)</u>
brinase (22)	<i>Aspergillus oryzae</i>	fibrinolytic
kallidinogenase (22)	pancreas or urine of mammals	splitting kinin, kallidin from kininogen (vasodilator)
ocrase (28)	<i>Aspergillus ochraceus</i>	fibrinolytic (topically: cleaning wounds)
pegaspargase (64)		asparaginase
promelase (46)	<i>Aspergillus melleus</i>	proteinase (chronic bronchitis)

	rasburicase (81)	<i>Aspergillus flavus</i>	urate oxidase (hyperuricaemia)
	serrapeptase (31)	<i>Serratia sp.</i> E15	proteinase (chronic paranasal sinusitis etc.)
	sfericase (40)	<i>Bacillus sphaericus</i>	proteinase (chronic paranasal sinusitis etc.)
	streptokinase (6)	<i>Streptococcus haemolyticus</i>	changing plasminogen into plasmin (activator of fibrinolysis)
	urokinase (48)	human origin	plasminogen activator
	urokinase alfa (27)	recombinant material	plasminogen activator
(b)	<u>without -ase suffix:</u>		
	batroxobin (29)	the venom of the serpent <i>Bothrops atrox</i>	thrombin like enzyme
	bromelains (18)	<i>Ananas comosus</i> Merr.	fibrin depolymerizing (antiinflammatory)
	chymopapain (26)	papaya latex	proteolytic (chemonucleosis)
	chymotrypsin (10)	mammalian pancreas	proteolytic (antiinflammatory, antioedema)
	defibrotide (44)	mammalian pancreas	proteolytic (antiinflammatory, antioedema)
	sutilains (18)	<i>Bacillus subtilis</i>	proteolytic
<hr/>			
II	<u>-lipase</u>		
	rizolipase (22)	<i>Rhizopus arrhizus</i> var. Delemar	lipase
<hr/>			
III	<u>co-enzymes</u>		
	cocarboxylase (1)	chemically defined	co-enzyme in the metabolism of pyruvic acid

	ubidecarenone (48)	chemically defined	naturally occurring co-enzyme, a component in the electron transfer system in mitochondria (congestive heart failure)
<hr/>			
IV	<u>-dismase</u> enzymes with superoxide dismutase activity		USAN
	(USAN: superoxide dismutase activity (exception: orgotein))		
(a)	ledismase (70), sudismase (58)		
(c)	<u>isomerase</u>		
	orgotein (31)	mammalian tissue (liver, red blood cell etc.)	superoxide dismutase activity (anti-inflammatory)
	pegorgotein (72)		
<hr/>			
V	<u>-diplase</u> plasminogen activator combined with another enzyme		
	amediplase (79)		
<hr/>			
VI	<u>-teplase</u> tissue-type-plasminogen activators		USAN
(a)	alteplase (59), anistreplase (59), desmoteplase (80), duteplase (62), lanoteplase (76), monteplase (71), nateplase (73), pamiteplase (78), reteplase (69), silteplase (65), tenecteplase (79)		
<hr/>			
VII	<u>-uplase</u> urokinase-type-plasminogen activators		USAN
(a)	nasaruplase (68), nasaruplase beta (85), saruplase (58)		
<hr/>			
VIII	<u>others</u>		
	agalsidase alfa (84)	human origin	treatment of deficiency of alpha-galactosidase activity (Fabry's disease)
	agalsidase beta (84)	<i>hamster</i>	treatment of deficiency of alpha-galactosidase activity (Fabry's disease)

alfimeprase (85)	<i>Agkistrodon contrix contrix</i>	antithrombotic
dornase alfa (70)	human origin	treatment of cystic fibrosis
epafipase (85)	human origin	antiallergic, antiasthmatic
eufauserase (84)	<i>Euphausia Superba</i>	digests proteins and selected cell surface adhesion molecules (wound healing; vaginal/oral candidosis)
hyalosidase (50)		hyaluronoglucosaminidase (treatment of myocardial infarction)
hyaluronidase (1)	various origins	depolymerizing hyaluronic acid (cellular diffusion factor)
idusulfase (87)		treatment of Hunter Syndrome (Mucopolysaccharidosis Type II), degrades glycosaminoglycans heparan and dermatan sulfate
imiglucerase (72)	human origin (placenta isoenzyme)	
laronidase (85)	human origin	
penicillinase (10)	<i>Bacillus cereus</i>	inactivating penicillin
ranpirnase (81)	<i>Rana pipiens</i>	ribonuclease (antineoplastic)
streptodornase (6)	<i>Streptococcus haemolyticus</i>	hydrolysing desoxyribonucleoprotein
tilactase (50)	$\beta$ -D-galactosidase	

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 BAN, USAN

-ast (x)

**antiasthmatic, antiallergics, not acting primarily as antihistaminics**

K.0.0.0

(BAN: antiasthmatics, antiallergics when not acting primarily as antihistamines)

(USAN: antiasthmatics or antiallergic substances not acting primarily as antihistamines)

(a)

acitazanolast (72), acrezast (77), andolast (67), asobamast (63), ataquimast (82), bamaquimast, (76), batebulast (66), binizolast (60), bunaprolast (60), cilomilast (82), dametralast (54), dazoquinast (54), doqualast (48), eclazolast (55), eflumast (61), enofelast

(67), enoxamast (52), fenprinas (48), filaminast (75), ibudilast (58), idenast (58), lirimilast (85), loxanast (46), melquinast (62), ontazolast (72), oxalinast (49), pemirolast (61), piclamilast (73), picumast (47), pirodomast (64), quazolast (55), raxofelast (68), repirinast (55), revenast (51), roflumilast (77), scopinast (76), suplatast tosilate (64), tazanolast (59), tetrazolast (67), tiacrilast (52), tibenelast (58), tioxamast (53), tiprinast (50), tofimidast (85), tranilast (46), zaprinast (46)

**-lukast      leukotriene receptor antagonist**

(a)      ablukast (61), cinalukast (70), iralukast (70), montelukast (73), pobilukast (70), pranlukast (67), ritolukast (64), sulukast (63), tomelukast (59), verlukast (65), zafirlukast (71)

**-trodast      thromboxane A<sub>2</sub> receptor antagonists, antiasthmatics**

(a)      imitrodast (70), seratrodast (70)

(c)      bufrolin (34), oxarbazole (38), pirolate (44)

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BAN, USAN

**-astine (x)      antihistaminics**

G.2.0.0      (BAN: antihistamines, not otherwise classifiable)  
(USAN: antihistaminics (histamine-H<sub>1</sub> receptor antagonists))

(a)      acrivastine (51), alinastine (74), azelastine (36), barmastine (59), bepiastine (19), bepotastine (78), bilastine (82), cabastinen (50), carebastine (52), clemastine (22), dorastine (23), ebastine (52), emedastine (59), epinastine (55), flezelastine (67), levocabastine (50), linetastine (74), mapinastine (72), mizolastine (64), moxastine (15), noberastine (59), octastine (37), perastine (15), piclopastine (22), rocastine (57), setastine (39), talastine (18), temelastine (54), zepastine (26)

(b)      cloperastine (18) (antitussive), vinblastine (12) (vinca-alkaloid)

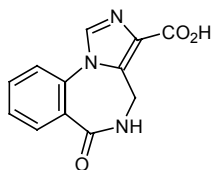
(c)      astemizole (45), carbinoxamine (4)

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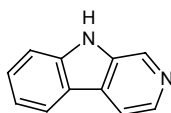
**-azam      see - azepam**



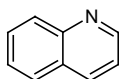
USAN

**-azenil      benzodiazepine receptor antagonists/agonists (benzodiazepine derivatives)**

- (a)      bretazenil (60), flumazenil (55), iomazenil <sup>123</sup>I (66), sarmazenil (59)
- (b)      nabazenil (49)

**-carnil      benzodiazepine receptor antagonists/agonists (carboline derivatives)**

- (a)      abecarnil (60), gedocarnil (61)

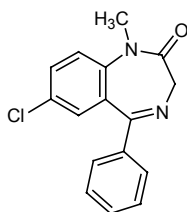
**-quinil      benzodiazepine receptor partial agonists (quinoline derivatives)**

- (a)      lirequinil (72), terbequinil (63)

BAN, USAN

**-azepam (x)      diazepam derivatives**

- C.1.0.0      (BAN: substances of the diazepam group)  
                   (USAN: antianxiety agents (diazepam type))



- (a)      bromazepam (22), camazepam (30), carbamazepam (39), cinolazepam (46), clonazepam (22), cyprazepam (16), delorazepam (40), diazepam (12), doxefazepam (43), elfazepam (36), fletazepam (31), fludiazepam (36), flunitrazepam (24), flurazepam (20), flutemazepam (58), flutoprazepam (45), fosazepam (27), halazepam (29), iclazepam (37), lorazepam (23), lormetazepam (38), meclonazepam (44), medazepam (20), menitrazepam (22), metaclazepam

(46), motrazepam (31), nimetazepam (26), nitrazepam (16), nordazepam (39), nortetrazepam (20), oxazepam (13), pinazepam (32), pivoxazepam (34), prazepam (14), proflazepam (31), quazepam (36), reclazepam (53), sulazepam (14), temazepam (22), tetrazepam (17), tolufazepam (51), tuclazepam (40), uldazepam (30)

not true benzodiazepines: bentazepam (33), clotiazepam (30), lopirazepam (36), premazepam (45), ripazepam (33), zolazepam (28)

related: adinazolam (45), alprazolam (30), arfendazam (39), clazolam (29), climazolam (51), clobazam (25), clobenzepam (25), cloxazolam (29), ecopipam (80), estazolam (31), flutazolam (32), haloxazolam (38), ketazolam (26), lofendazam (36), loprazolam (44), mexazolam (40), midazolam (40), nefopam (25), oxazolam (25), razobazam (52), tofisopam (26), trepipam (38), triazolam (30), triflubazam (28), zapizolam (43), zomebazam (49)

- (c) brotizolam (40), chlordiazepoxide (11), ciclotizolam (40), demoxepam (23), dipotassium clorazepate (17), ethyl carfluzepate (43), ethyl dirazepate (44), ethyl loflazepate (43), etizolam (40), potassium nitrazepate (17)

TRS 581 not related: anti-anx.: fenobam (36), muscle relax.: xilobam (36)

**-azepide      cholecystokinin receptor antagonist**

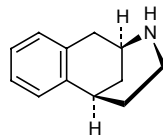
J.1.1.0.0

- (a) devazepide (62), pranazepide (75), tarazepide (68)
- (c) lorglumide (56)

USAN

**-azocine      narcotic antagonists/agonists related to 6,7-benzomorphan**

A.4.1.0 (USAN: narcotic antagonists/agonists related to 6,7-benzo-morphan)



- (a) anazocine (30), bremazocine (43), butinazocine (53), carbazocine (16), cogazocine (36), cyclazocine (14), eptazocine (45), gemazocine (29), ibazocine (36), ketazocine (34), metazocine (9), moxazocine (38), pentazocine (14), phenazocine (9), quadazocine (54), tonazocine (46), volazocine (19)
- (b) streptozocin (33)

related compounds: dezocine (35)

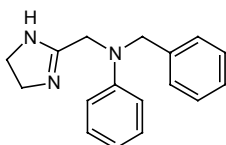
TRS 581

**-azolam**      **see -azepam**

USAN

**-azoline**      **antihistaminics or local vasoconstrictors, antazoline derivatives**

E.4.0.0      (USAN: antihistaminics or local vasoconstrictors of the antazoline group)



- (a)      antazoline (1), cilutazoline (61), cirazoline (38), clonazoline (18), coumazoline (26), domazoline (30), fenoxazoline (12), indanazoline (42), metrafazoline (33), naphazoline (1), nemazoline (63), oxymetazoline (13), phenamazoline (6), prednazoline (22), tefazoline (24), tinazoline (39), tramazoline (15), xylometazoline (8)
- (b)      cefazolin (25) (antibiotic)
- (c)      tetrazyoline (6), metizoline (22)

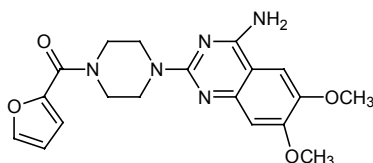
TRS 581

**-azone**      **see -buzone**

USAN

**-azosin**      **antihypertensive substances, prazosin derivatives**

H.3.0.0      (USAN: antihypertensives (prazosin type))



- (a)      bunazosin (50), doxazosin (47), neldazosin (60), prazosin (22), quinazosin (17), terazosin (44), tiodazosin (41), trimazosin (31)

related: alfuzosin (49), tamsulosin (65), tipentosin (55)

BAN, USAN

**-bactam       $\beta$ -lactamase inhibitors**

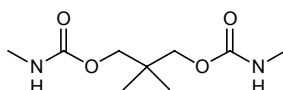
S.6.5.0

- (a) brobactam (53), sulbactam (44), tazobactam (60)
- (c) clavulanic acid (44)

BAN, USAN

**-bamate      tranquilizers, propanediol and pentanediol derivatives**

C.1.0.0



- (a) cyclobamate (13), meprobamate (6), nisobamate (21), pentabamate (13), tybamate (14)
- (b) difebarbamate (16), febarbamate (12), lorbamate (24), phenprobamate (10)
- (c) mebutamate (12), metaglycodol (12) (not a carbamate)

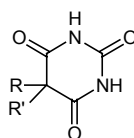
TRS 581

BAN, USAN

**barb (d)      hypnotics, barbituric acid derivatives**

A.2.1.0

(BAN: -barb, -barb-: for barbiturates)  
(USAN: -barb; or -barb-: barbituric acid derivatives)



- (a) allobarbital (1), amobarbital (1), aprobarbital (1), barbexa-clone (16), barbital (4), barbital sodium (4), benzobarbital (25), brallobarbital (41), carbubarb (14), cyclobarbital (1), difebarbamate (16), eterobarb (32), febarbamate (12), heptabarb (14), hexobarbital (1), methylphenobarbital (1), nealbarbital (11), pentobarbital (1), phenobarbital (4), phenobarbital sodium (4), probarbital sodium (1), proxibarbal (33), secbutabarbital (12), secobarbital (4), tetrabarbital (4), thialbarbital (4), thiotetrabarbital (4), vinbarbital (1)
- (c) butalbital (4), buthalital sodium (8), metharbital (1), methitural (6), methohexital (8), phetharbital (10), talbutal (17), thiopental sodium (4), vinylbital (12)

prazitone (19) (barbituric acid derivative used as antidepressive), bucolome (17) (barbituric acid derivative used as anti-inflammatory uricosuric)

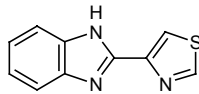
TRS 581

**-bandan**      **see -dan**

USAN

**-bendazole**    **anthelmintics, tiabendazole derivatives**

S.3.1.0      (USAN: anthelmintics (tiabendazole type))



(a)      albendazole (35), albendazole oxide (56), bisbendazole (29), cambendazole (24), ciclo bendazole (31), dribendazole (49), etibendazole (49), fenbendazole (29), flubendazole (34), lobendazole (28), luxabendazole (52), mebendazole (24), oxibendazole (30), parbendazole (19), subendazole (31), tiabendazole (13), triclabendazole (45)

(b)      bendazol (12) (vasodilator, also benzimidazole derivative)

L.0.0.0: nocodazole (36), procodazole (36) (also benzimidazole derivative)

(c)      oxfendazole (35), tioxidazole (39)

related: furodazole (37) (S.3.1.0)

TRS 581

BAN, USAN

**bol (x)**      **anabolic steroids**

M.4.1.0      (BAN: steroids, anabolic)  
(USAN: bol- or -bol- : anabolic steroids)

(a)      bolandiol (16), bolasterone (13), bolazine (21), boldenone (20), bolenol (19), bolmantalate (16), clostebol (22), enestebol (22), formebolone (31), furazabol (16), mebolazine (21), mesabolone (29), metribolone (17), mibolerone (27), norboletone (15), norclostebol (22), oxabolone cipationate (14), quinbolone (14), roxibolone (40), stenbolone (17), tibolone (22), trenbolone (24)

(c)      ethylestrenol (13), hydroxystenozole (10), metandienone (12), metenolone (12), oxandrolone (12), propetandrol (13), tiomesterone (14)

**-bradine      bradycardic agents**

H.0.0.0

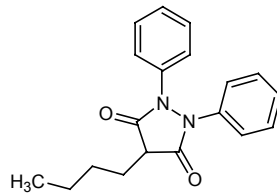
- (a)            cilobradine (63), ivabradine (75), zatebradine (62)

**-brate            see -fibrate**

USAN

**-buzome (x)    anti-inflammatory analgesics, phenylbutazone derivatives**

A.4.2.0



- (a)            feclobuzone (27), kebuzone (19), pipebuzone (25), suxibuzone (24), tribuzone (33)

**-butazone        (USAN: anti-inflammatory analgesics of the phenylbutazone type)**

mofebutazone (15), oxyphenbutazone (8), phenylbutazone (1)

**-azone            aminophenazone (13), bisfenazone (33), famprofazone (21), morazone (12), nifenazone (15), nimazone (20), niprofazone (29), phenazone (4), propyphenazone (1), sulfinpyrazone (8)****-zone            clofezone (17), proxifezone (24)**related:        azapropazone (18), benhepazone (15), bumadizone (24), cinnopentazone (17), isamfazone (37), metamfazone (12), osmadizone (26), ruvazone (26)

- (c)            benzpiperylone (12), butopyrammonium iodide (8), dibupyrone (17), metamizole sodium (53), metazamide (16), piperylone (11)

TRS 581

BAN, USAN

**-caine (x)        local anaesthetics**

D.1.0.0

- (a)            ambucaine (6), amoxecaine (1), aptocaine (21), articaine (47) (previously carticaine (27)), benzocaine (42), betoxycaine (13), bucricaine (49), bumecaine (25), bupivacaine (17),

butacaine (4), butanilcaine (16), chlorprocaine (6), cinchocaine (1), clibucaine (14), clodacaine (13), clormecaine (17), cyclomethycaine (6), dexivacaine (20), diamocaine (22), edronocaine (84), elucaine (29), etidocaine (29), fexicaine (25), fomocaine (18), hexylcaine (4), hydroxyprocaine (1), hydroxytetracaine (1), ipravacaine (85), ketocaine (15), leucinocaine (17), levobupivacaine (74), lidocaine (1), lotucaine (27), mepivacaine (11), meprylcaine (4), myrtecaine (15), octacaine (14), oxetacaine (13), oxybuprocaine (8), parethoxycaine (1), paridocaine (8), phenacaine (4), pinolcaine (32), piperocaine (1), piridocaine (1), pramocaine (4), pribecaine (32), prilocaine (14), procaine (10), propanocaine (6), propipocaine (16), propoxycaine (4) proxymetacaine (6), pyrrocaine (13), quatacaine (18), quinisocaine (4), risocaine (26), rodocaine (27), ropivacaine (50), tetracaine (4), tolycaine (16), trapencaine (56), trimecaine (11), vadocaine (57)

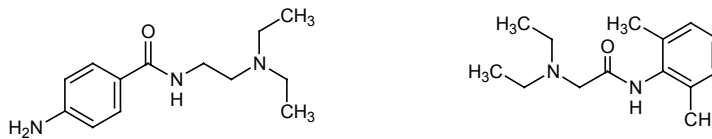
- (c) amolanone (6), benzyl alcohol (1), cryofluorane (6), dipiperodon (1), dyclonine (6), midamaline (6)

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 BAN

**-cain- (x) Class I antiarrhythmics, procainamide and lidocaine derivatives**

H.2.0.0 (BAN: antifibrillants with local anaesthetic activity)



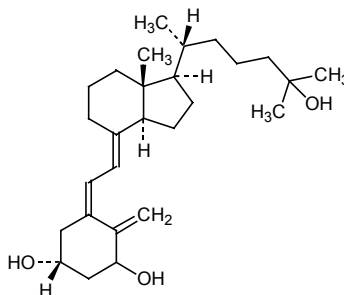
- (a) acecainide (39), asocainol (47), barucainide (52), bucaïnide (35), carcainium chloride (36), carocainide (46), droxicainide (47), encainide (40), epicainide (40), erocainide (50), flecainide (37), guafecainol (38), indecainide (48) (originally ricainide (47)), itrocainide (54), ketocainol (32), lorcainide (38), milacainide (77), modecainide (63), murocainide (46), nicainoprol (46), nofecainide (44), pilsicainide (62), pincainide (49), procainamide (1), quinacainol (50), recainam (54), solpecainol (55), stirocainide (47), suricainide (55), tocaïnide (36), transcainide (51), (verocainine (42) - replaced by tiapamil in List 43), zocainone (41)

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 USAN

**calci Vitamin D analogues/derivatives**

N.8.0.0



- (a) alfacalcidol (40), calcifediol (26), calcipotriol (61), calcitriol (39), colecalfiferol (13), doxercalfiferol (82), ecalcidene (85), ergocalciferol (13), falecalcitriol (74), inecalcitol (87), lexacalcitol (71), maxacalcitol (75), paricalcitol (78), secalfiferol (62), seocalcitol (78), tacalcitol (65)
- (b) calcitonin (31) (polypeptide)
- (c) dihydrotachysterol (1)

USAN

**-carbef antibiotics, carbacepham derivatives**

## S.6.1.0

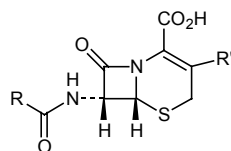
- (a) loracarbef (60)

**-carnil see -azenil**

BAN, USAN

**cef- (x) antibiotics, cefalosporanic acid derivatives**

## S.6.1.0 (USAN: cephalosporins)

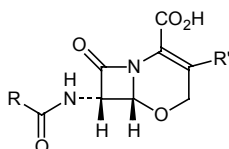


- (a) cefacetrile (25), cefaclor (36), cefadroxil (33), cefalexin (18), cefaloglycin (16), cefalonium (16), cefaloram (16), cefaloridine (15), cefalotin (14), cefamandole (30), cefaparole (33), cefapirin (23), cefatrizine (34), cefazaflur (36), cefazedone (36), cefazolin (25), cefbuperazone (48), cefcanel (59), cefcanel daloxate (59), cefcapene (68), cefclidine (64), cefdaloxime (64), cefdinir (61), cefditoren (66), cefedrolor (53), cefempidone (58), cefepime (57), cefetamet (49), cefetecol (64), cefetrizole (44), cefivitril (52), cefixime (53), cefizopran (66), cefluprenam (71), cefmatilen (81), cefmenoxime (44), cefmepidium chloride (57), cefmetazole (39), cefminox (53), cefodizime (44), cefonicid (42), cefoperazone (42), ceforanide (39), cefoselis (71), cefotaxime (40), cefotetan (48), cefotiam (40), cefoxazole (34), cefoxitin (29), cefozopran (66), cefpimizole (50), cefpiramide (47), cefpirome (50), cefpodoxime (58), cefprozil (60), cefquinome (59), cefradine (26), cefrotil (34), cefroxadine (42), cefsulodin (38), cefsumide (38), ceftazidime (44), cefteram (55), ceftazole (34), ceftibuten (60), ceftiofur (53), ceftiolene (49), ceftioxide (43), ceftizoxime (42), ceftizoxime alaproxil (77), ceftriaxone (44), cefuracetime (45), cefuroxime (34), cefuzonam (55)



**-oxef**                    **antibiotics, oxacefalosporanic acid derivatives**

S.6.1.0                (USAN: antibiotic oxacefalosporanic acid derivatives)



(a)                    flomoxef (55), latamoxef (46)

**cell- or**                **cellulose derivatives**  
**cel-**                    **[cel- in spanish]**

U.4.0.0

(a)                    celucloral (40)

