





**Use of stems in the selection of  
International Nonproprietary Names (INN)  
for pharmaceutical substances**

**(Stem book 2024)**



Use of stems in the selection of International Nonproprietary Names (INN) for pharmaceutical substances, 2024

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# Preface

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The document *“Use of stems in the selection of International Nonproprietary Names (INN) for pharmaceutical substances”* is intended primarily for persons and companies applying to the WHO INN Programme for the selection of an INN for a new pharmaceutical substance and has been designed to assist in the process of devising a suitable proposal. It will also be of assistance to institutions and specialists involved in the review of proposed INN, including drug regulatory authorities, pharmaceutical manufacturers, patent offices and trade mark officers as well as for scientists, teachers, health professionals and other persons interested generally in drug nomenclature. The document is composed of four main parts and six annexes.

Part I *“Introduction”* describes the WHO INN Programme, INN selection procedure and criteria for name selection and provides general information on the INN stem system.

Part II contains the list of all INN stems. It is composed of two indexes, one entitled *“Alphabetical list of common stems”* which presents the list of stems, and another entitled *“Alphabetical list of common stems and their definitions”* which includes a definition for each stem.

Part III presents the stem classification system used by the INN Programme to categorize the principal activity of pharmaceutical substances. Each category included in the list is given an appropriate code consisting of a capital letter and three digits. When INN for substances belonging to a given category include a specific stem, appropriate information is included in the table.

Part IV of the document entitled *“Alphabetical list of stems together with corresponding INN”* serves as a listing of all proposed INN (published in Lists 1 - 129) containing INN stems. The list is organized in alphabetical order (as set out in Part II) and includes all INN containing a stem. In addition, under each stem heading, information is given on INN in which the preferred stem has been used but not in accordance with its definition, as well as on INN which belong to the same group of pharmaceutical substances but in which no preferred stem has been used. To facilitate the use of Part IV, the lay-out of information is presented as a diagram on page 7 and is complemented by additional information given at the end of part I *“Introduction”*.

Six annexes attached to the document are intended to be of assistance to users. Annex 1 reproduces the *Procedure for the selection of recommended International Nonproprietary Names for pharmaceutical substances* as approved by the World Health Organization (WHO) Executive Board in its resolution EB15.R7 as amended by resolution EB115.R4. Annex 2 reproduces *General Principles for guidance in devising International Nonproprietary Names for pharmaceutical substances* as approved by the WHO Executive Board in the above-mentioned resolution, as amended. Annex 3 explains the nomenclature scheme for monoclonal antibodies. Annex 4 explains the nomenclature scheme for gene therapy substances. Annex 5 gives reference to the volumes of the *WHO Drug Information* in which proposed lists of INN have been published. Annex 6 *“Why INN ?”* gives general information on the current situation of the WHO INN Programme and its achievements.





# Part I

---

## INTRODUCTION

### WHO'S INN PROGRAMME

The World Health Organization (WHO) has a constitutional responsibility to “develop, establish and promote international standards with respect to biological, pharmaceutical and similar products”. The International Nonproprietary Names (INN) Programme is a core activity embedded in the normative functions of WHO and has served the global public health and medicines community for over seventy years. The Programme was established to assign nonproprietary names to pharmaceutical substances so that each substance would be recognized by a unique name. Such names are needed for the clear identification, safe prescription and dispensing of medicines, and for communication and exchange of information among health professionals. INN can be used freely because they are in the public domain. In addition to being a basic component of many WHO medicines activities and programmes, INN are used in regulatory and administrative processes in many countries. They are also intended for use in pharmacopoeias, labelling and product information and to provide standardized terminology for the international exchange of scientific information.

### INN SELECTION PROCEDURE

Each name proposed for designation as an INN is examined and selected in accordance with a formal procedure. Requests for INN can be submitted directly to WHO (application forms online at <https://www.who.int/teams/health-product-and-policy-standards/inn/inn-online-application>). In some countries where national nomenclature commissions exist, applications may also be made through the national nomenclature authority.

Members of the WHO Expert Panel on the International Pharmacopoeia and Pharmaceutical Preparations (or other Panel as appropriate) are officially designated to select nonproprietary names. Based on the information provided, an agreed name is selected and published as a **proposed** INN. During a four month period, any person can make comments or lodge a formal objection to the proposed name. If no objection is raised, this agreed name is published as the **recommended** INN.

In 1993, the World Health Assembly endorsed resolution WHA46.19 which states that trade marks should not be derived from INN and INN stems should not be used in trade marks. The Assembly reasoned that such practice could frustrate the rational selection of INN and ultimately compromise the safety of patients by promoting confusion in drug nomenclature. Above all, INN are protected for use in the public domain.

## CRITERIA FOR SELECTION

International Nonproprietary Names (INN) should be distinctive in sound and spelling. They should not be inconveniently long and not be liable to confusion with names in common use. Information on the selection procedure and general criteria in devising INN is set out in Annexes 1 and 2.

## INN STEMS

Stems define the pharmacologically related group to which the INN belongs. The present document describes stem use procedure and includes, in Parts II and IV, the list of common stems for which chemical and/or pharmacological categories have been established. These stems and their definitions have been selected by WHO experts and are used when selecting new international nonproprietary names. Because the nomenclature process is ongoing and constantly under revision, definitions of older stems are modified as and when newer information becomes available.

Whenever possible, an INN should include the stem that expresses the pharmacologically-related group to which the substance belongs. Names that are likely to convey an anatomical, physiological, pathological or therapeutic suggestion should be avoided.

In addition, certain rules have been established in devising INN to facilitate their use internationally. For example, to make pronunciation possible in various languages, the letters “h” and “k” should be avoided; “e” should be used instead of “ae” and “oe”, “i” instead of “y”, “t” instead of “th” and “f” instead of “ph”.

## INFORMATION ON USING PART IV “ALPHABETICAL LIST OF STEMS TOGETHER WITH CORRESPONDING INN”

The following information complements or describes the diagram set out on page 7.

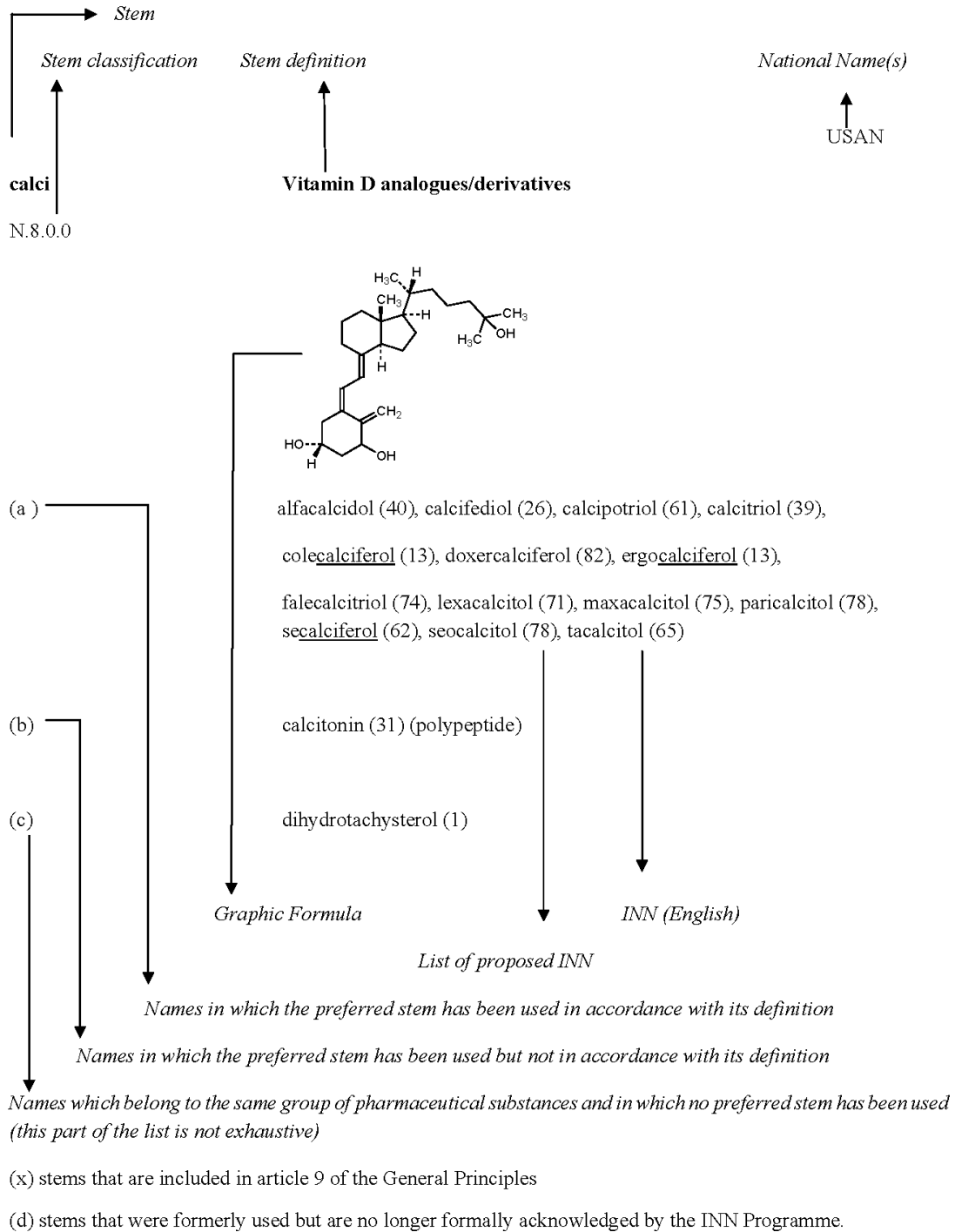
1. The list includes INN published in *Proposed International Nonproprietary Names Lists 1 - 119* categorized according to the list of stems (see Annex 5).

For each stem, INN have been classified as:

- (a) INN in which the preferred stem has been used in accordance with its definition;
  - (b) INN in which the preferred stem has been used, but not in accordance with its definition;
  - (c) INN which belong to the same group of pharmaceutical substances but in which the preferred stem has not been used. (This part of the list is not exhaustive).
2. References to nationally used syllables published in the British Approved Names (BAN) Dictionary and the United States Pharmacopoeia (USP) Dictionary of US Approved Names (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 set out in brackets under the INN definition.

3. The codes presented on the diagram as Stem Classification refer to the stem classification system used by the INN Programme described in Part III of the document.
4. Symbol (x) indicates stems included as examples in Article 9 of the *“General Principles for guidance in devising International Nonproprietary Names for pharmaceutical substances”* (see Annex 2).
5. Symbol (d) indicates stems that were formerly used, but are no longer formally acknowledged by the INN Programme.

## Layout of information



# Part II A

## ALPHABETICAL LIST OF COMMON STEMS

### A

-abine (see -arabine and -citabine)

-ac

-acetam (see -racetam)

-actide

-adenant

-adol/-adol-

-adom

-afenone

-afil

-aj-

-al

-aldrate

-alol (see -olol)

-alox (see -ox)

-amivir (see vir)

-ampanel

andr

-anib

-anide

-anserin

-antel

-antrone

-apine (see -pine)

-apt-

-(ar)abine

-arit

-arol

-arone

-arotene

arte-

-ase

-ast

-astine

-asvir (see -vir)

-azam (see -azepam)

-azenil

-azepam

-azepide

-azocine

-azolam (see -azepam)

-azoline

-azone (see -buzone)

-azosin

### B

-bacept (see -cept)

-bactam

-bamate

barb

-bart

-becestat (see stat)

-begron

-bart

-benakin (see -kin)

-bendan (see -dan)

-bendazole

-bep

-bercept (see -cept)

-bermin (see -ermin)

-bersat

-betasol (see pred)

bol

-borbactam (see bactam)

-bradine

-brate (see -fibrate)

-bresib

-brutinib (see -tinib)

-bufen

-bulin

-butazone (see -buzone)

-buvir (see vir)

-buzone

### C

-caftor

-caine

-cain-

-calcet/-calcet-

calci

-capavir (see -vir)

-capone

-carbef

-carnil (see -azenil)

-castat (see -stat)

-catib

-cavir (see vir)

cef-

-cel

cell-/cel-

cell-ate (see cell-/cel-)

-cellose (see cell-/cel-)

-cept

-cerfont

-cetrapib

-cianine

-cic

-ciclib

-ciclovir (see vir)

-cidin

-ciguat

-cillide (see -cillin)  
-cillin  
-cillinam (see -cillin)  
-cilpine (see -pine)  
-cysteine (see -steine)  
-citabine  
-citinib (see -tinib)  
-clidine/-clidinium  
-clone  
-(clo)sporine  
-cocept (see -cept)  
-cog  
-cogin  
-conazole  
copan  
-corat  
-corilant  
cort  
-coxib  
-crinat  
-crine  
-cromil  
-curium (see -ium)  
-cycline

## D

-dan  
-dapstone  
-decakin (see -kin)  
-denoson  
-degib  
-delpar  
-demstat (see stat)  
-dermin (see -ermin)  
-dil  
-dilol (see -dil)  
-dipine  
-dismase (see -ase)  
-distim (see -stim)

-docokin (see kin)  
-dodekin (see -kin)  
-domide  
-dopa  
-dotin  
-dotril (see -tril/-trilat)  
-dox (see -ox/-alox)  
-dralazine  
-drine  
-dronic acid  
-dustat (see stat)  
-dutant (see -tant)  
-dutide (see tide)  
-dyl (see -dil)

## E

-ectin  
-elestat (see -stat)  
-elvekin (see -kin)  
-emcinal  
-enatide (see -tide)  
-enicokin (see -kin)  
-entan  
-epdkinra (see -kinra)  
(-)eptacog (see -cog)  
-eptakin (see kin)  
erg  
-eridine  
-ermin  
-ertinib (see -tinib)  
-espib  
estr  
-estrant  
-etanide (see -anide)  
-ethidine (see -eridine)  
-exakin (see -kin)  
-exine

## F

-farcept (see -cept)  
-fenacin  
-fenamate (see -fenamic acid)  
-fenamic acid  
-fenicol  
-fenin  
-fenine  
-fensine  
-fentanil  
-fentrine  
-fermin (see -ermin)  
-fexor  
-fiban  
-fibrate  
-filermin (see -ermin)  
-flapon  
-flurane  
-folastat (see -stat)  
-formin  
fos  
-fosine (see -fos)  
-fosfamide (see -fos)  
-fovir (see vir)  
-fradil  
-frine (see -drine)  
-fungin  
-fusp  
-fylline

## G

gab  
-gacestat (see stat)  
gado-  
-ganan  
-gatran  
-gene

-gepant  
gest  
-gestr- (see estr)  
-giline  
-gillin

gli  
-gliflozin (see gli)  
-gliptin (see gli)  
-glitazar (see gli)  
-glitazone (see gli)  
-glumide  
-glurant  
-glustat (see -stat)  
-glutide (see -tide)  
-golide  
-golix  
-gosivir (see vir)  
-gramostim (see -stim)  
-grastim (see -stim)  
-grel-/-grel  
guan-

## I

-ibine (see -ribine)  
-icam  
-ifene  
-igetide (see -tide)  
-ilide  
imex  
-imibe  
-imod  
-imus  
-ine  
-inostat (see -stat)  
-inurad  
io-  
iod-/-io-  
-irudin  
-isant

-isomide  
-ium  
-ixafor  
-ixibat  
-izine (-yzine)

## K

-kacin  
-kalant  
-kalim  
-kef-  
-kin  
-ki(n)- (see -mab)  
-kinra  
-kiren

## L

-laner  
-lefacept (see -cept)  
-leukin (see -kin)  
-leuton  
-lisib  
-listat (see -stat)  
-lubant  
-lukast (see -ast)  
-lutamide  
-lutril (see -tril/-trilat)

## M

-mab  
-madlin  
-mantadine  
-mantine (see -mantadine)  
-mantone (see -mantadine)  
-mapimod (see -imod)  
-mastat (see -stat)

-meline  
-ment  
mer-/-mer  
-mer  
-meran  
-mesine  
-mestane  
-metacin  
-metostat (see stat)  
-met(h)asone (see pred)  
-metinib (see -tinib)  
-micin  
-mifene (see -ifene)  
-mig  
-milast (see -ast)  
mito-  
-monam  
-morelin (see -relin)  
-mostim (see -stim)  
-motide (see -tide)  
-motine  
-moxin  
-mulin  
-mustine  
-mycin

## N

nab  
-nabant  
-nacept (see -cept)  
-nakin (see -kin)  
-nakinra (see -kinra)  
nal-  
-naritide (see -tide)  
-navir (see vir)  
-nepag  
-nermin (see -ermin)  
-nercept (see -cept)  
-nersen (see -rsen)

-nertant (see -tant)  
 -netant (see -tant)  
 -netide (see -tide)  
 -nicate (see nico-)  
 -nicline  
 nico-/nic-/ni-  
 -nidazole  
 -nidine  
 nifur-  
 -nil (see -azenil)  
 nitro-/nitr-/nit-/ni-/ni-  
 -nixin  
 (-)nonacog (see -cog)

## O

-octakin (see -kin)  
 -octadekin (see -kin)  
 (-)octocog (see -cog)  
 -ol  
 -olol  
 -olone (see pred)  
 -onakin (see -kin)  
 -one  
 -onide  
 -onidine  
 -(o)nidine (see -nidine)  
 -onium (see -ium)  
 -opamine (see -dopa)  
 -orex  
 -orexant  
 -orph- (see orphan)  
 orphan  
 -otermin (see -ermin)  
 -ox/-alox  
 -oxacin  
 -oxan(e)  
 -oxanide (see -anide)  
 -oxef (see cef-)  
 -oxepin (see -pine)

-oxetine  
 -oxicam (see -icam)  
 -oxifene (see -ifene)  
 -oxopine (see -pine)

## P

-pafant  
 -pamide  
 -pamil  
 -paratide (see -tide)  
 -parcin  
 -parib  
 -parin  
 -parinux (see -parin)  
 -patril/-patrilat (see -tril/-trilat)  
 -pendekin (see -kin)  
 -pendyl (see -dil)  
 -penem  
 perfl(u)-  
 -peridol (see -perone)  
 -peridone (see -perone)  
 -perone  
 -pidem  
 -pin(e)  
 -piprazole (see -prazole)  
 -pirone (see -spirone)  
 -pirox (see -ox/-alox)  
 -pitant (see -tant)  
 -pixant  
 -plact  
 -pladib  
 -planin  
 -plase (see -ase)  
 -plasmid (see -gene)  
 -platin  
 -plermin (see -ermin)  
 -plestim (see -stim and -kin)

-plon  
 -poetin  
 -porfin  
 -poride  
 -pramine  
 -prazan  
 -prazole  
 pred  
 -prenaline (see -terol)  
 -pressin  
 -previr (see vir)  
 -pride  
 -pril  
 -prilat (see -pril)  
 -prim  
 pris  
 -pristin  
 -prodil  
 -profen  
 prost  
 -prostil (see prost)  
 -(o)pterin  
 -pultide (see -tide)

## Q

-quidar  
 -quin(e)  
 -quinil (see -azenil)

## R

-racetam  
 -racil  
 -rafenib  
 -rasib  
 -relin  
 -relix  
 -renone  
 -reotide (see -tide)



-restat (see -stat)

retin

-ribine

rifa-

-rinone

-ritide (see -tide)

-rixin

-rizine (see -izine)

-rolimus (see -imus)

-rozole

-rsen

-rubicin

## S

sal

salazo- (see sal)

-salazine/-salazide (see sal)

-salan (see sal)

-sartan

-semide

-sermin (see -ermin)

-serod

-serpine

-sertib

-setron

-siban

-sidenib

-siran

som-

-sopine (see -pine)

-spirone

-stat/-stat-

-steine

-ster-

-steride (see -ster-)

-stigmine

-stim

-stinel

-sudil (see dil)

sulfa-

-sulfan

## T

-tacept (see cept)

-tadine

-tansine

-tant

-tapide

-taxel

-tecan

-tegravir (see vir)

-tepa

-tepine (see -pine)

-teplase (see -ase)

-termin (see -ermin)

-terol

-terone

-thiouracil (see -racil)

-tiazem

-tibant

-tide

-tidine

-tiline (see -triptyline)

-tinib

-tirelin (see -relin)

-tirom(-)

-tizide

-tocin

-toclax

-toin

-tolimod (see -imod)

-trakin (see -kin)

-trakinra (see -kinra)

-traline

-trectinib (see -tinib)

-tredekin (see -kin)

-trep

-trexate

-trexed

-tricin

-trigine

-tril/-trilat

-triptan

-triptyline

-troban

-trodast (see -ast)

trombopag

trop

-tug

-turev (see -rev)

## U

-uplase (see -ase)

-uridine

## V

-vaptan

-vastatin (see -stat)

-vec (see -gene)

-verine

-vetmab (see mab)

vin-/-vin-

vir

-vircept (see -cept)

-virine (see vir)

-viroc (see vir)

-virsen

-vi(.)mab (see mab)

-vivint

-vos (see fos)

-vudine (see -uridine)

## X

-xaban

-xanox (see -ox/-alox)

-xetan

## Y

-yzine (see -izine)

## Z

-zafone

-zepine (see -pine)

-zolast (see -ast)

-zolid

# Part II B

## ALPHABETICAL LIST OF COMMON STEMS AND THEIR DEFINITION

### A

<b>-abine (see -arabine and -citabine)</b>	arabinofuranosyl derivatives; nucleosides antiviral or antineoplastic agents, cytarabine or azacitidine derivatives
<b>-ac</b>	anti-inflammatory agents, ibufenac derivatives
<b>-acetam (see -racetam)</b>	amide type nootrope agents, piracetam derivatives
<b>-actide</b>	synthetic polypeptide with a corticotropin-like action
<b>-adenant</b>	adenosin receptor antagonists
<b>-adol/-adol-</b>	analgesics
<b>-adom</b>	analgesics, tifuladom derivatives
<b>-afenone</b>	antiarrhythmics, propafenone derivatives
<b>-afil</b>	inhibitors of phosphodiesterase PDE5 with vasodilator action
<b>-aj-</b>	antiarrhythmics, ajmaline derivatives
<b>-al</b>	Aldehydes
<b>-aldrate</b>	antacids, aluminium salts
<b>-alol (see -olol)</b>	aromatic ring related to -olols
<b>-alox (see -ox)</b>	antacids, aluminium derivatives
<b>-amivir (see vir)</b>	neuraminidase inhibitors
<b>-ampanel</b>	antagonists of the ionotropic non-NMDA ( <i>N</i> -methyl-d-aspartate) glutamate receptors (Namely the AMPA (amino-hydroxymethyl-isoxazole-propionic acid) and/or KA (kainite) receptors)
<b>andr</b>	steroids, androgens
<b>-anib</b>	angiogenesis inhibitors
<b>-anide</b>	-
<b>-anserin</b>	serotonin receptor antagonists (mostly 5-HT <sub>2</sub> )
<b>-antel</b>	anthelmintics (undefined group)
<b>-antrone</b>	antineoplastics; anthraquinone derivatives

-apine (see -pine)	tricyclic compounds
-apt-	aptamers, classical and mirror ones
-(ar)abine	arabinofuranosyl derivatives
-arit	antiarthritic substances, acting like clobuzarit and lobenzarit, (mechanism different from anti-inflammatory type substances, e.g. -fenamates or -profens)
-arol	anticoagulants, dicoumarol derivatives
-arone	-
-arotene	arotinoid derivatives
arte-	antimalarial agents, artemisinin related compounds
-ase	enzymes
-ast	anti-allergic or anti-inflammatory, not acting as anti-histaminics
-astine	antihistaminics
-asvir (see -vir)	antivirals, hepatitis C Virus (HCV) NS5A inhibitors
-azam (see -azepam)	diazepam derivatives
-azenil	benzodiazepine receptor antagonists/agonists (benzodiazepine derivatives)
-azepam	diazepam derivatives
-azepide	cholecystokinin receptor antagonists, benzodiazepine derivatives
-azocine	narcotic antagonists/agonists related to 6,7-benzomorphan
-azolam (see -azepam)	diazepam derivatives
-azoline	antihistaminics or local vasoconstrictors, antazoline derivatives
-azone (see -buzone)	anti-inflammatory analgesics, phenylbutazone derivatives
-azosin	antihypertensive substances, prazosin derivatives
<b>B</b>	
-bacept (see -cept)	B-cell activating factor receptors
-bactam	β-lactamase inhibitors