(c)                    celiprolol (35)

**cell-ate**                **cellulose ester derivatives for substances containing acidic residues**

U.4.0.0                **[cel-ato in spanish]**

(a)                    cellaburate (23), cellacefate (18)

**-cellose**                **cellulose ether derivatives**

U.4.0.0                **[-elosa in spanish]**

(a)                    -

(c)                    carmellose (45), croscarmellose (48), ethylcellulose (80), hyetellose (80), hymetellose (80), hyprolose (80), hypromellose (18), methylcellulose (4)

USAN

**-cic**                    **hepatoprotective substances with a carboxylic acid group**

J.1.2.0                (USAN: hepatoprotectives (timonacic group))

(a)                    limazocic (69), tidiacic (33), timonacic (33), (tiofacic (45) replaced by stepronin (46))

(b)                    bisorcic (34) (psychostimulant)

(c)                    stepronin (46)

USAN

**-cidin** naturally occurring antibiotics (undefined group) (14th Report, 1964)

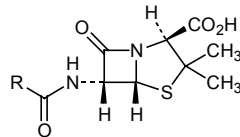
S.6.0.0 (USAN: natural antibiotics (undefined group))

- (a) candicidin (17), gramicidin (1), gramicidin S (26), methocidin (6)
- (b) guancidine (18) (hypotensive)

BAN, USAN

**-cillin (x)** antibiotics, 6-aminopenicillanic acid derivatives

S.6.1.0 (USAN: penicillins)



- (a) adicillin (14), almecillin (14), amantocillin (17), amoxicillin (27), ampicillin (13), apalcillin (39), aspoxicillin (50), azidocillin (19), azlocillin (36), bacampicillin (32), benethamine penicillin (1), benzathine benzylpenicillin (18), benzylpenicillin (53), carbenicillin (20), carfecillin (30), carindacillin (29), ciclacillin (22), clemizole penicillin (8), clometocillin (12), cloxacillin (13), dicloxacillin (16), epicillin (25), fenbenicillin (13), fibracillin (30), flucloxacillin (17), fomidacillin (55), fumoxicillin (47), furbucillin (31), fuzlocillin (47), hetacillin (16), isopropicillin (12), lenampicillin (50), levopropicillin (12), metampicillin (20), meticillin (12), mezlocillin (34), nafcillin (13), oxacillin (15), oxetacillin (33), penamecillin (16), pheneticillin (11), phenoxymethyl penicillin (6), phenyracillin (8), piperacillin (38), pirbenicillin (35), piridicillin (43), piroxicillin (49), pivampicillin (23), prazocillin (27), propicillin (13), quinacillin (14), rotamicillin (35), sarmoxicillin (41), sarpicillin (36), sulbenicillin (26), sultamicillin (48), suncillin (25), talampicillin (31), tameticillin (35), temocillin (46), ticarcillin (29), tifencillin (12), tobicillin (78)
- (b) xantocillin (12)
- (c) penimepicycline (16), penimocycline (22)

**-cillide:**

S.6.1.0 libecillide (32)

**-cillinam:**

S.6.1.0 bacmecillinam (38), mecillinam (32), pivmecillinam (32)

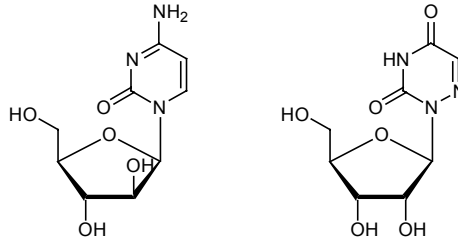
TRS 581

**-cysteine**      **see -steine**

USAN

**-citabine**      **nucleoside antiviral or antineoplastic agents, cytarabine or azarabine derivatives**

L.4.0.0



- (a) ancitabine (36), capecitabine (72), decitabine (61), enocitabine (46), fiacitabine (59), flurocitabine (38), galocitabine (65), gemcitabine (62), ibacitabine (57), tezacitabine (84), torcitabine (87), troxacitabine (81), zalcitabine (66)
- (b) cytarabine (14), azacitidine (40)

**-clone**      **hypnotic tranquillizers**

A.2.2.0

- (a) barbexaclone (16), eszopiclone (87), pagoclone (74), pazinaclone (70), suproclone (46), suriclone (43), suproclone (46), zopiclone (39)
- (b) gestaclone (23), pimeclone (20)

**-cog**      **blood coagulation factors**

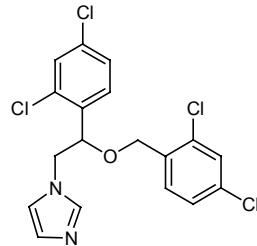
I.2.0.0

- (-)*eptacog* blood coagulation VII:      eptacog alfa (activated) (72)
- (-)*octocog* blood factor VIII:      moroctocog alfa (72), octocog alfa (73)
- (-)*nonacog* blood factor IX:      nonacog alfa (77)
- related: drotrecogin alfa (85), tifacogin (78)

BAN, USAN

**-conazole (x) systemic antifungal agents, miconazole derivatives**

S.4.0.0 (BAN: systemic antifungals of the miconazole group)  
(USAN: systemic antifungals (miconazole type))

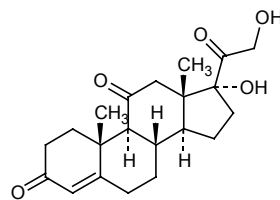


- (a) albaconazole (87), aliconazole (43), alteconazole (53), azaconazole (45), becliconazole (65), brolaconazole (58), butoconazole (40), ciskonazole (59), croconazole (55), (cyproconazole (ISO)), democonazole (42), (diniconazole (ISO C<sub>17</sub>H<sub>17</sub>Cl<sub>2</sub>N<sub>3</sub>O)), doconazole (37), eberconazole (64), econazole (27), enilconazole (44), ((etaconazole (ISO)), fenticonazole (44), fluconazole (54), fosfluconazole (83), ((furconazole (ISO/TC 81 N 872 C<sub>15</sub>H<sub>14</sub>Cl<sub>2</sub>F<sub>3</sub>N<sub>3</sub>O<sub>2</sub>)), (hexaconazole (ISO C<sub>14</sub>H<sub>17</sub>Cl<sub>2</sub>N<sub>3</sub>O)), isoconazole (30), itraconazole (50), ketoconazole (43), lanoconazole (66), luliconazole (86), miconazole (22), neticonazole (63), omoconazole (45), orconazole (40), oxiconazole (42), parconazole (39), (penconazole, (ISO)), posaconazole (82), (propiconazole (ISO)), ravuconazole (83), saperconazole (59), sertaconazole (56), sulconazole (38), (tebuconazole (ISO C<sub>16</sub>H<sub>22</sub>ClN<sub>3</sub>O)), terconazole (45) (originally triaconazole), tioconazole (40), (uniconazole (ISO C<sub>15</sub>H<sub>18</sub>ClN<sub>3</sub>O)), valconazole (40), voriconazole (73), zinoconazole (50), zoficonazole (43)
- (c) bifonazole (44)

BAN, USAN

**cort (x) corticosteroids, except prednisolone derivatives**

Q.3.0.0 (USAN: -cort-: cortisone derivatives)



- (a) amebucort (54), anecortave (80), butixocort (63), cicortonide (28), corticotropin (68), corticotropin-zinc hydroxide (68), cortisone (1), cortisuzol (30), cortivazol (23), cortodoxone (15), deflazacort (39) (previously azacort (38)), desoxycortone (4), fluazacort (30), fludrocortisone (6), fludroxycortide (12), fluocortin (31), formocortal (18), hydrocortamate (6), hydrocortisone (1), locicortolone dicibate (60), naflocort (50), nicocortonide (40), nivacortol (24), resocortol (74), tixocortol (38)

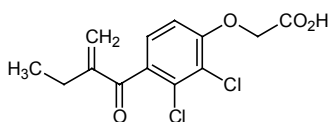
- (b) prednisolone derivatives: clocortolone (16), difluocortolone (18), fluocortolone (15), halocortolone (31)
- (c) aldosterone (6), algestone (22) (also progest. when used as algestone acetophenide), medrysone (16)

TRS 581

USAN

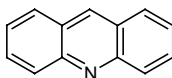
**-crinat diuretics, etacrynic acid derivatives**

N.1.2.2 (USAN: diuretics (ethacrynic acid derivatives))



- (a) brocrinat (51), sulicrinat (52)
- (c) etacrynic acid (14), furacrinic acid (29), indacrinone (51), tienilic acid (25)

USAN

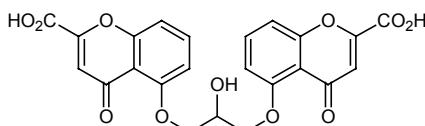
**-crine (d) acridine derivatives**

- (a) antineoplastics: amsacrine (44), nitracrine (35)  
anthelmintics; antimalarials: floxacrine (34), mepacrine (4)  
antidepressants: dimetacrine (19), monometacrine (19)  
antiparkinsonian: botiacrine (38)  
acetylcholinesterase inhibitors: ipidacrine (73), suronacrine (61), tacrine (8), velnacrine (61)
- (c) acridorex (21), acriflavinium chloride (1), acrisorcine (13), aminoacridine (1), ethacridine (1), proflavine (1)

USAN

**-cromil antiallergics, cromoglicic acid derivatives**

K.0.0.0 (USAN: antiallergics (cromoglicic acid type))



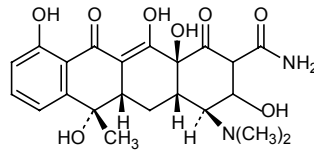
- (a) ambicromil (48) (replacement of probicromil (46)), isocromil (39), minocromil (50), nedocromil (50), proxicromil (39), terbucromil (38), texacromil (58)
- (c) cromitrile (46), cromoglicate lisetil (72), cromoglicic acid (18)

**-curium**      **see -ium**

BAN, USAN

**-cycline (d)**    **antibiotics, tetracycline derivatives**

S.6.3.0      (BAN: antibiotics of the tetracycline group)  
 (USAN: antibiotics tetracycline derivatives)



- (a) amicycline (14), apicycline (17), cetocycline (39), chlortetracycline (4), clomocycline (16), colimecycline (33), demeclocycline (25), demecycline (14), doxycycline (16), etamocycline (18), guamecycline (22), lymecycline (14), meclocycline (14), meglucycline (22), metacycline (12), minocycline (14), nitrocycline (14), oxytetracycline (1), pecocycline (15), penimepicycline (16), penimocycline (22), pipacycline (12), rolitetracycline (11), sancycline (15), tetracycline (4), tigecycline (86)

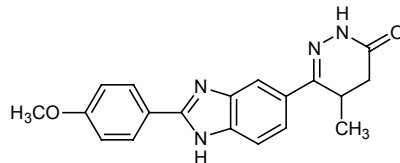
related: carubicin (40), daunorubicin (20), detorubicin (41), doxorubicin (25), zorubicin (39)

TRS 581

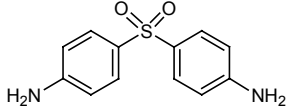
USAN

**-dan**      **cardiac stimulants, pimobendan derivatives**

H.1.0.0



- (a) adibendan (57), bemorodan (61), imazodan (55), indolidan (57), levosimendan (68), meribendan (62), pimobendan (46), prinoxodan (64), senazodan (85), simendan (66)
- (b) nitrodan (15), tyromedan (15)

		USAN
<b>-dapsone</b>	<b>antimycobacterials, diaminodiphenylsulfone derivatives (14th Report, 1964)</b>	
S.5.2.0	(USAN: antimycobacterial diaminodiphenylsulfone derivatives)	
		
(a)	acedapsone (22), amidapsone (28), dapsone (23)	
<b>-dermin</b>	<b>see –ermin</b>	
		USAN
<b>-dil</b>	<b>vasodilators (18th Report, 1968)</b>	
F.2.0.0		
F.2.1./2.0	(USAN: -dil; dil-; or -dil-: vasodilators (undefined group))	
F.2.0.0		
(a)	alprostadil (39), aviptadil (78), belfosdil (61), benfurodil hemisuccinate (16), biclodil (52), buflomedil (33), burodiline (26), carprazidil (45), cetiedil (27), cinepaxadil (50), dopropidil (59), eliprodil (66), fenoxedil (27), flosatidil (64), fostedil (51), fronepidil (59), ifenprodil (27), levosemotiadil (72), manozodil (47), mefenidil (48), minoxidil (25), naftopidil (52), naminidil (87), nesapidil (52), perfomedil (60), pinacidil (46), piribedil (23), pitenodil (37), podilfen (22), stevaladil (34), suloctidil (30), tipropidil (44), urapidil (27), viquidil (25)	
(c)	<u>dilmefone</u> (33)	
F.2.1.0		
(a)	<u>coronary vasodilators</u> : bepridil (30), bumepidil (44), ecipramidil (40), fendiline (24), fenetradil (30), floredil (28), hexadiline (13), ipramidil (51), mepramidil (27), metrifudil (23), nicorandil (44), pirozadil (33), pretiadil (27), razi-nodil (38), semotiadil (64), sinitrodil (74), terodiline (16), tixadil (18), trapidil (29)	
(c)	<u>dilazep</u> (22), <u>diltiazem</u> (30)	
<b>-dilol</b>	carvedilol (50), dioxadilol (53), dramedilol (57), flavodilol (48), mindodilol (52), nipradilol (50) (previously nipradolol), oberadilol (77), parodilol (57), prizidilol (44), tribendilol (54)	
(b)	diloxanide (8) (amebicide), methdilazine (10) (antihistaminic), phenobutiodil (6) (contrast medium), prodilidine (12) (analgesic)	
<b>-pendyl</b>	cloxypendyl (15), isothipendyl (6), oxypendyl (13), prothipendyl (6)	

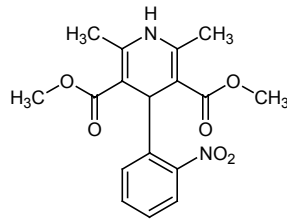
**-dyl** bisacodyl (13) (lax.), bunamiodyl (10), iofendylate (12), trihexyphenidyl (1) (antiparksonian)

TRS 581

BAN, USAN

**-dipine (x)** **calcium channel blockers, nifedipine derivatives**

F.2.1.0 (BAN: calcium ion channel antagonists)  
(USAN: phenylpyridine vasodilators (nifedipine type))

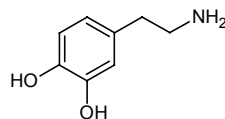


- (a) amlodipine (53), aranidipine (69), azelnidipine (69), barnidipine (64), benidipine (58), cilnidipine (66), clevidipine (75), cronidipine (61), darodipine (51) (replaces dazodipine (49)), efonidipine (66), elgodipine (61), felodipine (44), flordipine (48), furnidipine (67), iganidipine (70), isradipine (55), lacidipine (57), lemildipine (69), lercanidipine (69) (previously masnidipine), levniguldipine (67), manidipine (59), mesudipine (40), nicardipine (42), nifedipine (27), niguldipine (60), niludipine (38), nilvadipine (52), nimodipine (40), nisoldipine (42), nitrendipine (42), olradipine (69), oxodipine (52), palonidipine (64), pranidipine (66), riodipine (51), sagandipine (64), sornidipine (58), teludipine (64) (previously taludipine (61))
- (b) budipine (36) (central stimulant, antidepressant and antiparkinsonian), prodipine (29) (central stimulant antiparkinsonian)

**-dismase** **enzymes with superoxide dismutase activity, see -ase item V**

**-dopa** **dopamine receptor agonists, dopamine derivatives, used as antiparkinsonism/  
prolactin inhibitors**

E.1.1.0



- (a) carbidopa (37), ciladopa (52), dopamantine (31), droxidopa (57), etilevodopa (80), fluorodopa (<sup>18</sup>F) (64), levodopa (21), melevodopa (83)

**-opamine** **dopaminergic agents dopamine derivatives used as cardiac stimulant/  
antihypertensives/diuretics**

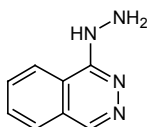


- (a) butopamine (43), cliropamine (59), denopamine (50), dopamine (18), fosopamine (69), ibopamine (43), octopamine (32), oxidopamine (37) (glaucoma), ractopamine (54) (1 of 4 isomers of butopamine)
- (b) tiopropamine (36) (gastric and duodenal ulcers), tolpropamine (13) (antihistaminic)
- (c) dobutamine (29), docarpamine (59), dopexamine (50), fenoldopam (53), levdobutamine (65), methyldopa (12) (alpha-2 adrenoreceptor agonist, cardiogenic), zelandopam (84)

USAN

**-dralazine antihypertensives, hydrazinephthalazine derivatives**

H.3.0.0 (USAN: antihypertensives (hydrazine-phthalazines))



- (a) budralazine (33), cadralazine (41), dihydralazine (4), endralazine (39), hydralazine (1), mopidralazine (52), oxdralazine (38), picodralazine (18), pildralazine (48), todralazine (26)

**-drine sympathomimetics (16th Report, 1966)**

E.4.0.0

- (a) alifedrine (49), butidrine (16), cafedrine (14), cinnamedrine (19), corbadrine (1), dioxethedrin (6), dioxifedrine (41), etafedrine (14), meluadrine (78), methoxyphedrine (6), midodrine (27), norbudrine (17), oxyfedrine (16), pholedrine (1), pseudoephedrine (11), racephedrine (66), ritodrine (22), theophylline ephedrine (14), tinofedrine (32), trecadrine (53)

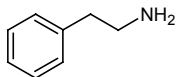
not phenethylamine derivatives: levopropylhexedrine (37), octodrine (19), propylhexedrine (6)

- (b) bufenadrine (13) (antiemetic) related chemically, chlormerodrin (4) (diuretic), chlormerodrin (197 Hg) (24), dieldrin (10) (insecticide), orphenadrine (8) (spasmolytic)

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**-frine sympathomimetic, phenethyl derivatives**

E.4.0.0



- (a) amidefrine mesilate (15), berefrine (68), ciclafrine (33), dimetofrine (27), dipivefrine (39), epinephrine (16), etilefrine (18), etilefrine pivalate (50), gepefrine (38), norepinephrine (45), norfenefrine (16), oxilofrine (62), phenylephrine (1), pivenfrine (42), racepinefrine (41)

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 USAN

**-dronic acid calcium metabolism regulator, pharmaceutical aid**

N.8.0.0

U.4.0.0 (USAN: -dronate: calcium metabolism regulators)

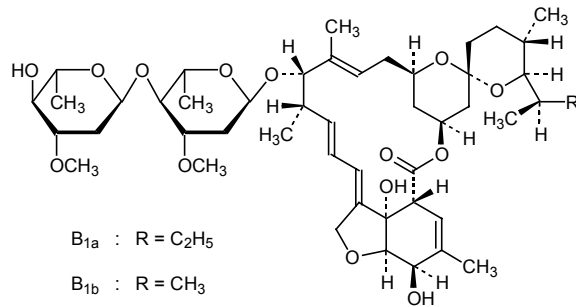
- (a) alendronic acid (61), butedronic acid (59), clodronic acid (37), etidronic acid (22), ibandronic acid (71), incadronic acid (70), lidadronic acid (84), medronic acid (39), minodronic acid (78), neridronic acid (61), olpadronic acid (71), oxidronic acid (42), pamidronic acid (59), piridronic acid (58), risedronic acid (62), tiludronic acid (60), zoledronic acid (71)

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 USAN

**-ectin antiparasitics, ivermectin derivatives**

S.3.0.0



- (a) abamectin (53), dimadectin (73), doramectin (63), eprinomectin (73), fuladectin (71), ivermectin (44), moxidectin (61), nemadectin (60), selamectin (81)

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 USAN

**-entan endothelin receptor antagonists**

F.2.0.0

- (a) ambrisentan (85), atrasentan (83), bosentan (70), darusentan (82), edonentan (86), enrasentan (80), fandosentan (87), feloprentan (85), sitaxentan (83), tezosentan (81)

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 USAN

**erg ergot alkaloid derivatives**

F.4.0.0

C.7.0.0 (USAN: -erg-: ergot alkaloid derivatives)

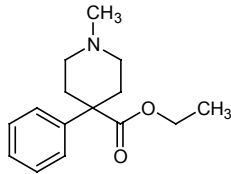
- (a) acetergamine (18), amesergide (67), brazergoline (37), bromerguride (51), cabergoline (54), cianergoline (47), delergotril (42), dihydroergotamine (16), disulergine (45), dosergoside (54), ergometrine (4), ergotamine (4), etisulergine (47), lergotril (32), lysergide (8), mergocriptine (54), mesulergine (47), metergoline (18), metergotamine (29), methylergometrine (1), methysergide (11), nicergoline (26), pergolide (41), propisergide (35), proterguride (50), romergoline (66), sergolexole (60), terguride (50), tiomergine (42), voxergolide (61)
- (b) ergocalciferol (13)

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 USAN

**-eridine analgesics, pethidine derivatives (14th Report, 1964)**

A.4.1.0 (USAN: analgesics (meperidine group))



- (a) anileridine (5), carperidine (11), etoxeridine (6), morpheridine (6), oxpheneridine (5), pheneridine (5), phenoperidine (11), properidine (5), sameridine (68), trimeperidine (6)
- (b) diaveridine (18) (cocciostat.), eseridine (53), nexeridine (34) (somewhat related)
- (c) benzethidine (9), butoxylate (14), diphenoxylate (10), fetoxilate (21), furethidine (9), hydroxypethidine (5), pethidine (4), piminodine (9)

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 USAN

**-ermin growth factors**

U.0.0.0 (USAN: growth factors)

**-bermin vascular endothelial growth factors**

- (a) telbermin (85)

**-dermin epidermal growth factors**

- (a) murodermin (63)

**-fermin fibrinoblast growth factors**

- (a) ersofermin (66), palifermin (86), repifermin (82), trafermin (74)

**-filermin leukemia-inhibiting factor**

(a) emfilermin (82)

*-nermin* **tumour necrosis factor**

(a) plusonermin (73), sonermin (68), tasonermin (76)

*-plermin* **platelet-derived growth factor**

(a) becaplermin (74)

*-sermin* **insulin-like growth factors**

(a) mecasermin (66)

*-termin* **transforming growth factor**

avotermin (77), cetermin (74), liatermin (81)

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BAN, USAN

**estr** **estrogens**

Q.2.1.0 (USAN: estr-; or -estr-: estrogens)

(a) almestrone (24), benze**st**rol (1), bro**pa**restrol (8), clo**xe**stradiol (12), die**ne**strol (1), diethylstil**be**strol (4), epi**est**riol (12), epi**me**strol (22), (eptame**st**rol/eta**me**strol (49) deleted), e**st**radiol (4), e**st**radiol benzoate (4), e**st**radiol undecylate (16), e**st**radiol valerate (35), e**st**ram**ust**ine (24), e**st**rapro**nic**ate (34), e**st**razinol (16), e**st**riol succinate (14), e**st**rofu**ra**te (25), e**st**rone (4), ethinyle**st**radiol (1), fe**ne**strel (18), fo**sf**estrol (15), fu**lv**estrant (78), fu**ro**stil**be**strol (1), he**xe**strol (1), me**st**ranol (12), me**th**allenestril (6), me**th**estrol (1), mo**xe**strol (24), ni**le**strial (32), ore**st**rate (17), po**ly**e**st**radiol phosphate (36), pro**me**strie**ne** (31), qui**ne**stradol (15), qui**ne**strol (14)

(b) alfatradiol (84) (topical), allylestrenol (10) (progest.), ethylestrenol (13) (anabol.), lynestrenol (13) (progest.)

*-gestr-:* edog**est**rone (22), levonorg**est**rel (30), me**gest**rol (13), meleng**est**rol (13), norgestrel (17), norgestrienone (18), pentage**st**rone (14), quing**est**rone (13)

(c) chlorotrianisene (6), clomifene (12), enclomifene (33), zuclomifene (33) (antiestrogens)

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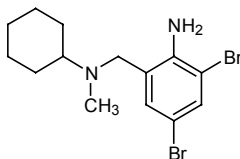
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**-etanide** **see -anide**

**-ethidine**      **see -eridine**

**-exine**          **mucoytic, bromhexine derivatives**

K.0.0.0



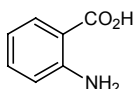
- (a)            adamexine (36), bromhexine (20), brovanexine (31), cistinexine (54), dembexine (56), neltenexine (62), oxabrexine (40)
- (b)            enefexine (54) (antidepressant), gamfexine (17) (antidepressant)
- (c)            ambroxol (32) (dembrexol (50): replaced by dembexine (56))

USAN

**-fenamic acid**      **anti-inflammatory, anthranilic acid derivatives**

**-fenamate**      **"fenamic acid" derivatives**

A.4.2.0

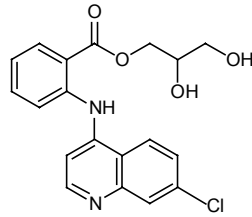


- (a)            clofenamic acid (13), enfenamic acid (45), flufenamic acid (13), meclofenamic acid (17), mefenamic acid (13), tolfenamic acid (24)
- colfenamate (29), etofenamate (29), prefenamate (36), terofenamate (32), ufenamate (50)
- (b)            clantifen (24), oxyfenamate (13)
- phonetically close: clofenamide (13), diclofenamide (13) (N.1.1.0)
- (c)            flutiazin (22)

USAN

**-fenine  
phenine**      **analgesics, glafenine derivatives (subgroup of fenamic acid group)**

A.4.3.0

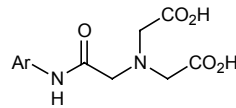


- (a) antrafenine (35), floctafenine (24), florifenine (50), glafenine (15), nicafenine (40)
- (b) spasmolytic diphenylacetates: adiphenine (1), drofenine (26)  
other: bufenine (8) (vasodil.), cifenine (27) (antidepressant)

USAN

**-fenin**      **diagnostic aids; (phenylcarbamoyl)methyl iminodiacetic acid derivatives**

U.1.0.0

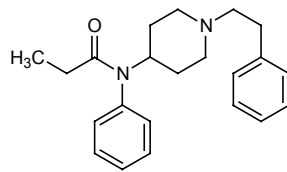


- (a) arclofenin (52), butilfenin (41), disofenin (43), etifenin (43), galtifenin (59), lidofenin (39), mebrofenin (47)

USAN

**-fentanil**      **narcotic analgesics, fentanyl derivatives**

A.4.1.0



- (a) alfentanil (43), brifentanil (62), carfentanil (39), fentanyl (14), lofentanil (43), mirfentanil (64), ofentanil (61), remifentanil (67), sufentanil (36), trefentanil (67)

**-fiban**      **fibrinogen receptor antagonists (glycoprotein IIb/IIIa receptor antagonists)**

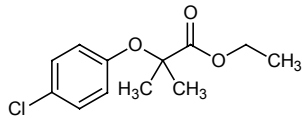
I.2.0.0

- carafiban (78), elarofiban (83), fradafiban (72), gantofiban (80), lamifiban (72), lefradafiban (75), lotrafiban (78), orbofiban (75), roxifiban (77), sibrafiban (77), tirofiban (73), xemilofiban (74)

BAN, USAN

**-fibrate (x) clofibrate derivatives**

H.4.0.0 (BAN: substances of the clofibrate group)  
(USAN: clofibrate type compounds)



(a) bezafibrate (35), biclofibrate (28), binifibrate (44), ciprofibrate (36), clinofibrate (39), dulofibrate (43), etofibrate (31), fenirofibrate (49), fenofibrate (35), lifibrate (30), nicofibrate (31), picafibrate (35), ponfibrate (37), ronifibrate (55), salafibrate (41), serfibrate (34), simfibrate (22), sitofibrate (32), tiafibrate (33), timofibrate (40), tocofibrate (33), urefibrate (37), xantifibrate (31)

clofibrinic acid (20), clofibrate (13), aluminium clofibrate (31), calcium clofibrate (34), cinnarizine clofibrate (38), etofylline clofibrate (38), magnesium clofibrate (31)

clofibrinide (28), plafibrinide (39)

related: beclobrate (35), eniclobrate (39), gemfibrozil (34), halofenate (20), lifibrol (62), metibrinide (53), terbufibrol (35), tibric acid (33), (fibrafylline (43) deleted)

(b) bromebric acid (25) (prophylaxis of migraine), fibracillin (30) (antibiotic)

(c) nafenopin (24), treloxinate (25)

TRS 581

**-flapon 5-lipoxygenase-activating protein (FLAP) inhibitor**

K.0.0.0

J.0.0.0

quiflapon (72)

**-flurane halogenated compounds used as general inhalation anaesthetics**

A.1.1.0

(a) aliflurane (36), cryofluorane (6), desflurane (62), enflurane (25), isoflurane (28), methoxyflurane (11), norflurane (20), roflurane (12), sevoflurane (25), teflurane (12)

(b) apafurane (73)

(c) halothane (6)

TRS 581

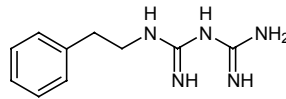
**perfl(u)- perfluorinated compounds used as blood substitutes and/or diagnostic agents**

(a) perflexane (82), perfluamine (45), perflubrodec (87), perflubron (66), perflunafene (45), perflutren (82)

USAN

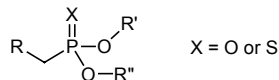
**-formin (d) antihyperglycaemics, phenformin derivatives**

M.5.0.0 (USAN: oral hypoglycemics (phenformin type))



(a) benfosformin (29), buformin (17), etoformin (34), metformin (21), phenformin (10), tiformin (22)

TRS 581

**-fos (-vos) insecticides, anthelmintics, pesticides etc., phosphorous derivatives**S.3.1.0  
Y.0.0.01. organophosphorous derivatives:(a) vet. insecticides:

quintiofos (25)

(b) toldimfos (23) (vet. phosphorous source)

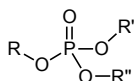
(c) vet. insecticides and anthelmintics:



metrifonate (16)

anthelmintic: butonate (30)

2. phosphates:



(a) vet. insecticides:

clofenvinfos (23)

vet. anthelmintics:

bromofenofos (43), dichlorvos (28), naftalofos (16)

anthelmintics:

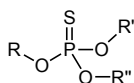
vincofos (28)

(b) triclofos (13) (hypnotic, sedative)

(c) vet. anthelmintics:

fospirate (21), haloxon (16)

3. phosphorothioates:

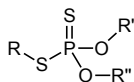


vet. insecticides:

(a) bromofos (25), coumafos (16), fenclofos (23), temefos (31)

(c) dimpylate (16), phoxim (20) (vet. insecticide and anthelmintic), pyrimitate (16)

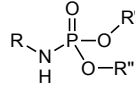
4. phosphorodithioates:



(a) benoxafos (22) (vet. pesticide)

(c) carbofenotion (23) (vet. insecticide), dioxation (16) (vet. insecticide), (malathion (46) (deleted!))

5. phosphoramidates



crufomate (16), uredofos (37)

anthelminthic:

imcarbofos (44)

**-fos- or  
fos-**

**various pharmacological categories belonging to fos (other than those above):**

***-fos-***

alafosfalin (41), amifostine (44), belfosdil (61), benfosformin (29), butafosfan (38), cifostodine (50), creatinolfosfate (20), dexfosfosferine (68), ferpifosate sodium (69), fosmenic acid (49), fosopamine (69), fosquidone (64), furifosmin (70), monophosphothiamine (8), sodium picofosfate (37), sparfosic acid (46), technetium ( $^{99\text{m}}\text{Tc}$ ), tetrofosmin (66), trifosmin (74)

***-fosfamide*** alkylating agents of the cyclophosphamide group

cyclophosphamide (10), defosfamide (12), glufosfamide (77), ifosfamide (23), mafosfamide (51), perfosfamide (66), sufosfamide (36), trofosfamide (23)

***-fosine*** cytostatic

edelfosine (59), fostriecin (55), ilmofosine (56), miltefosine (61), perifosine (78)

***fos-***

fosarilate (53), fosazepam (27), foscarnet sodium (42), foscolic acid (12), fosenazide (46), fosfestrol (15), fosfocreatinine (50), fosfomicin (25), fosfonet sodium (35), fosfosal (37), fosfructose (81), fosmidomycin (46), fostedil (51)

**-fradil**

**alcium channel blockers acting as vasodilators**

F.2.1.0

mibefradil (72)

**-frine**

**see -drine**

USAN

**-fungin      antifungal antibiotics (18th Report, 1968)**

S.6.0.0      (USAN: antifungal antibiotics (undefined group))

S.4.3.0

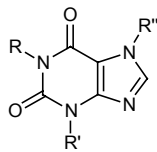
- (a)      abafungin (74), anidulafungin (81), basifungin (72), caspofungin (80), cilofungin (60), fusafungine (15), kalafungin (20), micafungin (84), nifungin (24), oxifungin (40), sinefungin (39), triafungin (40)

TRS 58I

USAN

**-fylline      N-methylated xanthine derivatives**

B.1.0.0



- (a)      acefylline clofibrol (44), acefylline piperazine (14), albifylline (66), aminophylline (4), apaxifylline (71), arofylline (75), bamifylline (15), cipamfylline (71), denbufylline (55), dimabefylline (19), diniprofylline (18), diprophylline (1), doxofylline (47), enprofylline (44), etamiphylline (6), etofylline (14), etofylline clofibrate (38), fibrafylline (43) (deleted), flufylline (48), fluprofylline (50), furafylline (48), guaifylline (16), isbufylline (62), laprafylline (60), lisofylline (72), lomifylline (37), mercurophylline (1), metescufylline (15), mexafylline (48), midaxifylline (79), naxifylline (86), nestifylline (64), pentifylline (29), pentoxifylline (29), perbufylline (58), pimefylline (21), propentofylline (46), proxyphylline (10), pyridofylline (14), spirofylline (58), stacofylline (73), tazifylline (52), theophylline ephedrine (14), torbafylline (56), triclofylline (19), verofylline (43), visnafylline (24), choline theophyllinate (8), fenetylline (16)
- (c)      cafedrine (14), dimenhydrinate (1), dimethazan (8), meralluride (1), mercumatilin sodium (4), piprinhydrinate (8), promethazine teoclate (10), protheobromine (14), theodrenaline (14), xantifibrate (31), xantinol nicotinate (16)

radicals and groups: teprosilate (29)

TRS 58I

USAN

**gab gabamimetic agents**

E.0.0.0

- (a) fengabine (53), gabapentin (46), gaboxadol (48) (used as analgesic), pivagabine (66), pregabalin (78), progabide (43) (used as antiepileptic), retigabine (76), tiagabine (63), tolgabide (53), vigabatrin (52) (anticonvulsants)
- (b) gabexate (35) (proteolytic)

USAN

**gado- diagnostic agents, gadolinium derivatives**

U.0.0.0

- (a) gadobenic acid (64), gadobutrol (66), gadocoletic acid (85), gadodiamide (63), gadomelitol (85), gadopenamide (60), gadopentetic acid (50), gadoteric acid (59), gadoversetamide (71), gadoxetic acid (71)

USAN

**-gatran thrombin inhibitor, antithrombotic agent**

I.2.0.0

- (a) dabigatran (83), dabigatran etexilate (87), efegatran (71), inogatran (72), melagatran (74), napsagatran (72), ximelagatran (84)
- (c) argatroban (57)

BAN, USAN

**gest (x) steroids, progestogens**

Q.2.2.0 (USAN: -gest-: progestins)

- (a) altrenogest (46), anagestone (16), cingestol (20), clogestone (21), clomegestone (20), demegestone (24), desogestrel (38), dexnorgestrel (30), dienogest (49), dydrogesterone (12), edogestrone (22), etonogestrel (65), flugestone (16), gestaclone (23), gestadienol (22), gestodene (37), gestonorone caproate (16), gestrinone (39), haloprogestone (11), hydroxyprogesterone (8), levonorgestrel (33) (previously dexnorgestrel), medrogestone (15), medroxyprogesterone (10), medoxyprogesterone (10), medrogestone (15), megestrol (13), melengestrol (13), metogest (33), norelgestromin (83), norgesterone (14), norgestimate (35), norgestomet (32), norgestrel (17), norgestrienone (18), oxogestone (19), pentagestrone (14), progesterone (4), proligestone (28), promegestone (38), quingestanol (15), quingestrone (13), tigestol (20), tosagestin (86), trengestone (22), trimegestone (66)

- (b) algestone (22) (glucocorticoid)
- (c) allylestrenol (10), chlormadinone (12), cismadinone (12), delmadinone (23), dimethisterone (8), ethisterone (4), ethyneronone (17), etynodiol (13), hydromadinone (12), lynestrenol (13), metynodiol (27), norethisterone (6), noretynodrel (13), norvinisterone (10)
- clometerone (15) (antiestrogen), dimepregnen (24) (antiestrogen)

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 USAN

**-giline**      **MAO-inhibitors type B**

C.3.1.0

- (a) clorgiline (23), mofegiline (69), pargiline (13), rasagiline (70), selegiline (39)

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**-gillin**      **antibiotics produced by *Aspergillus strains* (16th Report, 1966)**

S.6.0.0

- (a) fumagillin (1), mitogillin (17)
- (c) mitosper (24), nifungin (24)

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 BAN, USAN

**gli (x)**      **antihyperglycaemics, sulfonamide derivatives**  
(previously gly-)

M.5.2./3.0      (BAN: sulphonamide hypoglycaemics)  
(USAN: gli-: oral hypoglycemics (glipizide type))

- (a) gliamilide (33), glibenclamide (18), glibornuride (22), glibutimine (31), glicaramide (28), glicetanile (37), gliclazide (25), (deleted: glidanile (23)), glicondamide (44), glidazamide (24), gliflumide (33), glimepiride (53), glipalamide (62), (glipentide (27) replaced by glisentide (58)), glipizide (27), gliquidone (28), glisamuride (45), glisentide (58) (previously glipentide), glisindamide (43), glisolamide (43), glisoxepide (24), glybuthiazol (8), glybuzole (15), glycopyramide (17), glycyclamide (12), glyhexamide (15), glymidine sodium (15), glyoctamide (14), glyparamide (USAN only), glypinamide (13), glyprothiazol (8), glysobuzole (12)
- (b) glycerol (4), glycobinarsol (1), glycopyrronium bromide (12)
- (c) l: acetohexamide (12), butadiazamide (10), chlorpropamide (8), heptolamide (12), metahexamide (10), thiohexamide (12), tolazamide (12), tolbutamide (6), tolpentamide (12), tolpyrramide (13)

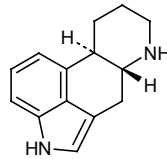
2. other than sulfonamide derivatives: balaglitazone (84), camiglibose (67), ciglitazone (50), darglitazone (69), derigidole (66), emiglitate (55), englitazone (64), farglitazar (84), ingliforib (85), isaglidole (61), linoglriride (48), meglitinide (34), midaglizole (57), miglitol (55), mitiglinide (78), naglivan (65), nateglinide (77), netoglitazone (85), pioglitazone (60), pirogliride (40), ragaglitazar (85), reglitazar (84), repaglinide (65), rivoglitazone (84), rosiglitazone (78), tesaglitazar (85), tibeglisene (64), troglitazone (68), voglibose (65)

3. peptide: seglitide (57)

TRS 581

**-golide**      **dopamine receptor agonists, ergoline derivatives**

E.1.1.0



(a)      adrogolide (82), naxagolide (60), pergolide (41), quinagolide (62), voxergolide (61)

(c)      rotigotine (83)

**-grastim**      **see -stim**

USAN

**-grel-**  
**-grel**      **platelet aggregation inhibitors**

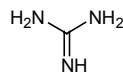
I.2.1.0      (USAN: platelet antiaggregants (undefined group))

(a)      anagrelide (42), camonagrel (61), cangrelor (82), clopidogrel (57), dazmegrel (51), furegrelate (53), isbogrel (59), itazigrel (56), midazogrel (53), nafagrel (64), nicogrelate (48), oxagrelate (47), ozagrel (55), pamicogrel (70), pirmagrel (53), ridogrel (59), rolafagrel (65), samixogrel (72), sarpogrelate (63), satigrel (67), sunagrel (52), terbogrel (75), trifenagrel (53)

USAN

**guan-**      **antihypertensives, guanidine derivatives**

H.3.0.0      (USAN: anti-hypertensive substances (guanidine type))



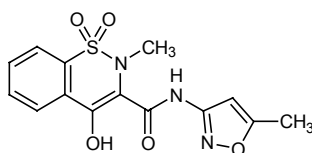
- (a) guanabenz (26), guanacline (16), guanadrel (20), guanazodine (27), guancidine (18), guanclofine (36), guanethidine (11), guanfacine (35), guanisoquine (15), guanochlor (15), guanoctine (16), guanoxan (15), guanoxabenz (31), guanoxyfen (16), guabenxan (32)
- (c) guabenxan (32)

**-ibine**      **see -ribine**

**-icam**      **anti-inflammatory, isoxicam derivatives**

USAN

A.4.2.0      (USAN: anti-inflammatory agents (isoxicam group))

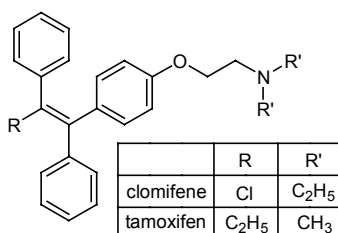


- (a) ampiroxicam (56), droxicam (52), enolicam (45), isoxicam (30), lornoxicam (59), meloxicam (52), piroxicam (32), sudoxicam (27), tenoxicam (44), tesicam (25)

**-ifene**      **antiestrogens, clomifene and tamoxifen derivatives**

USAN

(Q.2.1.0  
L.6.0.0)



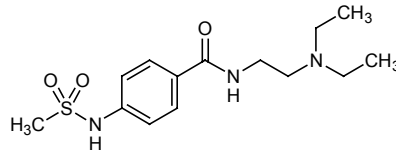
- (a) acolbifene (86), arzoxifene (80), bazedoxifene (86), clomifene (12), droloxifene (53), enclomifene (33), idoxifene (68), lasofoxifene (81), levormeloxifene (73), miproxifene (74), nitromifene (33), ormeloxifene (69), ospemifene (85), panomifene (58), pipendoxifene (84), raloxifene (54), tamoxifen (28), tesmififene (81), toremifene (53), trioxifene (41), zindoxifene (54), zuclomifene (33), clomifenoxide (54)
- (b) dextropropoxyphene (7), levopropoxyphene (7), suloxifen (30) (bronchodilator)
- (c) nafoxidine (16)

**-igetide**      **see -tide**

USAN

**-ilide**      **class III antiarrhythmics, sematilide derivatives**

H.2.0.0



- (a) ambasilide (59), artilide (67), azimilide (72), dofetilide (65), ersentilide (72), ibutilide (63), ipazilide (62), risotilide (62), sematilide (58), trecetilide (79)
- (b) bromacrylide (13), ftaxilide (32), gliamilide (33)

USAN

**imex (d)**      **immunostimulants**

S.7.0.0

- (a) azimexon (40), forfenimex (55), imexon (37), roquinimex (53), ubenimex (56)

USAN

**-imod**      **immunomodulators, both stimulant/suppressive and stimulant**

S.7.0.0

- (a) atiprimod (75), cridanimod (83), defoslimod (79), esonarimod (79), glaspimod (74), iguratimod (86), imiquimod (66), ivarimod (60), laquinimod (85), pidotimod (63), resiquimod (82), susalimod (73), tiprotimod (57)

USAN

**-imus**      **immunosuppressants (other than antineoplastics)**

S.7.0.0

- (a) abetimus (81), anisperimus (82), everolimus (82), gusperimus (68), iguratimod (86), laflunimus (70), laquinimod (85), napirimus (60), pimecrolimus (81), sirolimus (69), tacrolimus (66), tresperimus (75)

**-ine (d)**      **alkaloids and organic bases**

- (a) 1120 (24.04%) INNs ending in *-ine* in Lists 1-48 of Proposed INNs

TRS 581



BAN, USAN

**io- (x) iodine-containing contrast media**

## U.1.1.0

- (a) iobenzamic acid (14), iobitridol (68), iobutoic acid (20), iocarmic acid (22), iocetamic acid (18), iocanlidic acid (77), iodamide (15), iodecimol (51), iodetryl (1), iodixanol (53), iodophthalein sodium (1), iodoxamic acid (26), iofendylate (12), iofratol (67), ioglicic acid (33), ioglucol (41), ioglucomide (41), ioglundide (40), ioglycamic acid (15), iohexol (43), iolidonic acid (26), iolixanic acid (26), iomeglamic acid (26), iomeprol (54), iomorinic acid (37), iopamidol (40), iopanoic acid (1), iopentol (52), iophenoic acid (4), ioprocemic acid (39), iopromide (44), iopronic acid (28), iopydol (14), iopydone (14), iosarcol (54),iosefamic acid (14), ioseric acid (33), iosimide (50), iosulamide (39), iosumetic acid (33), iotalamic acid (13), iotasul (43), iotetric acid (37), iotranic acid (28), iotriside (60), iotrizoic acid (22), iotrolan (51), iotroxic acid (32), ioversol (56), ioxabrolic acid (53), ioxaglic acid (37), ioxilan (59), ioxitalamic acid (22), ioxotrizoic acid (33), iozomic acid (24)
- (c) adipiodone (4), bunamiodyl (10), dimethiodal sodium (1), diiodone (1), ethyl cartrizoate (12), methiodal sodium (1), metrizamide (26), pheniodol sodium (1), phenobutiodil (6), propyl docetrizoate (10), propyliodone (1), sodium acettrizoate (4), sodium amidotrizoate (4), sodium diprotrizoate (6), sodium metrizoate (13), sodium tyropanoate (12)

TRS 58I

**iod-)  
-io-)** iodine-containing compounds other than contrast media**io(d)-/-io-** iodine-containing radiopharmaceuticals

- (a) ethiodized oil (<sup>131</sup>I) (24), iobenguane (<sup>131</sup>I) (57), iodinated (<sup>125</sup>I) human serum albumin (24), iodinated (<sup>131</sup>I) human serum albumin (24), iodocetylic acid (<sup>123</sup>I) (47), iodocholesterol (<sup>131</sup>I) (39), iofetamine (<sup>123</sup>I) (51), iolopride (<sup>123</sup>I) (73), iomazenil (<sup>123</sup>I) (66), iometin (<sup>125</sup>I), iometin (<sup>131</sup>I) (24), sodium iodide (<sup>125</sup>I) (24), sodium iodide (<sup>131</sup>I) (24), sodium iodohippurate (<sup>131</sup>I) (24), sodium iotalamate (<sup>125</sup>I) (24), sodium iotalamate (<sup>131</sup>I) (24)
- (c) fibrinogen (<sup>125</sup>I), macrosalb (<sup>131</sup>I) (33), rose bengal (<sup>131</sup>I) sodium (24), tolpovidone (<sup>131</sup>I) (24)

USAN

**-irudin hirudin derivatives**

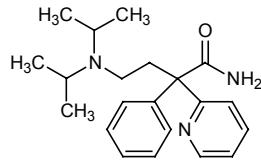
## I.2.1.0

bivalirudin (72), desirudin (70), lepirudin (73), pegmusirudin (77)