<b>-bamate</b>	tranquillizers, propanediol and pentanediol derivatives
<b>barb</b>	hypnotics, barbituric acid derivatives
<b>-bart</b>	artificial immunoglobulins (current monoclonal antibody naming scheme)
<b>-becestat</b>	beta secretase inhibitors
<b>-begron</b>	$\beta_3$ -adrenoreceptor agonists
<b>-benakin (see -kin)</b>	interleukin-1 analogues and derivatives
<b>-bendan (see -dan)</b>	cardiac stimulants, pimobendan derivatives
<b>-bendazole</b>	anthelmintics, tiabendazole derivatives
<b>-bercept (see -cept)</b>	target: VEGF receptors
<b>-bermin (see -ermin)</b>	vascular endothelial growth factors
<b>-bersat</b>	anticonvulsants, benzoylamino-benzpyran derivatives
<b>-betasol (see pred)</b>	prednisone and prednisolone derivatives
<b>-bep</b>	engineered or synthetic scaffold proteins, non-immunoglobulin variable domain derived
<b>bol</b>	anabolic steroids
<b>-borbactam (see bactam)</b>	$\beta$ -lactamase inhibitors, boronic acid derivatives
<b>-bradine</b>	bradycardic agents
<b>-brate (see -fibrate)</b>	clofibrate derivatives
<b>-bresib</b>	inhibitors of the bromodomain and extra-terminal motif (BET) family of bromodomain (BRD) proteins, antineoplastics
<b>-brutinib (see tinib)</b>	agammaglobulinaemia tyrosine kinase (Bruton tyrosine kinase) inhibitors
<b>-bufen</b>	non-steroidal anti-inflammatory agents, arylbutanoic acid derivatives
<b>-bulin</b>	antineoplastics; mitotic inhibitor, tubulin binder
<b>-butazone (see -buzone)</b>	anti-inflammatory analgesics, phenylbutazone derivatives
<b>-buvir (see vir)</b>	RNA polymerase (NS5B) inhibitors
<b>-buzone</b>	anti-inflammatory analgesics, phenylbutazone derivatives

**C**

-caftor	Cystic fibrosis transmembrane regulator (CFTR) protein modulators, correctors, and amplifiers
-cain-	class I antiarrhythmics, procainamide and lidocaine derivatives
-caine	local anaesthetics
-calcet/-calcet-	calcium-sensing receptor (CaSR) agonists
calci	vitamin D analogues/derivatives
-capavir (see -vir)	viral capsid and nucleocapsid inhibitors
-capone	catechol- <i>O</i> -methyltransferase (COMT) inhibitors
carbef	antibiotics, carbacephem derivatives
-carnil (see -azenil)	benzodiazepine receptor antagonists/agonists (carboline derivatives)
-castat (see -stat)	dopamine-hydroxylase inhibitors
-catib	cathepsin inhibitors
-cavir (see vir)	carbocyclic nucleosides
cef-	antibiotics, cephalosporanic acid derivatives
-cel	substances for cell therapies
cell-/cel-	cellulose derivatives
cell-ate (see cell-/cel-)	cellulose ester derivatives for substances containing acidic residues
-cellose (see cell-/cel-)	cellulose ether derivatives
-cept	receptor molecules or membrane ligands, native, modified or synthetic
-cerfont	corticotropin-releasing factor (CRF) receptor antagonists
-cetrapib	cholesteryl ester transfer protein (CETP) inhibitors
-cianine	indocyanine fluorescence dye group
-cic	hepatoprotective substances with a carboxylic acid group
-ciclib	cyclin dependant kinase inhibitors
-ciclovir (see vir)	antivirals, bicyclic heterocycles compounds
-cidin	naturally occurring antibiotics (undefined group)
-ciguat	guanylate cyclase activators and stimulators

-cillide (see -cillin)	antibiotics, 6-aminopenicillanic acid derivatives
-cillin	antibiotics, 6-aminopenicillanic acid derivatives
-cillinam (see -cillin)	antibiotics, 6-aminopenicillanic acid derivatives
-cilpine (see -pine)	tricyclic compounds
-cisteine (see -steine)	mucoytics, other than bromhexine derivatives
-citabine	nucleosides antiviral or antineoplastic agents, cytarabine or azacitidine derivatives
-citinib (see -tinib)	Janus kinase inhibitors
-clidine/-clidinium	muscarinic receptor agonists/antagonists
-clone	hypnotic tranquillizers
-(clo)sporin	cyclosporine derivatives
-cocept (see -cept)	complement receptors
-cog	blood coagulation factors
-cogin	blood coagulation cascade inhibitors
-conazole	systemic antifungal agents, miconazole derivatives
-copan	complement receptor antagonists/complement inhibitors
-corat	glucocorticoid receptor agonists
-corilant	glucocorticoid receptor antagonists (non-steroidal)
cort	corticosteroids, except prednisolone derivatives
-coxib	selective cyclo-oxygenase inhibitors
-crinat	diuretics, etacrynic acid derivatives
-crine	acridine derivatives
-cromil	antiallergics, cromoglicic acid derivatives
-curium (see -ium)	curare-like substances
-cycline	antibiotics, protein-synthesis inhibitors, tetracycline derivatives

## D

-dan	cardiac stimulants, pimobendan derivatives
-dapson	antimycobacterials, diaminodiphenylsulfone derivatives
-decakin (see -kin)	interleukin-10 analogues and derivatives

-degib	SMO receptor antagonists
-delpar	PPAR delta agonists
-demstat (see -stat)	Lysine-specific histone demethylase inhibitors
-denoson	adenosine A receptor agonists
-dermin (see -ermin)	epidermal growth factors
-dil	vasodilators
-dilol (see -dil)	vasodilators
-dipine	calcium channel blockers, nifedipine derivatives
-dismase (see -ase)	enzymes with superoxide dismutase activity, see -ase
-distim (see -stim)	combination of two different types of colony stimulating factors
-docokin (see kin)	interleukin-22 analogues and derivatives
-dodekin (see -kin)	interleukin-12 analogues and derivatives
-domide	antineoplastics, thalidomide derivatives
-dopa	dopamine receptor agonists, dopamine derivatives, used as antiparkinsonism/prolactin inhibitors
-dotin	synthetic derivatives of dolastatin series
-dox (see -ox/-alox)	antibacterials, quinazoline dioxide derivatives
-dralazine	antihypertensives, hydrazinephthalazine derivatives
-drine	sympathomimetics
-dronic acid	calcium metabolism regulator, pharmaceutical aid
-dustat (see stat)	hypoxia inducible factor (HIF) prolyl hydroxylase inhibitors
-dutant (see -tant)	neurokinin NK <sub>2</sub> receptor antagonist
-dutide (see -tide)	oxyntomodulin analogues and other dual agonists of glucagon-like peptide receptor 1 (GLP-1R) and glucagon receptor (GCGR)
-dyl (see -dil)	vasodilators

## E

-ectin	antiparasitics, ivermectin derivatives
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-elestat (see -stat)	elastase inhibitors
-elvekin (see -kin)	interleukin-11 analogues and derivatives
-emcinal	erythromycin derivatives lacking antibiotic activity, motilin agonists
-enatide (see -tide)	glucagon-like peptide-1 receptor (GLP1R) agonists, exenatide (exendin-4) and analogues
-enicokin (see -kin)	interleukin-21 human analogues and derivatives
-entan	endothelin receptor antagonists
-epdekinra (se -kinra)	interleukin-17 receptor antagonists
(-)eptacog (see -cog)	blood coagulation VII
-eptakin (see kin)	interleukin-7 analogues and derivatives
erg	ergot alkaloid derivatives
-eridine	analgesics, pethidine derivatives and other synthetic small molecule $\mu$ -opioid receptor agonists
-ermin	growth factors
-ertinib (see -tinib)	epidermal growth factor receptor (EGFR) inhibitors
-espib	heat shock protein (HSP) 90 inhibitors (other than <i>-mycin</i> )
estr	estrogens
-estrant	estrogen antagonists, including estrogen receptor down-regulators
-etanide (see -anide)	diuretics, piretanide derivatives
-ethidine (see -eridine)	analgesics, pethidine derivatives
-exakin (see -kin)	interleukin-6 analogues and derivatives
-exine	mucolytic, bromhexine derivatives
<b>F</b>	
-farcept (see -cept)	subgroup of interferon receptors
-fenacin	muscarinic receptor antagonists
-fenamate (see -fenamic acid)	"fenamic acid" derivatives
-fenamic acid	anti-inflammatory, anthranilic acid derivatives
-fenicol	antibacterials, chloramphenicol analogues

<b>-fenin</b>	diagnostic aids; (phenylcarbamoyl)methyl iminodiacetic acid derivatives
<b>-fenine</b>	analgesics, glafenine derivatives (subgroup of fenamic acid group)
<b>-fensine</b>	noreinephrine, serotonin, dopamine reuptake inhibitors
<b>-fentanil</b>	opioid receptor agonists, analgesics, fentanyl derivatives
<b>-fentrine</b>	inhibitors of phosphodiesterases
<b>-fermin (see -ermin)</b>	fibroblast growth factors
<b>-folastat (see stat)</b>	inhibitors of folate hydrolase 1 (prostate-specific membrane antigen, PSMA)
<b>-fiban</b>	fibrinogen receptor antagonists (glycoprotein IIb/IIIa receptor antagonists)
<b>-fibrate</b>	clofibrate derivatives, peroxisome proliferator activated receptor- $\alpha$ (PPAR- $\alpha$ ) agonists
<b>-filermin (see -ermin)</b>	leukemia-inhibiting factor
<b>-flapon</b>	5-lipoxygenase-activating protein (FLAP) inhibitor
<b>-flurane</b>	halogenated compounds used as general inhalation anaesthetics
<b>-formin</b>	antihyperglycaemics, phenformin derivatives
<b>fos</b>	insecticides, anthelmintics, pesticides etc., phosphorous derivatives
<b>-fosfamide (see -fos)</b>	alkylating agents of the cyclophosphamide group
<b>-fosine (see -fos)</b>	cytostatic
<b>-fovir (see vir)</b>	phosphonic acid derivatives
<b>-fradil</b>	calcium channel blockers acting as vasodilators
<b>-frine (see -drine)</b>	sympathomimetic, phenethyl derivatives
<b>-fungin</b>	antifungal antibiotics
<b>-fusp</b>	fusion proteins
<b>-fylline</b>	N-methylated xanthine derivatives

## **G**

<b>gab</b>	gabamimetic agents
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<b>gado-</b>	diagnostic agents, gadolinium derivatives
<b>-gacestat (see stat)</b>	gamma-secretase inhibitors
<b>-ganan</b>	antimicrobials, permeability increasing peptides
<b>-gatan</b>	thrombin inhibitor, antithrombotic agent
<b>-gene</b>	gene therapy substances
<b>-gepant</b>	calcitonin gene-related peptide receptor antagonists
<b>gest</b>	steroids, progestogens
<b>-gestr- (see estr)</b>	estrogens
<b>-giline</b>	monoamine oxydase (MAO)-inhibitors type B
<b>-gillin</b>	antibiotics produced by <i>Aspergillus</i> strains
<b>gli</b>	antihyperglycaemics
<b>-gliflozin (see gli)</b>	sodium glucose co-transporter inhibitors, phlorizin derivatives
<b>-gliptin (see gli)</b>	dipeptidyl aminopeptidase–IV inhibitors
<b>-glitazar (see gli)</b>	dual peroxisome proliferator activated receptors- $\alpha$ and $\gamma$ (PPAR- $\alpha,\gamma$ ) agonists
<b>-glitazone (see gli)</b>	peroxisome proliferator activating receptor- $\gamma$ (PPAR- $\gamma$ ) agonists, thiazolidinedione derivatives
<b>-glumide</b>	cholecystokinin (CCK) antagonists, antiulcer, anxiolytic agent
<b>-glurant</b>	metabotropic glutamate receptor antagonists/negative allosteric modulators
<b>-glustat (see stat)</b>	ceramide glucosyltransferase inhibitors
<b>-glutide (see -tide)</b>	Glucagon-Like Peptide (GLP) analogues
<b>-golide</b>	dopamine receptor agonists, ergoline derivatives
<b>-golix</b>	gonadotropin releasing hormone (GnRH) antagonists
<b>-gosivir (see vir)</b>	glucoside inhibitors
<b>-gramostim (see -stim)</b>	granulocyte macrophage colony stimulating factor (GM-CSF) types substances
<b>-grastim (see -stim)</b>	granulocyte colony stimulating factor (G-CSF) type substances
<b>-grel-/-grel</b>	platelet aggregation inhibitors

guan-	antihypertensives, guanidine derivatives
<b>I</b>	
-ibine (see -ribine)	ribofuranyl-derivatives of the “pyrazofurin” type
-icam	anti-inflammatory, isoxicam derivatives
-ifene	antiestrogens or estrogen receptor modulators, clomifene and tamoxifen derivatives
-igetide (see -tide)	peptides and glycopeptides
-ilide	class III antiarrhythmics, sematilide derivatives
imex	immunostimulants
-imibe	antihyperlipidaemics, acyl CoA: cholesterol acyltransferase (ACAT) inhibitors
-imod	immunomodulators, both stimulant/suppressive and stimulant
-imus	immunosuppressants (other than antineoplastics)
-ine	alkaloids and organic bases
-inostat (see stat)	histone deacetylase inhibitors
-inurad	urate transporter inhibitors
io-	iodine-containing contrast media
iod-/-io-	iodine-containing compounds other than contrast media
-irine	cytotoxic pyrrolobenzodiazepine dimers and analogues
-irudin	thrombin inhibitors, hirudin derivatives
-isant	histamine H <sub>3</sub> receptor antagonists
-isomide	class I antiarrhythmics, disopyramide derivatives
-ium	quaternary ammonium compounds
-ixafor	chemokine CXCR4 antagonists
-ixibat	ileal bile acid transporter (IBAT) inhibitors, bile acid reabsorption inhibitors
-izine (-yzine)	diphenylmethyl piperazine derivatives

**K**

-kacin	antibiotics, kanamycin and bekanamycin derivatives (obtained from <i>Streptomyces kanamyceticus</i> )
-kalant	potassium channel blockers
-kalim	potassium channel activators, antihypertensive
-kef-	Enkephalin, endorphin and dynorphin opioid $\delta$ , $\mu$ and $\kappa$ receptor agonists
-kin	interleukin type substances
-ki(n)- (see -mab)	target: interleukin
-kinra (see -kin)	interleukin receptor antagonists and interleukin antagonists
-kiren	renin inhibitors

**L**

-laner	antagonists of GABA (gamma-aminobutyric acid) regulated chloride channels, antiparasitic agents
-lefacept (see -cept)	lymphocyte function-associated antigen 3 receptors
-leukin (see -kin)	interleukin-2 analogues and derivatives
-leuton	5-lipo-oxygenase inhibitors, anti-inflammatory
-lisib	phosphatidylinositol 3-kinase inhibitors, antineoplastics
-listat (see -stat)	gastrointestinal lipase inhibitors
-lubant	leukotriene B <sub>4</sub> receptor antagonist
-lukast (see -ast)	leukotriene receptor antagonists
-lutamide	non-steroid antiandrogens

**M**

-mab	monoclonal antibodies (previous naming scheme)
-madlin	E3 ubiquitin-protein ligase Mdm2 (Hdm2) inhibitors
-mantadine	adamantane derivatives
-mantine (see -mantadine)	adamantane derivatives

-mantone (see -mantadine)	adamantane derivatives
-mapimod (see -imod)	mitogen-activated protein (MAP) kinase inhibitors
-mastat (see -stat)	matrix metalloproteinase inhibitors
-meline	cholinergic agents (muscarine receptor agonists/partial antagonists used in the treatment of Alzheimer's disease)
-ment	immunoglobulin fragments (current monoclonal antibody naming scheme)
mer-/-mer	mercury-containing drugs, antimicrobial or diuretic (deleted from General Principles in List 28 prop. INN)
-mer	polymers
-meran	messenger RNA (mRNA)
-mesine	sigma receptor ligands
-mestane	aromatase inhibitors
-metacin	anti-inflammatory, indometacin derivatives
-met(h)asone (see pred)	prednisone and prednisolone derivatives
-metinib (see -tinib)	MEK (MAPK <sup>#</sup> kinase) tyrosine kinase inhibitors
	<small># MAPK: mitogen activated protein kinase</small>
-metostat (see stat)	histone <i>N</i> -methyltransferase inhibitors
-micin	aminoglycosides, antibiotics obtained from various <i>Micromonospora</i>
-mifene (see -ifene)	antiestrogens, clomifene and tamoxifen derivatives
-mig	multi-specific immunoglobulins (current monoclonal antibody naming scheme)
-milast (see -ast)	Phosphodiesterase-4 (PDE4) inhibitors
mito-	antineoplastics, nucleotoxic agents (deleted from General Principles in List 24 prop. INN)
-monam	monobactam antibiotics
-morelin (see -relin)	growth hormone release-stimulating peptides
-mostim (see -stim)	macrophage stimulating factors (M-CSF) type substances
-motide (see -tide)	immunological agents for active immunization
-motine	antivirals, quinoline derivatives

-moxin	monoamine oxidase inhibitors, hydrazine derivatives
-mulin	antibacterials, pleuromulin derivatives
-mustine	antineoplastic, alkylating agents, ( $\beta$ -chloroethyl) amine derivatives
-mycin	antibiotics, produced by <i>Streptomyces</i> strains (see also -kacin)

## N

nab	cannabinoid receptor agonists
-nabant	cannabinoid receptor antagonists
-nacept (see -cept)	interleukin-1 receptors
-nakin (see -kin)	interleukin-1 analogues and derivatives
-nakinra (see -kin)	interleukin-1 receptor antagonists
nal-	opioid receptor antagonists/agonists related to normorphine
-naritide (see -tide)	peptides and glycopeptides
-navir (see vir)	Human Immunodeficiency Virus (HIV) protease inhibitors
-nepag	prostaglandin receptor agonists, non-prostanoids
-nermin (see -ermin)	tumour necrosis factor
-nercept (see -cept)	tumour necrosis factor receptors
-nersen (see rsen)	targeting neurological functions
-nertant (see -tant)	neurotensin antagonists
-netant (see -tant)	neurokinin NK <sub>3</sub> receptor antagonists
-netide (see -tide)	neurological
-nicate (see nico-)	antihypercholesterolaemic and/or vasodilating nicotinic acid esters
-nicline	nicotinic acetylcholine receptor partial agonists / agonists
nico-/nic-/ni-	nicotinic acid or nicotinoyl alcohol derivatives
-nidazole	antiprotozoals and radiosensitizers, metronidazole derivatives
-nidine	$\alpha$ 2 adrenoreceptor agonists

nifur-	5-nitrofuran derivatives
-nil (see -azenil)	benzodiazepine receptor antagonists/agonists (benzodiazepine derivatives)
nitro-/nitr-/nit-/ni-/ni-	NO <sub>2</sub> - derivatives
-nixin	anti-inflammatory, anilinicotinic acid derivatives
(-)nonacog (see -cog)	blood factor IX

## O

octakin (see -kin)	interleukin-8 analogues and derivatives
-octadekin (see -kin)	interleukin-18 human analogues and derivatives
(-)octocog (see -cog)	blood factor VIII
-ol	for alcohols and phenols (deleted from General Principles in 14 <sup>th</sup> Report)
-olol	β-adrenoreceptor antagonists
-olone (see pred)	steroids other than prednisolone derivatives
-onakin (see -kin)	interleukin-1 analogues and derivatives
-one	ketones
-onide	steroids for topical use, acetal derivatives
-(o)nidine (see -nidine)	α <sub>2</sub> adrenoreceptor agonists, clonidine derivatives
-onium (see -ium)	quaternary ammonium compounds
-opamine (see -dopa)	dopaminergic agents dopamine derivatives used as cardiac stimulant/antihypertensives/diuretics
-orex	anorexics
-orexant	orexin receptor antagonists
-orph- (see orphan)	opioid receptor antagonists/agonists, morphinan derivatives
orphan	opioid receptor antagonists/agonists, morphinan derivatives
-otermin (see -ermin)	bone morphogenetic proteins
-ox/-alox	antacids, aluminium derivatives
-oxacin	antibacterials, nalidixic acid derivatives
-oxan(e)	benzodioxane derivatives



-oxanide (see -anide)	antiparasitics, salicylanilides and analogues
-oxef (see cef-)	antibiotics, oxacefalosporanic acid derivatives
-oxepin (see -pine)	tricyclic compounds
-oxetine	serotonin and/or norepinephrine reuptake inhibitors, fluoxetine derivatives
-oxicam (see -icam)	anti-inflammatory, isoxicam derivatives
-oxifene (see -ifene)	antiestrogens or estrogen receptor modulators, clomifene and tamoxifen derivatives
-oxopine (see -pine)	tricyclic compounds

## P

-pafant	platelet-activating factor antagonists
-pamide	diuretics, sulfamoylbenzoic acid derivatives (could be sulfamoylbenzamide)
-pamil	calcium channel blocker, verapamil derivatives
-paratide (see -tide)	parathyroid hormone analogues
-parcin	for glycopeptide antibiotics
-parib	poly-ADP-Ribose polymerase inhibitors
-parin	heparin derivatives including low molecular mass heparins
-parinux (see -parin)	synthetic heparinoids
-pendekin (see -kin)	interleukin-15 analogues and derivatives
-pendyl (see -dil)	vasodilators
-penem	analogues of penicillanic acid antibiotics modified in the five-membered ring
perfl(u)-	perfluorinated compounds used as blood substitutes and/or diagnostic agents
-peridol (see -perone)	antipsychotics, haloperidol derivatives
-peridone (see -perone)	antipsychotics, risperidone derivatives
-perone	tranquillizers, neuroleptics, 4'-fluoro-4-piperidinobutyrophenone derivatives
-pidem	hypnotics/sedatives, zolpidem derivatives
-pin(e)	tricyclic compounds

-piprazole (see -prazole)	psychotropics, phenylpiperazine derivatives
-pirone (see -spirone)	anxiolytics, buspirone derivatives
-pirox (see -ox/-alox)	antimycotic pyridone derivatives
-pitant (see -tant)	neurokinin NK <sub>1</sub> (substance P) receptor antagonist
-pixant	purinoreceptor (P2X) antagonists
-plact	platelet factor 4 analogues and derivatives
-pladib	phospholipase A <sub>2</sub> inhibitors
-planin	glycopeptide antibacterials ( <i>Actinoplanes</i> strains)
-plase (see -ase)	enzymes
-plasmid (see -gene)	gene therapy substances
-platin	antineoplastic agents, platinum derivatives
-plermin (see -ermin)	platelet-derived growth factor
-plestim (see -stim and -kin)	interleukin-3 analogues and derivatives
-plon	imidazopyrimidine or pyrazolopyrimidine derivatives, used as anxiolytics, sedatives, hypnotics
-poetin	erythropoietin type blood factors
-porfin	benzoporphyrin derivatives
-poride	Na <sup>+</sup> /H <sup>+</sup> antiport inhibitor
-pramine	substances of the imipramine group
-prazan	proton pump inhibitors, not dependent on acid activation
-prazole	antiulcer, benzimidazole derivatives
pred	prednisone and prednisolone derivatives
-prenaline (see -terol)	bronchodilators, phenethylamine derivatives
-pressin	vasopressin analogues
-previr (see vir)	Hepatitis Virus C (HVC) protease inhibitors
-pride	sulpiride derivatives and analogues
-pril	angiotensin-converting enzyme inhibitors
-prilat (see -pril)	angiotensin-converting enzyme inhibitors
-prim	antibacterials, dihydrofolate reductase (DHFR) inhibitors, trimethoprim analogues
-pris-	steroidal compounds acting on progesterone receptors (excluding -gest- compounds)

-pristin	antibacterials, streptogramins, protein synthesis inhibitors, pristinamycin derivatives
-prodil	<i>N</i> -methyl-D-aspartate (NMDA) receptor antagonists
-profen	anti-inflammatory agents, ibuprofen derivatives
prost	prostaglandins
-prostil (see prost)	prostaglandins, anti-ulcer
-(o)pterin	pteridine derivatives
-pultide (see -tide)	peptides and proteins, used in pulmonary surfactants

## Q

-quidar	drugs used in multidrug resistance, quinoline derivatives
-quin(e)	quinoline derivatives (deleted from General Principles in List 28 prop. INN)
-quinil (see -azenil)	benzodiazepine receptor agonists, also partial or inverse (quinoline derivatives)

## R

-racetam	amide type nootrope agents, piracetam type
-racil	uracil type antineoplastics
-rafenib	Raf (rapidly accelerated fibrosarcoma) kinase inhibitors
-rasib	Ras protein inhibitors
-relin	pituitary hormone-release stimulating peptides
-relix	gonadotropin-releasing-hormone (GnRH) inhibitors, peptides
-renone	mineralocorticoid receptor (MR, MCR, aldosterone receptor) antagonists
-reotide (see tide)	somatostatin receptor agonists/antagonists
-restat (see -stat)	aldose reductase inhibitors
retin	retinol derivatives
-ribine	ribofuranyl-derivatives of the "pyrazofurin" type
rifa-	antibiotics, rifamycin derivatives

-rinone	cardiac stimulants, amrinone derivatives
-ritide	natriuretic peptides
-rixin	chemokine CXCR receptor antagonists
-rizine (see -izine)	antihistaminics/cerebral (or peripheral) vasodilators
-rolimus (see -imus)	immunosuppressants, rapamycin derivatives
-rozole	aromatase inhibitors, imidazole-triazole derivatives
-rsen	antisense oligonucleotides
-rubicin	antineoplastics, daunorubicin derivatives

## S

sal	salicylic acid derivatives
salazo-	phenylazosalicylic acid derivatives antibacterial
-salan	brominated salicylamide derivatives disinfectant
-sartan	angiotensin II receptor antagonists, antihypertensive (non-peptidic)
-semide	diuretics, furosemide derivatives
-sermin (see -ermin)	insulin-like growth factors
-serod	serotonin receptor antagonists and partial agonists
-serpine	derivatives of <i>Rauwolfia</i> alkaloids
-sertib	serine/threonine kinase inhibitors
-setron	serotonin receptor antagonists (5-HT <sub>3</sub> ) not fitting into other established groups of serotonin receptor antagonists
-siban	oxytocin antagonists
-sidenil	isocitrate dehydrogenase inhibitors
-siran	small interfering RNA including siRNA, miRNA and piRNA
som-	growth hormone derivatives
-sopine (see -pine)	tricyclic compounds
-spirone	anxiolytics, buspirone derivatives
-stat/-stat-	enzyme inhibitors
-steine	mucolytics, other than bromhexine derivatives
-ster-	androgens/anabolic steroids

-steride (see -ster-)	androgens/anabolic steroids
-stigmine	acetylcholinesterase inhibitors
-stim	colony stimulating factors
-stinel	<i>N</i> -methyl-D-aspartate (NMDA) receptor co-agonists
-sudil (see -dil)	Rho protein kinase inhibitors
sulfa-	anti-infectives, sulfonamides
-sulfan	antineoplastic, alkylating agents, methanesulfonates
<b>T</b>	
-tacept (see -cept)	cytotoxic T lymphocyte-associated antigen 4 (CTLA-4) receptors
-tadine	tricyclic histamine-H <sub>1</sub> receptor antagonists, tricyclic compounds
-tansine	maytansinoid derivatives, antineoplastics
-tant	neurokinin (tachykinin) receptor antagonists
-tapide	microsomal triglyceride transfer protein (MTP) inhibitors
-taxel	antineoplastics; taxane derivatives
-tecan	antineoplastics, topoisomerase I inhibitors
-tegravir	HIV integrase inhibitors
-tepa	antineoplastics, thiotepa derivatives
-tepine (see -pine)	tricyclic compounds
-teplase (see -ase)	tissue type plasminogen activators, see -ase
-tercept (see -cept)	transforming growth factors receptors
-termin (see -ermin)	transforming growth factor
-terol	bronchodilators, phenethylamine derivatives
-terone	antiandrogens
-thiouracil (see -racil)	uracil derivatives used as thyroid antagonists
-tiazem	calcium channel blockers, diltiazem derivatives
-tibant	bradykinin receptor antagonists
-tide	peptides and glycopeptides (for special groups of peptides see -actide, -pressin, -relin, -tocin)

<b>-tidine</b>	histamine-H <sub>2</sub> -receptor antagonists, cimetidine derivatives
<b>-tilide (see -ilide)</b>	class III antiarrhythmics, sematilide derivatives
<b>-tiline (see -triptyline)</b>	antidepressants, dibenzo[a,d]cycloheptane or cycloheptene derivatives
<b>-tinib</b>	tyrosine kinase inhibitors
<b>-tirelin (see -relin)</b>	thyrotropin releasing hormone analogues
<b>-tirom(-)</b>	antihyperlipidaemics, thyromimetic derivatives
<b>-tizide</b>	diuretics, chlorothiazide derivatives
<b>-tocin</b>	oxytocin derivatives
<b>-toclax</b>	B-cell lymphoma 2 (Bcl-2) inhibitors
<b>-toin</b>	antiepileptics, hydantoin derivatives
<b>-tolimod (see -imod)</b>	toll-like receptor (TLR) agonists
<b>-trakin (see -kin)</b>	interleukin-4 analogues and derivatives
<b>-trakinra (see -kinra)</b>	interleukin-4 receptor antagonists
<b>-traline</b>	serotonin reuptake inhibitors
<b>-trectinib (see tinib)</b>	tropomyosin receptor kinase (TRK) inhibitors
<b>-tredekin (see -kin)</b>	interleukin-13 analogues and derivatives
<b>-trep</b>	transient receptor potential antagonists
<b>-trexate</b>	folic acid analogues
<b>-trexed</b>	antineoplastics; thymidilate synthetase inhibitors
<b>-tricin</b>	antibiotics, polyene derivatives
<b>-trigine</b>	sodium channel blockers, signal transduction modulators
<b>-tril/trilat</b>	endopeptidase inhibitors
<b>-triptan</b>	serotonin (5HT <sub>1</sub> ) receptor agonists, sumatriptan derivatives
<b>-triptyline</b>	antidepressants, dibenzo[a,d]cycloheptane or cycloheptene derivatives
<b>-troban</b>	thromboxane A <sub>2</sub> -receptor antagonists; antithrombotic agents
<b>-trodast (see -ast)</b>	thromboxane A <sub>2</sub> -receptor antagonists, antiasthmatics
<b>-trombopag</b>	thrombopoietin agonists

**trop** atropine derivatives  
**-tug** unmodified immunoglobulins (current monoclonal antibody naming scheme)

## U

**-uplase (see -ase)** urokinase type plasminogen activators, see -ase  
**-ur (see -uridine)** uridine derivatives used as antiviral agents and as antineoplastics  
**-uridine** uridine derivatives used as antiviral agents and as antineoplastics

## V

**-vaptan** vasopressin receptor antagonists  
**-vastatin (see -stat)** antihyperlipidaemic substances, HMG CoA reductase inhibitors  
**-vec (see -gene)** gene therapy product  
**-verine** spasmolytics with a papaverine-like action  
**-vetmab (see -mab)** monoclonal antibodies for veterinary use  
**vin-/-vin-** vinca alkaloids  
**vir** antivirals (undefined group)  
**-vircept (see -cept)** antiviral receptors  
**-virine (see vir)** non-nucleoside reverse transcriptase inhibitors (NNRTI)  
**-viroc (see -vir)** CCR5 (Chemokine CC motif receptor 5) receptor antagonists  
**-virsen (see vir and -rsen)** antisense oligonucleotides, antivirals  
**-vivint** Wnt signaling inhibitors  
**-vos (see fos)** insecticides, anthelmintics, pesticides etc., phosphorus derivatives  
**-vudine (see -uridine)** uridine derivatives used as antiviral agents and as antineoplastics

## X

**-xaban** blood coagulation factor X<sub>A</sub> inhibitors, antithrombotics  
**-xanox (see -ox/-alox)** anti-allergics, tixanox group

-xetan

chelating agents

## Y

-yzine (see -izine)

diphenylmethyl piperazine derivatives

## Z

-zafone

alozafone derivatives

-zepine (see -pine)

tricyclic compounds

-zolast (see -ast)

leukotriene biosynthesis inhibitors

-zolid

oxazolidinone antibacterials

-zomib

proteasome inhibitors

-zone (see -buzone)

anti-inflammatory analgesics, phenylbutazone derivatives

-zotan

5-HT<sub>1A</sub> receptor agonists / antagonists acting primarily as neuroprotectors

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# Part III

## STEM CLASSIFICATION WITH CORRESPONDING EXAMPLES OF STEMS AND THEIR DEFINITION

<b>A000</b>	<b>CNS DEPRESSANTS</b>		
<b>A100</b>	<b>General anaesthetics</b>		
A110	General anaesthetics, volatile	<i>-flurane</i>	halogenated compounds used as general inhalation anaesthetics
A120	General anaesthetics, other		
<b>A200</b>	<b>Hypnotics - sedatives</b>		
A210	Barbiturates	<i>barb</i>	hypnotics, barbituric acid derivatives
A220	Hypnotic sedatives, other	<i>-clone</i>	hypnotic tranquillizers
A220		<i>-plon</i>	imidazopyrimidine or pyrazolopyrimidine derivatives, used as anxiolytics, sedatives, hypnotics
A240	Chloral derivatives, hypnotic sedatives		
<b>A300</b>	<b>Centrally acting voluntary muscle tone modifying drugs</b>		
A310	Antiepileptics	<i>-bersat</i>	anticonvulsants, benzoylamino-benzopyran derivatives
A311	Hydantoins, Antiepileptics	<i>-toin</i>	antiepileptics, hydantoin derivatives
A312	Acetylureas, Antiepileptics		
A313	Oxazolidinediones, Antiepileptics		
A314	Succinimides, Antiepileptics		
A315	Barbiturates, Antiepileptics		
A316	Antiepileptics, other		
A320	Central anticholinergics		
A330	Centrally acting voluntary-muscle relaxants		
<b>A400</b>	<b>Analgesics and antipyretics,</b> please see AA code here below.		
<b>A500</b>	<b>Antivertigo drugs</b>		

<b>AA- ANALGESICS AND ANTIPYRETICS*</b>			
* The stems here below have been extracted from the A-CNS depressant category since not all analgesics are CNS depressants. In this context, a subcategory "AA- Analgesics and antipyretics" has been created to better reflect this information.			
<b>A400</b>	<b>Analgesics</b>		
<b>A410</b>	<b>Opioids</b>	-adol or -adol-	analgesics
A410		-azocine	narcotic antagonists/agonists related to 6,7-benzomorphan
A410		-eridine	analgesics, pethidine derivatives and other synthetic small molecule $\mu$ -opioid receptor agonists
A410		-ethidine	see -eridine
A410		-fentanil	opioid receptor agonists, analgesics, fentanyl derivatives
A410		nal-	opioid receptor antagonists/agonists related to normorphine
A410		orphan	opioid receptor antagonists/agonists, morphinan derivatives; -orphine, -orphinol, -orphone
<b>A420</b>	<b>Analgesics - Antipyretics</b>	-ac	anti-inflammatory agents, ibufenac derivatives
A420		-adol or -adol-	analgesics
A420		-arit	antiarthritic substances, acting like clobuzarit and lobenzarit (mechanism different from anti-inflammatory type substances, e.g. -fenamates or -profens)
A420		-bufen	non-steroidal anti-inflammatory agents, arylbutanoic acid derivatives
A420		-butazone	-buzone: anti-inflammatory analgesics, phenylbutazone derivatives
A420		-buzone	anti-inflammatory analgesics, phenylbutazone derivatives
A420		-coxib	selective cyclo-oxygenase inhibitors
A420		-fenamate	"-fenamic acid" derivatives
A420		-fenamic acid	anti-inflammatory, anthranilic acid derivatives
A420		-icam	anti-inflammatory, isoxicam derivatives
A420		-metacin	anti-inflammatory, indometacin derivatives
A420		-nixin	anti-inflammatory, anilinonicotinic acid derivatives

A420		-profen	anti-inflammatory agents, ibuprofen derivatives
<b>A430</b>	<b>Analgesics, other</b>	-adom	analgesics, tipluadom derivatives
A430		-fenine, phenine	analgesics, glafenine derivatives - (subgroup of fenamic acid group)
<b>A440</b>	<b>Central antiemetics</b>		

<b>B000</b>	<b>CNS STIMULANTS</b>	<i>-ampanel</i>	antagonists of the ionotropic non-NMDA ( <i>N</i> -methyl-D-aspartate) glutamate receptors (Namely the AMPA (amino-hydroxymethyl-isoxazole-propionic acid) and/or KA (kainite antagonist) receptors)
<b>B100</b>	<b>Analeptics</b>	<i>-fylline</i>	<i>N</i> -methylated xanthine derivatives
B100		<i>-racetam</i>	amide type nootrope agents, piracetam derivatives
B100		<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
B200		<i>orphan</i>	opioid receptor antagonists/agonists, morphinan derivatives
<b>B300</b>	<b>Benzodiazepine receptor antagonists</b>		

<b>C000</b>	<b>PSYCHOPHARMACOLOGICS</b>	<i>-glurant</i>	metabotropic glutamate receptor antagonists/negative allosteric modulators
		<i>-isant</i>	histamine H <sub>3</sub> receptor antagonists
		<i>-orexant</i>	orexin receptor antagonists
		<i>-piprazole</i>	psychotropics, phenylpiperazine derivatives ( <i>future use is discouraged due to conflict with the stem -prazole</i> )
<b>C000</b>		<i>-pride</i>	sulpiride derivatives and analogues
C000		<i>-racetam</i>	amide type nootrope agents, piracetam derivatives
C000		<i>-triptan</i>	serotonin (5-HT <sub>1</sub> ) receptor agonists, sumatriptan derivatives
C000		<i>-zotan</i>	serotonin 5-HT <sub>1A</sub> receptor agonists/antagonists acting primarily as neuroprotectors
<b>C100</b>	<b>Anxiolytic sedatives</b>	<i>-azenil</i>	benzodiazepine receptor antagonists/agonists (benzodiazepine derivatives)
C100		<i>-azepam</i>	diazepam derivatives

C100		<i>-bamate</i>	tranquillizers, propanediol and pentanediol derivatives
C100		<i>-carnil</i>	benzodiazepine receptor antagonists/agonists (carboline derivatives)
C100		<i>-peridone</i>	see <i>-perone</i> : antipsychotics, risperidone derivatives
C100		<i>-perone</i>	tranquillizers, neuroleptics, 4'-fluoro-4-piperidino-butyrophenone derivatives
C100		<i>-pidem</i>	hypnotics/sedatives, zolpidem derivatives
C100		<i>-plon</i>	imidazopyrimidine or pyrazolopyrimidine derivatives, used as anxiolytics, sedatives, hypnotics
C100		<i>-quinil</i>	benzodiazepine receptor agonists also partial or inverse (quinoline derivatives), see <i>-azenil</i>
C100		<i>-spirone</i>	anxiolytics, buspirone derivatives
C100		<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
C210	Brain amine depleters		
C220	Central adrenoreceptor antagonists		
<b>C300</b>	<b>Antidepressants</b>	<i>-fensine</i>	Norepinephrine, serotonin, dopamine reuptake inhibitors
		<i>-oxetine</i>	serotonin and/or norepinephrine reuptake inhibitors, fluoxetine derivatives
		<i>-traline</i>	serotonin reuptake inhibitors
C310	MAO inhibitors	<i>-giline</i>	MAO-inhibitors type B
C310		<i>-moxin</i>	monoamine oxidase inhibitors, hydrazine derivatives
C320	Tricyclic antidepressants	<i>-pin(e)</i>	tricyclic compounds; <i>dipine</i> : see <i>-dipine</i> ; <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>-tepine</i>
C320		<i>-pramine</i>	substances of the imipramine group
C320		<i>-triptyline</i>	antidepressants, dibenzo[a,d]cycloheptane or cycloheptene derivatives
C330	Tetracyclic antidepressants		
C340	Bicyclic antidepressants		

<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> )
C700		<i>erg</i>	ergot alkaloid derivatives
C700		<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>E000</b>	<b>DRUGS ACTING AT SYNAPTIC AND NEUROEFFECTOR JUNCTIONAL SITES</b>	<i>gab</i>	gabamimetic agents
E000		<i>-nabant</i>	cannabinoid receptor antagonists
E000	Local anaesthetics	<i>-caine</i>	local anaesthetics
<b>E100</b>	<b>Cholinergic agents</b>	<i>-meline</i>	cholinergic agents (muscarinic receptor agonists/partial antagonists used in the treatment of Alzheimer's disease)
E100		<i>-clidine/ -clidinium</i>	muscarinic receptor agonists/antagonists
E110	Dopaminergic receptor agonists	<i>-dopa</i>	dopamine receptor agonists, dopamine derivatives, used as antiparkinsonism/prolactin inhibitors
E110		<i>-golide</i>	dopamine receptor agonists, ergoline derivatives
E111	Muscarinic receptor agonists		
E112	Nicotinic receptor agonists	<i>-nicline</i>	nicotinic acetylcholine receptor partial agonists / agonists
E120	Anticholinesterase agents	<i>-stigmine</i>	anticholinesterases
<b>E200</b>	<b>Cholinergic antagonists</b>	<i>trop</i>	atropine derivatives
E210	Peripheral cholinergic antagonists		
E220	Ganglionic antagonists		
<b>E300</b>	<b>Neuromuscular blocking agents</b>	<i>-curium</i>	curare-like substance; see <i>-ium</i>
E300		<i>-ium</i>	quaternary 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

E400		<i>-drine</i>	sympathomimetics; -frine: sympathomimetic, phenethyl derivatives
E400		<i>-frine</i>	sympathomimetic, phenethyl derivatives
E400		<i>-terol</i>	bronchodilators, phenethylamine derivatives [previously -prenaline or -terenol]
E410	Beta adrenoreceptor agonists		
E420	Alpha adrenoreceptor agonists		
<b>E500</b>	<b>Adrenoreceptor antagonists</b>		
E510	Alpha adrenoreceptor antagonists	<i>-oxan(e)</i>	benzodioxane derivatives
E520	Beta adrenoreceptor antagonists	<i>-alol</i>	aromatic ring -CHOH-CH <sub>2</sub> -NH-R related to -olols
E520		<i>-olol</i>	beta-adrenoreceptor antagonists; <i>-alol</i> : aromatic ring -CH-CH <sub>2</sub> -NH-R related to -olols
E530	Catecholamines false transmitters		
E540	Adrenergic neurone blocking agents	<i>-serpine</i>	derivatives of <i>Rauwolfia</i> alkaloids

<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>-afil</i>	inhibitors of PDE5 with vasodilator action
F200		<i>-ciguat</i>	guanylate cyclase activators and stimulators
F200		<i>-dil</i>	vasodilators
F200		<i>-entan</i>	endothelin receptor antagonists
F210	Coronary vasodilators, also calcium channel blockers	<i>-dipine</i>	calcium channel blockers, nifedipine derivatives
F210		<i>-fradil</i>	calcium channel blockers acting as vasodilators
F210		<i>-pamil</i>	calcium channel blockers, verapamil derivatives
F210		<i>-tiazem</i>	calcium channel blockers, diltiazem derivatives
F220	Peripheral vasodilators	<i>-nicate</i>	antihypercholesterolaemic and/or vasodilating nicotinic acid esters
<b>F300</b>	<b>Smooth muscle stimulants</b>		
F310	Vasoconstrictor agents	<i>-pressin</i>	vasopressin analogues
<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
G210	Histamine H <sub>1</sub> -receptor antagonists	<i>-tadine</i>	histamine-H <sub>1</sub> receptor antagonists, tricyclic compounds
G220	Histamine H <sub>2</sub> -receptor antagonists	<i>-tidine</i>	histamine-H <sub>2</sub> -receptor antagonists, cimetidine derivatives
G230	Histamine H <sub>3</sub> -receptor antagonists	<i>-isant</i>	histamine H <sub>3</sub> receptor antagonists, inverse agonists
<b>G300</b>	<b>Histamine metabolism agents</b>		

<b>H000</b>	<b>CARDIOVASCULAR AGENTS</b>	<i>-bradine</i>	bradycardic agents
H000		<i>-denoson</i>	adenosine A receptor agonists
H000		<i>-vaptan</i>	vasopressin receptor antagonists
<b>H100</b>	<b>Cardiac glycosides and drugs with similar action</b>	<i>-dan</i>	cardiac stimulants, pimobendan derivatives
H100		<i>-rinone</i>	cardiac stimulants, amrinone derivatives
<b>H200</b>	<b>Antiarrhythmics</b>	<i>-afenone</i>	antiarrhythmics, propafenone derivatives
H200		<i>-aj-</i>	antiarrhythmics, ajmaline derivatives
H200		<i>-cain-</i>	Class I antiarrhythmics, procainamide and lidocaine derivatives (antifibrillants with local anaesthetic activity)
H200		<i>-ilide</i>	Class III antiarrhythmics, sotalolol derivatives
H200		<i>-isomide</i>	class I antiarrhythmics, disopyramide derivatives
H200		<i>-kalant</i>	potassium channel blockers
<b>H300</b>	<b>Antihypertensives</b>	<i>-azosin</i>	antihypertensive substances, prazosin derivatives
H300		<i>-dralazine</i>	antihypertensives, hydrazinephthalazine derivatives
H300		<i>guan-</i>	antihypertensives, guanidine derivatives
H300		<i>-kalim</i>	potassium channel activators, antihypertensive
H300		<i>-kiren</i>	renin inhibitors

H300		<i>-(o)nidine</i>	$\alpha_2$ adrenoreceptor agonists clonidine derivatives
H300		<i>-pril(at)</i>	angiotensin-converting enzyme inhibitors
H300		<i>-sartan</i>	angiotensin II receptor antagonists, antihypertensive (non-peptidic)
<b>H400</b>	<b>Antihyperlipidaemic drugs</b>	<i>-fibrate</i>	clofibrate derivatives, peroxisome proliferator activated receptor- $\alpha$ (PPAR- $\alpha$ ) agonists
<b>H400</b>		<i>-cetrapib</i>	Cholesteryl ester transfer protein (CETP) inhibitors
H400		<i>-nicate</i>	antihypercholesterolaemic and/or vasodilating nicotinic acid esters
H400		<i>-tapide</i>	microsomal triglyceride transfer protein (MTP) inhibitors
H400		<i>-vastatin</i>	see <i>-stat</i> ; antihyperlipidaemic substances, HMG CoA reductase inhibitors
<b>H500</b>	<b>Antivaricose drugs</b>		
H510	Sclerosing drugs		
<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>		
H810	Angiotensin converting enzyme inhibitors		
H820	Angiotensin receptor antagonists		

<b>I000</b>	<b>BLOOD AND AGENTS ACTING ON THE HAEMOPOIETIC SYSTEM (EXCL. CYTOSTATICS)</b>		
<b>I100</b>	<b>Antianaemic agents</b>		
I110	Iron preparations		
I120	Haematinics, other (Vit. B-12, folic acid, etc.)		
I130	Miscellaneous antianaemic agents		
<b>I200</b>	<b>Agents influencing blood coagulation</b>	<i>-cog</i>	<i>(-)-eptacog</i> : blood coagulation factor VII, <i>(-)-octocog</i> : blood coagulation factor VIII, etc.
I200		<i>-cogin</i>	blood coagulation cascade inhibitors
I200		<i>-fiban</i>	fibrinogen receptor antagonists (glycoprotein IIb/IIIa receptor antagonists)
I200		<i>-gafran</i>	thrombin inhibitor, antithrombotic agents



I200		<i>-parin</i>	heparin derivatives including low molecular mass heparins
I210	Anticoagulants	<i>-arol</i>	anticoagulants, dicoumarol derivatives
I210		<i>-grel-</i> or <i>-grel</i>	platelet aggregation inhibitors
I210		<i>-irudin</i>	hirudin derivatives
I210		<i>-pafant</i>	platelet-activating factor antagonists
I210		<i>-troban</i>	thromboxane A <sub>2</sub> -receptor antagonists; antithrombotic agents
I220	Prothrombin inhibitors		
I230	Prothrombin synthesis inhibitors		
I240	Anticoagulant inhibitors		
I250	Agents affecting fibrinolysis		
I260	Coagulation promoting agents		
I261	Blood clotting factors		
<b>I300</b>	<b>Blood proteins and their fractions</b>	<i>-poetin</i>	erythropoietin type blood factors
I310	Blood substitutes (macromolecular)		
<b>I400</b>	<b>Platelet-function regulators</b>		
<b>I500</b>	<b>Colony stimulating factors</b>	<i>-stim</i>	colony stimulating factors: <i>-distim</i> : combination of two different types of CSF; <i>-gramostim</i> : granulocyte macrophage colony stimulating factor (GM-CSF) type substances; <i>-grastim</i> : granulocyte colony stimulatory factor (G-CSF) type substances; <i>-mostim</i> : macrophage stimulating factors (M-CSF) type substances; <i>-plestim</i> : interleukin-3 analogues and derivatives
I500	Granulocyte stimulating factors	<i>-grastim</i>	see <i>-stim</i>
I500	Macrophage stimulating factor	<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>-emcinal</i>	erythromycin derivatives lacking antibacterial activity, motilin agonists
J000		<i>-glumide</i>	cholecystokinin antagonists, antiulcer, anxiolytic agents
J000		<i>-prazan</i>	Proton pump inhibitors, not dependent on acid activation
J000		<i>-prazole</i>	antiulcer, benzimidazole derivatives
J000		<i>-serod</i>	serotonin receptor antagonists and partial agonists