USAN

**-isomide antiarrhythmics, disopyramide derivatives**

H.2.0.0



- (a) actisomide (60), bidisomide (63), pentisomide (59)
- (c) disopyramide (12)

BAN, USAN

**-ium (x) quaternary ammonium compounds**

(USAN: -ium or onium)

USAN

**E.3.0.0 neuromuscular blocking agents with a flexible structure**

- (a) azamethonium bromide (1), decamethonium bromide (1), dicolonium iodide (25), dimecolonium iodide (14), fubrogonium iodide (18), hexamethonium bromide (1), mebezonium iodide (16), oxapropanium iodide (1), oxydipentonium chloride (1), pentamethonium bromide (1), pentolonium tartrate (4), prodeconium bromide (6), stilonium iodide (32), suxamethonium chloride (1), suxethonium chloride (1), tetrylammonium bromide (1), tiametonium iodide (15), trepirium iodide (25)
- (c) gallamine triethiodide (1)

**E.3.0.0 neuromuscular blocking agents with rigid structure**

(USAN: -curium, also curonium; neuromuscular blocking agents; quaternary ammonium derivatives)

- (a) alcuronium chloride (17), atracurium besilate (42), candocuronium iodide (70), cisatracurium besilate (73), dacuronium bromide (21), dimethyltubocurarium chloride (1), doxacurium chloride (58), fazadinium bromide (32), hexafluronium bromide (12), laudexium metilsulfate (4), mivacurium chloride (58), pancuronium bromide (19), pentacynium chloride (6), phenactropinium chloride (8), pipecuronium bromide (69), piprocurarium iodide (11), rapacuronium bromide (78), rocuronium bromide (66), stercuronium iodide (21), thiazinanium metilsulfate (37), trimethidinium methosulfate (8), truxicurium iodide (22), truxipicurium iodide (22), vecuronium bromide (46)
- (c) tubocurarine chloride (1)

**E.1.0.0 cholinergic agents**

- (a) acetonium napadisilate (44), ambenonium chloride (6), benzopyrinium bromide (1), carpronium chloride (23), demecarium bromide (10), furtrethonium iodide (1)
- (c) acetylcholine chloride (4), charbacol (4), choline alfoscerate (29), choline chloride (4), choline gluconate (1), choline salicylate (15) (analgesic), choline theophyllinate (8) (smooth muscle relaxant), methacholine chloride (1), nitricholine perchlorate (6) (antihypertensive), distigmine bromide (16), ecothiopate iodide (6), neostigmine bromide (4), obidoxime chloride (16), pralidoxime iodide (10), pyridostigmine bromide (6)

#### E.2.0.0 **anticholinergic agents**

- (a) benzilonium bromide (13), benzopyrroonium bromide (12), beperidium (57), bevonium metilsulfate (19), butropium bromide (30), ciclonium bromide (19), ciclotropium bromide (50), cimetropium bromide (51), clidinium bromide (6), cyclopyrroonium bromide (12), dimetipirium bromide (37), diponium bromide (15), dotefonium bromide (24), droclidinium bromide (33), emepronium bromide (18), etipirium iodide (22), fenclexonium metilsulfate (20), fempiverinium bromide (26), fentonium bromide (29), flutropium bromide (50), glycopyrroonium bromide (12), heteronium bromide (14), hexasonium iodide (15), hexocyclium metilsulfate (6), hexopyrroonium bromide (13), ipratropium bromide (31), methanthelinium bromide (1), methylbenactyzium bromide (34), metocinium iodide (26), nolinium bromide (37), otilonium bromide (38), oxapium iodide (26), oxitefonium bromide (18), oxitropium bromide (36), oxyphenonium bromide (1), oxypyrronium bromide (13), oxysonium iodide (15), pentapiperium metilsulfate (26), prifinium bromide (20), ritropirronium bromide (33), sintropium bromide (47), sultroponium (18), tematropium metilsulfate (64), tiemonium iodide (13), timepidium bromide (29), tiotropium bromide (67), tiquizium bromide (47), trantelinium bromide (24), trospium chloride (25), xenytropium bromide (15)
- (c) atropine methonitrate (4), buzepide metiodide (14), chlorisondamine chloride (6), diphemanil metilsulfate (4), homatropine methylbromide (1), isopropramide iodide (8), mepenzolate bromide (10), octatropine methylbromide (10), parapenzolate bromide (14), pipenzolate bromide (6), poldine metilsulfate (11), propantheline bromide (1), propyromazine bromide (12), tridihexethyl iodide (6), tropenziline bromide (11), thihexinol methylbromide (1), tricyclamol chloride (4)

#### S.2.3.0 **surfactants used as antibacterials and antiseptics**

- (a) acriflavinium chloride (1), amantanium bromide (39), benzalkonium chloride (1), benzethonium chloride (1), benzododecinium chloride (1), benzoxonium chloride (36), cefalonium (16), cefmepidium chloride (57), cetalkonium chloride (15), cethexonium chloride (36), cetrimonium bromide (1), cetylpyridinium chloride (1), chlorphenoctium amsonate (8), deditonium bromide (15), denatonium benzoate (15), dequalinium chloride (8), disiquonium chloride (55), dodeclonium bromide (16), dofamium chloride (21), fludazonium chloride (33), furazolium chloride (15), halopenium chloride (10), hedaquinium chloride (8), lapirium chloride (27), lauralkonium chloride (62), laurcetium bromide (70), laurolinium acetate (12), mecetronium etilsulfate (51), metalkonium chloride (60), methylbenzethonium chloride (1), methylrosanilinium chloride (1), methylthioninium chloride (1), miripirium chloride (63),

miristalkonium chloride (41), octafonium chloride (16), opratonium iodide (76), penoctionium bromide (20), pirralkonium bromide (19), polidronium chloride (67), polixetonium chloride (70), prolonium iodide (14), sanguinarium chloride (68), sepazonium chloride (34), tetradonium bromide (18), tibezoneium iodide (32), tiodonium chloride (36), toliodium chloride (36), toloconium metilsulfate (17), tonzonium bromide (14), triclobisonium chloride (10)

(c) domiphen bromide (23)

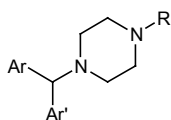
### other agents

amezinium metilsulfate (36), amprolium chloride (16), azaspirium chloride (25), bephenium hydroxynaphthoate (11), bibenzonium bromide (12), bidimazium iodide (27), bretylium tosilate (10), butopyrammonium iodide (8), carcainium chloride (36), clofilium phosphate (42), datelliptium chloride (57), detajmium bitartrate (34), dibrospidium chloride (51), ditercalinium chloride (49), edrophonium chloride (4), elliptinium acetate (43), emilium tosilate (37), famiraprinium chloride (58), feniodium chloride (23), gallium ( $^{67}\text{Ga}$ ) citrate (33), homidium bromide (36), isometamidium chloride (18), mefenidramium metilsulfate (52), meldonium (86), mequitamium iodide (61), nолpitantium besilate (75), pinaverium bromide (32), pirdonium bromide (28), prajmalium bitartrate (23), pranolium chloride (32), pretamazium iodide (29), propagermanium (65), prospidium chloride (22), pyritidium bromide (16), pyrvinium chloride (6), quindonium bromide (14), quinuclium bromide (40), repagermanium (63), rimazolium metilsulfate (26), roxolinium metilsulfate (33), samarium ( $^{153}\text{Sm}$ ) lexicronam (74), sevotropium mesilate (56), spirogermanium (43), stilbazium iodide (13), thenium closilate (12), tipetropium bromide (42), tolonium chloride (4), trazium esilate (54), trethinium tosilate (14), troxonium tosilate (13), troxypyrrolium tosilate (13)

(c) alazanine triclofenate (13) (anthelminthic), colfosceril palmitate (64) (pulmonary surfactant), dithiazanine iodide (8) (anthel-minthic), hexadimethrine bromide (8) (heparin antagonist)

### -curium (d) curare-like substances

### -izine (-yzine) diphenylmethyl piperazine derivatives



(a) antihistaminics: G.2.0.0: buclizine (4), cetirizine (51), chlorcyclizine (1), clocinazine (15), cyclizine (1), efletirizine (71), elbanizine (60), flotrenizine (48), levocetirizine (78), pibaxizine (62), trenizine (48)

homochlorcyclizine (10) (serotonin antagonist)

tranquillizers: etodroxizine (18), hydroxyzine (6)

various: benderizine (40) (antiarrhythmic), decloxizine (19) (respiratory insufficiency), ropizine (36) (anticonvulsant)

**-rizine      antihistaminics/cerebral (or peripheral) vasodilators**

belarizine (36), buterizine (42), cinnarizine (11), dotarizine (50), flunarizine (22), lifarizine (66), tagorizine (72), tamolarizine (66), trelnarizine (62)

chemically related: pipoxizine (32) (respiratory insufficiency)

(b) phenothiazine derivatives: chloracyzine (12) (vasodilator), fluacizine (25) (sedative), moracizine (25) (antiarrhythmic), tiracizine (62) (antiarrhythmic)

benzilate esters: benactyzine (6) (tranquillizer), benaprizine (26) (anti-parkinsonian)

phenylpiperazine: dimetholizine (10) (antiallergic), dropropizine (18)/levodropropizine (64) (antitussive)

antibiotic "cef": cefatrizine (34)

pyrazine derivatives: ampyzine (15) (central nervous stimulant), triampyzine (15) (anticholinergic)

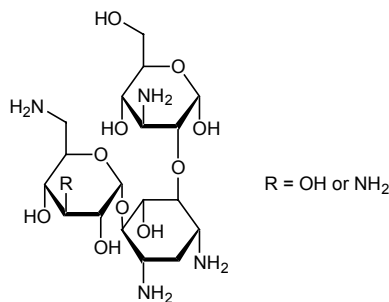
indoloquinolines (anticholinergic): metoquizine (17), toquizine (17)

(c)      medibazine (16)

USAN

**-kacin      antibiotics, kanamycin and bekanamycin derivatives (obtained from *Streptomyces kanamyceticus*)**

S.6.3.0      (USAN: antibiotics obtained from *Streptomyces kanamyceticus* (related to kanamycin))



(a)      amikacin (30), arbekacin (56), butikacin (41), dibekacin (31), propikacin (43)

(c) bekanamycin (24), kanamycin (10)

other aminoglycoside antibiotics:

*Strept. griseus*: dihydrostreptomycin (1) (semisynthetic), streptomycin (1), streptoniazid (13) (semisynthetic)

*Strept. tenebrarius*: apramycin (31), nebramycin (19) (mixture of several antibiotics, including apramycin and tobramycin), tobramycin (28)

*Bacillus circularis*: butirosin (25)

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USAN

**-kalant**      **potassium channel blockers**

H.2.0.0

(a) adekalant (83), almokalant (64), clamikalant (81), nifekalant (75), terikalant (66), pinokalant (82)

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BAN, USAN

**-kalim**      **potassium channel activators, antihypertensive**

H.3.0.0

(a) aprikalim (64), bimakalim (64), cromakalim (58)/levcromakalim (66), emakalim (66), mazokalim (75), rilmakalim (65), sarakalim (81)

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USAN

**-kef-**      **enkephalin agonists**

casokefamide (65), frakefamide (81), metkefamide (44)

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**-kin**      **interleukin type substances**

S.7.0.0

IL-1 :      *-nakin*      interleukin-1 analogues and derivatives:

*-onakin*      interleukin-1 analogues and derivatives: pifonakin (77)

*-benakin*      interleukin-1 analogues and derivatives: mobenakin (72)

IL-2 :      *-leukin*      interleukin-2 analogues and derivatives: aldesleukin (63), celmoleukin (65),

		denileukin diftitox (78), teceleukin (54)
		<u>pegaldesleukin</u> (67)
IL-3 :	<i>-plestim</i>	<u>interleukin-3 analogues and derivatives</u> : muplestim (72)
IL-4 :	<i>-trakin</i>	<u>interleukin-4 analogues and derivatives</u> : binetrakin (82)
IL-6 :	<i>-exakin</i>	<u>interleukin-6 analogues and derivatives</u> : atexakin alfa (72)
IL-8 :	<i>-octakin</i>	<u>interleukin-8 analogues and derivatives</u> : emoctakin (74)
IL-10 :	<i>-decakin</i>	<u>interleukin-10 analogues and derivatives</u> : ilodecakin (81)
IL-11 :	<i>-elvekin</i>	<u>interleukin-11 analogues and derivatives</u> : oprelvekin (76)
	<i>-kinra</i>	<u>interleukin receptor antagonists</u> : pitrakinra (84)
IL-12 :	<i>-dodekin</i>	<u>interleukin-12 analogues and derivatives</u> : edodekin alfa (79)
IL-13 :	<i>-nakinra</i>	<u>interleukin-1 receptor antagonists</u> : anakinra (72)

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 USAN

**-kiren      renin inhibitors**

## H.3.0.0

- (a)      aliskiren (83), ciprokiren (69), ditekiren (62), enalkiren (61), remikiren (66), terlakiren (66), zankiren (70)

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 USAN

**-lubant      leukotriene B<sub>4</sub> receptor antagonist**

- (a)      amelubant (85), moxilubant (78), ticolubant (76)

**-lukast      leukotriene receptor antagonists, see -ast**


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 BAN, USAN

**-mab      monoclonal antibodies** (see also Annex)

## S.7.0.0

- amab*      rat origin

<i>-emab</i>	hamster origin
<i>-imab</i>	primate origin
<i>-omab</i>	<b>mouse origin:</b>
<i>ba(c)</i>	<u>bacterial</u> : edobacomab (69)
<i>co(l)</i>	<u>colon</u> : edrecolomab (74), nacolomab tafenatox (71)
<i>go(v)</i>	<u>ovary (tumours)</u> : igovomab (74), oregovomab (86)
<i>li(m)</i>	<u>lymphocyte</u> : afelimomab (72), dorlimomab aritox (66), enlimomab (70), enlimomab pegol (77), faralimomab (76), gavilimomab (84), inolimomab (71), maslimomab (66), nerelimomab (76), odulimomab (73), telimomab aritox (66), vepalimomab (80), zolimomab aritox (69)
<i>ci(r)</i>	<u>cardiovascular</u> : biciromab (66), imciromab (66)
<i>le(s)</i>	<u>infectious lesions</u> : lemalesomab (84), sulesomab (75), technetium ( <sup>99m</sup> Tc) fanolesomab (86)
<i>pr(o)</i>	<u>tumour (prostate)</u> : capromab (70)
<i>tu(m)</i>	<u>tumour (miscellaneous)</u> : anatumomab mafenatox (79), arcitumomab (74), altumomab (68), bectumomab (75), detumomab (70), epitumomab (82), ibritumomab tiuxetan (81), minretumomab (80), mitumomab (82), satumomab (67), taplitumomab paptox (84), technetium ( <sup>99m</sup> Tc) nofetumomab merpentan (76), technetium ( <sup>99m</sup> Tc) pintumomab (75), tositumomab (80)
<i>-umab</i>	<b>human origin:</b>
<i>ba(c)</i>	<u>bacterial</u> : nebacumab (66)
<i>li(m)</i>	<u>immunomodulator</u> : adalimumab (82), atorolimumab (80), lerdelimumab (83), metelimumab (86), morolimumab (79), ziralimumab (84)
<i>tu(m)</i>	<u>tumour</u> : votumumab (70)
<i>vi(r)</i>	<u>viral</u> : regavirumab (71), sevirumab (66), tuvirumab (66)
<i>-ximab</i>	<b>chimeric origin</b>
<i>ci(r)</i>	<u>cardiovascular</u> : abciximab (70)



<i>li(m)</i>	<u>immunomodulator</u> : basiliximab (76), clenoliximab (77), infliximab (77), keliximab (76), priliximab (72), teneliximab (87), vapaliximab (87)
<i>me(l)</i>	<u>melanoma</u> : ecromeximab (87)
<i>tu(m)</i>	<u>tumor</u> : cetuximab (82), rituximab (77)
(c)	muromonab CD3 (59)
<b>-zumab</b>	<b>humanized origin</b>
<i>ci(r)</i>	<u>cardiovascular</u> : bevacizumab (83)
<i>li(m)</i>	<u>lymphocyte</u> : apolizumab (87), daclizumab (78) (previously: dacliximab), eculizumab (87), efalizumab (85), erlizumab (84), fontolizumab (87), mepolizumab (81), natalizumab (79), omalizumab (84), palivizumab (79), pascolizumab (87), pexelizumab (85), reslizumab (85), rovelizumab (81), ruplizumab (83), siplizumab (87), toralizumab (87), visilizumab (84)
<i>tu(m)</i>	<u>tumor: (miscellaneous)</u> : alemtuzumab (83), bivatuzumab (83), cedelizumab (77), epratuzumab (82), gemtuzumab (83), labetuzumab (85), lintuzumab (76), sibrotuzumab (81), trastuzumab (78)
<i>vi(r)</i>	<u>viral</u> : felvizumab (77)

USAN

**-mantadine** **adamantane derivatives**  
**-mantine**  
**-mantone**

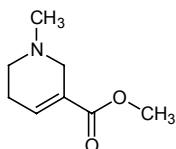


- (a) antiviral: S.5.3.0: amantadine (15), rimantadine (17), somantadine (51), tromantadine (28)  
antiparkinsonian: E.2.0.0: carmantadine (31), dopamantine (31), memantine (35)  
immunostimulant: S.7.0.0: idramantone (71)
- (b) anthelmintic: S.3.1.0: dimantine (14)
- (c) adamexine (36) (mucolytic), amantocillin (17) (antibiotic), bolmantalate (16) (anabolic)

USAN

**-meline**      **cholinergic agents (muscarine receptor agonists/partial antagonists used in the treatment of Alzheimer's disease)**

E.1.0.0



alvameline (79), cevimeline (76), itameline (71), milameline (74), sabcomeline (76), tazomeline (77), xanomeline (70)

**mer- or****-mer- (d)**      **<sup>1</sup>mercury-containing drugs, antimicrobial or diuretic (deleted from General Principles in List 28 prop. INN)**

- (a)      S.2.2.0 antimicrobial: meralein sodium (13), merbromin (1), mercurbutol (1), otimerate sodium (51), phenylmercuric borate (4), sodium timerfonate (13), thiomersal (1)

<sup>1</sup>*mer-* and *-mer-* can be used for any type of substances and are no longer restricted to use in INNs for mercury-containing drugs (18th Consultation on INNs 1988)

N.1.3.0 diuretic: chlormerodrin (4), chlormerodrin (197 Hg) (24), meralluride (1), mercaptomerin (1), mercuderamide (1), mercumatilin sodium (4), mercurphylline (1), merisoprol (197 Hg) (24) (diagnostic), mersalyl (4)

- (b)      difemerine (17) (spasmolyt.), dimercaprol (1) (antidote, -SH group), lomerizine (68), (cerebral vasodilator), mercaptopurine (6) (cytostatic, -SH group), nifurmerone (16), pemerid (25)

(antituss.), suxemerid (25) (antituss.)

- (c)      hydrargaphen (10)

USAN

**-mer**      **polymers:**

- (a)      amilomer (33), cadexomer (60), carbetimer (50), carbomer (21), crilanomer (53), dextranomer (33), eldexomer (51), leuciglumer (68), maletamer (14), poloxamer (34), porfimer sodium (64), sevelamer (77), surfomer (44), zinostatin stimalamer (74)

- (b)      succimer (42)

**-mesine sigma receptor ligands**

igmesine (68), panamesine (73), siramesine (81)

USAN

**-mestane aromatase inhibitors**

L.0.0.0/Q.2.1.0

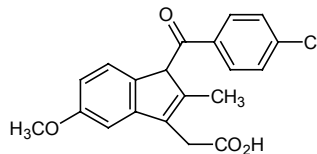
exemestane (65), formestane (66), minamestane (64)

**met(h)asone see pred**

BAN, USAN

**-metacin (x) anti-inflammatory, indometacin derivatives**

A.4.2.0 (BAN: anti-inflammatory substances of the indomethacin group)  
 (USAN: -methacin: anti-inflammatory substances (indomethacin type))



(a) acemetacin (32), cinmetacin (24), clometacin (27), delmetacin (48) (originally demetacin (42)), duometacin (27), glucametacin (32), indometacin (13), niometacin (33), oxametacin (37), pimmetacin (47), proglumetacin (35), sermetacin (36), talmetacin (46), zidometacin (39)

other anti-inflammatory, indole derivatives: etoprine (22), indopine (12), indoxole (17), nictindole (28)

USAN

**-micin antibiotics obtained from various *Micromonospora***(S.6.5.0) (USAN: antibiotics (*Micromonospora* strains))

astromicin (44), betamicin (38), etisomicin (47), evernimicin (82), gentamicin (22), isepamicin (54), maduramicin (52), megalomicin (37), micronomicin (45), mirosamicin (58), netilmicin (36), ozogamicin (83), pentisomicin (41), repromicin (37), rosaramicin (41) (prev. rosamicin), semduramicin (60), sisomicin (25)

TRS 581

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**-mifene**      **see -ifene**

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**mito- (d)**      **antineoplastics, nucleotoxic agents (deleted from General Principles in List 24 prop. INN)**

L.0.0.0

(a)      mitobronitol (20), mitocarcin (25), mitoclomine (18), mitoflaxone (60), mitogillin (17), mitoguazone (20), mitolactol (26), mitomalcin (19), mitomycin (26), mitonafide (40), mitopodozide (17), mitoquidone (54), mitosper (24), mitotane (21), mitotenamine (17), mitoxantrone (44), mitozolomide (51)

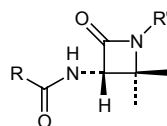
mitindomide (48)

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USAN

**-monam**      **monobactam antibiotics**

S.6.0.0



(a)      carumonam (51), gloximonam (54), oximonam (54), pirazmonam (58), tigemonam (57)

(c)      aztreonam (48)

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USAN

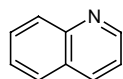
**-mostim**      **see -stim**

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USAN

**-motine**      **antivirals, quinoline derivatives (19th Report 1970)**

S.5.3.0      (USAN: antiviral quinoline derivatives)



famotine (23), memotine (22)

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**-moxin (d)**      **monoamine oxidase inhibitors, hydrazine derivatives\***

C.3.1.0

(a)      benmoxin (20), cimemoxin (17), domoxin (14), octamoxin (15)

\*not part of definition

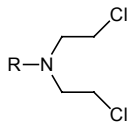
- (c) carbenzide (11), etryptamine (12), fenoxypipazine (12), iproclozide (13), iproniazid (1), isocarboxazid (11), mebanazine (15), nialamide (10), pargyline (13), phenelzine (10), pheniprazine (11), tranylcypromine (11)

TRS 581

USAN

**-mustine antineoplastic, alkylating agents, ( $\beta$ -chloroethyl)amine derivatives**

L.2.0.0 (USAN: antineoplastic agents ([ $\beta$ -chloroethyl]amine derivatives))



- (a) alestramustine (68), ambamustine (60), atrimustine (61), bendamustine (48), bofumustine (44), carmustine (24), ditiomustine (49), ecomustine (61), elmustine (49), estramustine (24), fotemustine (57), galamustine (61), lomustine (27), mannomustine (8), neptamustine (48) (originally pentamustine (45)), nimustine (37), prednimustine (31), ranimustine (55), semustine (27), spiromustine (47), tallimustine (68), tauromustine (50), uramustine (13)
- (c) chlorambucil (6), chlormethine (1), chlornaphazine (1), cyclophosphamide (10), defosfamidine (12), ifosfamide (23), mafosfamidine (51), melphalan (8), mitoclozine (18), mitotenamine (17), perfosfamidine (66), sarcocystin (17), sufosfamidine (36), trichlormethine (11), trofosfamidine (23)

TRS 581

BAN, USAN

**-mycin (x) antibiotics, produced by Streptomyces strains (see also -kacin)**

S.6.0.0 (USAN: antibiotics, Streptomyces strains)

- (a) amfomicin (12), antelmicycin (15), apramicycin (31), avilamicycin (46), azalomicycin (26), azithromyacin (58), bambermicycin (21), bekanamicycin (24), berithromyacin (26), bicozamicycin (38), biniramicycin (23), bluensomicycin (14), capreomicycin (12), carbomicycin (1), cethromicycin (87), clarithromyacin (59), clindamicycin (21), coumamicycin (15), daptomicycin (58), dihydrostreptomicycin (1), diproleandomicycin (33), dirithromyacin (53), efrotomicycin (53), endomicycin (6), enramicycin (23), enviomicycin (31), erythromyacin (4), estomicycin (14 - deleted in List 28), flurithromyacin (51), fosfomicycin (25), fosmidomicycin (46), ganefromicycin (68), hachimicycin (23), heliomicycin (25), hydroxymicycin (8 - deleted in List 28), josamicycin (23), kanamicycin (10), kitasamicycin (13), laidlo-micycin (61), lexithromyacin (65), lincomicycin (13), lividomicycin (32), maridomicycin (32), midecamicycin (30), mikamicycin (17), mirincamicycin (31), mocimicycin (28), natamicycin (15), nebramicycin (19), neomicycin (1), neutramicycin (15),

oleandomycin (6), paldimycin (55), paromomycin (10), paulomycin (47), pirlimycin (47), primycin (38), pristinamycin (12), ranimycin (20), relomycin (15), ribostamycin (27), rifamycin (13), rokitamycin (53), roxithromycin (54), salinomycin (37), sedecamycin (55), spectinomycin (13), spiramycin (6), stallimycin (30), steffimycin (20), streptomycin (1), telithromycin (80), terdecamycin (65), tobramycin (28), troleandomycin (24), trospectomycin (53), tulathromycin (87) (vet.), vancomycin (6), viomycin (4), virginiamycin (18)

antibiotics, antineoplastics:

ambomycin (13), antramycin (17), azotomycin (13), bleomycin (23), cactinomycin (15), dactinomycin (18), duazomycin (13), lucimycin (13), mitomycin (26), nogalamycin (16), olivomycin (18), peliomycin (15), peplomycin (44), plicamycin (50) (previously mithramycin (16)), porfiromycin (15), puromycin (15), rufocromomycin (12), sparsomycin (13), talisomycin (41)

antibiotics, antineoplastics, antibacterial:

cirolemycin (21)

antibiotic, antifungal:

hamycin (17), lidimycin (20), rutamycin (14)

(c)

antibiotic, antibacterial:

aspartocin (11), azidamfenicol (14), cetofenicol (14), chloramphenicol (1), cloramfenicol pantotenat comp. (14), cycloserine (6), novobiocin (6), ostreogrycin (6), rifamide (15), rifampicin (17), streptoniazid (13), streptovarycin (6), thiamphenicol (10), tylosin (16)

antibiotic, antifungal:

amphotericin B (10), candicidin (17), filipin (20), kalafungin (20), nystatin (6), viridofulvin (16)

antibiotic, antineoplastic:

daunorubicin (20), mitomalcin (19), streptonigrin (14) (deleted in List 33)

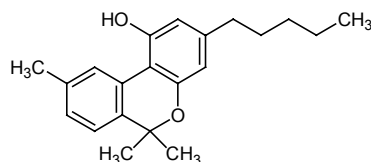
see also -rubicin

USAN

**nab**

**cannabinol derivatives**

(USAN: -nab; or -nab-: cannabinol derivatives)



- (a) cannabinol (23), dronabinol (51), menabitan (49), nabazenil (49), nabilone (49), nabitan (42), naboctate (45), nonabine (47), pirnabin (41), rimonabant (83), tinabinol (49)
- (b) fenabutene (26), guanabenz (26), muromonab-CD3 (59), nabumetone (44)

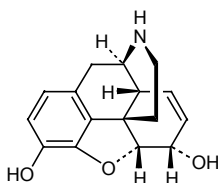
**nal-**                    **narcotic antagonists/agonists related to normorphine**

USAN

A.4.1.0

B.2.0.0

(USAN: narcotic agonists or antagonists related to normorphine)



- a) nalbuphine (21), nalfurafine (87), nalmefene (49) (originally nalmetrene (47)), nalmexone (19), nalorphine (1), naloxone (13), naltrexone (29)
- (b) nalidixic acid (13)

TRS 58I

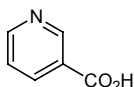
**-naritide**            **see -tide**

**-nermin**            **see -ermin**

**-nercept**            **tumour necrosis factor antagonist**

etanercept (81), lenercept (72), onercept (82)

**nico- or nic-**    **nicotinic acid or nicotinoyl alcohol derivatives**  
**or ni-**



**nico-**: nicoboxil (43), nicoclonate (29), nicocodine (12), nicocortonide (40), nicodicodine (15), nicofibrate (31), nicofuranose (14), nicofurate (28), nicomol (23), nicomorphine (7),

nicopholine (1), nicorandil (44), nicothiazone (10), nicotinamide (4), nicotinic acid (4), nicotredole (72), nicoxamat (44), nikethamide (4)

inositol nicotinate (16), xantanol nicotinate (16)

**nic-**: nicafenine (40), nicainoprol (46), nicametate (15), nicardipine (42), nicanartine (72), nicergoline (26), niceritrol (23), niceverine (15), nictindole (28), nizofenone (44)

**ni-**: nialamide (10), niaprazine (24), nifenazone (15), niometacin (33), niprofazone (29), nixylic acid (17)

**-nicate: antihypercholesterolaemic and/or vasodilating nicotinic acid esters**

H.4.0.0

F.2.2.0

- (a) ciclonicate (33), derpanicate (58), estrapronicate (34), glunicate (51), hepronicate (22), micinicate (44), pantenicate (56), sorbinicate (33)
- (b) nitrile derivative: nimazone (21)  
other: nifungin (24), nimidane (34), nisbuterol (38)
- (c) **NO<sub>2</sub> - derivatives**: acenocoumarol (6) (anticoag.), azathioprine (12) and tiamiprine (15) (antimetabolites), bronopol (14) (antiseptic), chloramphenicol (1) (antibiotic), clonazepam (22) (sed.), flurantel (25) (anthelmintic), flutamide (33) (nonsteroid anti-androgen)

**nitro- NO<sub>2</sub> - derivatives**

**or nitr- or nit-**

**or ni- or -ni-**

**nifur-** all INNs of this series (see under nifur-)

**nitro-**: nitroclofene (41), nitrocyline (14), nitrodan (15), nitrofural (1), nitrofurantoin (11), nitromifene (33), nitroscanate (33), nitrosulfathiazole (1), nitroxinil (19), nitroxoline (15)

**nitr-**: nitracrine (35), nitrafudam (40), nitramisole (33), nitraquazone (53), nitrazepam (16), nitrefazole (46), nitricholine perchlorate (6)

**nit- and -nit-**: nitarsonsone (17), ranitidine (41)

**ni-**: nibroxane (35), niclofolan (20), niclosamide (13), nidroxyzone (6), nifenalol (22), nihydrazone (10), nimesulide (44), nimorazole (22), niridazole (17)

**ni-dipine**: nicardipine (42), nifedipine (27), niludipine (38), nisoldipine (42), nitrendipine (42), vatamidipine (77)

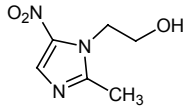
**-nidazole**: for INNs of this series see under -nidazole



BAN, USAN

**-nidazole (x) antiprotozoals, metronidazole derivatives**

S.3.3.0 (USAN: antiprotozoal substances (metronidazole type))  
 Y.0.0.0



- (a) abunidazole (52), azanidazole (38), bamnidazole (37), benznidazole (31), carnidazole (32), etanidazole (57), fexinidazole (37), flunidazole (21), ipronidazole (21), metronidazole (11), misonidazole (38), moxnidazole (33), ornidazole (28), panidazole (24), pimonidazole (57), pirinidazole (32), propenidazole (45), ronidazole (18), satranidazole (48), secnidazole (30), sulnidazole (33), ternidazole (34), tinidazole (21), tivanidazole (48)
- (c) dimetridazole (17), nimorazole (22), stirimazole (25)

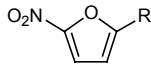
TRS 581

**-nidine see -onidine**

USAN

**nifur- (d) 5-nitrofuran derivatives**

S.2.1.0



- (a) nifuradene (16), nifuraldezone (17), nifuralide (34), nifuratel (17), nifuratrone (24), nifurdazil (16), nifurethazone (10), nifurfoline (20), nifurimide (18), nifurizone (22), nifurmazole (22), nifurmerone (16), nifuroquine (36), nifuroxazide (14), nifuroxime (11), nifurpipone (20), nifurpirinol (22), nifurprazine (16), nifurquinazol (18), nifursemizone (16), nifursol (20), nifurthiazole (14), nifurtimos (21), nifurtoinol (36), nifurvidine (17), nifurzide (37)
- (c) furalazine (13), furaltadone (17), furazolidone (13), furazolium chloride (15), furmethoxadone (8), levofuraltadone (17), nidroxyzone (6), nihydrazone (10), nitrofural (1), nitrofurantoin (11), thiofuradene (11)

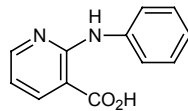
TRS 581

**-nil see -azenil, also for -carnil, -quinil**

USAN

**-nixin anti-inflammatory, anilinicnicotinic acid derivatives**

A.4.2.0



- (a) butanixin (32), clonixin (22), diclonixin (31), flunixin (31), isonixin (34), metanixin (31)
- (c) clonixeril (22), niflumic acid (17), nixylic acid (17)

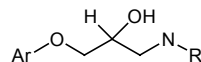
TRS 581

**-ol (d) for alcohols and phenols (deleted from General Principles in 14th Report)**

BAN, USAN

**-olol (x) β-adrenoreceptor antagonists**

E.5.2.0 (BAN: beta-adrenoreceptor antagonists)

aromat. ring -O-CH<sub>2</sub>-CHOH-CH<sub>2</sub>-NH-R

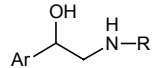
(BAN: beta adrenoreceptor blocking agents of the propranolol group)  
 (USAN: beta-blockers)

- (a) acebutolol (28), adaprolol (63), adimolol (50), afurolol (40), alprenolol (19), ancarylol (47), arnolol (56), arotinolol (48), atenolol (33), befunolol (39), betaxolol (40), bevantolol (36), bisoprolol (48), bometolol (42), bopindolol (42), bornaprolol (46), bucindolol (43), bucumolol (35), bufetolol (30), bunitrolol (28), bunolol (22), bupranolol (27), butocrolol (38), butofilolol (40), carazolol (36), carpindolol (42), carteolol (35), celiprolol (35), cetamolol (47), cicloprolol (48), cinamolol (44), cloranolol (41), crinolol (41) (replaced by pacrinolol (44)), dextropranolol (21), diacetolol (41), draquinolol (54), ecastolol (56), epanolol (52), ericolol (50), esatenolol (76), esmolol (50), exaprolol (32), falintolol (53), fleistolol (53), flusoxolol (50), idropranolol (31), imidolol (49) (replaced by adimolol (50)), indenolol (37), indopanlol (48), iprocrolol (39), isoxaprolol (45), landiolol (75), levobetaxolol (61), levobunolol (42), levomoprolol (58), mepindolol (36), metipranolol (38), metoprolol (30), moprolol (36), nadolol (34), nadoxolol (28), nafetolol (39), nebivolol (56), nipradilol (50) (previously nipradolol (49)), oxprenolol (20), pacrinolol (44), pafenolol (46), pamatolol (36), pargolol (36), penbutolol (25), penirolol (36), pindolol (23), pirepolol (48), practolol (23), primidolol (42), procinolol (25), propranolol (15), ridazolol (51), ronactolol (57), soquinolol (43), spirendolol (46), talinolol (28), tazolol (31), teoprolol (43), tertatolol (48), tienoxolol (56), tilisolol (57), timolol (29), tiprenolol (23), tolamolol (29), toliprolol (28), trigevolol (56), xibenolol (48), xipranolol (22)

(b) Q.2.3.0: stanozolol (18) (anabolic steroid)

TRS 581

**-alol**      **aromatic ring -CH-CH<sub>2</sub>-NH-R related to -olols**  
**OH**



(USAN: combined alpha and beta blockers)

amosulalol (50), bendacalol (59), brefonalol (56), bufuralol (31), dexsotalol (74), dilevalol (50), labetalol (35), medroxalol (43), nifenalol (22), pronetalol (14), sotalol (18), sulfinalol (41), butidrine (16)

(c) butidrine (16)

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USAN

**-olone**      **see pred**

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**-one (d)**      **ketones**

(a) 448 (9.62%) INNs ending in *-one* in Lists 1-48 of Proposed INNs

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BAN, USAN

**-onide**      **steroids for topical use, acetal derivatives**

Q.3.0.0

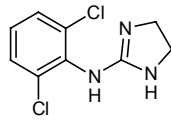
(a) acrocinonide (27), amcinonide (33), budesonide (37), ciclesonide (62), cicortonide (28), ciprocinonide (38), desonide (24), dexbudesonide (80), drocinonide (29), fluclorolone acetonide (22), fluocinolone acetonide (11), flumoxonide (38), fluocinonide (25), halcinonide (29), itrociccinonide (62), nicocortonide (40), prociccinonide (38), rofleponide (72), tralonide (27), triamcinolone benetonide (36), triamcinolone furetonide (36), triamcinolone hexacetonide (15), triclونide (30)

(c) amcinafal (25), amcinafide (25)

TRS 581

**-onidine      antihypertensives, clonidine derivatives**

H.3.0.0



- (a) apraclonidine (59) (control of intraocular pressure), benclonidine (42), brimonidine (66), clonidine (40), flutonidine (31), moxonidine (48), piclonidine (44), tolonidine (28)

related: alinidine (40) (analgesic)

**-nidine**

H.3.0.0

- (a) related antihypertensives: betanidine (13), indanidine (50), rilmenidine (57), tiamenidine (28)
- (b) muscle relaxant: tizanidine (43)  
topical antiinfective: octenidine (43), pirtenidine (57)  
antibacterial: sulfaguanidine (4)  
vet. coccidiostat: robenidine (25)
- (c) dexlofexidine (48), levlofexidine (48), lofexidine (33)

**-onium      see -ium****-opamine      see -dopa**

BAN, USAN

**-orex      anorexics**

M.1.0.0 (BAN: anorexic agents, phenethylamine derivatives)  
 (USAN: anorexants)

- (a) acridorex (21), amfepentorex (16), aminorex (14), benfluorex (25), clobenzorex (18), cloforex (16), clominorex (14), difemetorex (41), etolorex (20), fenisorex (29), fenproporex (17), flucetorex (30), fludorex (19), fluminorex (14), formetorex (14), furfenorex (16), indanorex (30), mefenorex (19), morforex (26), oxifentorex (20), pentorex (16), picilorex (40), tiflorex (34)

- (c) amfebutamone (31), amfecloral (12), amfepramone (13), amfetamine (55), amfetaminil (40), benzfetamine (55), brolamfetamine (55), chlorphentermine (11), clortermine (22), dexamfetamine (55), dimetamfetamine (38), etilamfetamine (40), fenbutrazate (12),

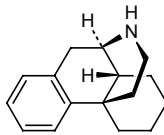
fenfluramine (14), hexapradol (12), levamfetamine (12), mephentermine (6), ortetamine (13), phendimetrazine (11), phenmetrazine (6), phentermine (11)

TRS 581

**orphan**      **narcotic antagonists/agonists, morphinan derivates**

A.4.1.0

B.2.0.0      (USAN: -orphan: morphinan derivatives that are narcotic antagonists or agonists)



- (a) A.4.1.0: butorphanol (31), dextromethorphan (1), dextrorphan (1), dimemorfan (30), ketorfanol (49), levomethorphan (1), levophenacilmorphan (9), levorphanol (4), norlevorphanol (9), oxilorphan (31), phenomorphan (5), proxorphan (43), racemethorphan (1), racemorphan (1), xorphanol (48)

TRS 581      B.2.0.0: levallorphan (2)

**-orph-**      **-orphine**: acetorphine (17), alletorphine (25), buprenorphine (29), cyprenorphine (17), desomorphine (5), diprenorphine (21), etorphine (17), homprenorphine (25), methyldesorphine (5), methyldihydro-morphine (5), nalorphine (1), nicomorphine (7), normorphine (7)

**-orphinol**: hydromorphinol (11)

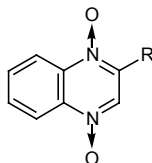
**-orphone**: conorfone (46), hydromorphone (1), oxymorphone (5), pentamorphone (60), semorphone (67)

- (b) emorfazone (44), morforex (26), morpheridine (6), orphenadrine (8)

**-ox**                    **antacids, aluminium derivatives:** glucalox (13), sucralox (13)

**-alox**

*-dox*                antibacterials, quinazoline dioxide derivatives:



carbadox (19), ciadox (44), cinoquidox (40), drazidox (24), mequidox (19), olaquinox (31), temodox (27)

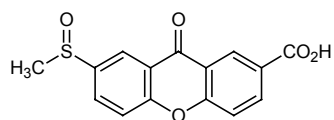
*-pirox*            antimycotic pyridone derivatives:



ciclopirox (26), metipirox (26), rilopirox (56)

USAN

*-xanox*            anti-allergics, tixanox group:



(a)                    amlexanox (55), mepixanox (49), sudexanox (44), tixanox (37), traxanox (44)

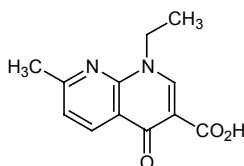
(c)                    xanoxic acid (33)

others:            bifepunox (87) (antipsychotic), cefminox (53) (antibiotic), deferasirox (86) (chelating agent), nifurtimox (21) (antiprotozoal), sulbenox (37) (animal growth regulator), acipimox (33) (antilipemic), etofenprox (57) (insecticide)

BAN, USAN

**-oxacin (x)    antibacterials, nalidixic acid derivatives**

S.5.5.0        (BAN: antibacterial agents of the cinoxacin group)  
 (USAN: antibacterial agents (nalidixic acid type))

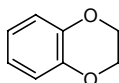


- (a)            alatrofloxacin (75), amifloxacin (51), balofloxacin (71), binfloxacin (60), cadrofloxacin (81), cetefloxacin (68), cinoxacin (32), ciprofloxacin (50), clinafloxacin (67), danofloxacin (61), difloxacin (55), droxacin (36), ecenofloxacin (78), enoxacin (49), enrofloxacin (56), esafloxacin (60), fandofloxacin (78), finafloxacin (85), floxacin (56), garenoxacin (87), gatifloxacin (74), gemifloxacin (81), grepafloxacin (68), ibafloxacin (60), irloxacin (53), levofloxacin (64), lomefloxacin (58), marbofloxacin (65), merafloxacin (69), miloxacin (40), moxifloxacin (78), nadifloxacin (64), norfloxacin (46), ofloxacin (49), olamufloxacin (79), orbifloxacin (68), pazufloxacin (71), pefloxacin (45), pradofloxacin (84), premafloxacin (72), prulifloxacin (72), rosoxacin (36), rufloxacin (57), sarafloxacin (62), sitafoxacin (75), sparfloxacin (63), temafloxacin (58), tioxacin (34), tosufloxacin (60), trovafloxacin (73), vebufloxacin (69)
- (c)            flumequine (34), nalidixic acid (13), oxolinic acid (15), pipemidic acid (32), piromidic acid (27)
- metioxate (34)

USAN

**-oxan(e)        benzodioxane derivatives**

E.5.1.0        (USAN: -adrenoreceptor antagonists; benzodioxane derivatives)



- (a)            **-adrenoreceptor antagonists**  
azaloxan (52) (antidepressant), fluparoxan (58) (antidepressant), idazoxan (49) ( $\alpha_2$ ), imiloxan (52) ( $\alpha_2$ ) (antidepressant), piperoxan (1) (sympatholytic), proroxan (39)
- antihypertensives:  
flesinoxan (55), guabenxan (32), guanoxan (15)
- tranquilizers:  
butamoxane (12), ethomoxane (12), pentamoxane (12)

related:

efaroxan (59) ( $\alpha_2$ )

- (b) ambenoxan (21), amoproxan (22), nibroxane (35), razoxane (40)/dexrazoxane (62), sobuzoxane (62), tolboxane (12)

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USAN

**-oxanide**      **see -anide**

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USAN

**-oxef**          **see cef-**

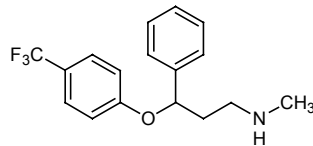
**-oxepine**      **see -pine**

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USAN

**-oxetine**      **antidepressants, fluoxetine derivatives**

C.3.0.0



- (a) ansoxetine (58), dapoxetine (65), duloxetine (68), femoxetine (36), fluoxetine (34), ifoxetine (54), litoxetine (64), nisoxetine (34), omiloxetine (76), paroxetine (38), reboxetine (54), seproxetine (66), tomoxetine (49)

**-oxifene**      **see -ifene**

**-oxicam**      **see -icam**

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BAN, USAN

**-pafant**      **platelet-activating factor antagonists**

I.2.1.0

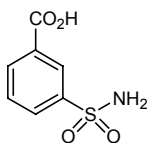
- (a) apafant (60), bepafant (60), dacopafant (63), foropafant (75), israpafant (76), lexipafant (70), minopafant (80), modipafant (65), nupafant (70), rocepafant (71), setipafant (72), tulopafant (64)



USAN

**-pamide**      **diuretics, sulfamoylbenzoic acid derivatives  
(could be sulfamoylbenzamide) (19th Report, 1970)**

N.1.2.0      (USAN: diuretics (sulfamoylbenzoic acid derivatives))

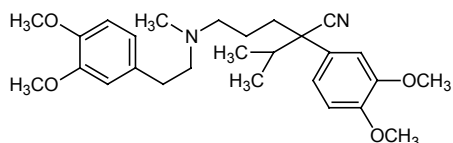


- (a)      alipamide (18), besulpamide (52), clopamide (13), indapamide (29), tripamide (44), xipamide (22), zidapamide (50) (previously isodapamide (47))
- (b)      chlorpropamide (8) (hypoglycemic), isopropamide iodide (8) (anticholinergic)
- (c)      bumetanide (24), chlortalidone (12), clorexolone (15), furosemide (14), sulclamide (15), tiamizide (16)

USAN

**-pamil**      **coronary vasodilators, verapamil derivatives**

F.2.1.0      (USAN: coronary vasodilators (verapamil type))



- (a)      anipamil (49), dagapamil (52), devapamil (53), dexverapamil (65), emopamil (52), falipamil (48), gallopamil (38), levemopamil (62), nexopamil (67), ronipamil (51), tiapamil (43), verapamil (16)

related: bertosamil (64), bisaramil (60)

USAN

**-parcin**      **for glycopeptide antibiotics**

S.6.0.0

- (a)      avoparcin (29), orientiparcin (72)

USAN

**-parin      heparin derivatives including low molecular mass heparins**

I.2.0.0

- (a) ardeparin sodium (68), bemiparin sodium (75), certoparin sodium (70), dalteparin sodium (64), enoxaparin sodium (52), heparin sodium (54), livaraparin calcium (85), minolteparin sodium (73), nadroparin calcium (65), parnaparin sodium (65), reviparin sodium (65), tinzaparin sodium (65)