<b>J100</b>	<b>Drugs acting on gastrointestinal system</b>	<i>-azepide</i>	cholecystokinin receptor antagonists
<b>J100</b>		<i>-pride</i>	sulpiride derivatives and analogues
J120	Choleretics (and hepatoprotective agents)	<i>-cic</i>	hepatoprotective substances with a carboxylic acid group
J130	Digestive enzymes		
<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 AND ANTIALLERGICS</b>	<i>-ast</i>	antiallergics or anti-inflammatory, not acting as antihistaminics; <i>-lukast</i> : leukotriene receptor antagonist; <i>-milast</i> : phosphodiesterase 4 (PDE 4) inhibitors; <i>-trodast</i> : thromboxane A <sub>2</sub> receptor antagonists, antiasthmatics, <i>-zolast</i> : leukotriene biosynthesis inhibitors
K000		<i>-cromil</i>	antiallergics, cromoglicic acid derivatives
K000		<i>-exine</i>	mucolytic, bromhexine derivatives
K000		<i>-fentrine</i>	inhibitors of phosphodiesterases
K000		<i>-lukast</i>	leukotriene receptor antagonists, see <i>-ast</i>
K000		<i>-steine</i>	mucolytics, other than bromhexine derivatives
K000		<i>-trodast</i>	thromboxane A <sub>2</sub> receptor antagonists, antiasthmatics; see <i>-ast</i>
K000		<i>-xanox</i>	antiallergic respiratory tract drugs, xanoxic acid derivatives
<b>K100</b>	<b>Antitussives</b>		
K110	Antitussives - central		
K120	Antitussives - peripheral		
<b>K200</b>	<b>Expectorants</b>		

<b>L000</b>	<b>CYTOTOXICS, TARGETED THERAPIES AND HORMONES IN CANCER THERAPY</b>	<i>-anib</i>	angiogenesis inhibitors
L000		<i>-antrone</i>	antineoplastics; anthraquinone derivatives
L000		<i>-(ar)abine</i>	arabinofuranosyl derivatives
L000		<i>-bulin</i>	antineoplastics; mitotic inhibitors, tubulin binders
L000		<i>-degib</i>	SMO receptor antagonists
L000		<i>-dotin</i>	Synthetic derivatives of dolastatin series
L000		<i>-mestane</i>	aromatase inhibitors
L000		<i>mito-</i>	antineoplastics, nucleotoxic agents
L000		<i>-platin</i>	antineoplastic agents, platinum derivatives
L000		<i>-quidar</i>	drugs used in multidrug resistance; quinoline derivatives
L000		<i>-racil</i>	uracil type antineoplastics
L000		<i>-rafenib</i>	Raf (rapidly accelerated fibrosarcoma) kinase inhibitors
L000		<i>-ribine</i>	ribofuranil-derivatives of the "pyrazofurin" type
L000		<i>-rozole</i>	aromatase inhibitors, imidazole-triazole derivatives
L000		<i>-sertib</i>	serine/threonine kinase inhibitors
L000		<i>-tansine</i>	maytansinoid derivatives, antineoplastics
L000		<i>-taxel</i>	antineoplastics; taxane derivatives
L000		<i>-tecan</i>	antineoplastics, topoisomerase I inhibitors
L000		<i>-tinib</i>	tyrosine kinase inhibitors
L000		<i>-trexed</i>	antineoplastics; thymidylate synthetase inhibitors
<b>L100</b>	<b>Immunosuppressants</b>		
<b>L200</b>	<b>Alkylating agents</b>	<i>-mustine</i>	antineoplastic, alkylating agents, (beta-chloroethyl)amine derivatives
L200		<i>-sulfan</i>	antineoplastic, alkylating agents, methanesulfonates
L200		<i>-tepa</i>	antineoplastics, thiotepa derivatives
<b>L300</b>	<b>Radioisotopes (except diagnostics)</b>		
L310	Radioisotopes - systemic		
L320	Radioisotopes - locally applied		

<b>L400</b>	<b>Antineoplastics - antimetabolites</b>	<i>-abine</i>	see <i>-arabine, -citabine</i>
L400		<i>-citabine</i>	nucleosides antiviral or antineoplastic agents, cytarabine or azacitidine derivatives
L400		<i>-trexate</i>	folic acid analogues
L400		<i>-uridine</i>	uridine derivatives used as antiviral agents and as antineoplastics; also <i>-udine</i>
L410	Ornithine decarboxylase inhibitors		
<b>L500</b>	<b>Antineoplastics - natural products (incl. antibiotics)</b>	<i>-rubicin</i>	antineoplastics, daunorubicin derivatives
L500		<i>vin-</i> or <i>-vin-</i>	vinca alkaloids
<b>L600</b>	<b>Antineoplastics - sex hormone analogues and inhibitors</b>		
L610	Aromatase inhibitors		
L620	Luteinizing hormone-releasing hormone agonists		

<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> : antihyperlipidaemic substances, HMG CoA reductase inhibitors
M100	<b>Anorectics</b>	<i>-orex</i>	anorectics
<b>M200</b>	<b>Dietetics and antiadipositas drugs</b>		
M210	Bulk forming drugs		
<b>M300</b>	<b>Agents influencing lipid and fat metabolism</b>	<i>-imibe</i>	antihyperlipidaemics, acyl CoA:cholesterol acyltransferase (ACAT) inhibitors
M300		<i>-listat</i>	see <i>-stat</i>
M310	Antiatherosclerosis agents		
M320	Lipotropic agents		
M321		<i>-begron</i>	$\beta_3$ -adrenoreceptor agonists
M330	Lipogenesis inducing agents		
<b>M400</b>	<b>Agents influencing protein metabolism</b>		
M410	Anabolic steroids	<i>bol</i>	anabolic steroids
M420	Catabolic agents		
M430	Amino acids		

<b>M500</b>	<b>Agents influencing carbohydrate metabolism</b>	<i>-restat</i> (or <i>-restat-</i> )	see <i>-stat</i> ; aldose-reductase inhibitors
M510	Insulins		
M520	Oral antidiabetics - islet mediated	<i>-formin</i>	antihyperglycaemics, phenformin derivatives
M520		<i>gli-</i> , <i>-gli-</i>	previously <i>gly-</i> ; antihyperglycaemics
M520		<i>-gliptin</i>	dipeptidyl aminopeptidase-IV inhibitors
M520		<i>-glitazar</i>	dual peroxisome proliferator activated receptors- $\alpha$ and $\gamma$ (PPAR- $\alpha,\gamma$ ) agonists
M520		<i>-glitazone</i>	peroxisome proliferator activating receptor- $\gamma$ (PPAR) agonists, thiazolidinedione derivatives
M530	Oral antidiabetics - extra pancreatic	<i>gli</i>	antihyperglycaemics
M540	Gluconeogenesis influencing agents		
<b>M600</b>	<b>Agents influencing uric acid metabolism</b>		
M610	Uricosurics		
M620	Uric acid synthesis inhibitors		
M630	Agents influencing oxalic acid metabolism		
<b>M700</b>	<b>Thyroid and antithyroids</b>		
M710	Thyroid and thyroid hormones		
M720	Thyroid stimulators		
M730	Antithyroids	<i>-thiouracil</i>	uracil derivatives used as thyroid antagonists
M740	Radioactive iodine agents (for therapy)		
<b>M800</b>	<b>Enzymes</b>		
M810	Enzyme inhibitors		
M820	Enzyme stimulators		

<b>N000</b>	<b>AGENTS INFLUENCING WATER AND MINERAL METABOLISM</b>		
<b>N100</b>	<b>Diuretics</b>		
N110	Carbonic anhydrase inhibitors	<i>-semide</i>	diuretics, furosemide derivatives
N120	Saluretics	<i>-anide</i>	N.1.2.0 <i>-etanide</i> : diuretics, piretanide derivatives; S.3.0.0 <i>-oxanide</i> : antiparasitic, salicylanilides and analogues
N120		<i>-etanide</i>	diuretics, piretanide derivatives; see <i>-anide</i>

N120		<i>-pamide</i>	diuretics, sulfamoylbenzoic acid derivatives (could be sulfamoylbenzamide)
N121	Thiazide derivatives	<i>-tizide</i>	diuretics, chlorothiazide derivatives
N122	Ethacrynic acid derivatives	<i>-crinat</i>	diuretics, etacrynic acid derivatives
N123	Chlortalidone derivatives		
N129	Saluretics, other		
N130	Mercurial diuretics	<i>mer-</i> (or <i>-mer-</i> )	mercury-containing drugs, antimicrobial or diuretic [ <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]
N170	Purines and other diuretics		
N180	Aldosterone inhibitors	<i>-renone</i>	Mineralocorticoid receptor (MR, MRC, aldosterone receptor) antagonists,
<b>N200</b>	<b>Acidifiers</b>		
<b>N400</b>	<b>Saline cathartics</b>		
<b>N500</b>	<b>Alkalizers</b>		
N510	Parenteral alkalizer solutions		
N520	Oral antacids	<i>-aldrate</i>	antacids, aluminium salts
N520		<i>-alox</i>	see <i>-ox</i>
<b>N600</b>	<b>Fluid and electrolyte replacement therapy</b>		
N610	Electrolyte and carbohydrate solutions		
<b>N700</b>	<b>Mineral salts</b>		
N710	Ion exchange resins		
<b>N800</b>	<b>Vitamin D group and calcium metabolism drugs</b>	<i>calci</i>	Vitamin D analogues/derivatives
N800		<i>-dronic acid</i>	calcium metabolism regulator, pharmaceutical aid

<b>P000</b>	<b>VITAMINS</b>		
<b>P100</b>	<b>Vitamin A</b>	<i>-arotene</i>	arotinoid derivatives
P100		<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> ; pituitary hormone release-stimulating peptides
Q000		<i>prost</i>	prostaglandins; <i>-prostil</i> : prostaglandins, anti-ulcer
Q000		<i>-relin</i>	pituitary 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
<b>Q100</b>	<b>Hypophysis hormones</b>		
Q110	Hypophysis anterior lobe		
Q111	Hypophysis anterior lobe hormones	<i>-actide</i>	synthetic polypeptides with a corticotropin-like action
Q112	Hypophysis anterior lobe inhibitors		
Q120	Hypophysis posterior lobe (incl. other oxytocics)	<i>-pressin</i>	vasoconstrictors, vasopressin derivatives
Q120		<i>-tocin</i>	oxytocin derivatives
<b>Q200</b>	<b>Sex hormones and analogues</b>	<i>-pris-</i>	steroidal compounds acting on progesterone receptors (excluding <i>-gest</i> -compounds)
Q210	Estrogens, also interceptive contraceptive agents e.g. epostane	<i>estr</i>	estrogens
Q210		<i>-ifene</i>	antiestrogens or estrogen receptor modulators, <i>clomifene</i> and <i>tamoxifen</i> derivatives
Q220	Progestogens	<i>gest</i>	steroids, progestogens
Q230	Androgens	<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	Androgens	<i>-terone</i>	antiandrogens
Q240	Gonadotrophins and gonadotrophin secretion stimulating drugs		

Q241	Antigonadotrophins		
<b>Q300</b>	<b>Adrenocortical hormones and analogues</b>	<i>cort</i>	corticosteroids, except prednisolone derivatives
Q300		<i>-olone</i>	steroids other than prednisolone derivatives
Q300		<i>-onide</i>	steroids for topical use, acetal derivatives
Q310	Mineralosteroids		
Q320	Mineralosteroid antagonists		
Q330	Glucosteroids	<i>pred</i>	prednisone and prednisolone derivatives; <i>-methasone</i> or <i>-metasone</i> , <i>-betasol</i> , <i>-olone</i>
Q340	Glucosteroids antagonists		

<b>S000</b>	<b>ANTI-INFECTIVES AND DRUGS ACTING ON IMMUNITY</b>		
<b>S100</b>	<b>Ectoparasiticides</b>		
<b>S200</b>	<b>Antiseptics and disinfectants</b>		
S210	Antiseptics (excl. heavy metal antiseptics)	<i>-nifur-</i>	5-nitrofur derivatives
S220	Heavy metal antiseptics	<i>-mer-</i>	mercury-containing drugs, antimicrobial or diuretic [ <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]
S230	Detergent antiseptics		
<b>S300</b>	<b>Chemotherapeutics of parasitic diseases</b>	<i>-ectin</i>	antiparasitics, ivermectin derivatives
S300		<i>-oxanide</i>	antiparasitics, salicylanilides and analogues; see <i>-anide</i>
S310	Anthelmintics (excl. antinematode agents)	<i>-antel</i>	anthelmintics (undefined group)
S310		<i>-bendazole</i>	anthelmintics, tiabendazole derivatives
S310		<i>-fos (-vos)</i>	insecticides, anthelmintics, pesticides etc., phosphorous derivatives
S310		<i>-fos-</i> or <i>fos-</i>	various pharmacological categories belonging to <i>-fos</i> (other than above)
S320	Antinematode agents		
S330	Antiprotozoal agents (incl. all arsphenamines)	<i>arte-</i>	antimalarial agents, artemisinin related compounds
S330		<i>-nidazole</i>	antiprotozoals and radiosensitizers, metronidazole derivatives



<b>S400</b>	<b>Chemotherapeutics of fungal diseases</b>	<i>-conazole</i>	systemic antifungal agents, miconazole derivatives
S410	Antifungal agents		
S420	Fungicides		
S430	Antifungal antibiotics		
<b>S500</b>	<b>Antibiotics, antibacterial and antiviral agents</b>	<i>-planin</i>	glycopeptide antibacterials ( <i>Actinoplanes</i> strains)
S510	Sulfonamides	<i>sulfa-</i>	anti-infectives, sulfonamides
S520	Antimycobacterials	<i>-dapson</i>	antimycobacterials, diaminodiphenylsulfone derivatives
S520		<i>-pirox</i>	see <i>-ox</i>
S530	Antiviral	<i>-arabine</i>	arabinofuranosyl derivatives
S530		<i>-motine</i>	antivirals, quinoline derivatives
S530		<i>-ribine</i>	ribofuranil-derivatives of the <i>pyrazofurin</i> type
S530		<i>-uridine</i>	uridine derivatives used as antiviral agents and as antineoplastics; <i>-udine</i>
S530		<i>vir</i>	antivirals (undefined group): <i>-amivir</i> , <i>-cavir</i> , <i>-ciclovir</i> , <i>-fovir</i> , <i>-gosivir</i> , <i>-navir</i> , <i>-virsen</i> , ...
S550	Antibacterial/other	<i>-citabine</i>	nucleosides antiviral or antineoplastic agents, cytarabine or azacitidine derivatives
S550		<i>-oxacin</i>	antibacterials, nalidixic acid derivatives
S550		<i>-prim</i>	antimicrobials, dihydrofolate reductase (DHFR) inhibitors, trimethoprim analogues
<b>S600</b>	<b>Antibiotics (except antineoplastic antibiotics)</b>	<i>-cidin</i>	naturally occurring antibiotics (undefined group)
S600		<i>-fungin</i>	antifungal antibiotics
S600		<i>-gillin</i>	antibiotics produced by <i>Aspergillus</i> strains
S600		<i>-monam</i>	monobactam antibiotics
S600		<i>-mycin</i>	antibiotics, produced by <i>Streptomyces</i> strains (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
S600		<i>-pristin</i>	antibacterials, streptogramins, protein-synthesis inhibitors, pristinamycin derivatives

S610	Antibiotics acting on the bacterial cell wall	<i>-carbef</i>	antibiotics, carbacephem 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	Antibiotics affecting cell membrane and with detergent effect	<i>-tricin</i>	antibiotics, polyene derivatives
S630	Antibiotics affecting protein synthesis	<i>-cycline</i>	antibiotics, protein-synthesis inhibitors, tetracycline derivatives
S630		<i>-kacin</i>	antibiotics, kanamycin and bekanamycin derivatives (obtained from <i>Streptomyces kanamyceticus</i> ); S.6.5.0: <i>-micin</i> : aminoglycosides, antibiotics obtained from various <i>Micromonospora</i>
S630		<i>-zolid</i>	Oxazolidinone antibacterials
S640	Antibiotics affecting nucleic acid metabolism	<i>rifa-</i>	antibiotics, rifamycin derivatives
S650	Antibiotics-action unclassified (including $\beta$ -lactamase inhibitors)	<i>-bactam</i>	$\beta$ -lactamase inhibitors
S650		<i>-micin</i>	see <i>-kacin</i> ; aminoglycosides, antibiotics obtained from various <i>Micromonospora</i>
<b>S700</b>	<b>Immunomodulators and immunostimulants (incl. gamma globulins)</b>	<i>-cept</i>	receptor molecules or membranes ligands, native, modified or synthetic
S700		<i>imex</i>	immunostimulants
S700		<i>-imod</i>	immunomodulators, both stimulant/suppressive and stimulant
S700		<i>-imus</i>	immunosuppressants (other than antineoplastics)
S700		<i>-kin</i>	interleukin type substances: <i>-nakin, -leukin, -trakin, -exakin, -octakin, -decakin, -elvekin, -dodekin, tredekin, -octadekin</i>
S700		<i>-kinra</i>	interleukin-receptors antagonists: <i>-nakinra, -trakinra</i>
S700		<i>-mab</i>	monoclonal antibodies (see also Annex)
S710	Interferons and immunomodulators		

<b>T000</b>	<b>LOCALLY ACTING AGENTS (INCL. DERMATOLOGIC AND INTERNALLY USED DRUGS)</b>
<b>T100</b>	<b>Locally acting externally-applied agents</b>
T110	Vasodilators (external) - rubefaciens
<b>T200</b>	<b>Locally acting internally-applied agents</b>
T210	Adsorbents, astringents
T220	Lubricant cathartics
T230	Irritant cathartics
T240	Gastro-intestinal anti-infectives, non-resorbed
T250	Saponins
T260	Detergents
<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
U000		<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
U110	Radiocontrast media	<i>io-</i>	iodine-containing contrast media
U110		<i>-io- or iod-</i>	iodine-containing compounds other than contrast media
U120	Diagnostic aids, other		
U130	Diagnostic radioisotopes		
<b>U200</b>	<b>Chelating agents, detoxicants, etc.</b>	<i>-xetan</i>	Chelating agents
U210	Alcohol deterrents		
<b>U300</b>	<b>Anti-inflammatory agents</b>	<i>-lubant</i>	phospholipase A <sub>2</sub> inhibitors
U310	Non-antipyretic antirheumatics		
U320	Anti-inflammatory agents, other		
<b>U400</b>	<b>Pharmaceutical adjuncts</b>	<i>cell- or cel-</i>	cellulose derivatives; ( <i>cell-ate</i> and <i>-cellose</i> )
U400		<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>
W000		<i>-pladib</i>	phospholipase A <sub>2</sub> inhibitors
W000		<i>-stat</i>	enzyme inhibitors

<b>Y000</b>	<b>VETERINARY DRUGS</b>	<i>-nidazole</i>	antiprotozoals and radiosensitizers, metronidazole derivatives
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<b>Z000</b>	<b>GENE and cell THERAPY SUBSTANCES</b>	<i>-cel</i>	cell therapy substances
		<i>-gene</i>	gene therapy substances, please refer to Annex 4

# Part IV

## ALPHABETICAL LIST OF STEMS TOGETHER WITH CORRESPONDING INN

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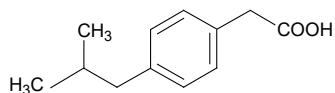
**-abine**      **see -arabine, -citabine**

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

USAN

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



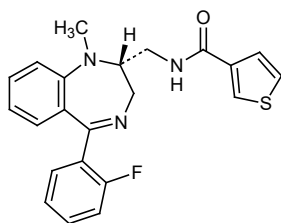
- (a)      -clofenac: aceclofenac (52), alclofenac (23), diclofenac (28), diclofenac etalhyaluronate (111), fenclofenac (30)  
-dolac: dexpemedolac (71), etodolac (45), pemedolac (58)  
-fenac: amfenac (38), bromfenac (55), furofenac (40), ibufenac (14), lexofenac (38), nepafenac (78)  
-zolac: bufezolac (39), isofezolac (39), lonazolac (34), mofezolac (64), pirazolac (43), ro vazolac (117), trifezolac (34), zenuzolac (125)  
others: anirolac (52), bendazac (22), cinfenoac (41), clidanac (39), clofurac (42), clopirac (30), eltenac (53), felbinac (54), fenclorac (33), fentiazac (32), isoxepac (37), ketorolac (51), oxepinac (36), oxindanac (54), (quinclorac, ISO name for a herbicide), sulindac (33), tianafac (31), tifurac (57), tiopinac (40), zomepirac (37)
- (b)      bufexamac (20) (anti-inflammatory; acetohydroxamic acid group instead of acetic acid group)
- (c)      amtolmetin guacil (65), clamidoxic acid (17), fenclozic acid (22), metiazinic acid (20), prodolic acid (29), tolmetin (23)
-

<b>-acetam</b>	<b>see -racetam</b>	
<b>-actide</b>	<b>synthetic polypeptides with a corticotropin-like action</b>	USAN
Q.1.1.1	(USAN: synthetic corticotropins)	
(a)	alsactide (45), codactide (24), giractide (29), norleusactide (18), seractide (31), tetracosactide (18), tosactide (24), tricosactide (44), tridecactide (97)	
<b>-adenant</b>	<b>adenosine receptor antagonists</b>	USAN
(a)	ciforadenant (118), etrumadenant (124), imaradenant (122), inupadenant (124), preladenant (99), sipagladenan (127), taminadenant (120), tozadenant (106), vipadenant(103)	
<b>-adol (x) or -adol-</b>	<b>analgesics</b>	BAN, USAN
A.4.1.0		
A.4.2/3.0	(USAN: analgesics (mixed opiate receptor agonists/antagonists))	
(a)	<u>A.4.1.0</u> : acetylmethadol (5), alimadol (39), alphacetylmethadol (5), alphamethadol (5), axomadol (87), betacetylmethadol (5), betamethadol (5), indantadol (94), levacetylmethadol (27), noracymethadol (12), tapentadol (87)	
	<u>A.4.2/3.0</u> : apadoline (74), asimadoline (74), befiradol (99), bromadoline (49), cebranopadol (107), ciprefadol (41), ciramadol (39), cloracetadol (16), desmetramadol (117), dibusadol (24), dimenoxadol (7), diproxadol (34), eluxadoline (109), enadoline (68), faxeladol (97), filenadol (47), flumexadol (36), fluradoline (48), gaboxadol (48), insalmadol (92), levonantradol (43), lexanopadol (109), lorcinadol (57), moxadolen (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), pravadoline (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)	<u>A.4.1.0</u> : dimepheptanol (5)	

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**-adom**      **analgesics, tipluadom derivatives**

A.4.3.0



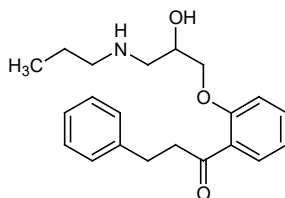
(a)      lufuradom (50), tipluadom (48)

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USAN

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

H.2.0.0



(a)      alprafenone (62), berlafafenone (63), diprafafenone (48), etafafenone (19),  
propafenone (29)

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USAN

**-afil**      **inhibitors of phosphodiesterase PDE5 with vasodilator action**

F.2.0.0

(USAN: PDE5 inhibitors)

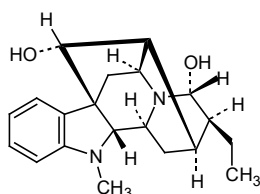
(a)      avanafil (92), beminafil (90), dasantafil (91), gisadenafil (101), lodenafil  
carbonate (94), mirodenafil (95), sildenafil (75), tadalafil (85), udenafil (93),  
vardenafil (127)

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USAN

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

H.2.0.0



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

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**-al (d)**      **aldehydes**