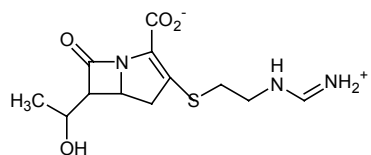
**-parinux      synthetic heparinoids**

fondaparinux sodium (83) (replaces fondaparin sodium (79))

USAN

**-penem      analogues of penicillanic acid antibiotics modified in the five-membered ring**

S.6.0.0 (USAN: analogues of penicillanic acid antibiotics modified in the five-membered ring)



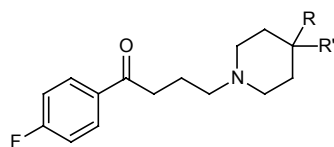
- (a) biapenem (69), doripenem (83), ertapenem (84), faropenem (69), imipenem (50), lenapenem (73), meropenem (60), panipenem (64), ritipenem (67), sulopenem (68), tacapenem (87), tebipenem (82)

USAN

**-perone      tranquilizers, neuroleptics, 4'-fluoro-4-piperidinobutyrophenone derivatives**

C.1.0.0

C.2.0.0 (USAN: 4'-fluoro-4-piperidinobutyrophenone derivatives; antianxiety agents; neuroleptics)



- (a) aceperone (14), amiperone (14), biriperone (51), carperone (24), cicarperone (28), cinuperone (53), cloroperone (38), declenperone (42), duoperone (54), fenaperone (28), fluspiperone (34), lenperone (27), lodiperone (44), melperone (34), metrenperone (56), milenperone (37), mindoperone (38), moperone (14), nonaperone (44), pipamperone (17), pirenperone (46), prideperone (54), primaperone (17), propyperone (16), roxoperone (17), setoperone (51), spiperone (17), timiperone (40)

closely related: azabuperone (34), azaperone (18), lodiperone (44), zoloperone (39)

USAN

**-peridol      antipsychotics, haloperidol derivatives**

benperidol (14), bromperidol (33), [clofluperol (18)], droperidol (14), [fluanisone (13)], haloperidol (10), trifluperidol (16)

USAN

**-peridone      antipsychotics, risperidone derivatives**

abaperidone (80), belaperidone (78), cloperidone (17), iloperidone (69), lusaperidone (82), ocaperidone (64), paliperidone (83), risperidone (57), tioperidone (37)

(c) domperidone (36), etoperidone (36) (antiemetic)

USAN

**-pidem      hypnotics/sedatives, zolpidem derivatives**

C.1.0.0

alpidem (53), necopidem (66), saripidem (67), zolpidem (53)

**-pin(e)      see also Pharm S/Nom 970 (tricyclic compounds)**

*-dipine*      see *-dipine*

(a)  
*-zepine*      antidepressant/neuroleptic: C.3.2.0: dibenzepin (14), elanzepine (35), enprazepine (30), mezepine (22), nuvenzepine (59), prazepine (15), propizepine (19), tilozepine (40)

tricyclic antiulcer: J.0.0.0: darenzepine (52), pirenzepine (30), siltenzepine (63), telenzepine (50), zolenzepine (48)

tricyclic anticonvulsant: A.3.1.0: carbamazepine (15), etazepine (51), licarbazepine (81), oxcarbazepine (41)

hyperthermia: amezepine (42)

*-apine*      psychoactive: C.0.0.0: amoxapine (25), asenapine (87), batelapine (64), clotiapine (16), clozapine (22), flumezapine (47), fluperlapine (46), loxapine (22), metiapine (22), mirtazapine (61), olanzapine (67), pentiapine (56), perlapine (23), quetiapine (74), rilapine (52), serazapine (63), tenilapine (52)

*-cilpine*      antiepileptic: A.3.1.0: dizocilpine (60)

- <i>oxepin</i>	beloxepin (75), cidoxepin (17), doxepin (15), maroxepin (54), metoxepin (33), pinoxepin (18), savoxepin (56), spiroxepin (32)	
- <i>oxopine</i>	traboxopine (58)	
- <i>sopine</i>	adosopine (63)	
- <i>tepine</i>	citatepine (54), clorotepine (29), damotepine (27), metitepine (27), tropatepine (28) dosulepin (15)	
(b)	atromepine (15), noscapine (7), prozapine (14)	
(c)	clobenzepam (25), homopipramol (20), opipramol (15)	
<hr/>		
<b>-piprazole</b>	<b>see -prazole</b>	
<hr/>		
<b>-pirox</b>	<b>see -ox</b>	USAN
<hr/>		
<b>-pirone</b>	<b>see -spirone</b>	
<hr/>		
<b>-plact</b>	<b>platelet factor 4 analogues and derivatives</b> irop lact (74)	
<hr/>		
<b>-planin</b>	<b>antibacterials (<i>Actinoplanes</i> strains)</b>	USAN
S.5.0.0	actaplanin (34), mideplanin (66), ramoplanin (57), teicoplanin (48)	
<hr/>		
<b>-plase</b>	<b>see -teplase, -uplase under -ase</b>	
<hr/>		
<b>-platin</b>	<b>antineoplastic agents, platinum derivatives</b>	USAN
L.0.0.0	(USAN: antineoplastics (platinum derivatives))	
(a)	carboplatin (48), cisplatin (39), dexormaplatin (64), enloplatin (64), eptaplatin (83), iproplatin (51), lobaplatin (65), miboplatin (66), miriplatin (85), nedaplatin (67), ormaplatin (63),	

oxaliplatin (56), picoplatin (87), satraplatin (80), sebriplatin (68), spiroplatin (48), triplatin tetranitrate (87), zeniplatin (63)

**-plon**      **pyrazolo[.]pyrimidine derivatives, used as anxiolytics, sedatives, hypnotics**

A.2.2.0

C.1.0.0

ocinaplon (72), indiplon (86), zaleplon (72)

BAN, USAN

**-poetin**      **erythropoietin type blood factors**

I.0.0.0

(a)      darbepoetin alfa (85), epoetin alfa (62), epoetin beta (62), epoetin delta (85), epoetin gamma (67), epoetin epsilon (72), epoetin omega (73)

USAN

**-porfin**      **benzoporphyrin derivatives**

(a)      rostaporfin (83), stanssoporfin (79), talaporfin (83), temoporfin (70), verteporfin (71)

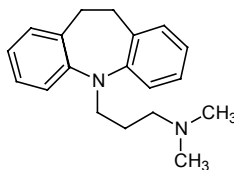
**-poride**      **Na<sup>+</sup>/H<sup>+</sup> antiport inhibitor**

amiloride (18), cariporide (74), eniporide (79), sabiporide (84), zoniporide (85)

BAN, USAN

**-pramine**      **substances of the imipramine group**

C.3.2.0      (USAN: imipramine type compounds)



(a)      saturated dibenzazepine:  
 azipramine (36), carpipramine (16), cianopramine (47), ciclopramine (29), clocapramine (28), clomipramine (17), depramine (31), desipramine (13), imipramine (8), ketimipramine (17), lofepramine (24), lopramine (24) (replaced by lofepramine (34)), metapramine (34), mosapramine (64), pumaprazole (76), quinupramine (32), tampramine (54), tienopramine (38), trimipramine (13), imipraminoxide (36)

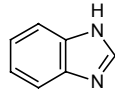
- (c) unsaturated dibenzazepine:  
 carbamazepine (15), homopipramol (20), opipramol (15)

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USAN

**-prazole antiulcer, benzimidazole derivatives**

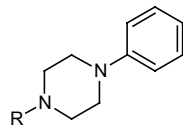
J.0.0.0 (USAN: antiulcerative benzimidazole derivatives)



- (a) cinprazole (34), disuprazole (56), esaprazole (45), esomeprazole (79), fuprazole (39), ilaprazole (86), lansoprazole (60), leminoprazole (68), nepaprazole (74), nilprazole (37), omeprazole (46), pantoprazole (62), picoprazole (46), pumaprazole (76), rabeprazole (69), saviprazole (62), tenatoprazole (80), timoprazole (35), ufiprazole (58)

**-piprazole psychotropics, phenylpiperazine derivatives**

C.0.0.0

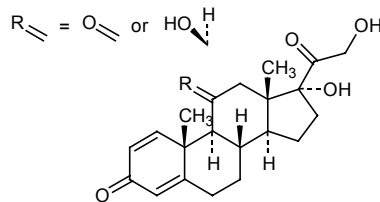


- (a) aripiprazole (75), dapiprazole (45), elopiprazole (70), enpiprazole (24), lorpiprazole (60), mepiprazole (24), sonpiprazole (80) tolpiprazole (25)
- (b) dapiprazole (see above)

USAN

**pred prednisone and prednisolone derivatives**

Q.3.3.0 (USAN: pred-; -pred- or -pred)



- (a) chlorprednisone (12), cloprednol (31), difluprednate (21), domoprednate (47), fluprednidene (19), fluprednisolone (13), halopredone (36), isoflupredone (36), isoprednidene (24), loteprednol (64), mazipredone (32), meprednisone (15), methylprednisolone (8), methylprednisolone aceponate (52), methylprednisolone suleptanate (56), oxisopred (29),

prednazate (16), prednazoline (22), prednicarbate (44), prednimustine (31), prednisolamate (13), prednisolone (6), prednisolone steaglate (16), prednisone (6), prednylidene (13), tipredane (54)

(c) **-methasone or -metasone:** alclometasone (41), amelometasone (74), beclometasone (17), betamethasone (11), betamethasone acibutate (26), cormetasone (29), desoximetasone (20), dexamethasone (8), dexamethasone acefurate (57), flumetasone (13), halometasone (41), icometasone enbutate (70), mometasone (56), paramethasone (12)

**-betasol:** clobetasol (26), doxibetasol (26), ulobetasol (54)

(USAN: steroids (not prednisolone derivatives))

Q.3.0.0 **-olone:** clocortolone (16), descinolone (17), diflucortolone (18), fluclorolone acetonide (22), fluocinolone acetonide (11), fluocortolone (15), fluorometholone (8), fluperolone (13), ganaxolone (76), halocortolone (31), rimexolone (38), triamcinolone (8), triamcinolone benetonide (36), triamcinolone furetonide (36), triamcinolone hexacetonide (15)

clobetasone (26), cloticasone (52), deprodone (20), dichlorisone (10), diflorasone (30), flunisolide (11), fluticasone (52), meclorisone (40), timobesone (51)

**-olone** steroids other than prednisolone derivatives

A.1.2.0 general anesthetics, pregnanes: alfadolone (27), alfaxalone (27), minaxolone (39), renanolone (8)

H.2.0.0 anti-arrhythmic: amafolone (40), edifolone (56)

L.6.0.0 cytostatics - sex hormones: drostanolone (13), trestolone (25)

Q.2.3.0 androgens: androstanolone (4), drostanolone (13), mesabolone (29), mestanolone (10), mesterolone (15), metenolone (12), metribolone (17), nandrolone (22), norethandrolone (6), oxabolone cipionate (14), oxandrolone (12), oxymetholone (11), quinbolone (14), rosterolone (59), stenbolone (17), tibolone (22), trenbolone (24)

J.0.0.0 glycyrrhetic acid derivatives: carbenoxolone (15), cicloxolone (33), cinoxolone (33), deloxolone (51), enoxolone (15), roxolonium metilsulfate (33)

Q.2.3.1 oxendolone (42)

various non-steroidal compounds

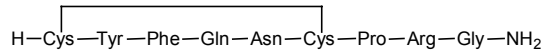
citolone (23) (hepato-bil. troubles), clorexolone (15) (diuretic), fenozolone (14) (psychotonic), tioxolone (16) (keratolytic), vistatolon (25) (antiviral)

**-prenaline**    **see -terol**

USAN

**-pressin**    **vasoconstrictors, vasopressin derivatives**

Q.1.2.0



(a)    argipressin (13), desmopressin (33), felypressin (13), lyspressin (13), ornipressin (22), terlipressin (46), vasopressin injection (16)

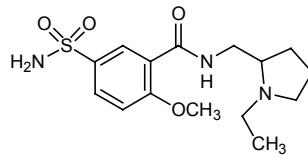
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BAN, USAN

**-pride (x)**    **sulpiride derivatives**

C.0.0.0

J.1.0.0



(a)    C.0.0.0: alizapride (43), alpiropride (49), amisulpride (44), batanopride (61), broclepride (43), cisapride (49), dazopride (50), denipride (58), etacepride (52), eticlopride (52), flubepride (35), nemonapride (63) (previously emonapride (61)), peralopride (43), prosulpride (43), prucalopride (78), sulmepride (43), sultopride (26), sulverapride (44), veralipride (43)

J.1.0.0: alepride (40), bromopride (27), cinitapride (41), cipropride (41), clebopride (32), dobupride (57), irolapride (55), isosulpride (36), itopride (66), lintopride (65), lirexapride (74), lorapride (44), mezacopride (56), mosapride (66), pancopride (62), raclopride (52), remoxipride (49), renzapride (60), tiapride (28), ticalopride (83), tinisulpride (44), trazolopride (51), tropapride (48), zacopride (55)

K.0.0.0: cloxacepride (42)

U.1.1.0/C.0.0.0: iolopride (<sup>123</sup>I) (73)

(b)    glimepride (66)

(c)    C.0.0.0: levosulpiride (63), sulpiride (18)

J.1.0.0: metoclopramide (17)



BAN, USAN

**-pril (x)      angiotensin-converting enzyme inhibitors**

H.3.0.0 (BAN: inhibitors of angiotensin-converting enzyme)  
(USAN: antihypertensive agents (captopril type))

- (a) alacepril (50), benazepril (58), captopril (39), ceronapril (64), cilazapril (53), delapril (54), enalapril (46), fosinopril (56), idrapril (66), imidapril (60), indolapril (50), libenzapril (58), lisinopril (50), moexipril (60), moveltipril (58), orbutopril (57), pentopril (53), perindopril (53), pivopril (52), quinapril (54), ramipril (52), rentiapril (55), spirapril (56), temocapril (64), trandolapril (53), utibapril (63), zabicipril (58), zofenopril (51)

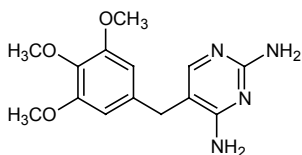
**-prilat (x)**

- (a) benazeprilat (58), cilazaprilat (54), enalaprilat (50), fosinoprilat (62), imidaprilat (71), moexiprilat (67), perindoprilat (56), quinaprilat (60), ramiprilat (53), spiraprilat (60), temocaprilat (78), trandolaprilat (60), utibaprilat (65), zabiciprilat (64), zofenoprilat (63)

USAN

**-prim      antibacterials, trimethoprim derivatives**

S.5.5.0

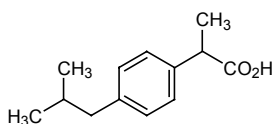


- (a) aditoprim (49), baquiloprim (56), brodimoprim (44), epioprim (44), metioprim (42), ormetoprim (21), tetroxoprim (33), trimethoprim (11), vaneprim (48)
- (c) diaveridine (18)

BAN, USAN

**-profen (x)      anti-inflammatory agents, ibuprofen derivatives**

A.4.2.0 (USAN: anti-inflammatory or analgesic substances (ibuprofen type))



- (a) alminoprofen (40), araprofen (65), atliprofen (74), bakeprofen (61), benoxaprofen (34), bermoprofen (57), bifeprofen (57), carprofen (35), cicloprofen (32), cliprofen (32), dexibuprofen (61), dexindoprofen (49), dexketoprofen (70), esflurbiprofen (56), fenoprofen (26), flunoxaprofen (44), fluprofen (18), flurbiprofen (28), frabuprofen (51), furaprofen (42), furclopuprofen (44), hexaprofen (30), ibuprofen (16), indoprofen (32), isoprofen (40), ketoprofen

(28), lobuprofen (53), lonaprofen (44), losmiprofen (61), loxoprofen (50), mabuprofen (64), mexoprofen (33), miroprofen (44), odalprofen (66), pelubiprofen (76), piketoprofen (40), pirprofen (32), pranoprofen (38), suprofen (31), tazeprofen (50), tetriprofen (29), tilnoprofen arbamel (74), tioxaprofen (39), vedaprofen (72), ximoprofen (37), zaltoprofen (64), zoliprofen (55)

(b) aprofene (12) (antispasm. coron. vasodil.), diprofene (12) (antispasm. blood vessels)

(c) brofezil (31), protizinic acid (27), tiaprofenic acid (30)

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BAN, USAN

**prost (x) prostaglandins**

Q.0.0.0 (USAN: -prost- or -prost: prostaglandin derivatives)

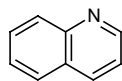
(a) alfaprostol (45), alprostadil (39), ataprost (62), beraprost (59), bimatoprost (85), butaprost (55), carboprost (36), cicaprost (54), ciprostone (51), clinprost (68), cloprostenol (33), delprostenate (42), dimoxaprost (52), dinoprost (26), dinoprostone (26), doxaprost (34), ecraprost (83), eganoprost (84), enisoprost (50), epoprostenol (44), eptaloprost (56), etiproston (46), fenprostalene (42), flunoprost (53), fluprostenol (33), froxiprost (55), gemeprost (42), iloprost (48) (originally ciloprost (46)), lanprostol (72), latanoprost (67), limaprost (56), lubiprostone (87), luprostiol (44), meteneprost (45), misoprostol (47), naxaprostene (58), Nileprost (45), nocloprost (51), oxoprostol (44), penprostene (37), pimilprost (71), piriprost (51), prostalene (34), remiprostil (65), rosaprostol (48), sulprostone (37), taprostene (58), tiaprost (41), tilsuprost (51), tiprostanide (48), travoprost (80), treprostiniil (87), unoprostone (66), vapiprost (58), viprostol (53)

**-prostil prostaglandins, anti-ulcer**

(a) arbaprostil (35), deprostil (32), enprostil (50), mexiprostil (52), ornoprostil (56), rioprostil (49), spiriprostil (63), trimoprostil (49)

TRS 581

**-quine (d) quinoline derivatives (deleted from General Principles in List 28 prop. INN)**  
**quin**



- (a) antimalarial: amodiaquine (1), amopyroquine (8), bulaquine (82), chloroquine (4), hydroxychloroquine (8), mefloquine (33), moxipraquine (26), pamaquine (4), pentaquine (4), primaquine (1), quinocide (34), tafenoquine (80), tebuquine (49)
- amebicide: clamoxyquine (16), mebiquine (29) (gastrointest. antiseptic), benzoxiquine (18) (antiseptic), cletoquine (20) (anti-inflammatory), cloxiquine (30) (antiseptic), debrisoquine (15) (hypotensive agent), esproquine (31) (cardiovascular agent), flumequine (34) (antibacterial), guanisoquine (15) (hypotensive agent), nifuroquine (36), oxamniquine (28) (schistosomacide)
- (c) antirheumat., antigout (antimalarial): acequinoline (22), cinchophen (1), neocinchophen (1), oxycinchophen (6)
- antibact.: actinoquinol (15), aminoquinuride (45), broquinaldol (17), broxaldine (12), chlorquinaldol (1), clioquinol (16), dequalinium chloride (8), diiodohydroxyquinoline (1), laurolinium acetate (12), nitroxoline (15), quindecamine (15), tilbroquinol (45), tiliquinol (45)
- antifungal: hedaquinium chloride (8)
- anthelmintic: pyrvinium chloride (6)
- treatment of leishmaniasis etc: aminoquinol (22), sitamaquine (80)
- amebicide: cloquinate (11), dehydroemetine (15), quinfamide (40)
- antiproteus: oxolinic acid (15)
- coccidiostat: amquinate (21), buquinolate (16), ciproquinate (22), decoquinate (20), nequinate (22), proquinolate (17), quindoxin (26) (growth promoter for pigs and poultry)
- growth promoter, bactericide: cinoquidox (40), olaquindox (31) (quinoxaline derivative)
- antiviral: famotine (23), memotine (22)
- antihypertensive: amiquinsin (17), leniquinsin (18), peraquinsin (29) (quinazolinone derivative), trethinium tosilate (14), quinuclium bromide (40)
- heart failure: buquineran (40)
- diuretic: quincarbonate (31)
- vasodilator, treatment of cerebrovascular insuff.: viquidil (25)
- curarizing agent: dimethyltubocurarinium chloride (1), laudexium metilsulfate (4), tubocurarine chloride (1)
- anti-cholinergic: toquizine (17), tiquizium bromide (47)

antispasm. muscle relaxant: dimoxyline (1), drotaverine (17), ethaverine (4), flucarbril (14), niceverine (15), octaverine (18), quinetalate (16)

bronchodilator: quinprenaline (17), tretoquinol (21), (bronchial asthma)

oxytocic: quipazine (17)

analgesic: glafenine (15), metofoline (12)

local anaesthetic: cinchocaine (1), euprocin (22), quinisocaine (4)

antituss.: iquindamine (34), noscapine (7)

diagnostic aid: quinaldine blue (17)

antihist.: pirquinozol (43), tritoqualine (14)

antihyperlipidemic: climiqualine (33) (isoquin. der.)

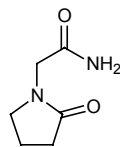
anti-ulcer: isotiquimide (49), tiquinamide (35)

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BAN, USAN

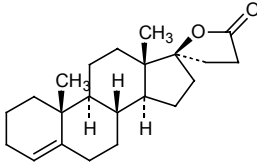
**-racetam      amide type nootrope agents, piracetam derivatives**

B.1.0.0      (BAN: substances of the piracetam group)  
 (USAN: nootropic substances (piracetam type))



(a)      aloracetam (62), aniracetam (44), cebaracetam (66), coluracetam (86), dimiracetam (68), doliracetam (53), dupracetam (38), etiracetam (40), fasoracetam (78), imuracetam (42), levetiracetam (62), molracetam (55), nebracetam (59), nefiracetam (64), nicoracetam (63), oxiracetam (43), piracetam (22), pramiracetam (46), rolziracetam (54)

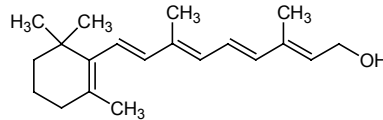
related: tenilsetam (51)

		BAN, USAN
<b>-relin (x)</b>	<b>prehormones or hormone-release stimulating peptides</b>	
Q.0.0.0	(BAN: hypophyseal hormone release-stimulating peptides)	
(a)	<b><u>LHRH-release-stimulating peptides</u></b> : avorelin (74), buserelin (36), deslorelin (61), gonadorelin (32), goserelin (55), histrelin (53), leuprorelin (47), lutrelin (51), nafarelin (50), triptorelin (56)	
<b>-morelin</b>	<b><u>growth hormone release-stimulating peptides</u></b> : capromorelin (83), dumorelin (59), examorelin (72), ipamorelin (78), pralmorelin (77), rismorelin (74), sermorelin (56), somatorelin (57), tabimorelin (80)	
<b>-tirelin</b>	<b><u>thyrotropin releasing hormone analogues</u></b> :	
(a)	azetirelin (60), fertirelin (42), montirelin (58), orotirelin (58), posatirelin (60), protirelin (31), taltirelin (75)	
(a)	<u>other</u> : corticorelin (64)	
TRS 581		
		USAN
<b>-relix</b>	<b>hormone-release inhibiting peptides</b>	
(a)	abarelix (78), cetorelix (64), degarelix (86), detirelix (56), ganirelix (65), iturelix (79), prazarelix (81), ramorelix (68), teverelix (71)	
		USAN
<b>-renone</b>	<b>aldosterone antagonists, spironolactone derivates</b>	
N.1.8.0	(USAN: aldosterone antagonists (spironolactone type))	
		
(a)	canrenoic acid (20) and potassium canrenoate (20), canrenone (20), dicirenone (50), drospirenone (63), eplerenone (77), mespirenone (51), spirorenone (45)	
(b)	bromchlorenone (12) (antifungal), menatetrenone (28) (antihemor-rhagic), teprenone (50), ubidecarenone (48) (in congestive heart failure)	
(c)	oxpre <u>noate</u> potassium (53), prore <u>noate</u> potassium (32), spironolactone (11), spiroxasone (14)	

USAN

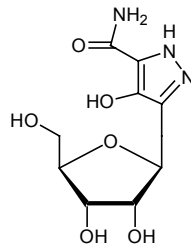
**retin**      **retinol derivatives**

P.1.0.0      (USAN: -retin-)



- (a)      acitretin (56) (previously etretin (51)), alitretinoin (80), doretinel (60), etretinate (41), fenretinide (51), isotretinoin (41), motretinide (38), pelretin (60), retinol (18), tretinoin (25), tretinoin tocoferil (66)
- (b)      noretynodrel (13), secretin (1), trethinium tosilate (14)

USAN

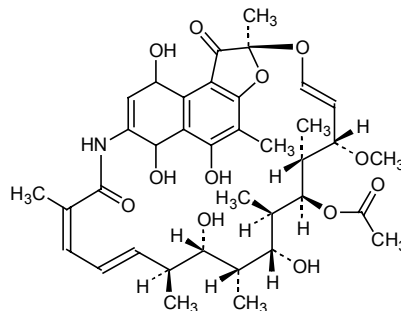
**-ribine**      **ribofuranyl-derivatives of the "pyrazofurin" type**L.0.0.0./  
S.5.3.0

- (a)      azaribine (19), cladribine (68), isatoribine (83), loxoribine (64), mizoribine (46), triciribine (46)
- (c)      pirazofurin (31), ribavirin (31), riboprine (20), tiazofurine (48)
- related: benaxibine (50)

USAN

**rifa-**      **antibiotics, rifamycin derivatives**

S.6.4.0

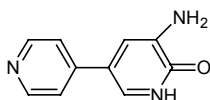


- (a) rifabutin (52), rifalazil (78), rifametane (61), rifamexil (67), rifamide (15), rifampicin (17), rifamycin (13), rifapentine (43), rifaximin (49) (previously rifaxidine (48))

USAN

**-rinone cardiac stimulants, amrinone derivatives**

H.1.0.0 (USAN: cardiotonic agents (amrinone type))



- (a) amrinone (38), bemarkinone (57), medorinone (54), milrinone (50), nanterinone (60), olprinone (70), pelrinone (53), saterinone (56), toborinone (72), vesnarinone (57)

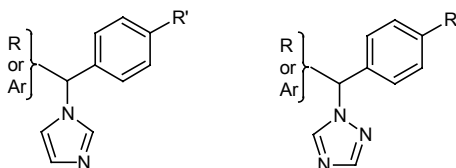
- (b) gestrinone (39), indacrinone (51), taziprinone (48)

**-rize see -izine**

USAN

**-rozole aromatase inhibitors, imidazole-triazole derivatives**

L.0.0.0

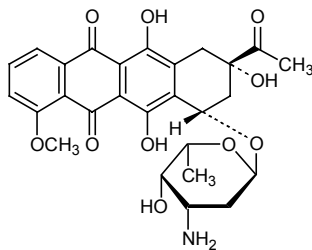


anastrozole (72), fadrozole (64), finrozole (81), letrozole (70), liarozole (64), vorozole (64)

USAN

**-rubicin antineoplastic antibiotics, daunorubicin derivatives**

L.5.0.0 (USAN: antineoplastic antibiotics (daunorubicin type))



- (a) aclarubicin (44), amrubicin (65), carubicin (40), daunorubicin (20), detorubicin (41), doxorubicin (25), epirubicin (48) (originally pidorubicin (47)), esorubicin (47), galarubicin

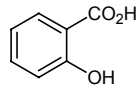
(80), idarubicin (47), ladirubicin (83), leurubicin (64), medorubicin (47), nemorubicin (71), pirarubicin (55), rodorubicin (54), valrubicin (79), zorubicin (39)

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 USAN

**sal**                    **salicylic acid derivatives**

(USAN: -sal-; -sal; or sal-)



- (a)                    **sal-**                    analgesic anti-inflammatory A.4.2.0  
 choline salicylate (15), imidazole salicylate (51), salacetamide (1), salcolex (23), saletamide (20), salfluverine (29), salicylamide (1), salnacedin (73), salprotoside (31), salsalate (28), salverine (15)

various

salantel (29) (anthelmintic), salinazid (8) (antituberc.)

**-sal**                    analgesic anti-inflammatory A.4.2.0

detanosal (23), diflunisal (33), fendosal (35), flufenisal (22), fosfosal (37), guacetisal (40), guaimesal (50), parcetasal (65), pranosal (24), sulprosal (36), tenosal (63)

antithrombotic

flufosal (42)

various: antituberc.

fenamisal (15), thiomersal (1) (disinfect.), triflusal (37) (antithrombotic)

**-sal-**                    analgesic anti-inflammatory A.4.2.0

acetaminosalol (1), acetylsalicylic acid (IP), carbasalate calcium (27), carsalam (13), etersalate (50), etosalamide (14), parsalimide (32), talosalate (43)

various

amotosalen (85), calcium benzamidosalicylate (10), homosalate (28) (sunscreen agent), lasalocid (30) (antibiotic. vet.), mersalyl (4) (mercurial diuretic), octisalate (83) (sunscreen), osalmid (15) (choleric), xenysalate (12) (antiseborrheic)

**salazo-**                    phenylazosalicylic acid derivatives antibact. S.5.1.0

salazodine (22), salazosulfadimidine (11), salazosulfamide (1), salazosulfathiazole (1)

**-salazine/-salazide**

dersalazine (86), mesalazine (52), olsalazine (52), sulfasalazine (55), balsalazide (48), ipsalazide (48)



**-salan** brominated salicylamide derivatives disinfect. S.2.1.0

bensalan (18), dibromsalan (14), flusalan (16), fursalan (18), metabromsalan (16), tiosalan (18), tribromsalan (14)

(b) non-salicylic acid derivatives

macrosalb (<sup>99m</sup>Tc) (33), trioxysalen (16) (pigmenting agent)

bronchodil.

levosalbutamol (78), salbutamol (20), salmefamol (23)

(c) analgesic, anti-inflammatory A.4.2.0

aloxiprin (13), anilamate (13), benorilate (21), brosetamide (29), cresotamide (28), dibusadol (24), dipyroceryl (6), ethenzamide (10), fenamifuril (16), hydroxytoluic acid (17), sodium gentisate (1), sodium glucaspaldrate (17)

various

4-aminosalicylates of the -caine series D.1.0.0: ambucaine (6), hydroxyprocaine (1), hydroxytetracaine (1), propoxycaine (4)

antihypertensives H.3.0.0

labetalol (35)

antitussives K.1.0.0

alloclamide (16), flualamide (20)

saluretics N.1.2.0

xipamide (22) (sulfamoyl deriv.),

mercurial diuretics N.1.3.0

mercuderamide (1)

anthelmintics S.3.1.0

bromoxanide (31), clioxanide (19), niclosamide (13), rafoxanide (24)  
closantel (36), flurantel (25), resorantel (23)

antifungals S.4.0.0

buclosamide (16), exalamide (37), pentalamide (13)

See also Pharm S/Nom 557

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 USAN
**-sartan** **angiotensin II receptor antagonists, antihypertensive (non-peptidic)**

## H.3.0.0

abitesartan (73), candesartan (71), elisartan (72), embusartan (78), eprosartan (71), forasartan (74), irbesartan (71), losartan (66), milfasartan (76), olmesartan (80), pomisartan (73),

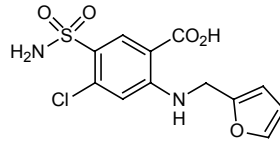
prazosin (85), ripisartan (73), saprisartan (72), tasosartan (72), telmisartan (70), valsartan (68), zolasartan (70)

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USAN

**-semide      diuretics, furosemide derivatives**

N.1.1.0



(a)      azosemide (35), furosemide (14), galosemide (33), torasemide (35)

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USAN

**-serpine (d)      derivatives of *Rauwolfia* alkaloids**

E.5.4.0

(a)      bietaserpine (14), mefeserpine (15), reserpine (4)

(c)      chloroserpidine (11), deserpidine (6), methoserpidine (11), metoserpate (20), rescimetol (44), rescinnamine (6), syrosingopine (10)

TRS 581

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USAN

**-setron      serotonin receptor antagonists (5-HT<sub>3</sub>) not fitting into other established groups of serotonin receptor antagonists**

(BAN: serotonin receptor antagonists (5HT<sub>3</sub>) used as antihyper-tensives)

(a)      alosetron (66), azasetron (68), bemesetron (64), cilansetron (68), dolasetron (65), fabesetron (74), galdansetron (72), granisetron (59), indisetron (76), itasetron (68), lerisetron (69), lurosetron (69), mirisetron (72), ondansetron (59), palonosetron (74), ramosetron (70), ricasetron (70), tropisetron (62), zatosetron (64)

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USAN

**som-      growth hormone derivatives**

Q.0.0.0

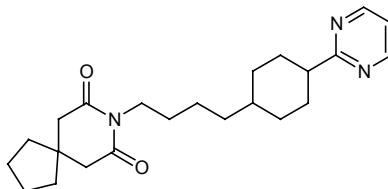
(a)      somagrebove (63), somalapor (62), somatosalm (69), somatrem (54), somatropin (56), somavubove (63), somenopor (62), somfasepor (66), sometribove (54), sometripor (55), somidobove (58)

(b) somatorelin (57), somantadine (51), somatostatin (46)

USAN

**-spirone**      **anxiolytics, buspirone derivatives**

C.1.0.0



(a) alnespirone (70), binospirone (65), buspirone (30), enilospirone (52), perospirone (71), revospirone (61), tandospirone (60), tiospirone (57), umespirone (60), zalospirone (64)

(c) eptapirone (82), gepirone (54), ipsapirone (54)

BAN, USAN

**-stat- or  
-stat**      **enzyme inhibitors**

(BAN: -stat: enzyme inhibitors)

**-castat**      dopamine -hydroxylase inhibitors

nepicastat (78)

**-elestat**      elastase inhibitors

sivelestat (78)

**-listat**      pancreatic lipase inhibitors

(a) orlistat (66)

**-mastat**      matrix metalloproteinase inhibitors

(a) batimastat (70), cipemastat (81), ilomastat (73), marimastat (75), prinomastat (82), solimastat (80), tanomastat (82)

**-restat or  
-restat-**      aldose reductase inhibitors

M.5.0.0

(a) alrestatin (37), epalrestat (55), fidarestat (78), imirestat (59), lidorestat (87), minalrestat (76), ponalrestat (58), risarestat (82), tanomastat (82), tolrestat (51), zenarestat (64), zopalrestat (64)

**-vastatin      antihyperlipidaemic substances, HMG CoA reductase inhibitors**

## H.4.0.0

- (a) atorvastatin (71), bervastatin (72), cerivastatin (74), crilva-statin (63), dalvastatin (64), fluvastatin (62), glenvastatin (70), lovastatin (57), mevastatin (44), pitavastatin (83) (replaces itavastatin (80)), pravastatin (57), rosuvastatin (83), simvastatin (58), tenivastatin (85)

proteolytic enzyme inhibitors: aloxistatin (57), ulinastatin (56); camostat (46), nafamostat (53), patamostat (69), sepimostat (68)

various:

- azalanstat (73): lanosterol 14 $\alpha$ -demethylase inhibitor
- febuxostat (85): xanthine oxidase and xanthine dehydrogenase inhibitor
- benurestat (31): urease inhibitor
- cilastatin (50): renal dehydropeptidase inhibitor
- miglustat (85): glucosyltransferase inhibitor
- nystatin (6): antifungal antibiotic
- pentostatin (38): vidarabin activity potentiator; inhibitor of enzymatic deaminative metabolism
- pepstatin (28): pepsin inhibitor
- somatostatin (43): growth hormone release inhibiting factor
- tendamistat (44): amylase inhibitor
- vistatolon (25): antiviral antibiotic
- zinostatin (40): antineoplastic
- zinostatin stimalamer (74)

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 BAN
**-steine      mucolytics, other than bromhexine derivatives**

K.0.0.0 (BAN: substances of the acetylcysteine group)

- (a) acetylcysteine (13), bencisteine (30), carbocisteine (34), cartasteine (72), dacisteine (49), danosteine (53), erdosteine (56), fudosteine (77), guaisteine (57), isalsteine (63), letosteine (38), mecysteine (13), midesteine (63), moguisteine (61), nesosteine (52), omonasteine (40), prenisteine (42), salmisteine (58), taurosteine (63), telmesteine (63)

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 USAN
**-ster-      androgens/anabolic steroids**

## Q.2.3.1

- (a) **-testosterone**: cloxotestosterone (12), methyltestosterone (4), testosterone (4), testosterone ketolaurate (16)

**-sterone**: bolasterone (13), fluoxymesterone (6), oxymesterone (12), prasterone (23), tiomesterone (14)

**-ster-**: mesterolone (15), penmesterol (14), rosterolone (59)

(b) progestational steroids

**-gesterone**: dydrogesterone (12), haloprogesterone (11), hydroxyprogesterone (8), medroxyprogesterone (10), norgesterone (14), progesterone (4)

**-sterone**: dimethisterone (8), ethisterone (4), norethisterone (6), norvinisterone (10)

various: **-sterone**: aldosterone (6) (corticosteroid), calusterone (23) (antineoplastic)

**-sterol**: azacosterol (16) (hypocholesterolemic), dihydrotachy-sterol (1) (antihypoparathyroid), iodocholesterol (<sup>131</sup>I) (39)

**ster**: nisterime (38) (contragestational agent), stercuronium iodide (21) (neuromuscular blocking agent)

**-(a)steride** (USAN: testosterone reductase inhibitors) - antineoplastic

bexlosteride (81), dutasteride (78), epristeride (69), finasteride (62), izonsteride (81), lapisteride (85), turosteride (67)

**-stigmine (d) acetylcholinesterase inhibitors**

E.1.2.0

(a) distigmine bromide (16), eptastigmine (62), ganstigmine (81), neostigmine bromide (4), pyridostigmine bromide (6), quilstigmine (76), rivastigmine (77), terestigmine (77)

(c) eseridine (53)

USAN

**-stim colony stimulating factors**

I.5.0.0

ancestim (79) (cell growth factor), garnocestim (85) (immunomodulator), pegacaristim (80) (megakaryocyte growth factor)

**-distim combination of two different types of colony stimulating factors**

(a) milodistim (74), leridistim (80)

**-grastim granulocyte colony stimulating factor (G-CSF) type substances**

(a) filgrastim (64), lenograstim (64), nartograstim (66), pegfilgrastim (85), pegnartograstim (80)

**-gramostim granulocyte macrophage colony stimulating factor (GM-CSF) types substances**

(a) ecogramostim (62), molgramostim (64), regramostim (64), sargramostim (66)

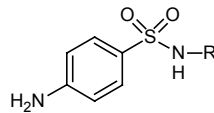
**-mostim macrophage stimulating factors (M-CSF) type substances**

(a) cilmostim (71), mirimostim (65)

**-plestim interleukin-3 analogues and derivatives**

daniplestim (76), muplestim (72)

BAN, USAN

**sulfa- anti-infectives, sulfonamides**S.5.1.0 (BAN: sulpha-)  
(USAN: antimicrobial sulfonamides)

(a) sulfabenz (17), sulfabenzamide (27), sulfacarbamide (12), sulfacecole (30), sulfacetamide (1), sulfachlorpyridazine (10), sulfachrysoidine (1), sulfacitine (23), sulfacloamide (17), sulfaclozole (25), sulfaclozine (25), sulfadiazole sodium (1), sulfadiazine (4), sulfadiazine sodium (4), sulfadicramide (4), sulfadimethoxine (10), sulfadimidine (1), sulfadoxine (20), sulfaethidole (8), sulfafurazole (1), sulfaguanidine (4), sulfaguanole (23), sulfalene (12), sulfaloxic acid (15), sulfamazone (40), sulfamerazine (4), sulfamerazine sodium (4), sulfamethizole (1), sulfamethoxazole (14), sulfamethoxypyridazine (8), sulfametomidine (12), sulfametoxydiazine (17), sulfametrole (31), sulfamonomethoxine (11), sulfamoxole (12), sulfanilamide (4), sulfanitran (15), sulfaperin (14), sulfaphenazole (10), sulfaproxyline (4), sulfapyrazole (18), sulfapyridine (1), sulfaquinoxaline (46), sulfasalazine (55), sulfasomizole (10), sulfasuccinamide (41), sulfasymazine (12), sulfathiazole (4), sulfathiourea (1), sulfatolamide (10), sulfatroxazole (29), sulfatrozole (24)

(b) sulfarsphenamine (4)

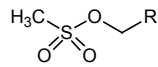
(c) benzylsulfamide (1), glucosulfamide (1), maleylsulfathiazole (1), mesulfamide (41), nitrosulfathiazole (1), phthalylsulfamethizole (6), phthalylsulfathiazole (1), salazodine (22), salazosulfa-dimidine (11), salazosulfamide (1), salazosulfathiazole (1), stearyl-sulfamide (1), succinylsulfathiazole (4), sulfisomidine (1), vanyldisulfamide (1), mafenide (1) (sulfonamide, but not sulfanilamide)

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USAN

**-sulfan antineoplastic, alkylating agents, methanesulfonates**

L.2.0.0



- (a) busulfan (6), improsulfan (35), mannosulfan (24), piposulfan (15), ritrosulfan (33), treosulfan (26)

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**-tant neurokinin (tachykinin) receptor antagonists***-pitant* neurokinin NK<sub>1</sub> (substance P) receptor antagonist

- (a) aprepitant (84), dapitant (74), ezlopitant (82), figopitant (82), vofopitant (82), lanepitant (77), nelpitantium besilate (75)

*-dutant* neurokinin NK<sub>2</sub> receptor antagonist

nepadutant (78), saredutant (75)

*-nertant* neurotensin antagonist

reminertant (85)

*-netant* neurokinin NK<sub>3</sub> receptor antagonist

- (a) osanetant (74), talnetant (81)

**-tecan antineoplastics, topoisomerase I inhibitors**

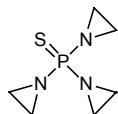
L.0.0.0 (USAN: anti-neoplastics (camptothecine derivatives))

afeletecan (85), diflomotecan (84), exatecan (81), gimatecan (86), irinotecan (64), lurtotecan (74), mureletecan (85), rubitecan (82), topotecan (65)

USAN

**-tepa antineoplastics, thiotepa derivatives**

L.2.0.0 (USAN: antineoplastic thiotepa derivatives)



(a) azatepa (12), pumitepa (48), thiotepa (10)

**-tepine see -pine**

USAN

**-teplase tissue type plasminogen activators, see -ase item VI**

BAN, USAN

**-terol (x) bronchodilators, phenethylamine derivatives**

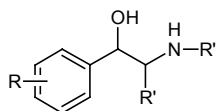
(previously (USAN: bronchodilators (phenethylamine derivatives))

-prenaline

or

-terenol

unofficial)



(a) amiterol (26), bambuterol (49), bitolterol (34), broxaterol (51), carbuterol (29), cimaterol (54), clenbuterol (28), colterol (36), difeterol (36), divabuterol (51), etanterol (53),

E.4.0.0 fenoterol (26), formoterol (44), imoxiterol (52), mabuterol (46), naminterol (53), nardeterol (62), picumeterol (64), pirbuterol (30), procaterol (37), reproterol (30), rimiterol (26), salmeterol (55), sulfonterol (31), tobuterol (45), tulobuterol (40), zilpaterol (60), zinterol (38)

cardiac stimulants:

metaterol (43), prenalterol (38), xamoterol (48); clorprenaline (17), hexoprenaline (21), isoprenaline (1), levisoprenaline (10), metiprenaline (24), orciprenaline (14), quinprenaline (17)

deterenol (25), soterenol (20)

(b) azacosterol (16), dihydrotachysterol (1), penmesterol (14)



- (c) dioxethedrine (6), isoetarine (13), methoxyphenamine (1), pseudoephedrine (11), salbutamol (20), salmefamol (23), terbutaline (22)

TRS 581

**-terone      antiandrogens**

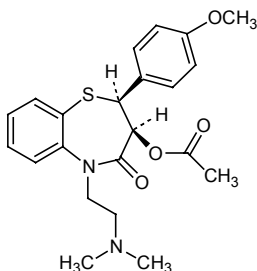
(Q.2.3.1)

- (a) abiraterone (74), benorterone (15), cyproterone (16), delanterone (42), inocoterone (54), osaterone (68), zanoterone (67)
- (b) oxendolone (42)
- (c) clometerone (15) (anti-estrogen)

USAN

**-tiazem      calcium channel blockers, diltiazem derivatives**

F.2.1.0



clentiazem (61), diltiazem (30), iprotiazem (56), nictiazem (54), siratiazem (68)

USAN

**-tide      peptides and glycopeptides (for special groups of peptides see -actide, -pressin, -relin, -tocin)**

analgesic: leconotide (86), ziconotide (78)

angiogenesis inhibitor: cilengitide (81)

antibiotic: nosiheptide (35)

antidepressant: nemifitide (87)

antidiabetic: amlintide (76), liraglutide (87), seglitide (57), pramlintide (74)

antidiarrhoeal: lagatide (75)

antithrombotic: eptifibatide (78)

angiotensin convers. inhibitor: teprotide (36)

atrial natriuretic factor type substance: anaritide (57), neseritide (80), ularitide (69)

cardiac stimulant: carperitide (65)

diagnostic: betiatide (58), bibapcitide (78), ceruletide (34), depreotide (80), mertiatide (60), pendetide (70), technetium ( $^{99m}\text{Tc}$ ) apcitide (78), teriparatide (50)

gastro-intestinal bleeding/antineoplastic: edotreotide (84), ilatreotide (66), lanreotide (64), octreotide (52), pentetreotide (66), vapreotide (62)

gut motility increasing: ociltide (52)

immunomodulator: almurtide (74), goralatide (72), murabutide (49), pentigetide (60), pimelautide (53), prezatide copper acetate (67), romurtide (61), tabilautide (60), temurtide (60), tiplimotide (82)

neuromodulator: ebiratide (56)

peptic ulcer: sulglicotide (29), triletide (50)

pulmonary surfactant: lusupultide (80), sinapultide (78)

sedative: emideltide (70)

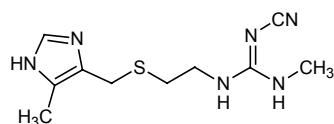
treatment of Parkinson's disease: doreptide (58), pareptide (38)

(b) defibrotide (44) (nucleotide), diamfenetide (28) (fasciolicide), diclometide (19) (behaviour modifier), fludroxycortide (12), glisentide (58)

BAN, USAN

**-tidine (x) histamine-H<sub>2</sub>-receptor antagonists, cimetidine derivatives**

G.2.0.0 (BAN: H<sub>2</sub>-receptor antagonists of the cimetidine group)  
(USAN: H<sub>2</sub>-receptor antagonists (cimetidine type))



(a) bisfentidine (57), cimetidine (33), dalcotidine (76), donetidide (56), ebrotidine (57), etintidine (44), famotidine (48), lafutidine (70), lamtidine (48), lavoltidine (61) (previously loxtidine

(48)), lupitidine (53), mifentidine (50), niperotidine (54), nizatidine (48), osutidine (76), oxmetidine (44), pibutidine (78), quisultidine (47) (replaced by quisultazine (51)), ramixotidine (55), ranitidine (41), roxatidine (54), sufotidine (54), tiotidine (44), tuvatidine (54), venritidine (67), zaltidine (54)

(b) benzethidine (9), furethidine (9), guanethidine (11), hexetidine (6), hydroxypethidine (5), pethidine (4), propinetidine (12)

azacitidine (40) (antineoplastic)

(c) metiamide (30)

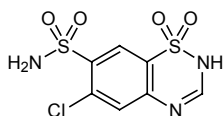
**-tirelin**      **see -relin**

**-tiline**      **see -triptyline**

**-tizide**      **diuretics, chlorothiazide derivatives**

USAN

N.1.2.1 (USAN: thiazide: diuretics (thiazide derivatives))



(a) altizide (13), bemetizide (27), butizide (13), carmetizide (30), epitizide (13), hydrobentizide (14), mebutizide (15), paraflutizide (16), penflutizide (29), sumetizide (20)

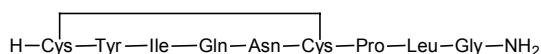
(c) bendroflumethiazide (11), benzthiazide (10), chlorothiazide (8), cyclopenthiazide (12), cyclothiazide (12), disulfamide (11), ethiazide (14), flumethiazide (10), hydrochlorothiazide (10), hydroflumethiazide (10), methyclothiazide (11), polythiazide (12), teclothiazide (12), trichlormethiazide (11)

TRS 581

**-tocin**      **oxytocin derivatives**

USAN

Q.1.2.0

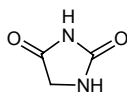


(a) argiprestocin (13), aspartocin (11), carbetocin (45), cargutocin (35), demoxytocin (22), nacartocin (49), oxytocin (13)

USAN

**-toin (d) antiepileptics, hydantoin derivatives**

A.3.1.1



(a) albutoin (13), doxenitoin (31), ethotoin (6), fosphenytoin (62), mephenytoin (1), metetoin (12), phenytoin (4)

ropitoin (40) (H.2.0.0.)