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		USAN
<b>-aldrate</b>	<b>antacids, aluminium salts</b>	
N.5.2.0		
(a)	carbaldrate (53), potassium glucaldrate (14), magaldrate (49), simaldrate (15), sodium glucaspaldrate (17)	
	<u>algedrate</u> (15), <u>almadrate</u> sulfate (15), <u>almagodrate</u> (52)	
(c)	alexitol sodium (45), almagate (41), almasilate (43), dosmalfate (110), glucalox (13), hydrotalcite (23), lactalfate (53), sucralox (13)	
		USAN
<b>-alol</b>	<b>see -olol</b>	
<b>-alox</b>	<b>see -ox</b>	
<b>-amivir</b>	<b>see -vir</b>	
		USAN
<b>-ampanel</b>	<b>antagonists of the ionotropic non-NMDA (<i>N</i>-methyl-D-aspartate) glutamate receptors (Namely the AMPA (amino-hydroxymethyl-isoxazole-propionic acid) and/or KA (kainite antagonist) receptors)</b>	
B.0.0.0	(USAN: ionotropic non-NMDA glutamate receptors (AMPA and/or KA receptors) antagonists)	
(a)	becampanel (90), dasolampanel (105), fanapanel (80), irampanel (82), perampanel (97), selurampanel (104), talampanel (80), tezampanel (95), zonampanel (85)	
		USAN
<b>andr (d)</b>	<b>steroids, androgens</b>	
Q.2.3.0	(USAN: -andr- androgens)	
(a)	<u>i. andr</u> : androstanolone (4), methandriol (1), nandrolone (22), norethandrolone (6), ovandrotone albumin (52), silandrone (18)	
	<u>ii. -stan- (d)</u> : androstanolone (4), drostanolone (13), epitiostanol (31), mestanolone (10), stanozolol (18), epostane (51) (contraceptive)	
	<u>iii. -ster- (d)</u> : 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)

ii. 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)

USAN

**-anib                    angiogenesis inhibitors**

L.0.0.0

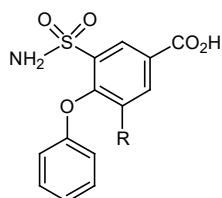
(a) acrizanib (116), alofanib (113), beloranib (100), bevasiranib (108), brivanib alaninate (97), cediranib (95), crenolanib (105), foslinanib (119), motesanib (97), nintedanib (105), linifanib (102), lucitanib (107), pazopanib (94), pegaptanib (88), pegdinetanib (103), necuparanib (112), opaganib (117), pegpleranib (112), risuteganib (120), rivoceranib (117), semaxanib (85), timtraxanib (125), tivozanib (102), toceranib (100), trebananib (106), umedaptanib pegol (128), vandetanib (91), vatalanib (84), vorolanib (115)

USAN

**-anide**

*-etanide*                    diuretics, piretanide derivatives

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

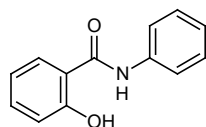


(a) bumetanide (24), piretanide (33)

(c) besunide (30)

-*oxanide* antiparasitics, salicylanilides and analogues

S.3.0.0 (USAN: antiparasitics (salicylanilide derivatives))



(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) (antiarthritic; gout-remedy), ceforanide (39) (antibiotic), oglufanide (86) (immunomodulator), polihexanide (24) (antibacterial), tiprostanide (48) (antihypertonic)

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BAN, USAN

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

C.7.0.0 (USAN: serotonin 5-HT<sub>2</sub> receptor antagonists)

(a) adatanserin (70), altanserin (50), blonanserin (76), butanserin (51), eplivanserin (80), fananserin (69), flibanserin (75), iferanserin (89), ketanserin (46), lidanserin (62), nelotanserin (101), opiranserin (117), pelanserin (57), pimavanserin (97), pruvanserin (90), seganserin (56), trelanserin (97), tropanserin (55), volinanserin (95)

(b) serotonin receptor antagonists, psychoactive: cinanserin (17), glemanserin (68), mianserin (20), ritanserin (51)

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USAN

**-antel anthelmintics (undefined group)**

S.3.1.0

(a) amidantel (40), antelmecin (15), atelocantel (116), carbantel (35), closantel (36), derquantel (99), epsiprantel (57), febantel (38), flurantel (25), monepantel (98), morantel (22), oxantel (31), pexantel (22), praziquantel (34), pyrantel (17), resorantel (23), salantel (29), zilantel (33)

**-antrone antineoplastics; anthraquinone derivatives**

L.0.0.0/

L.5.0.0

(USAN: -antrone as above, and -(x)antrone with following definition: antineoplastics, L.5.0.0 mitoxantrone derivatives aza-anthracenedione class of antitumor agents)

- (a) ametantrone (45), banoxantrone (90), butantrone (49), ledoxantrone (76), losoxantrone (68), mitoxantrone (44), nortopixantrone (87), piroxantrone (59), pixantrone (89), sepantronium bromide (105), teloxantrone (68), topixantrone (87)

**-apine see -pine****-apt- aptamers, classical and mirror ones**

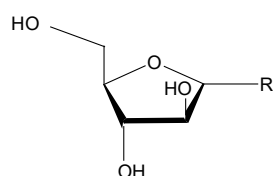
- (a) avacincaptad pegol (113), egaptivon pegol (111), emapticap pegol (108), lexaptetid pegol (108), olapteted pegol (109), pegaptanib (88)
- (b) *-vaptan* stem: conivaptan (82), lixivaptan (83), mozavaptan (87), nelivaptan (98), relcovaptan (82), ribuvaptan (110), satavaptan (93), tolvaptan (83).  
*others*: aptazapine(50), aptiganel (72), aptocaine (21), captamine (18), captodiame (06), captopril (39), danegaptide (101), daptomycin (58), icrocaptide (89), mercaptamine (01), mercaptomerin (01), mercaptopurine (06), naptumomab estafenatox (96), rotigaptide (94), sodium borocaptate (<sup>10</sup>B) (62), sodium stibocaptate (17), taplitumomab paptox (84)
- (c) pegnivacogin (106)

**-(ar)abine arabinofuranosyl derivatives**

L.4.0.0/

S.5.3.0

(USAN: -arabine: antineoplastic (arabinofuranosyl derivatives))



- (a) aspacytarabine (120), clofarabine (90), cytarabine (14), fazarabine (56), fludarabine (48), nelarabine (80), vidarabine (23)  
See also the stem -citabine: ancitabine (36), apricitabine (95), capecitabine (73), decitabine (61), dexelvucitabine (95), elvucitabine (89), emtricitabine

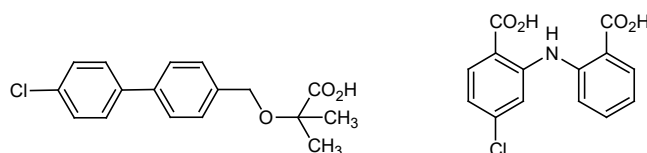
(80), enocitabine (46), fiacitabine (59), flurocitabine (38), fosgemcitabine palabenamide (119), galocitabine (65), gemcitabine (62), guadecitabine (113), ibacitabine (57), lumicitabine (115), mericitabine (108), sapacitabine (94), tezacitabine (84), torcitabine (87), troxacitabine (81), valopicitabine (93), valtorcitabine (90), zalcitabine (66)

(c) S.5.3.0: ribavirin (31), taribavirin (95)

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 (lobenzarit type))



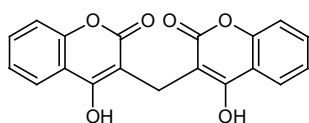
(a)      actarit (62), bindarit (64), clobuzarit (44), lobenzarit (46), romazarit (60)

(c)      tarenflurbil (97)

USAN

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

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



(a)      acenocoumarol (6), clocoumarol (31), coumetarol (13), dicoumarol (23), tiocoumarol (31), xylocoumarol (15)

(b)      cloridarol (29) (coron. vasodil.), fluindarol (16) (anticoag. of indonedione-type)

(c)      diarbarone (15), ethyl biscoumacetate (4), phenprocoumon (11), tecarfarin (101), warfarin (23)

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USAN

**-arone**

(USAN: antiarrhythmics)

amiodarone (16) (antiarrhythmic), benzarone (13), benzbromarone (13) (uricosuric), benziodarone (11), brinazarone (64) (calcium channel blocker), bucromarone (48) (antiarrhythmic), budiodarone (101), celivarone (94), diarbarone (15), dronedarone (75) (antianginal, antiarrhythmic), etabenzarone (17), fantofarone (65) (calcium channel blocker), furidarone (19), inicarone (27), mecinarone (30), pyridarone (16), rilozarone (58)

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USAN

**-arotene**

**arotinoid derivatives**

P.1.0.0 (USAN: -arot-: arotinoids, and -arotene: arotinoid derivatives)

(a) adarotene (100), amsilarotene (98), betacarotene (38), bexarotene (80), etarotene (64), linarotene (65), mofarotene (70), palovarotene (99), sumarotene (64), tamibarotene (73), tazarotene (72), temarotene (54), trifarotene (107)

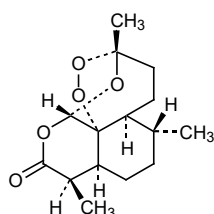
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USAN

**arte-**

**antimalarial agents, artemisinin related compounds**

S.3.3.0



(a) artefenomel (109), arteflene (70), artemether (61), artemisinin (56), artemisone (95), artemotil (80), artemimol (81), arterolane (97), artesunate (61)

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USAN

**-ase**

**enzymes**

W.0.0.0 For more details, please refer to the "INN for biological and biotechnological substances, a review", available on the WHO INN Programme website: <http://www.who.int/medicines/services/inn/en/>

**-diplase**

**two plasminogen activators combined with another enzyme**

(a) amediplase (79)

<b>-dismase</b>	<b>superoxide dismutase activity</b>
(a)	ledismase (70), sudismase (58)
(c)	orgotein (31), pegorgotein (72)
<b>-lipase</b>	<b>lipases</b>
(a)	bucelipase alfa (95), burlulipase (107), rizolipase (22), sebelipase alfa (107)
<b>-teplase</b>	<b>tissue-type plasminogen activators</b>
(a)	alteplase (73), desmoteplase (80), duteplase (62), lanoteplase (76), monteplase (72), nateplase (73), pamiteplase (78), reteplase (69), silteplase (65), tenecteplase (79)
(c)	anistreplase (59)
<b>-uplase</b>	<b>urokinase (urinary)-type plasminogen activators</b>
(a)	nasaruplase (76), nasaruplase beta (86), saruplase (76)
(c)	urokinase (48), urokinase alfa (77)

The following suffixes have also been used:

<b>-dornase</b>	deoxyribonucleases	alidornase alfa (115), dornase alfa (70), streptodornase (6)
<b>-glucerase</b>	glucosylceramidase	alglucerase (68), imiglucerase (72), taliglucerase alfa (101), velaglucerase alfa (98)
<b>-glucosidase</b>	$\alpha$ -glucosidase	alglucosidase alfa (117), avalglucosidase alfa (121), cipaglucosidase alfa (123), revelglucosidase alfa (111)
<b>-icase</b>	uricases	pegadricase (105), pegloticase (98), rasburicase (82)
<b>-liase</b>	lyases (decarboxylases)	condoliase (106), pegtarviliase (127), pegvaliase (111), reloxaliase (117)
<b>-sulfase</b>	sulfatases	cebsulfase alfa (127), elosulfase alfa (108), galsulfase (92), idursulfase (90), idursulfase beta (106)

- (c) ancrod (23), batroxobin (29), bromelains (18), chymopapain (26), chymotrypsin (10), fibrinolysin (human) (10), ocriplasmin (101), sultilains (18), thrombin (60), thrombin alfa (97), troplasminogen alfa (99)

Co-enzymes: cobamamide (15), cocarboxylase (1), mecobalamin (26), ubidecarenone (48)

Others:

agalsidase alfa (84)	α-galactosidase
agalsidase beta (84)	α-galactosidase
alfimeprase (85)	fibrolase
alunacedase (124)	angiotensin-converting enzyme (ACE) 2 analogue
apadamtase alfa (118)	ADAMTS13 endopeptidase
asfotase alfa (104)	alkaline phosphatase
berahyaluronidase alfa (128)	hyaluronoglucosaminidase
bovhyaluronidase azoximer (112)	hyaluronoglucosaminidase
brinase (22)	fibrolase
calaspargase pegol (105)	L-asparaginase
cerliponase alfa (111)	tripeptidyl-peptidase 1
cinaxadamtase alfa (125)	metalloprotease ADAMTS 13
crisantaspase (111)	L-asparaginase
efzimfotase alfa (128)	alkaline phosphatase (ALPL, TNAP, TNSALP)
elapegademase (116)	adenosine deaminase
epafipase (85)	acetylalkylglycerol acetylhydrolase
eufauserase (84)	serine endopeptidase
exebacase (117)	lysozyme (muramidase)
glucarpidase (92)	glutamate carboxypeptidase
hyalosidase (50)	hyaluronoglucosaminidase
hyaluronidase (1)	hyaluronoglucosaminidase
ilofotase alfa (124)	alkaline phosphatase
imlifidase (117)	streptopain (streptococcal cysteine proteinase, Streptococcus peptidase A)
kallidinogenase (22)	tissue kallikrein
laronidase (86)	L-iduronidase
lesinidase alfa (116)	α-N-acetylglucosaminidase
ocrase (28)	fibrolase
olipudase alfa (111)	sphingomyelin phosphodiesterase
pegademase (63)	adenosine deaminase
pegargiminase (111)	arginine deiminase
pegaspargase (64)	L-asparaginase
pegcrisantaspase (111)	L-asparaginase
pegtibatina (123)	cystathionine beta-synthase (CBS) (EC:4.2.1.22 - cystathionine β-synthase)

pegunigalsidase alfa (115)	$\alpha$ -galactosidase
pegvorhyaluronidase alfa (122)	hyaluronoglucosaminidase
pegzilarginase (117)	arginine amidinase
penicillinase (111)	$\beta$ -lactamase
praconase (118)	pentosyltransferase
promelase (47)	oryzin
ranpirnase (81)	pancreatic ribonuclease
ribaxamase (116)	$\beta$ -lactamase
rinvocalinase alfa (127)	kallikrein-1 analogue
sacrosidase (112)	$\beta$ -fructofuranosidase ( $\beta$ -fructosidase, invertase, saccharase)
senrebotase (107)	serine endopeptidase
serrapeptase (31)	oryzin
sfericase (40)	serine endopeptidase
streptokinase (6)	co-enzyme
tilactase (50)	$\beta$ -galactosidase
tonabacase (115)	lysozyme (muramidase)
tralesinidase alfa (117)	$\alpha$ - <i>N</i> -acetylglucosaminidase
velmanase alfa (113)	$\alpha$ -mannosidase
vestronidase alfa (115)	$\beta$ -glucuronidase
vonapanitase (111)	pancreatic elastase
vorhyaluronidase alfa (111)	hyaluronoglucosaminidase
zamagluténase (126)	gliadin protease

BAN, USAN

**-ast (x)      anti-allergic or anti-inflammatory, not acting as anti-histaminics**

K.0.0.0      (BAN: antiasthmatics, antiallergics when not acting primarily as antihistamines)

(USAN: antiasthmatics / antiallergics: not acting primarily as antihistamines; leukotriene biosynthesis inhibitors)

(a)      acitazanolast (72), acreoast (77), andolast (67), asobamast (63), ataquimast (82), bamaquimast, (76), batebulast (66), bunaprolast (60), carotegrast (102), dametralast (54), dazoquinast (54), doqualast (48), eflumast (61), enofelast (67), enoxamast (52), fenprinast (48), filaminast (75), firategrast (96), ibudilast (58), idenast (58), loxanast (46), melquinast (62), oxalinast (49), pemirolast (61), picumast (47), pirodomast (64), quinotolast (64), raxofelast (68), repirinast (55), revenast (51), scopinast (76), suplastat tosilate (64), tazanolast (59), tiacrilast (52), tibenelast (58), tioxamast (53), tiprinast (50), tranilast (46), valategrast (93), zaprinast (46), zaurategrast (101)



<b>-lukast</b>	<b>leukotriene receptor antagonists</b>	USAN
(a)	ablukast (61), cinalukast (70), gemilukast (110), iralukast (70), masilukast (94), montelukast (73), pobilukast (70), pranlukast (67), ritolukast (64), sulukast (63), tipelukast (95), tomelukast (59), verlukast (65), zafirlukast (71)	
<b>-milast</b>	<b>phosphodiesterase 4 (PDE 4) inhibitors</b>	USAN
(a)	apremilast (97), catramilast (95), cilomilast (82), difamilast (118), dovramilast (127), elbimilast (107), indimilast (112), lavamilast (112), lirimilast (86), lotamilast (118), mufemilast (126), oglemilast (94), orismilast (121), piclamilast (73), revamilast (102), roflumilast (77), tanimilast (121), tetomilast (91), tofimilast (85), zatolmilast (123)	
<b>-tegrast</b>	<b>integrin antagonists</b>	
(a)	bexotegast (127), carotegast (102), firategrast (96), lifitegrast (107), milategrast (121), valategrast (93), zaurategrast (101)	
<b>-trodast</b>	<b>thromboxane A<sub>2</sub> receptor antagonists, antiasthmatics</b>	USAN
	(USAN: thromboxane A <sub>2</sub> receptor antagonists)	
(a)	imitrodast (70), seratrodast (70)	
<b>-zolast</b>	<b>leukotriene biosynthesis inhibitors</b>	USAN
	(USAN: benzoxazole derivatives)	
(a)	binizolast (60), eclazolast (55), ontazolast (72), quazolast (55), tetrazolast (67)	
(c)	bufrolin (34), oxarbazole (38), pirolate (44)	
		BAN, USAN
<b>-astine (x)</b>	<b>antihistaminics</b>	
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), bamirastine (91), 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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**-asvir**      **see -vir**

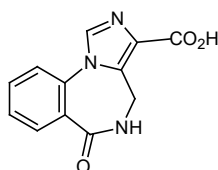
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**-azam**      **see -azepam**

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

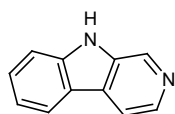
C.1.0.0      (USAN: benzodiazepine receptor antagonists/agonists)



(a)      bretazenil (60), dimdazenil (127), flumazenil (55), iomazenil <sup>123</sup>I (66), sarmazenil (59)

(b)      nabazenil (49)

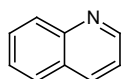
**-carnil**      **benzodiazepine receptor antagonists/agonists (carboline derivatives)**



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

**-quinil**      **benzodiazepine receptor agonists, also partial or inverse (quinoline derivatives)**

(USAN: benzodiazepine receptor agonists, also partial or inverse (quinoline derivatives))



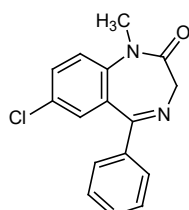
(a)      lirequinil (72), radequinil (93) (replaces resequin (90)), terbequinil (63)

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), carburazepam (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), levotofisopam (92), lofendazam (36), loprazolam (44), mexazolam (40), midazolam (40), nefopam (25), oxazolam (25), razobazam (52), remimazolam (102), 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)

not related: anxiolytic: fenobam (36), muscle relax.: xilobam (36)

USAN

**-azepide      cholecystkinin receptor antagonists, benzodiazepine derivatives**

J.1.1.0.0 (USAN: cholecystkinin receptor antagonists)

- (a) ceclazepide (116), devazepide (62), nastorazepide (113), netazepide (106), pranazepide (75), tarazepide (68)

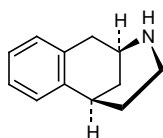
- (c) lorglumide (56)

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USAN

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

A.4.1.0      (USAN: narcotic antagonists/agonists, 6,7-benzomorphan derivatives)



- (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)  
related compounds: dezocine (35)
- (b)      streptozocin (33)

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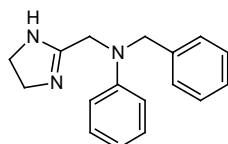
**-azolam      see -azepam**

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USAN

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

E.4.0.0      (USAN: antihistamines/local vasoconstrictors (antazoline type))



- (a)      antazoline (1), cilutazoline (61), cirazoline (38), clonazoline (18), coumazoline (26), domazoline (30), fenoxazoline (12), indanazoline (42), lerimazoline (110), metrafazoline (33), naphazoline (1), nemazoline (63), oxymetazoline (13), phenamazoline (6), prednazoline (22), talazoline (01), tefazoline (24), tinazoline (39), tramazoline (15), xylometazoline (8)
- (b)      cefazolin (25) (antibiotic)
- (c)      tetryzoline (6), metizoline (22)

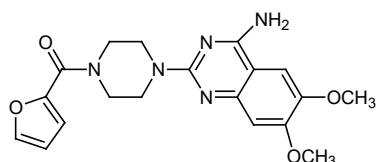
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**-azone      see -buzone**

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**-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), tipentisin (55)**-bacept      see -cept**

BAN, USAN

**-bactam      β-lactamase inhibitors**

S.6.5.0

(a)      avibactam tomilopil (128), brobactam (53), durlobactam (119), enmetazobactam (121), funobactam (127), nacubactam (115), pralurbactam (128), relebactam (112), zidebactam (113)

(c)      clavulanic acid (44)

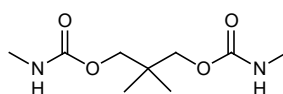
**-borbactam      β-lactamase inhibitors, boronic acid derivatives**

(a)      edaborbactam (125), ledaborbactam etzadroxil (125), taniborbactam (119), vaborbactam (113), xeruborbactam (125)

BAN, USAN

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

C.1.0.0      (USAN: tranquilizers/antiepileptics (propanediol and pentanediol groups))



(a)      carisbamate (96), cenobamate (113), cyclarbamate (13), felbamate (54), meprobamate (6), nisobamate (21), pentabamate (13), tybamate (14)

(b) difebarbamate (16), febarbamate (12), lorbamate (24), phenprobamate (10)

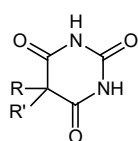
(c) mebutamate (12), metaglycodol (12) (not a carbamate)

BAN, USAN

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

A.2.I.0      (BAN: -barb, -barb-: for barbiturates)

(USAN: -barb; or -barb-: barbituric acid derivatives)



(a) allobarbital (1), amobarbital (1), aprobarbital (1), barbexaclone (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)

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

**-bart      artificial immunoglobulins (new scheme for monoclonal antibodies)**

**-cibart      cardiovascular**

(a) delpacibart (127), delpacibart etedesiran (127), patecibart (128)

**-debart      metabolic or endocrine pathways**

(a) lixudebart (128), maridebart (128), maridebart cafraglutide (128)

**-kibart      cytokine and cytokine receptor**

(a) bempikibart (127), dazukibart (128), evunzekibart (127), exlinkibart (127), linavonkibart (127), ozekibart (128), picankibart (128), rademikibart (128), stapokibart (128), temtokibart (128), trabikibart (127), tulisokibart (127), vamikibart (128), varokibart (127), zigakibart (127)

<b>-lerbart</b> (a)	<b>allergen</b> atisnolerbart (127), bremszalerbart (127), freneslerbart (127), mevonlerbart (127), umesolerbart (127)
<b>-nebart</b> (a)	<b>neural</b> fepixnebart (127), iluzanebart (128), oloctinebart (128)
<b>-osbart</b> (a)	<b>bone</b> narlumosbart (127), prafnosbart (127), resugosbart (127)
<b>-prubart</b> (a)	<b>immunosuppressive</b> empasiprubart (127), paridiprubart (126), riliprubart (128), tegoprubart (128), ulviprubart (127)
<b>-stobart</b> (a)	<b>immunostimulatory</b> anzurstobart (127), benmelstobart (128), dalnicastobart (127), enlonstobart (128), epacmarstobart (127), eurestobart (128), gotistobart (128), lipustobart (127), perenostobart (127), polzastobart (127), porustobart (127), pradusinstobart (127), renvistobart (128), rolistobart (128), sovipostobart (128), tuparstobart (127), verzistobart (128)
<b>-tabart</b> (a)	<b>tumour</b> anvatabart opadotin (127), anvatabart pactil (127), erzotabart (128), izeltabart (127), izeltabart tapatansine (127)
<b>-vetbart</b> (a)	<b>veterinary use</b> nolavetbart (128), riltovetbart (127)
<b>-vibart</b> (a)	<b>viral</b> crexavibart (126), masavibart (126), nepuvibart (126), nisfevitug (127), ogalvibart (126), simaravibart (127), tobevibart (127)

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USAN

<b>-begron</b>	<b>β<sub>3</sub>-adrenoreceptor agonists</b>
M.3.2.1	
(a)	amibegron (94), fasobegron (98), lubabegron (109), mantabegron (88), mirabegron (98), rafabegron (88), ritobegron (91), solabegron (90), talibegron (86), vibegron (108)

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**-benakin**      **see -kin**

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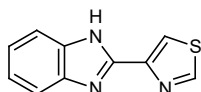
**-bendan**      **see -dan**

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

USAN

S.3.I.0      (USAN: anthelmintics (tiabendazole type))