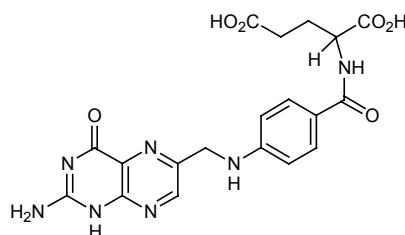
(b) clodantoin (13) (antifungal), nitrofurantoin (11) (antibact.)

TRS 581

USAN

**-trexate (x) folic acid analogues**

L.4.0.0 (USAN: folic acid analogues used as antimetabolites)



(a) edatrexate (61), ketotrexate (50), methotrexate (10), trimetrexate (46)

USAN

**-tricin antibiotics, polyene derivatives**

S.6.2.0

(a) mepartricin (34), partricin (27)

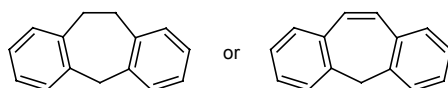
(b) tyrothricin (1)

(c) amphotericin B (10), candicidin (17), filipin (20), hachimycin (23), hamycin (17), levorin (15), mocimycin (28), natamycin (15), nystatin (6), pecilocin (16)

**-triptan**      **serotonin (5HT<sub>1</sub>) receptor agonists, sumatriptan derivatives**

- (a)      almotriptan (76), avitriptan (76), donitriptan (82), eletriptan (74), frovatriptan (78), naratriptan (69), oxitriptan (39), rizatriptan (75), sumatriptan (59), zolmitriptan (74)
- (c)      alniditan (72)

USAN

**-triptyline**      **antidepressants, dibenzo[a,d]cycloheptane or cycloheptene derivatives**C.3.2.0      (USAN: antidepressants (dibenzo[a,d]cycloheptane derivatives))

- (a)      amitriptyline (11), butriptyline (16), cotriptyline (26), intriptyline (26), nortriptyline (12), octriptyline (33), protriptyline (14), amitriptylinoxide (36), demexiptiline (43), levoprotiline (56), noxiptiline (20), oxaprotiline (45), setiptiline (56)
- (b)      oxitriptyline (21) (anticonvuls.)
- (c)      hepzidine (15)
- TRS 581      see also Pharm S/Nom 970

**-troban**      **thromboxane A<sub>2</sub>-receptor antagonists; antithrombotic agents**

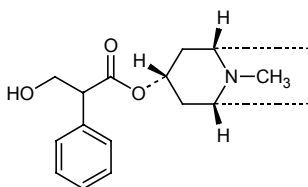
I.2.1.0

argatroban (57), daltroban (57), domitroban (73), ifetroban (71), linotroban (69), mipitroban (73), ramatroban (73), sulotroban (55)

USAN

**trop**      **atropine derivatives**

E.2.0.0      (USAN: trop- ; or -trop-)



- (a)      parasympatholytic/anticholinergic: E.2.2.0:

tertiary amines:

atropine oxyde (12), benztropine (4), decitropine (18), etybenztropine (12), eucatropine (1), tropatepine (28), tropicamide (11), tropigline (8), tropodifene (18)

closely related:

esbatropate (65)

quaternary ammonium salts:

atropine methonitrate (4), butropium bromide (30), ciclotropium bromide (50), cimetroplum bromide (51), flutropium bromide (50), homatropine methylbromide (1), ipratropium bromide (28), octatropine methylbromide (10), oxitropium bromide (36), phenactropinium chloride (8), ritropirronium bromide (33), sevitropium mesilate (56), sintropium bromide (47), sultroponium (18), tematropium metilsulfate (64), tiotropium bromide (67), tipetropium bromide (42), tropenziline bromide (11), xenytropium bromide (15)

various:

clobenztropine (13) (antihistaminic), cyheptropine (15) (antiarrhythmic), deptropine (12) (antiasthmatic), revatropate (74) (bronchodilator), tropabazate (41) (tranquillizer), tropanserine (55), tropapride (48) (antipsychotic), tropirine (20) (respiratory disorders), tropisetron (62)

(b) dextropropoxyphene (7), somatropin (56)

(c) parasympatholytic/anticholinergic, tertiary amines:  
poskine (8), prampine (11), tigloidin (14)

various:

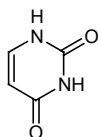
zepastine (26) (antihistaminic)

**-uplase**      **urokinase type plasminogen activator, see -ase item VII**

**-ur**            **see –uridine**

**-uracil**        **uracil derivatives used as thyroid antagonists and as antineoplastics**

USAN



thyroid antagonists: iodothiouracil (1), methylthiouracil (1), propylthiouracil (1)

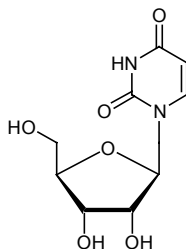
L.4.0.0: eniluracil (77), fluorouracil (13)

USAN

**-uridine**      **uridine derivatives used as antiviral agents and as antineoplastics**

S.5.3.0

L.4.0.0

L.4.0.0: broxuridine (30), doxifluridine (44)related: carmofur (45), clanfenur (58), tegafur (41)S.5.3.0: fialuridine (68), floxuridine (16), idoxuridine (17), navuridine (84), trifluridine (37)**-vudine**      (USAN: vudine: antineoplastics; antivirals (zidovudine type))related: alovudine (68), brivudine (59), clevudine (78), edoxudine (52), epervudine (61), fozivudine tidoxil (73), lamivudine (66), netivudine (72), sorivudine (64), stavudine (65), zidovudine (56)**-vastatin**      **see -stat-**

BAN, USAN

**-verine (x)**      **spasmolytics with a papaverine-like action**

F.1.0.0      (USAN: spasmolytics having a papaverine-like action)

- (a) alverine (16), amifloverine (28), bietamiverine (6), butaverine (13), camiverine (29), caroverine (28), clofeverine (31), demelverine (17), denaverine (25), dexsecoverine (53), dicycloverine (6), dihexyverine (4), dipiproverine (10), diproteverine (51), drotaverine (17), elziverine (57), ethaverine (4), febaverine (27), fenoverine (28), floverine (28), heptaverine (16), ibuverine (21), idaverine (55), mebeverine (14), milverine (52), mofloverine (28), moxaverine (36), nafiverine (16), niceverine (15), octaverine (18), pargeverine (38), pentoxyverine (6), pramiverine (21), prenoverine (41), propiverine (45), rociverine (33), salfluverine (29), salverine (15), secoverine (38), temiverine (76), zardaverine (59)

fenpiverinium bromide (26), pinaverium bromide (32)

- (b) cinnamaverine (10) (anticholinergic, tert. amine), diaveridine (18)

- (c) spasmolytics chemically related to some of the above INN ending in *-verine*

butetamate (17), butinoline (14), camylofin (12), cinnamedrine (19), cyclandelate (8), difemerine (17), diisopromin (11), dimoxylin (1), fempiprane (17), fenyramidol (12), metindizate (16), oxybutynin (13), papaveroline (29), pentapiperide (10), prozapine (14), triclazate (10), tropenziline bromide (11)

TRS 581

USAN

**vin- and  
-vin- (x)**

**vinca alkaloids**

(USAN: vin-; or -vin-)

(a) B.1.0.0 stim. of cerebrovasc. circul.  
apovincamine (48), brovincamine (42), vinburnine (45), vincamine (22), vincanol (37), vincantril (51), vinconate (47), vindeburnol (49), vinmegallate (59), vinpocetin (36), vinpoline (35), vintoperol (61)

L.5.0.0 cytostatic

vinblastine (12), vincristine (13), vindesine (35), vinepidine (50), vinflumine (76), vinformide (38), vinfosiltine (64), vinglycinate (16), vinleucinol (64), vinleur (13), vinorelbine (57), vinrosidine (13), vintriptol (51), vinzolidine (46)

(b)

barbiturates

vinbarbital (1), vinylbital (12)

others: vincofos (28) (phosphate, anthelmintic), vintiamol (16) (vit. B. deriv., antineuralgic)

BAN, USAN

**vir**

**antivirals (undefined group)**

S.5.3.0 (USAN: -vir; -vir; or vir-)

(a) aciclovir (42), adefovir (72), alvircept sudotox (69), amdoxovir (85), amitivir (67), atevirdine (69), buciclovir (52), capravirine (83), cidofovir (72), dapivirine (86), delavirdine (71), denotivir (70), desciclovir (55), detiviciclovir (86), efavirenz (78), emivirine (82), enfuvirtide (85), enviroxime (44), famciclovir (61), ganciclovir (56), litomeglovir (84), loviride (70), maribavir (80), nevirapine (66), omaciclovir (84), opavirine (83), penciclovir (61), pirodavir (63), ribavirin (31), rociclovir (62), talviraline (75), tenofovir (82), tiviciclovir (86), tivirapine (74), tomeglovir (84), trovirdine (73), valaciclovir (69), valganciclovir (78), valomaciclovir (84), viroxime (49), zinviroxime (44)

*-amivir* neuraminidase inhibitors: oseltamivir (80), peramivir (86), zanamivir (72)

*-cavir* carbocyclic nucleosides: abacavir (76), entecavir (82), lobucavir (72)

*-fovir* phosphonis acid derivatives: adefovir (72), cidofovir (72), tenofovir (82)



**-gosivir**      glucoside inhibitors: celgosivir (77)

**-navir**      HIV protease inhibitors: amprenavir (79), droxinavir (74), fosamprenavir (83), indinavir (74), lasinavir (76), lopinavir (80), mozenavir (84), nelfinavir (76), palinavir (74), ritonavir (74), saquinavir (69), telinavir (73), tipranavir (80)

USAN

**-virsen**      **antisense oligonucleotides**

(a)      afovirsen (70), fomivirsen (75), trecovirsen (77)

(b)      virginiamycin (18), viridofulvin (16)

(c)      avidine (50)

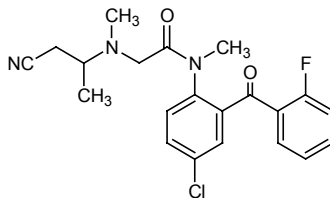
**-vudine**      **see -uridine**

**-xanox**      **see -ox**

K.0.0.0

**-zafone**      **alozafone derivatives**

C.1.0.0



(a)      alozafone (40), avizafone (64), ciprazafone (50), dinazafone (46), dulozafone (56), lorzafone (48), oxazafone (45), rilmazafone (55)

**-zepine**      **see -pine**

**-zone**      **see -buzone**

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 -perone  
 -pidem  
 -pin(e)  
 -piprazole (see –prazole)  
 -pirone (see -spirone)  
 -pirox (see –ox/-alox)  
 -pitant (see –tant)  
 -plact  
 -planin  
 -plase (see –ase)  
 -platin  
 -plermin (see –ermin)

-plestim (see –stim or –kin)  
 -plon  
 -poetin  
 -porfin  
 -poride  
 -pramine  
 -prazole  
 pred  
 -prenaline (see –terol)  
 -pressin  
 -pride  
 -pril/-prilat  
 -prim  
 -profen  
 prost  
 -prostil (see prost)

**Q**

-quin(e)  
 -quinil (see –azenil)

**R**

-racetam  
 -relin  
 -relix  
 -renone  
 -restat (see –stat)  
 retin  
 -ribine  
 rifa-  
 -rinone  
 -rizine (see –izine)  
 -rozole  
 -rubicin

**S**

sal  
 -sartan  
 -semide  
 -sermin (see –ermin)  
 -serpine  
 -setron  
 som-  
 -sopine (see –pine)  
 -spirone  
 -stane  
 -stat/-stat-  
 -steine  
 -ster-

-stigmine  
 -stim  
 sulfa-  
 -sulfan

**T**

-tant  
 -tecan  
 -tepa  
 -tepine (see –pine)  
 -teplase (see –ase)  
 -termin (see –ermin)  
 -terol  
 -terone  
 -tiazem  
 -tide  
 -tidine  
 -tilide  
 -tiline (see –triptyline)  
 -tirelin (see –relin)  
 -tizide  
 -tocin  
 -toin  
 -trakin (see –kin)  
 -trexate  
 -tricin  
 -triptan  
 -triptyline  
 -troban  
 -trodast (see –ast)  
 trop

**U**

-uplase (see –ase)  
 -ur (see –uridine)  
 -uracil  
 -uridine

**V**

-vastatin (see –stat-)  
 -verine  
 vin-/-vin-  
 vir  
 -virsen  
 -vudine (see –uridine)

**X**

-xanox (see –ox/-alox)

**Z**

-zafone  
 -zepine (see –pine)  
 -zone (see –buzone)



## ANNEX 1

### INNs for monoclonal antibodies

The following stem system was adopted by the members of the Expert Advisory Panel on the International Pharmacopoeia and Pharmaceutical Preparations designated to deal with the selection of nonproprietary names for naming monoclonal antibodies.

I. **General stem:** *-mab*

II. **Sub-stems for source of product:**

<i>u</i>	human
<i>o</i>	mouse
<i>a</i>	rat
<i>e</i>	hamster
<i>i</i>	primate
<i>xi</i>	chimeric
<i>zu</i>	humanized

The distinction between chimeric and humanized antibodies is as follows:

A chimeric antibody is one that contains contiguous foreign-derived amino acids comprising the entire variable region of both heavy and light chains linked to heavy and light constant regions of human origin.

A humanized antibody has segments of foreign-derived amino acids interspersed among variable region segments of human-derived amino acid residues and the humanized heavy-variable and light-variable regions are linked to heavy and light constant regions of human origin.

**III. Sub-stems for disease or target class:**

<i>-ba(c)-</i>	bacterial
<i>-ci(r)-</i>	cardiovascular
<i>-le(s)-</i>	infectious lesions
<i>-li(m)-</i>	immunomodulator
<i>-vi(r)-</i>	viral

tumours:

<i>-co(l)-</i>	colon
<i>-go(t)-</i>	testis
<i>-go(v)-</i>	ovary
<i>-ma(r)-</i>	mammary
<i>-me(l)-</i>	melanoma
<i>-pr(o)-</i>	prostate
<i>-tu(m)-</i>	miscellaneous

Whenever there is a problem in pronunciation, the final letter of the sub-stems for diseases or targets may be deleted, e.g. *-vi(r)-*, *-ba(c)-*, *-li(m)-*, *-co(l)-*, etc.

**IV. Prefix:**

Should be random e.g. the only requirement is to contribute to a euphonious and distinctive name.

**V. Second word:**

If the product is radiolabelled or conjugated to another chemical, such as toxin, identification of this conjugate is accomplished by use of a separate, second word or acceptable chemical designation. For monoclonals conjugated to a toxin, the *-tox* stem must be included as part of the name selected for the toxin.

If the monoclonal antibody is used as a carrier for a radioisotope, the latter will be listed first in the INN, e.g. technetium (<sup>99m</sup>Tc) pintumomab.

## ANNEX 2

### 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*<sup>1</sup> 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*.

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.

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

1. The title of this publication was changed to *WHO Chronicle* in January 1959. From 1987 onwards lists of INNs are published in *WHO Drug Information*.

## ANNEX 3

### GENERAL PRINCIPLES FOR GUIDANCE IN DEVISING INTERNATIONAL NONPROPRIETARY NAMES FOR PHARMACEUTICAL SUBSTANCES\*

1. International Nonproprietary Names (INN) should be distinctive in sound and spelling. They should not be inconveniently long and should not be liable to confusion with names in common use.
2. The INN for a substance belonging to a group of pharmacologically related substances should, where appropriate, show this relationship. Names that are likely to convey to a patient an anatomical, physiological, pathological or therapeutic suggestion should be avoided.

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

3. In devising the INN of the first substance in a new pharmacological group, consideration should be given to the possibility of devising suitable INN for related substances, belonging to the new group.
4. In devising INN for acids, one-word names are preferred; their salts should be named without modifying the acid name, e.g. "oxacillin" and "oxacillin sodium", "ibufenac" and "ibufenac sodium".
5. INN for substances which are used as salts should in general apply to the active base or the active acid. Names for different salts or esters of the same active substance should differ only in respect of the name of the inactive acid or the inactive base.

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

6. The use of an isolated letter or number should be avoided; hyphenated construction is also undesirable.
7. To facilitate the translation and pronunciation of INN, "f" should be used instead of "ph", "t" instead of "th", "e" instead of "ae" or "oe", and "i" instead of "y"; the use of the letters "h" and "k" should be avoided.
8. Provided that the names suggested are in accordance with these principles, names proposed by the person discovering or first developing and marketing a pharmaceutical preparation, or names already officially in use in any country, should receive preferential consideration.
9. Group relationship in INN (see Guiding Principle 2) should if possible be shown by using a common stem. The following list contains examples of stems for groups of substances, particularly for new groups. There are many other stems in active use.<sup>1</sup> Where a stem is shown without any hyphens it may be used anywhere in the name.

<i>Latin</i>	<i>English</i>	
-acum	-ac	anti-inflammatory agents of the ibufenac group
-actidum	-actide	synthetic polypeptides with a corticotropin-like action
-adolum	-adol )	analgetics
-adol-	-adol- )	
-astum	-ast	antiasthmatic, antiallergic substances not acting primarily as antihistaminics
-astinum	-astine	antihistaminics
-azepamum	-azepam	diazepam derivatives
-bactamum	-bactam	$\beta$ -lactamase inhibitors
bol	bol	steroids, anabolic
-buzonum	-buzone	anti-inflammatory analgesics, phenylbutazone derivatives
-cain-	-cain-	antifibrillant substances with local anaesthetic activity
-cainum	-caine	local anaesthetics
cef-	cef-	antibiotics, cefalosporanic acid derivatives
-cillinum	-cillin	antibiotics, derivatives of 6-aminopenicillanic acid
-conazolium	-conazole	systemic antifungal agents, miconazole derivatives
cort	cort	corticosteroids, except prednisolone derivatives
-dipinum	-dipine	calcium channel blockers, nifedipine derivatives
-fibratum	-fibrate	clofibrate derivatives
gest	gest	steroids, progestogens
gli-	gli-	sulfonamide hypoglycaemics
io-	io-	iodine-containing contrast media
-ium	-ium	quaternary ammonium compounds
-metacinum	-metacin	anti-inflammatory substances, indometacin derivatives
-mycinum	-mycin	antibiotics, produced by <i>Streptomyces</i> strains
-nidazolium	-nidazole	antiprotozoal substances, metronidazole derivatives
-ololum	-olol	$\beta$ -adrenoreceptor antagonists
-oxacinum	-oxacin	antibacterial agents, nalidixic acid derivatives
-pidum	-pride	sulpiride derivatives
-pril(at)um	pril(at)	angiotensin-converting enzyme inhibitors
-profenum	-profen	anti-inflammatory substances, ibuprofen derivatives
prost	prost	prostaglandins
-relinum	-relin	hypophyseal hormone release-stimulating peptides
-terolum	-terol	bronchodilators, phenethylamine derivatives
-tidinum	-tidine	histamine H <sub>2</sub> -receptor antagonists
-trexatum	-trexate	folic acid antagonists
-verinum	-verine	spasmolytics with a papaverine-like action
vin-	vin- )	vinca alkaloids
-vin-	-vin- )	

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\* In its twentieth report (WHO Technical Report Series, No. 581, 1975), the WHO Expert Committee on Nonproprietary Names for Pharmaceutical Substances reviewed the general principles for devising, and the procedures for selecting, international nonproprietary names (INN) in the light of developments in pharmaceutical compounds in recent years. The most significant change has been the extension to the naming of synthetic chemical substances of the practice previously used for substances originating in or derived from natural products. This practice involves employing a characteristic "stem" indicative of a common property of the members of a group. The reasons for, and the implications of, the change are fully discussed.

## WHY INNs?

Since the number of drug substances being registered during the last decades is constantly increasing, there is a strong need to ensure the identification of each pharmaceutical compound by a unique, universally available and accepted name. The existence of an international nomenclature system for pharmaceutical products is crucial for the clear identification, safe prescription and dispensing of medicines to patients, and for communication and exchange of information among health professionals and scientists worldwide.

An **International Nonproprietary Name (INN)** identifies a pharmaceutical substance by a **unique name that is globally recognized and is public property**. A nonproprietary name is also known as a generic name. Generic names are intended to be used in pharmacopoeias, labeling, advertising, drug regulation and scientific literature.

WHO has a constitutional mandate to offer recommendations to its Member States on any matter that falls within its competence. This includes setting norms and standards for pharmaceutical products moving in international commerce.

The INN system as it exists today was initiated in 1950 by the *World Health Assembly resolution WHA3.11* and began operating in 1953, when the first list of International Nonproprietary Names for pharmaceutical substances was published.

So far, some 8000 names have been designated as INNs, and this number is growing every year by some 120 – 150 new INNs.

INNs are selected in close collaboration with national nomenclature commissions (e.g. BAN *British Approved name*, JAN *Japanese Accepted Name*, USAN *United States Adopted Name* etc.). Today, the INN Committee assumes the leading role in assigning generic names to drug substances. Instances where a national generic name for a new pharmaceutical substance is different from the INN are rare exceptions.

As unique names, INNs have to be distinctive in sound and spelling, and should not be liable to confusion with other names in common use (e.g. trade marks). To make INNs universally available they are formally placed by WHO in the public domain, hence their designation as “nonproprietary”. They can be used without any restriction whatsoever to identify pharmaceutical substances. The clear depiction of INNs on labels assures that prescribers and users alike can easily identify the nature of the pharmacologically active substance in a brand product. The use of INNs is already common in research and clinical documentation, while the importance of the programme is growing further due to the expanding use of generic names for pharmaceutical products.