(a)      albendazole (35), albendazole oxide (56), bisbendazole (29), cambendazole (24), ciclobendazole (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.I.0)

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**-bep**      **engineered or synthetic scaffold proteins, non-immunoglobulin variable domain derived**

USAN

(USAN: bioengineered proteins)

(a)      dazodalibep (123), elarekibep (126), ensovibep (124), izokibep (122), lerodalbep (123), palsucibep pegol (126), taldefgrobep alfa (121), tezatabep matraxetan (122), tifalibep (122)

(c)      abicipar pegol (108)

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**-bercept**      **see -cept**

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**-bermin**      **see -ermin**

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**-betasol**      **see pred**

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**-bersat**      **anticonvulsants, benzoylamino-benzpyran derivatives**

USAN

A.3.1.0      (USAN: anticonvulsants; antimigraine (benzoylamino-benzpyran derivatives))

(a)      carabersat (85), tidembersat (84), tonabersat (85)

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		BAN, USAN
<b>bol (x)</b>	<b>anabolic steroids</b>	
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), furazabol (16), mebolazine (21), mibolerone (27), norboletone (15), norclostebol (22) <u>-bolone</u> : formebolone (31), mesabolone (29), metribolone (17), oxabolone cipionate (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)	
<b>-bradine</b>	<b>bradycardic agents</b>	
H.0.0.0		
(a)	cilobradine (63), ivabradine (75), zatebradine (62)	
<b>-brate</b>	<b>see -fibrate</b>	
		USAN
<b>-bresib</b>	<b>inhibitors of the bromodomain and extra-terminal motif (BET) family of bromodomain (BRD) proteins, antineoplastics</b> (USAN: extra-terminal motif (BET) family of bromodomain (BRD) proteins)	
(a)	alobresib (117), amredobresib (126), birabresib (115), mivebresib (115), molibresib (116), pelabresib (123), trotabresib (125)	
<b>-brutinib</b>	<b>see -tinib</b>	
		USAN
<b>-bufen</b>	<b>non-steroidal anti-inflammatory agents, arylbutanoic acid derivatives</b>	
A.4.2.0	(USAN: non-steroidal anti-inflammatory agents, fenbufen derivatives)	
(a)	butibufen (32), fenbufen (30), furobufen (30), indobufen (39), metbufen (43)	

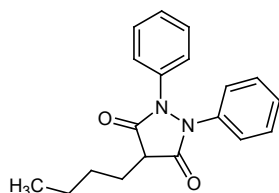
**-bulin      antineoplastics; mitotic inhibitors, tubulin binders**

L.0.0.0

- (a) avanbulin (120), batabulin (90), cevipabulin (96), crolibulin (104), denibulin (95), ecteribulin (125), entasobulin (110), eribulin (97), fosbretabulin (100), indibulin (91), lexibulin (105), lisavanbulin (115), mivobulin (77), ombrabulin (99), plinabulin (102), plocabulin (118), rosabulin (95), sabizabulin (125), taltobulin (91), tirbanibulin (119), unesbulin (124), valecobulin (119), verubulin (103)
- (b) thyroglobulin (26)

**-butazone      see -buzone****-buzone      anti-inflammatory analgesics, phenylbutazone derivatives**

A.4.2.0



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

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

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), sulfinyprazone (8)

**-zone** clofezone (17), proxifezone (24)

related: azapropazone (18), benhepazone (15), bumadizone (24), cinnopentazone (17), isamfazone (37), metamfazone (12), osmadizone (26), ruvazone (26)

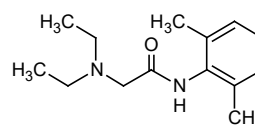
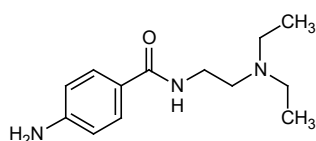
- (c) benzpiperylone (12), butopyrammonium iodide (8), dibupyrone (17), metamizole sodium (53), metazamide (16), piperylone (11)

		BAN, USAN
<b>-caftor</b>	<b>cystic fibrosis transmembrane regulator (CFTR) protein modulators, correctors, and amplifiers</b>	
(a)	bamocafator (121), deutivacafator (118), dirocaftor (123), elexacafator (121), galicafator (119), icentacafator (122), ivacafator (104), lumacafator (105), navocafator (121), nesolicafator (122), olacafator (119), posenacafator (122), tezacafator (114), vanzacafator (126), zatonacafator (128)	

		BAN, USAN
<b>-caine (x)</b>	<b>local anaesthetics</b>	
E.0.0.0		
(a)	ambucaine (6), amoxecaine (1), aptocaine (21), articaine (47) (previously carticaine (27)), benzocaine (42), betoxycaine (13), bucricaine (49), bumecaine (25), bupivacaine (17), butacaine (4), butanilicaine (16), chloroprocaine (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 (I), paridocaine (8), phenacaine (4), pinolcaine (32), piperocaine (I), piridocaine (I), 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)	amolano (6), benzyl alcohol (I), cryofluorane (6), dipiperodon (I), dyclonine (6), midamaline (6)	

		BAN
<b>-cain- (x)</b>	<b>Class I antiarrhythmics, procainamide and lidocaine derivatives</b>	

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



(a) acecainide (39), asocainol (47), barucainide (52), bucainide (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), modocainide (63), murocainide (46), nicainoprol (46), nofecainide (44), pilsicainide (62), pincainide (49), procainamide (1), quinacainol (50), recainam (54), solpecainol (55), stirocainide (47), suricainide (55), tocainide (36), transcainide (51), (verocainine (42) - replaced by tiapamil in List 43), zocainone (4l)

USAN

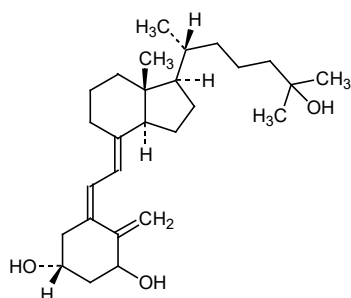
**-calcet/-calcet calcium-sensing receptor (CaSR) agonists**

- (a) cinacalcet (88), etelcalcetide (112), evocalcet (113), tecalcet (87), upacalcet (118)

USAN

**calci Vitamin D analogues/derivatives**

N.8.0.0 (USAN: calci- or -calci-: Vitamin D analogues)



- (a) alfacalcidol (40), atocalcitol (88), becalcidiol (92), calcifediol (26), calcipotriol (61), calcitriol (39), colecalfiferol (13), doxercalfiferol (82), ecalcidene (85), eldecalcitol (97), elocalcitol (95), ergocalciferol (13), falecalcitriol (74), inecalcitol (87), lexacalcitol (71), lunacalcipol (102), maxacalcitol (75), paricalcitol (78), pefcalcitol (107), secalfiferol (62), seocalcitol (78), tacalcitol (65)
- (b) calcitonin (31) (polypeptide)
- (c) dihydrotachysterol (1)

USAN

**-capone catechol-O-methyltransferase (COMT) inhibitors**

entacapone (65), nebicapone (96), neluxicapone (119), nitecapone (62), opicapone (103), tolcapone (66)

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**-carbef**      **antibiotics, carbacephem derivatives**      USAN

S.6.1.0  
(a)      loracarbef (60)

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**-carnil**      **see -azenil**

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**-castat**      **see -stat**

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**-catib**      **cathepsin inhibitors**      USAN

M.0.0.0  
(a)      balicatib (92), dutacatib (94), odanacatib (98), petesicatib (117), relacatib (95)

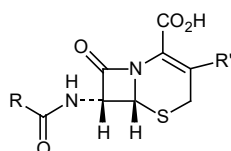
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**-cavir**      **see vir**

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**cef- (x)**      **antibiotics, cephalosporanic acid derivatives**      BAN, USAN

S.6.1.0      (USAN: cephalosporins)

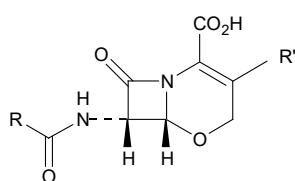


(a)      cefacetrile (25), cefaclor (36), cefadroxil (33), cefalexin (18), cefaloglycin (16), cefalonium (16), cefaloram (16), cefaloridine (15), cefalotin (14), cefamandole (30), cefaparole (33), cefapirin (23), cefatrizine (34), cefazaflur (36), cefazedone (36), cefazolin (25), cefbuperazone (48), cefcanel (60), cefcanel daloxate (59), cefcapene (68), cefclidin (64), cefdaloxime (64), cefdinir (61), cefditoren (66), cefedrolor (53), cefempidone (58), cefepime (57), cefetamet (49), cefetecol (63), cefetrizole (44), cefiderocol (114), cefilavancin (111), cefivitril (52), cefixime (53), cefluprenam (71), cefmatilen (81), cefmenoxime (44), cefmepidium chloride (57), cefmetazole (39), cefminox (53), cefodizime (44), cefonicid (42), cefoperazone (42), ceforanide (39), cefoselis (71), cefotaxime (42), cefotetan (48), cefotiam (40), cefovecin (87), cefoxazole (34), cefoxitin (29), cefozopran (66), cefpimizole (50), cefpiramide (47), cefpirome (50), cefpodoxime (58),

cefprozil (62), cefquinome (59), cefradine (26), cefrotil (34), cefroxadine (42), cefsulodin (38), cefsumide (38), ceftaroline fosamil (97), ceftazidime (44), ceferam (55), ceftazole (34), ceftibuten (60), ceftiofur (53), ceftiolene (49), ceftioxide (43), ceftizoxime (59), ceftizoxime alapivoxil (77), ceftobiprole (92), ceftobiprole medocaril (92), ceftolozane (105), 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)

**-cellulose                    cellulose ether derivatives**

U.4.0.0                    **[-celosa in Spanish]**

(a)                    -

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

-cel

## substances for cell therapies

For more details, please refer to the *“INN for biological and biotechnological substances, a review”*, available on the WHO INN Programme website: <http://www.who.int/medicines/services/inn/en/>

- (a) acmucabtagene autoleucel (125), adimlecleucel (117), afamitresgene autoleucel (122), anbalcabtagene autoleucel (127), anitocabtagene autoleucel (128), atidarsagene autotemcel (124), atleradstrocel (121), audencil (115), avoplacel (119121), axicabtagene ciloleucel (117), azamidugene autotemcel (125), azercabtagene zapreleucel (124), baltaleucel (116), bemdaneprocel (127), besvaltresgene autoleucel (128), betibeglogene autotemcel (125), bidoleucel (128), brexucabtagene autoleucel (125), cenplacel (115), cenzileucel (127), ciltocabtagene autoleucel (122), dalucabtagene autoleucel (126), darvadstrocel (117), debamestrocel (128), dilanubicel (119), durcabtagene autoleucel (128), elapomestrocel (126), elivaldogene autotemcel (121), eltrapuldencil (115), emiplacel (118), equocabtagene autoleucel (127), ersemadromcel (125), etuvetidigene autotemcel (125), evagenretcel (116), evencaleucel (126), exagamglogene autotemcel (124), famzeretcel (127), firolimogene autotemcel (125), firzotemcel (121), garveleucel (123), gavocabtagene autoleucel (123), idecabtagene vicleucel (119), ilixadencil (116), iltamiocel (124), inaleucel (127), inaticabtagene autoleucel (128), invimestrocel (123), itezocabtagene autoleucel (125), lecylimogene autotemcel (126), lenzumestrocel (119), letetresgene autoleucel (128), lifileucel (118), lotazadromcel (125), lovotibeglogene autotemcel (125), mafimestrocel (125), marnetegrage autotemcel (125), mipetresgene autoleucel (123), mocemestrocel (120), motacabtagene lurevgedleucel (125), mozafancogene autotemcel (125), murcidencil (128), nadravaleucel (127), nalotimagene carmaleucel (118), neltependocel (127), nivadstrocel (124), nulabeglogene autogedtemcel (128), obecabtagene autoleucel (123), olitresgene autoleucel (121), amidubicel (121), orvacabtagene autoleucel (122), palucorcel (115), plixacabtagene autoleucel (126), pomlucabtagene autoleucel (127), posoleucel (124), prademagene zamikeracel (119), przloncabtagne autoleucel (128), raguneprocel (126), rapcabtagene autoleucel (126), rebonuputemcel (123), relmacabtagne autoleucel (123), remestemcel (121), remumiocel (126), revakinagene taroretcel (123), rildinadstrocel (128), rilparencel (127), rivogenlecleucel (117), rovaleucel (121), satricabtagene autoleucel (127), setamevetcel (121), simoladagene autotemcel (122), sitocabtagene loxiveleucel (125), sizavaleucel (123), spanlecortemlocel, (115), stapuldencil (121); tabelecleucel (117), tacatresgene autoleucel (124), taniraleucel (127), tenvumestrocel (123), tinocabtagene autoleucel (128), tisagenlecleucel (117), tonogenconcel (115), torulimogene lonferencil (127), tremtelectogene empogeditemcel (127), trovocabtagene autoleucel (128), umetrimorgene autoleucel (127), vadacabtagene leraleucel (117), vandefitemcel (115)), varnimcabtagene autoleucel (127), vibapapogene autoleucel (123), vididencil (128), volamcabtagene durzigedleucel (126), voxeralgagene autotemcel (124),

zamtocabtagene autoleucl (124), zedenoleucl (125), zevorcabtagene autoleucl (125)

USAN

**-cept**

**Receptor molecules or membrane ligands, native, modified or synthetic**

S.7.0.0

(a)

*-ba-* B-cell activating factor receptors  
briobacept (98)

*-ber-* vascular endothelial growth factor (VEGF) receptors  
aflibercept (96), conbercept (105), sozinibercept (126)

*-co-* complement receptors  
mirococept (91)

*-far-* subgroup of interferon receptors  
bifarcept (86)

*-fri-* frizzled family receptors  
ipafricept (109)

*-ki-* interleukin receptors  
goflikicept (124), inbakicept (120), olamkicept (116)

*-lefa-* lymphocyte function-associated antigen 3 receptors  
alefacept (84)

*-na-* interleukin-1 receptors  
rilonacept (95)

*-ner-* Tumour Necrosis Factor (TNF) receptors  
asunercept (114), baminercept (99), etanercept (81), lenercept (72),  
onercept (82), opinercept (118), pegsunercept (87),  
tulinercept (116)

*-ta-* cytotoxic T lymphocyte-associated antigen 4 (CTLA-4) receptors  
abatacept (91), belatacept (93)

*-ter-* transforming growth factor receptors  
dalantercept (105), elritercept (128), luspatercept (110),  
ramatercept (108), sotatercept (104)

*-vir-* antiviral receptors  
alvircept sudotox (69)

*other:* acazicolcept (124), atacicept (95), batiraxcept (123),  
davoteticept (125), evorpaccept (126), maplirpaccept (127),



ontorpaccept (122), povetacicept (127), recifercept (122),  
telitacicept (120), timdarpaccept (128), valziflocept (117))

USAN

**-cerfont      corticotropin-releasing factor (CRF) receptor antagonists**

- (a) crinecerfont (120), emicerfont (102), pexacerfont (97), tildacerfont (119),  
verucerfont (102)

USAN

**-cetrapib      cholesteryl ester transfer protein (CETP) inhibitors**

anacetrapib (98), dalcetrapib (96), evacetrapib (105), obicetrapib (115),  
rocacetrapib (119), torcetrapib (87)

**-cianine      indocyanine fluorescence dye group**

- (a) nerindocianine (121), nizaracianine (125), omocianine (93), pafolacianine  
(124), pegsitacianine (125), pegulicianine (123)  
(c) pudexacianinium chloride (122)

USAN

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

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

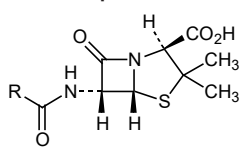
- (a) limazocic (69), tidiacic (33), timonacic (33), (tiofacic (45) replaced by  
stepronin (46))  
(b) bisorcic (34) (psychostimulant)  
(c) stepronin (46)

USAN

**-ciclib      cyclin dependant kinase inhibitors**

L.0.0.0 abemaciclib (112), asnuciclib (127), atuveciclib (117), briciclib (111),  
crozbaciclib (127), culmerciclib (127), dinaciclib (102), eciruciclib (126),  
enitociclib (126), inixaciclib (127), milciclib (105), narazaciclib (126),  
palbociclib (109), ribociclib (111), riviciclib (109), roniciclib (111), seliciclib  
(92), tanuxiciclib (126), trilaciclib (117), ulecaciclib (127), voruciclib (109)

**-ciclovir      see -vir**

		USAN
<b>-cidin</b>	<b>naturally occurring antibiotics (undefined group) (14<sup>th</sup> Report, 1964)</b>	
S.6.0.0	(USAN: natural antibiotics (undefined group))	
(a)	brilacidin (108), candicidin (17), gramicidin (1), gramicidin S (26), methocidin (6)	
(b)	guancidine (18) (hypotensive), hepcidin (123)	
		USAN
<b>-ciguat</b>	<b>guanylate cyclase activators and stimulators</b>	
F.2.0.0	(USAN: guanaline cyclase activators)	
(a)	ataciguat (88), cinaciguat (97), etriciguat (88), lificiguat (95), nelociguat (105), olinciguat (117), praliciguat (116), riociguat (98), vericiguat (109)	
		USAN
<b>-cillide</b>	<b>see -cillin</b>	
		BAN, USAN
<b>-cillin (x)</b>	<b>antibiotics, 6-aminopenicillanic acid derivatives</b>	
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)

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**-cillinam**     **see -cillin**

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**-cilpine**     **see -pine**

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**-cisteine**     **see -steine**

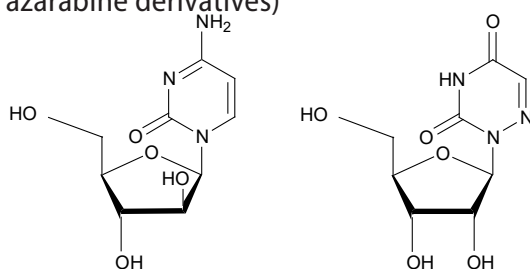
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USAN

**-citabine**     **nucleosides antiviral or antineoplastic agents, cytarabine or azacitidine derivatives**

(USAN: nucleoside antiviral or antineoplastic agents, cytarabine or azarabine derivatives)

L.4.0.0/S.5.5.0



(a) ancitabine (36), apricitabine (95), capecitabine (73), decitabine (61), dexelvucitabine (95), elvucitabine (89), emtricitabine (80), enocitabine (46), fiacitabine (59), flurocitabine (38), foscemcitabine palabenamide (119), fostroxacitabine bralpamide (125), galocitabine (65), gemcitabine (62), gemcitabine elaidate (106), guadecitabine (113), ibacitabine (57), lumicitabine (115), mericitabine (108), radgocitabine (125), roducitabine (123), sapacitabine (94), tezacitabine (84), torcitabine (87), troxacitabine (81), valopicitabine (93), valtorcitabine (90), zalcitabine (66)

(c) cytarabine (14), azacitidine (40)

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**-citinib**     **see -tinib**

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**-clidine/-clidinium muscarinic receptors agonists/antagonists**

E.1.0.0 aceclidine (13), benzoclidine (25), emraclidine (125), eticyclidine (44), gacyclidine (76), phencyclidine (11), procyclidine (01), rolicyclidine (44), talsaclidine (72), tenocyclidine (44), vedaclidine (76)  
aclidinium bromide (100), clidinium bromide (06), droclidinium bromide (33)  
umeclidinium bromide (106)

**-clone hypnotic tranquillizers**

A.2.2.0 (USAN: hypnotics / tranquillizers (zopiclone type))

(a) barbexaclone (16), eszopiclone (87), pagoclone (74), pazinaclone (70), suproclone (46), suriclone (43), suproclone (46), zopiclone (39)

(b) gestaclone (23), pimeclone (20)

**-(clo)sporine ciclosporine derivatives**

(a) ciclosporin (46), geclosporin (70), oxeclosporin (70), ruclosporin (114), voclosporin (97)

**-cocept see -cept****-cog blood coagulation factors**

I.2.0.0

(-)eptacog blood coagulation factor VII: eptacog alfa (activated) (77), eptacog alfa pegol (activated)(101), eptacog beta (112), marzeptacog alfa (113), oreptacog alfa (activated) (109), vatreptacog alfa (activated) (98)

(-)octocog blood factor VIII: beroctocog alfa (112), damoctocog alfa pegol (109), efanesoctocog alfa (122), efmoroctocog alfa (111), lonoctocog alfa (111), moroctocog alfa (72), omfiloctocog alfa (122), octocog alfa (73), ruriococog alfa pegol (111), simoctocog alfa (104), turoctocog alfa (108), turoctocog alfa pegol (118)

(-)nonacog blood factor IX: albutrepenonacog alfa (109), dalcinonacog alfa (118), eftrenonacog alfa (109), nonacog alfa (77), nonacog beta pegol (103), nonacog gamma (108), trenonacog alfa (107)

(-)tridecacog blood factor XIII: catridecacog (99)

Other: vonicog alfa (120)

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**-cogin            blood coagulation cascade inhibitors**

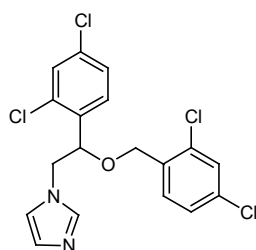
I.2.0.0            anpocogin (128), drotrecogin alfa (activated) (86), pegnivacogin (106),  
taneptacogin alfa (90), tifacogin (78)

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BAN, USAN

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

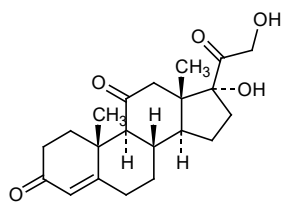
S.4.0.0            (BAN: systemic antifungals of the miconazole group)  
(USAN: systemic antifungals (miconazole type))



(a)            albaconazole (87), aliconazole (43), alteconazole (53), arasertaconazole (93), azaconazole (45), becliconazole (65), brolaconazole (58), butoconazole (40), ciskonazole (59), croconazole (55), (cyproconazole (ISO)), dapaconazole (111), 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), efinaconazole (104), embeconazole (92), enilconazole (44), (etaconazole (ISO)), fenticonazole (44), fluconazole (54), fosfluconazole (83), fosravuconazole (110), (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)), isavuconazole (96), isoconazole (30), itraconazole (50), ketoconazole (43), lanoconazole (66), levoketonazole (114), luliconazole (86), miconazole (22), neticonazole (63), omoconazole (45), opelconazole (124), orconazole (40), oteseconazole (115), oxiconazole (42), parconazole (39), (penconazole, (ISO)), posaconazole (82) (propiconazole (ISO)), pramiconazole (95), quilseconazole (116), 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), isavuconazonium chloride (96)

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		USAN
<b>-copan</b>	<b>complement receptor antagonists/ complement inhibitors</b>	
(a)	avacopan (114), danicopan (119), iptacopan (122), nomacopan (119), pelecopan (127), vemircopan (124)	
(c)	pegcetacoplan (120), zilucoplan (118)	
<b>-corat</b>	<b>glucocorticoid receptor agonists</b>	USAN
	(USAN: glucocorticoid receptor agonist (not glucocorticoids))	
(a)	dagrocorat (111), fosdagrocorat (111), mapracorat (102), mizacorat (127), tomicorat (108), velsecorat (121)	
<b>-corilant</b>	<b>glucocorticoid receptor antagonists (non steroidal)</b>	USAN
	(USAN: glucocorticoid receptor antagonists (not glucocorticoids))	
(a)	dazucorilant (125), exicorilant (119), miricorilant (119), nenocorilant (127), relacorilant (116), zavacorilant (125)	
<b>cort (x)</b>	<b>corticosteroids, except prednisolone derivatives</b>	BAN, USAN
Q.3.0.0	(USAN: -cort-: cortisone derivatives)	
		
(a)	amebucort (54), anecortave (80), benzodrocortisone (116), 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), hydrocortisone aceponate (54), locicortolone dicibate (60), naflocort (50), nicocortonide (40), nivacortol (24), resocortol (74), tixocortol (38)	
(b)	<u>prednisolone derivatives</u> : clocortolone (16), difluocortolone (18), fluocortolone (15), halocortolone (31)	
(c)	aldosterone (6), algestone (22) (also progest. when used as algestone acetophenide), medrysone (16)	

USAN

**-coxib (x) selective cyclo-oxygenase inhibitors**

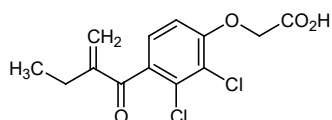
A.4.2.0 (USAN: cyclooxygenase-2 inhibitors)

- (a) apricoxib (99), celecoxib (80), cimicoxib (89), deracoxib (80), enficoxib (122), etoricoxib (84), firocoxib (89), lumiracoxib (87), mavacoxib (94), ocarocoxib (124), parecoxib (80), polmacoxib (111), robenacoxib (91), rofecoxib (80), tilmacoxib (84), valdecoxib (80)

USAN

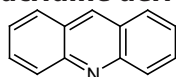
**-crinat diuretics, etacrynic acid derivatives**

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

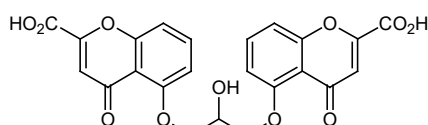
**-crine (d) acridine derivatives**

- (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) acidorex (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 derivatives))



- (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)

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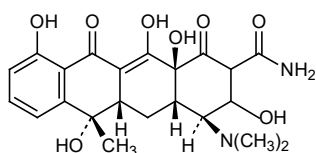
**-curium**      **see -ium**

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BAN, USAN

**-cycline (d)**      **antibiotics, protein-synthesis inhibitors, 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), eravacycline (108), etamocycline (18), guamecycline (22), lymecycline (14), meclocycline (14), meglucycline (22), metacycline (12), minocycline (14), nitrocycline (14), omadacycline (102), oxytetracycline (1), pecocycline (15), penimepicycline (16), penimocycline (22), pipacycline (12), rolitetracycline (11), sarecycline (109), sancycline (15), tetracycline (4), tigecycline (86), zifanocycline (125)

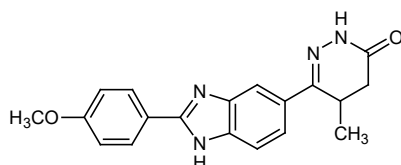
related: carubicin (40), daunorubicin (20), detorubicin (41), doxorubicin (25), zorubicin (39)

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USAN

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

H.1.0.0      (USAN: positive inotropic agents (pimobendan type))

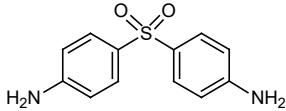


(a) adibendan (57), bemorodan (61), imazodan (55), indolidan (57), levosimendan (68), meribendan (62), pimobendan (46), prinoxodan (64), senazodan (85), siguazodan (60), simendan (66)

(b) nitrodan (15), tyromedan (15)

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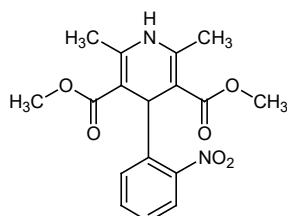


		USAN
<b>-dapson</b>	<b>antimycobacterials, diaminodiphenylsulfone derivatives</b>	
S.5.2.0	(USAN: antimycobacterial (diaminodiphenylsulfone derivatives))	
		
(a)	acedapson (22), amidapson (28), dapson (23)	
<b>-decakin</b>	<b>see -kin</b>	
		USAN
<b>-degib</b>	<b>SMO receptor antagonists</b>	
(a)	glasdegib (111), patidegib (111), sonidegib (107), taladegib (110), vismodegib (103)	
<b>-delpar</b>	<b>PPAR delta agonists</b>	USAN
(a)	bocidelpar (126), delparantag (108), fonadelpar (114), mavodelpar (127), seladelpar (115)	
<b>-denoson</b>	<b>adenosine A receptor agonists</b>	USAN
H.0.0.0		
(a)	apadenoson (94), binodenoson (90), capadenoson (95), evodenoson (108), namodenoson (117), neladenoson bialanate (113), piclidenoson (113), regadenoson (91), selodenoson (91), sonedenoson (101), tecadenoson (87), trabodenoson (107)	
<b>-dermin</b>	<b>see -ermin</b>	
		USAN
<b>-dil</b>	<b>vasodilators</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), fenoxedil (27), flosatidil (64), fostedil (51), fronepidil (59), 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)	
(b)	eliprodil (66), ifenprodil (27), onfasprodil (126), radiprodil (98), traxoprodil (86)	
(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), razinodil (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>-fradil</b>	<b>calcium channel blockers acting as vasodilators</b>	USAN
(a)	mibefradil (72)	
<b>-pendyl</b>	cloxypendyl (15), isothipendyl (6), oxypendyl (13), prothipendyl (6)	
<b>-dyl</b>	bisacodyl (13) (laxative), bunamiodyl (10), iofendylate (12), trihexyphenidyl (1) (antiparkinsonian)	
<b>-sudil</b>	<b>Rho protein kinase inhibitors</b>	
(a)	belumosudil (127), cotosudil (123), fasudil (64), netarsudil (113), ripasudil (109), sovesudil (122), verosudil (112), zelasudil (128)	
<b>-dilol</b>	<b>see -dil</b>	

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

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



- (a) amlodipine (53), clevidipine (75), darodipine (51) (replaces dazodipine (49)), dexniguldipine (67), elgodipine (61), elnadipine (59), felodipine (44), flordipine (48), isradipine (55), lacidipine (57), lemildipine (69), levamlodipine (97), levniguldipine (67), mesudipine (40), nicardipine (42), nifedipine (27), niguldipine (60), niludipine (38), nilvadipine (52), nimodipine (40), nisoldipine (42), nitrendipine (42), olradipine (69), oxodipine (52), rioldipine (51), sagandipine (64), teludipine (64) (previously taludipine (61))  
-nidipine: aranidipine (69), azelnidipine (69), barnidipine (64), benidipine (58), cilnidipine (66), cronidipine (61), efonidipine (66), furnidipine (67), iganidipine (70), lercanidipine (69) (previously masnidipine), manidipine (59), palonidipine (64), pranidipine (66), sornidipine (58), vatanidipine (77)
- (b) budipine (36) (central stimulant, antidepressant and antiparkinsonian), prodipine (29) (central stimulant antiparkinsonian)

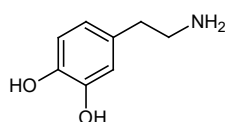
**-dismase enzymes with superoxide dismutase activity, see -ase****-distim see -stim****-docokin see -kin****-dodekin see -kin****- domide antineoplastics, thalidomide derivatives**

L.0.0.0

- (a) avadomide (117), cemsidomide (128), endomide (40), eragidomide (125), iberdomide (117), golcadomide (127), lenalidomide (101), mezigdomide (125), mitindomide (70), pomalidomide (97), thalidomide (08)

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

E.1.1.0      (USAN: dopamine receptor agonists)



- (a)      carbidopa (37), ciladopa (52), dopamantine (31), droxidopa (57), etilevodopa (80), fluorodopa (<sup>18</sup>F) (64), foscarbidopa (120), foslevodopa (120), levodopa (21), melevodopa (83), methyldopa (12)

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

(USAN: -pamine: dopaminergics (butopamine type))

- (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), levodopamine (65), methyldopa (12) (alpha-2 adrenoreceptor agonist, cardiotoxic), zelandopam (84)

**-dotin**      **synthetic derivatives of dolastatin series**

amadotin: lupartumab amadotin (115)  
 botidotin: trastuzumab botidotin (128)  
cemadotin (75)  
ixadotin: aprutumab ixadotin (115)  
mafodotin: belantamab mafodotin (118), denintuzumab mafodotin (111), depatuzumab mafodotin (115), vorsetuzumab mafodotin (107)  
opadotin: **anvatabart opadotin (127)**  
pelidotin: cofetuzumab pelidotin (117)  
rilsodotin: upinetatug rilsodotin (128)  
soblidotin (84)

tasidotin (93)

ugodotin: lonigutamab ugodotin (124)

vedotin: azintuxizumab vedotin (116), brentuximab vedotin (103), enapotamab vedotin (118), enfortumab vedotin (109), glembatumumab vedotin (113), iladatuzumab vedotin (117), indusatumab vedotin (112), ladiratumab vedotin (117), lifastuzumab vedotin (110), losatuxizumab vedotin (116), pinatumab vedotin (108), polatumab vedotin (108), samrotamab vedotin (118), sirtratumab vedotin (117), sofituzumab vedotin (110), tisotumab vedotin (113), telisotuzumab vedotin (115), vandortuzumab vedotin (113)

zovodotin: zanidatamab zovodotin (126)

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**-dotril**      **see -tril/trilat**

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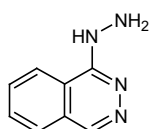
**-dox**      **see -ox/-alox**

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**-dralazine**      **antihypertensives, hydrazinephthalazine derivatives**

USAN

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)

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**-drine**      **sympathomimetics**

E.4.0.0

(a)      alifedrine (49), bedoradrine (95), 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)

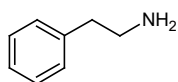
(b)      bufenadrine (13) (antiemetic) related chemically, chlormerodrin (4) (diuretic), chlormerodrin (<sup>197</sup>Hg) (24), dieldrin (10) (insecticide),

orphenadrine (8) (spasmolytic)

**-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)

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)

**-dutant**

**see -tant**

**-dyl**

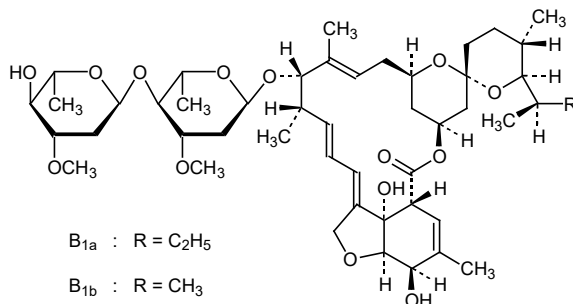
**see -dil**

USAN

**-ectin antiparasitics, ivermectin derivatives**

(USAN: antiparasitics (ivermectin derivatives))

S.3.0.0

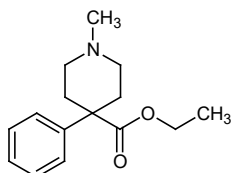


- (a) abamectin (53), dimadectin (73), doramectin (63), eprinomectin (73), fuladectin (71), ivermectin (44), latidectin (88), moxidectin (61), nemadectin (60), selamectin (81)

<b>-elestat</b>	<b>see -stat</b>	
<b>-elvekin</b>	<b>see -kin</b>	
<b>-emcinal</b>	<b>erythromycin derivatives lacking antibacterial activity, motilin agonists</b>	USAN
J.0.0.0	(USAN: erythromycin derivatives lacking antibiotic activity, motilin agonists)	
(a)	alemcinal (84), idremcinal (81), mitemcinal (86)	
<b>-enicokin</b>	<b>see -kin</b>	
<b>-entan (x)</b>	<b>endothelin receptor antagonists</b>	USAN
F.2.0.0		
(a)	ambrisentan (85), atrasentan (83), apocitentan (116), avosentan (93), bosentan (70), clazosentan (90), darusentan (82), edonentan (86), enrasentan (80), fandosentan (87), feloprentan (85), macitentan (107), nebentan (90), sitaxentan (83), sparsentan (113), tezosentan (81), vodudeutentan (127), zibotentan (94)	
<b>-epdekinra</b>	<b>see -kinra</b>	
<b>(-)eptacog</b>	<b>see -cog</b>	
<b>-eptakin</b>	<b>see -kin</b>	
<b>erg</b>	<b>ergot alkaloid derivatives</b>	USAN
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), fludihydroergotamine (115), lergotril (32), lysergide (8), mergocriptine (54), mesulergine (47), metergoline (18), metergotamine (29), methylegometrine (I), methysergide (11), nicergoline (26), <u>pergolide</u> (41), propisergide (35), proterguride (50), romergoline (66), sergolexole (60), terguride (50), tiomergine (42), <u>voxergolide</u> (61)	
(b)	ergocalciferol (13)	

**-eridine analgesics, pethidine derivatives and other synthetic small molecule  $\mu$ -opioid receptor agonists**

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



- (a) anileridine (5), carperidine (11), etoxeridine (6), morpheridine (6), oxpheneridine (5), pheneridine (5), phenoperidine (11), properidine (5), sameridine (68), tegileridine (126), trimeperidine (6)
- (b) diaveridine (18) (cocciostatic), eseridine (53), nexeridine (34)
- (c) benzethidine (9), butoxylate (14), diphenoxylate (10), fetoxilate (21), furethidine (9), hydroxypethidine (5), pethidine (4), piminodine (9)

**-ermin growth factors**

U.0.0.0

**-bermin vascular endothelial growth factors**

(a) telbermin (85)

**-dermin epidermal growth factors**

(a) murodermin (63), nepidermin (97)

**-fermin fibroblast growth factors**

(a) efruxifermin (126), ersofermin (66), palifermin (86), pegbelfermin (120), pegozafermin (127), repifermin (82), sprifermin (105), timufermin (125), trafermin (74), velafermin (94)

**-filermin leukemia-inhibiting factor**

(a) emfilermin (82)

**-nermin tumour necrosis factor**

(a) aldafermin (120), ardenermin (88), dulanermin (99), efaprinermin alfa (120), efgivanermin alfa (120), eftozanermin alfa (119), pegipanermin (125), plusonermin (73), rilunermin alfa (126), sonermin (68), tasonermin (76), tengonermin (118)

**-plermin platelet-derived growth factor**

(a) becaplermin (74)



<i>-sermin</i>	<b>insulin-like growth factors</b>
(a)	mecasermin (66), mecasermin rinfabate (91)
<i>-termin</i>	<b>transforming growth factor</b>
(a)	cetermin (74), liatermin (81)
<i>-otermin</i>	<b>bone morphogenic proteins</b>
(a)	avotermin (77), dibotermin alfa (89), eptotermin alfa (89), nebotermin (109), radotermin (92)
<i>Others:</i>	cenegermin (115), cimaglermin alfa (110), dapiclermin (93), oremepermin alfa (124)

USAN

**-espib      heat shock protein (HSP) 90 inhibitors (other than –mycin)**

(USAN: heat shock protein inhibitors)

- (a)      cemdomespib (126), ganetespib (105), icapamespib (123), luminespib (108), onalespib (112), pimitespib (121), zelavespib (123)

BAN, USAN

**estr      estrogens**

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

- (a)      almestrone (24), benzestrol (1), broparestrol (8), cloxestradiol (12), dienestrol (1), diethylstilbestrol (4), epiestriol (12), epimestrol (22), (eptamestrol/etamestrol (49) deleted), estradiol (4), estradiol benzoate (4), estradiol undecylate (16), estradiol valerate (35), estramustine (24), estrapronicate (34), estrazinol (16), estriol succinate (14), estrofurate (25), estrone (4), ethinylestradiol (1), fenestrel (18), fosfestrol (15), furostilbestrol (1), hexestrol (1), mestranol (12), methallenestril (6), methestrol (1), moxestrol (24), nilestriol (32), orestrate (17), polyestradiol phosphate (36), promestriene (31), quinestradiol (15), quinestrol (14)

- (b)      alfatradiol (84) (topical), allylestrenol (10) (progest.), ethylestrenol (13) (anabol.), lynestrenol (13) (progest.)  
estrogens receptor antagonists: brilanestrant (115), elacestrant (115), fulvestrant (78),

- gestr-:*      edogestrone (22), levonorgestrel (30), megestrol (13), melengestrol (13), norelgestromin (84), norgestrel (17), norgestrienone (18), pentagestrone (14), quingestrone (13)

- (c) estetrol (120), chlorotrianisene (6), clomifene (12), enclomifene (33),  
zuclomifene (33) (antiestrogens)

USAN

**-estrant**      **estrogen antagonists, including estrogen receptor down-regulators**

(USAN: estrogen antagonists)

- (a) amcenestrant (122), bexirestrant (126), brilanestrant (115), camizestrant  
(125), dintorestrant (123), elacestrant (115), fulvestrant (79), giredestrant  
(122), imlunestrant (126), palazestrant (128), rintodestrant (123),  
taragarestrant (127), vepdegestrant (127)

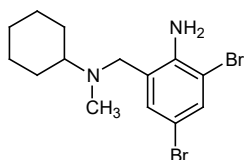
**-etanide**      **see -anide**

**-ethidine**      **see -eridine**

**-exakin**      **see -kin**

**-exine**      **mucolytic, bromhexine derivatives**

K.O.O.0



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

**-farcept**      **see -cept**

USAN

**-fenacin**      **muscarinic receptor antagonists**

afacifenacin (101), darifenacin (70), imidafenacin (90), revefenacin (114),  
solifenacin (85), tarafenacin (100), tofenacin (15), velufenacin (122),  
zamifenacin (68)

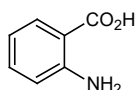
**-fenamate**      **see -fenamic acid**

USAN

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

(USAN: -fenamic acid: anti-inflammatory (anthranilic acid derivatives);  
 -fenamate: "fenamic acid" ester or salt 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), pefenamate (36), terofenamate (32),  
 ufenamate (50)
- (b) clantifen (24), oxyfenamate (13)  
phonetically close: clofenamide (13), diclofenamide (13) (N.1.1.0)
- (c) flutiazin (22)

USAN

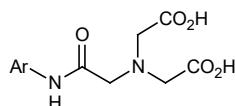
**-fenicol antibacterial antibiotics, chloramphenicol analogues**

- (a) azidamfenicol (14), cetofenicol (14), cloramfenicol pantotenate complex  
 (14), florfenicol (54), racefenicol (20), sirpefenicol (126)

USAN

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

U.1.0.0



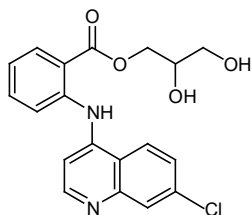
- (a) arclofenin (52), butilfenin (41), disofenin (43), etifenin (43), galtifenin (59),  
 lidofenin (39), mebrotfenin (47)

USAN

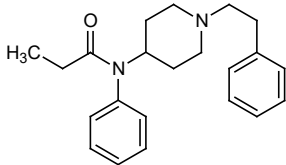
**-fenine analgesics, glafenine derivatives (subgroup of fenamic acid group)**  
**phenine**

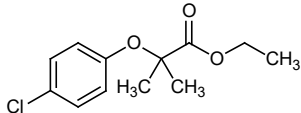
(USAN: -fenine: analgesics (fenamic acid subgroup))

A.4.3.0



- (a) antrafenine (35), floctafenine (24), florifenine (50), glafenine (15),  
 nicafenine (40)

(b)	<u>spasmolytic diphenylacetates</u> : adiphenine (1), drofenine (26) <u>other</u> : buphenine (8) (vasodilator), cinfenine (27) (antidepressant)	USAN
<b>-fensine</b>	<b>norepinephrine, serotonin, dopamine reuptake inhibitors</b>  brasofensine (76), diclofensine (44), lafadofensine (126), liafensine (109), nomifensine (24), perafensine (44), tesofensine (89)	USAN
<b>-fentanil</b>	<b>opioid receptor agonists, analgesics, fentanyl derivatives</b>  (USAN: -fentanil: narcotic analgesics (fentanyl derivatives))	USAN
A.4.1.0		
(a)	alfentanil (43), brifentanil (62), carfentanil (39), fentanyl (14), lofentanil (43), mirfentanil (64), ocfentanil (61), remifentanil (67), sufentanil (36), trefentanil (67)	USAN
<b>-fentrine</b>	<b>inhibitors of phosphodiesterases</b>	USAN
K.0.0.0		
(a)	benafentrine (44), ensifentrine (119), pumafentrine (86), tolafentrine (70)	
<b>-fermin</b>	<b>see -ermin</b>	USAN
<b>-fexor</b>	<b>farnesoid X receptor inhibitors</b>  cilofexor (119), nidufexor (118), omesdafexor (127), tropifexor (116), turofexorate isopropyl (103), vonafexor (122)	USAN
<b>-fiban</b>	<b>fibrinogen receptor antagonists (glycoprotein IIb/IIIa receptor antagonists)</b>  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), zalunfiban (125)	USAN

		BAN, USAN
<b>-fibrate</b>	<b>clofibrate derivatives, peroxisome proliferator activated receptor-<math>\alpha</math> (PPAR-<math>\alpha</math>) agonists</b>	
H.4.0.0	(BAN: substances of the clofibrate group) (USAN: antihyperlipidaemics (clofibrate type))	
		
(a)	bezafibrate (35), biclofibrate (28), binifibrate (44), choline fenofibrate (97), ciprofibrate (36), clinofibrate (39), dulofibrate (43), etofibrate (31), fenirofibrate (49), fenofibrate (35), lifibrate (30), nicofibrate (31), pemafibrate (113), picafibrate (35), ponfibrate (37), ronifibrate (55), salafibrate (41), serfibrate (34), simfibrate (22), sitofibrate (32), tiafibrate (33), timofibrate (40), tocofibrate (33), urefibrate (37), xantifibrate (31)  clofibric acid (20), clofibrate (13), aluminium clofibrate (31), calcium clofibrate (34), cinnarizine clofibrate (38), etofylline clofibrate (38), magnesium clofibrate (31) clofibride (28), plafibride (39)  <u>related:</u> arhalofenate (101), beclobrate (35), eniclobrate (39), gemfibrozil (34), halofenate (20), lifibrol (62), metibrade (53), terbufibrol (35), tibrac acid (33), (fibrafylline (43) deleted)	
(b)	bromebric acid (25) (prophylaxis of migraine), fibracillin (30) (antibiotic)	
(c)	nafenopin (24), treloxinate (25)	

**-filermin**      **see -ermin**

		USAN
<b>-flapon</b>	<b>5-lipoxygenase-activating protein (FLAP) inhibitors</b>	
K.0.0.0		
J.0.0.0		
(a)	atuliflapon (125), fiboflapon (105), quiflapon (72), veliflapon (95)	

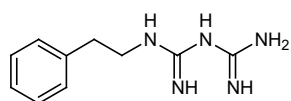
		USAN
<b>-flurane</b>	<b>halogenated compounds used as general inhalation anaesthetics</b>	
A.1.1.0	(USAN: general inhalation anaesthetics (halogenated alkane derivatives))	
(a)	aliflurane (36), cryofluorane (6), desflurane (62), enflurane (25), isoflurane (28), methoxyflurane (11), norflurane (20), roflurane (12), sevoflurane (25), teflurane (12)	

- (b) apaflurane (73)  
 (c) fluroxene (12), halothane (6)

USAN

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

M.5.2.0 (USAN: hypoglycemics (phenformin type))



- (a) benfosformin (29), buformin (17), etoformin (34), metformin (21), metformin glycinate (103), phenformin (10), tiformin (22)

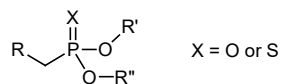
USAN

**-fos (-vos) insecticides, anthelmintics, pesticides etc., phosphorous derivatives**

(USAN: -fo(s)-: phosphoro-derivatives)

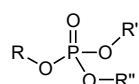
S.3.1.0  
(Y.0.0.0)

1. organophosphorous derivatives:



- (a) vet. insecticides:  
quintofos (25)
- (b) teldimfos (23) (vet. phosphorous source)
- (c) vet. insecticides and anthelmintics: metrifonate (16)  
anthelmintic: butonate (30)

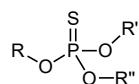
2. phosphates:



- (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)

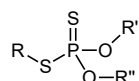
3. phosphorothioates:



vet. insecticides:

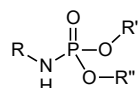
- (a) bromofos (25), coumafos (16), fenclofos (23), temefos (31)
- (c) dimpylate (16), phoxim (20) (vet. insecticide and anthelmintic), pyrimitate (16)

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)

anthelmintic: 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), dexfosfoserine (68), ferpifosate sodium (69), furifosmin (70), monophosphothiamine (8), rabacfosadine (111), sodium picofosfate (37), sofosbuvir (108), sparfosic acid (46), technetium (<sup>99m</sup>Tc), tetrafosmin (66), trifosmin (74)

**-fosfamide**: alkylating agents of the cyclophosphamide group (USAN: isophosphoramidate mustard derivatives)

canfosfamide (92), cyclophosphamide (10), defosfamide (12), evofosfamide (111), glufosfamide (77), ifosfamide (23), mafosfamide (51), palifosfamide (99), perfosfamide (66), sufosfamide (36), trofosfamide (23)

**-fosine** cytostatic

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

**fos-**

fosalvudine tidoxil (95), fosamprenavir (83), fosaprepitant (94), fosarilate (53), fosazepam (27), fosbretabulin (100), foscarnet sodium (42), fosclevudine alafenamide (127), foscolic acid (12), fosdagrocorat (111), fosdevirine (103), fosenazide (48), fosfestrol (15), fosfluconazole (83), fosfluridine tidoxil (93), fosfocreatinine (50), fosfomycin (25), fosfonet sodium (35), fosfosal (37), fosfructose (81), fosinopril (69), fosinoprilat (62), foslevcromakalim (128), fosmanogepix (119), fosmenic acid (49), fosmetpentotenane (116), fosmidomycin (46), fosopamine (69), fosphenytoin (62), fospirate (21), fospropofol (100), fosquidone (64), fosravuconazole (110), fostamatinib (100), fostedil (51), fostriecin (55), fosveset (83)

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**-fovir**      **see vir**

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USAN

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**-fradil**      **see -dil**

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**-frine**      **see -drine**

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USAN

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**-fungin**      **antifungal antibiotics**

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), rezafungin acetate (117), sinefungin (39), triafungin (40)

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USAN

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**-fusp**      **fusion proteins with more than one pharmacologically active component**

Action		Targeting	
-b <sub>(a)</sub>	binding protein	-a-	antibody
-c <sub>(b)</sub>	encapsulation protein	-e-	receptor
-f-	hormone	-i-	antigen
-g-	antigen	-o <sub>(d)</sub>	other



Action		Targeting	
-k-	cytokine	-U-(e)	untargeted
-m-	membrane protein		
-n-	enzyme		
-p-	apoptosis		
-r-	receptor		
-t-	T-cell receptor		
-V-(c)	multiple actions/ proteins		
-X-	toxin		

(a) -b- will be used for protein-protein interactions, but also for protein-lipid, protein-sugar, or protein-inorganic ion interactions;

(b) -c- will be used for all kind of encapsulation, which includes viral capsid proteins or proteins that capture small molecules inside a cavity;

(c) -v- will be used when a multifunctional fusion protein has multiple and not related actions;

(d) -o- will be used when some other targeting protein (i.e. other than antibody, receptor or antigen) is used in a bifunctional fusion protein or in a multifunctional fusion protein with multiple unrelated targeting;

(e) -u- will be used when a fusion protein has multiple actions and no targeting;

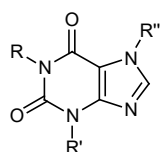
- (a) bifikafusp alfa (118), bintrafusp alfa (121), bizaxofusp (127), brenetafusp (128), cemavafusp (128), cinreba fusp alfa (121), clervonafusp alfa (120), dalutra fusp alfa (125), eciskafusp alfa (127), efdamrofusp alfa (125), eflimrufusp alfa (124), englumafusp alfa (127), eramkafusp alfa (124), gulgafafusp alfa (128), latikafusp (126), lepunafusp alfa (125), lorukafusp alfa (120), lunaxafusp (127), modakafusp alfa (122), nanrilke fusp alfa (126), nomlabofusp (126), onfekafusp alfa (118), oplunofusp (123), pabina fusp alfa (120), retlirafusp alfa (124), rozibafusp alfa (120), simlukafusp alfa (121), sotiburafusp alfa (128), tagraxofusp (118), tebentafusp (118), tividenofusp alfa (128), valanafusp alfa (118), vensobafusp (128)

USAN

## -fylline

### N-methylated xanthine derivatives

B.1.0.0 (USAN: theophylline derivatives)



- (a) acefylline clofibrol (44), acefylline piperazine (14), albifylline (66), aminophylline (4), apaxifylline (71), arofylline (75), bamifylline (15), cipamfylline (71), denbufylline (55), derenofylline (102), 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), istradefylline (89), 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), rolofylline (98), spirofylline (58), stacofylline (73), tazifylline (52), theophylline ephedrine (14), tonapofylline (102), 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)

USAN

**gab (x) gabamimetic agents**

E.0.0.0

- (a) afizagabar (120), alogabat (125), atagabalin (102), crisugabalin (128), darigabat (123), fengabine (53), gabapentin (46), gabapentin enacarbil (94), gaboxadol (48) (used as analgesic), imagabalin (101), lesogaberan (100), mirogabalin (109), pivagabine (66), pregabalin (78), progabide (43), retigabine (76), tiagabine (63), tolgabide (53), vigabatrin (52)

- (b) gabexate (35) (proteolytic)

USAN

**gado- (x) diagnostic agents, gadolinium derivatives**

U.0.0.0 (USAN: gadolinium derivatives (principally for diagnostic use))

- (a) gadobenic acid (64), gadobutrol (66), gadocolic acid (85), gadodenterate (91), gadodiamide (63), gadofosveset (86), gadomelitol (85), gadopenamide (60), gadopentetic acid (50), gadopiclenol (118), gadoterdol (70), gadoteric acid (59), gadoversetamide (71), gadoxetic acid (71)

USAN

**-ganan antimicrobials, permeability increasing peptides**

- (a) iseganan (85), lefleuganan (127), omiganan (89), peceleganan (126), pexiganan (78), upleganan (128), voxvoganan (126)

**-gatan (x)    thrombin inhibitors, antithrombotic agents**

I.2.0.0    (USAN: thrombin inhibitors (argatroban type))

(a)    atecegatran (103), atecegatran metoxil (105), dabigatran (83), dabigatran etexilate (87), efegatran (71), flovagatran (97), inogatran (72), melagatran (74), napsagatran (72), sofigatran (95), ximelagatran (84)

(c)    argatroban (57)

**-gene    substances for gene therapies** (see also Annex 4 for the General policies)

A two-word name approach has been selected:

<b>Word 1</b>	<i>-gene</i>	<i>gene component</i>
	<i>-beglo-</i>	<i>β-globin</i>
	<i>-cima-</i>	cytosine deaminase
	<i>-covto-</i>	SARS CoV-2
	<i>-distro-</i>	muscular dystrophies
	<i>-ermin-</i>	growth factor
	<i>-kin-</i>	interleukin
	<i>-lim(o)</i>	immunomodulator
	<i>-lip-</i>	human lipoprotein lipase
	<i>-mul-</i>	multiple gene
	<i>-naco-</i>	blood coagulation factor IX
	<i>-pap(o) -</i>	human papilloma virus
	<i>-reti-</i>	retinal dystrophies
	<i>-stim-</i>	colony stimulating factor
	<i>-tima-</i>	thymidine kinase

<b>Word 2</b>	<i>-vec</i>	<i>vector component is a virus</i>
	<i>-repvec</i>	<i>replicating viral vector</i>
	<i>-adeno-</i>	adenovirus
	<i>-arna-</i>	arenavirus
	<i>-cana-</i>	canarypox virus
	<i>-foli-</i>	fowlpox virus
	<i>-herpa-</i>	herpes virus
	<i>-lenti-</i>	lentivirus
	<i>-morbilli-</i>	paramoxyviridae morbillivirus
	<i>-parvo-</i>	adeno-associated virus

	(parvoviridae dependovirus)
- <i>pol</i> -	poliovirus
- <i>retro</i> -	other retrovirus
- <i>sax</i> -	coxsackievirus
- <i>vaci</i> -	vaccinia virus
- <i>bac</i>	<i>in case vector is a bacteria</i>
- <i>eco</i> -	<i>Escherichia coli</i>
- <i>lacti</i> -	lactic acid bacteria
- <i>lis</i> -	<i>Listeria monocytogenes</i>
- <i>plasmid</i>	<i>in case the vector is a plasmid</i>

In the case of non-substances for gene therapy based on plasmid naked DNA, there is at present no need for a second word 2 infix in the name.

In case of antisense nucleotides, please refer to the already existing stem -*rsen*.

#### **Viral vectors:**

adlinacogene civaparvovec (123), aglatimagene besadenovec (113), aguracingene cadoparvovec (126), alferminogene tadenovec (95), alipogene tiparvovec (99), alnugranogene aldeparvovec (127), alvamemugene sulseparvovec (127), avalotcagene ontaparvovec (123), beremagene geperpavec (123), betibeglogene darolentivec (116), bevufenogene nofeparvovec (124), bidridistrogene xeboparvovec (125), bomtabegagene bavoparvovec (125), botaretigene sparoparvovec (126), cadalimogene ixalentivec (120), cevaretigene ritoparvovec (123), contusugene ladenovec (97), cotoretigene toliparvovec (123), cretostimogene grenadenorepvec (127), crosigalcogene omlixparvovec (127), delandistrogene moxeparvovec (124), delolimogene mupadenorepvec (118), devafidugene civaparvovec (123), dirloctocogene samoparvovec (121), domofenogene zalfaparvovec (125), eladocogene exuparvovec (119), elivaldogene tavalentivec (115), encoberminogene rezmadenovec (124), enekinragene inzadenovec (127), engabexagene cincesparvovec (126), entacingene turiparvovec (123), eretidigene velentivec (115), esepapogene zalarnarepvec (127), esonadogene imvoparvovec (128), etranacogene dezaparvovec (128), ezaladcigene resoparvovec (121), fidanacogene elaparvovec (118), fordadistrogene movaparvovec (123), giroctocogene fitelparvovec(123), golnerminogene pradenovec (101), ifezuntirigene inilparvovec (125), igrelimogene litadenorepvec (127), inetagugene geperpavec (124), inlezipigene civaparvovec (123), isaralgagene civaparvovec (124), ixoberogene seroparvovec (127), lanacogene vosiparvovec (117), laruparetigene zovaparvovec (126), lenadogene nolparvovec (114), lixmabegagene relduparvovec (126), mesmulogene ancovacivec (114), nadofaragene firadenovec (117), ninsipapogene sibarnarepvec (127), ofranergene obadenovec (115), olenasufligene relduparvovec (124), olvimulogene

nanivacirepvec (122), onasemnogene abeparvovec (117), opilrelagene atradenorepvec (126), pariglasgene brecaparvovec (123), patidistrogene bexoparvovec (125), peboctocogene camaparvovec (124), pexastimogene devacirepvec (108), ranuzifigene civaparvovec (123), raxorulimogene belzovacirepvec (127), rebisufligene etisparvovec (118), resamirigene bilparvovec (120), riferminogene pecaplasmid (100), rilimogene galvacirepvec (107), rilimogene glafolivec (113), rivunatpagene miziparvovec (127), rovoctocogene durparvovec (120), seglebegagene dasniparvovec (127), sesiclenegene cosaparvovec (124), sirelretigene suboparvovec (125), sitimagene ceradenovec (97), sonpiretigene isteparvovec (128), taberminogene vadenovec (100), talimogene laherparepvec (104), tefidsogene civaparvovec (123), tezemlimogene daxadenorepvec (127), tidagixagene derxeparvovec (127), timrepigene emparvovec (117), tipapkinogene sovacivec (102), valoctocogene roxaparvovec (116), vanglusagene ensiparvovec (124), verbrinacogene setparvovec (123), vocimagene amiretorepvec (107), volrubigene ralaparvovec (128), voretigene neparvovec (115), vusolimogene oderparepvec (125), zaftuclenegene piruparvovec (126), zildistrogne varoparvovec (123), zocaglusagene nuzaparvovec (127)

**Bacterial vectors:**

axalimogene filolisbac (112), daptatifagene navolactibac (122), emilimogene sigulactibac (126), labafenogene marselecobac (128), miralimogene ensolisbac (117), opolimogene capmilisbac (117), pemlimogene merolisbac (117)

**Plasmids:**

amolimogene bepiplasmid (98), beperminogene perplasmid (95), bizalimogene ralaplasmid (118) detalimogene voraplasmid (128), donaperminogene seltoplasmid (116), ralaplasmid (125), inodiftagene vixteplasmid (120), lalikinogene sifuplasmid (125), linvekinogene treniplasmid (127), mavilimogene ralaplasmid (118), ozarlimogene inteplasmid (124), quaratusugene ozeplasmid (124), reluscovtogene ralaplasmid (124), rocakinogene sifuplasmid (122), tavokinogene telseplasmid (118), tirvalimogene teraplasmid (117), velimogene aliplasmid (97), vixicovtogene oboplasmid (126)

USAN

**-gepant      calcitonin gene-related peptide receptor antagonists**

C.3.1.0

(a) atogepant (116), olcegepant (86), rimegepant (109), telcagepant (100), ubrogepant (109), zavegepant (124)

		BAN, USAN
<b>gest (x)</b>	<b>steroids, progestogens</b>	
Q.2.2.0	(USAN: -gest-: progestins)	
(a)	altrenogest (46), anagestone (16), cingestol (20), clogestone (21), clomegestone (20), demegestone (24), desogestrel (38), dextrnorgestrel (30), dienogest (49), <u>dydrogesterone</u> (12), edogestrone (22), etonogestrel (65), flugestone (16), gestaclone (23), gestadienol (22), gestodene (37), gestonorone caproate (16), gestrinone (39), <u>haloprogesterone</u> (11), <u>hydroxyprogesterone</u> (8), hydroxyprogesterone caproate (8), levonorgestrel (33) (previously dextrnorgestrel), medrogestone (15), <u>medroxyprogesterone</u> (10), megestrol (13), melengestrol (13), metogest (33), nomegestrol (49), norelgestromin (83), <u>norgesterone</u> (14), norgestimate (35), norgestomet (32), norgestrel (17), norgestrienone (18), oxogestone (19), pentagestrone (14), <u>progesterone</u> (4), proligestone (28), promegestone (38), quingestanol (15), quingestrone (13), <u>segesterone</u> (89), 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), ethynerone (17), etynodiol (13), hydromadinone (12), lynestrenol (13), metynodiol (27), norethisterone (6), noretynodrel (13), norvinisterone (10)	
	clometerone (15) (antiestrogen), dimepregnen (24) (antiestrogen)	
<b>-gestr-</b>	<b>see estr</b>	
		USAN
<b>-giline</b>	<b>MAO-inhibitors type B</b>	
C.3.1.0		
(a)	adarigiline (117), clorgiline (23), mofegiline (69), pargyline (13), rasagiline (70), selegiline (39), sembragiline (111)	
		USAN
<b>-gillin</b>	<b>antibiotics produced by <i>Aspergillus</i> strains</b>	
S.6.0.0		
(a)	fumagillin (1), mitogillin (17)	
(c)	mitosper (24), nifungin (24)	

**gli (x) antihyperglycaemics**

(previously gly-)

M.5.2./3.0 (BAN: sulphonamide hypoglycaemics)  
(USAN: gli-: antihyperglycaemics)

- (a) **1. sulfonamide derivatives:** gliamilide (33), glibenclamide (18), glibornuride (22), glibutimine (31), glicaramide (28), glicetanile (37), gliclazide (25), (deleted: glidanile (23)), glicondamide (44), glidazamide (24), gliflumide (33), glimepiride (66), glipalamide (62), glipizide (27), gliquidone (28), glisamuride (45), glisentide (58) (previously glipentide (27)), glisindamide (43), glisolamide (43), glisoxepide (24), glybuthiazol (8), glybuzole (15), glyclopyramide (17), glycyclamide (12), glyhexamide (15), glymidine sodium (15), glyoctamide (14), glyparamide (USAN only), glypinamide (13), glyprothiazol (8), glysobuzole (12)
- 2. other than sulfonamide derivatives:** adomeglivant (115), camiglibose (67), dorzagliatin (116), deriglidole (66), emiglitate (55), fasiglifam (107), firuglipel (116), imeglimin (98), ingliforib (85), isaglidole (61), limiglidole (100), linoglriride (48), managlinat dialanetil (96), meglitinide (34), midaglizole (57), miglitol (55), mitiglinide (78), naglivan (65), nateglinide (77), piragliatin (97), pirogliride (40), repaglinide (65), teglicar (91), tibeglisene (64), voglibose (65)

**3. peptide:** seglitide (57)

- (b) cromoglicate lisetil (72), cromoglicic acid (18), ioglicic acid (33), ioxaglic acid (37), sulglicotide (29) (treatment of peptic ulcers), tropigline (08)
- (c) acetoexamide (12), butadiazamide (10), carbutamide (36), chlorpropamide (8), heptolamide (12), metaexamide (10), palmoxiric acid (48), thioexamide (12), tolazamide (12), tolbutamide (6), tolpentamide (12), tolypyramide (13)

**gly-** *prior to revision of the General Principles*

- (a) glybuthiazol (08), glybuzole (15), glyclopyramide (17), glycyclamide (13), glyhexamide (15), glymidine sodium (15), glyoctamide (14), glypinamide (13), glyprothiazol (08), glysobuzole (12)
- (c) glycerol (4), glycobarsol (1), glycopyrronium bromide (12)

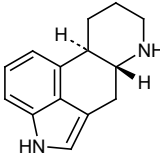
**-gliflozin sodium glucose co-transporter inhibitors, phlorizin derivatives** USAN  
(USAN: phlorozin derivatives, phenolic glycosides)

atigliflozin (100), bexagliflozin (113), canagliflozin (102), dapagliflozin (97), empagliflozin (104), enavogliflozin (121), ertugliflozin (107), ipragliflozin

(103), licogliflozin (118), luseogliflozin (104), mizagliflozin (114), remogliflozin etabonate (98), sergliflozin etabonate (98), sotagliflozin (110), tofogliflozin (103), velagliflozin (115)

<b>-gliptin</b> M.5.2.0	<b>dipeptidyl aminopeptidase–IV inhibitors</b>	USAN
(a)	alogliptin (96), anagliptin (103), bisegliptin (103), carmegliptin (98), cofroglipitin (127), denagliptin (94), dutogliptin (100), evogliptin (107), garvagliptin (117), gemigliptin (103), gosogliptin (101), linagliptin (99), melogliptin (99), omarigliptin (107), prusogliptin (124), saxagliptin (92), sitagliptin (94), teneligliptin (99), trelagliptin (106), vildagliptin (90)	
<b>-glitazar</b> M.5.2.0	<b>dual peroxisome proliferator activated receptors-<math>\alpha</math> and <math>\gamma</math> (PPAR- <math>\alpha</math>,<math>\gamma</math>) agonists</b>	USAN
(a)	(USAN: PPAR agonists (not thiazolidene derivatives)) aleglitazar (95), carfloglitazar (123), cevoglitazar (94), farglitazar (84), imiglitazar (91), indeglitazar (100), muroglitazar (90), naveglitazar (92), oxeglitazar (88), peliglitazar (92), pemaglitazar (92), ragaglitazar (85), reglitazar (87), saroglitazar (108), sipoglitazar (93), sodelglitazar (95), tesaglitazar (85)	
<b>-glitazone</b> M.5.2.0	<b>peroxisome proliferator activating receptor-<math>\gamma</math> (PPAR-<math>\gamma</math>) agonists, thiazolidinedione derivatives</b>	USAN
(a)	(USAN: PPST agonists (thiazolidene derivatives)) azemiglitazone (122), ciglitazone (50), balaglitazone (84), darglitazone (69), edaglitazone (91), englitazone (64), leriglitazone (119), lobeglitazone (95), netoglitazone (85), pioglitazone (60), rivoglitazone (87), rosiglitazone (78), troglitazone (69)	
(c)	efatutazone (102)	
<b>-gliflozin</b>	<b>see gli</b>	
<b>-gliptin</b>	<b>see gli</b>	
<b>-glitazar</b>	<b>see gli</b>	
<b>-glitazone</b>	<b>see gli</b>	



		USAN
<b>-glumide</b>	<b>cholecystokinine antagonists, antiulcer, anxiolytic agents</b>	
J.0.0.0/C.1.0.0	amiglumide (85), dexloxiglumide (65), itriglumide (82), lorglumide (56), loxiglumide (57), proglumide (16), spiroglumide (70), tomoglumide (56)	
		USAN
<b>-glurant</b>	<b>metabotropic glutamate receptor antagonists / negative allosteric modulators</b>	
	basimglurant (109), decoglurant (109), dipraglurant (102), mavoglurant (104), raseglurant (102), remeglurant (109)	
<b>-glutide</b>	<b>see tide</b>	
<b>-golide</b>	<b>dopamine receptor agonists, ergoline derivatives</b>	
E.1.1.0		
(a)	adrogolide (82), naxagolide (60), pergolide (41), quinagolide (62), voxergolide (61)	
(c)	rotigotine (83)	
		USAN
<b>-golix</b>	<b>gonadotropin releasing hormone (GnRH) antagonists</b>	
(a)	elagolix (99), linzagolix (118), merigolix (128), opigolix (118), relugolix (107), sufugolix (89)	
<b>-gosivir</b>	<b>see vir</b>	
<b>-gramostim</b>	<b>see -stim</b>	
<b>-grastim</b>	<b>see -stim</b>	

USAN

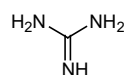
**-grel-  
-grel****platelet aggregation inhibitors**I.2.1.0 (USAN: -grel- or -grel: platelet aggregation inhibitors, primarily platelet P2Y<sub>12</sub> receptor antagonists)

- (a) anagrelide (42), camonagrel (61), cangrelor (97), clopidogrel (57), dazmegrel (51), elinogrel (101), furegrelate (53), isbogrel (59), itazigrel (56), midazogrel (53), nafagrel (64), nicogrelate (48), oxagrelate (47), ozagrel (55), pamigogrel (70), parogrelil (94), pirmagrel (53), prasugrel (91), rafigrelide (106), regrelor (97), ridogrel (59), rolafagrel (65), samixogrel (72), sarpogrelate (63), satigrel (67), selatogrel (119), sunagrel (52), temanogrel (103), terbogrel (75), ticagrelor (95), trifenagrel (53)

USAN

**guan-  
antihypertensives, guanidine derivatives**

H.3.0.0



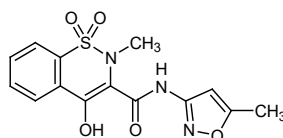
- (a) guanabenz (26), guanaciline (16), guanadrel (20), guanazodine (27), guancidine (18), guanclofine (36), guanethidine (11), guanfacine (35), guanisoquine (15), guanochlor (15), guanoctine (16), guanoxan (15), guanoxabenz (31), guanoxyfen (16), guabenzan (32)
- (c) guabenzan (32)

**-ibine** **see -ribine**

USAN

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

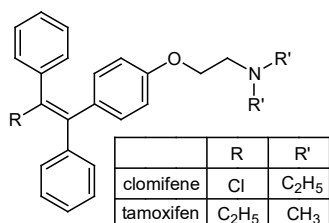
A.4.2.0 (USAN: anti-inflammatory agents (isoxicam type))



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

**-ifene      antiestrogens or estrogen receptor modulators, clomifene and tamoxifen derivatives**

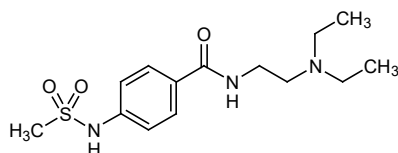
(USAN: -ifen(e): antiestrogens of the clomifene and tamoxifen groups)

(Q.2.1.0  
L.6.0.0)

- (a) acolbifene (86), clomifenoxide (54), tesmilifene (81)  
-oxifene: afimoxifene (95), arzoxifene (80), bazedoxifene (86), droloxifene (53), idoxifene (68), lasofoxifene (81), levormeloxifene (73), miproxifene (74), ormeloxifene (69), pipendoxifene (84), raloxifene (54), tamoxifen (28), trioxifene (41), zindoxifene (54)  
-mifene: clomifene (12), enclomifene (33), fispemifene (89), nitromifene (33), ospemifene (85), panomifene (58), sivifene (99), toremifene (53), zuclomifene (33)
- (b) dextropropoxyphene (7), levopropoxyphene (7), suloxifen (30) (bronchodilator)
- (c) nafoxidine (16)

**-igetide      see -tide****-ilide      class III antiarrhythmics, sematilide derivatives**

(USAN: class III antiarrhythmic agents)



- (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)

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USAN

**imex (d)      immunostimulants**

S.7.0.0

- (a)      azimexon (40), forfenimex (55), imexon (37), roquinimex (53), ubenimex (56), veledimex (110)

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USAN

**-imibe      antihyperlipidaemics, acyl CoA: cholesterol acyltransferase (ACAT) inhibitors,**

M.3.0.0

- (a)      avasimibe (80), canosimibe (100), eflucimibe (84), eldacimibe (76), ezetimibe (83), lecimibide (70), nevanimibe (119), octimibate (52), pactimibe (89)

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USAN

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

S.7.0.0

(USAN: immunomodulators)

- (a)      alintegimod (128), amiselimod (112), apilimod (95), atiprimod (75), bevifimod (119), blisibimod (107), cenerimod (118), ceralifimod (109), cridanimod (83), cupabimod (115), defoslimod (79), efizonerimod alfa (117), efitlagimod alfa (116), efgartigimod alfa (116), efprezimod alfa (125), efzofitimod (125), epetirimod (97), esonarimod (79), etrasimod (116), fingolimod (91), forigerimod (104), golotimod (97), glaspimod (74), icanbelimod (127), iguratimod (86), imiquimod (66), indoximod (111), ivarimod (60), laquinimod (85), litenimod (96), mocravimod (116), mosedipimod (118), navoximod (115), obefazimod (125), orilotimod (111), ozanimod (112), paquinimod (94), pegtarazimod (128), pidotimod (63), pixatimod (117), ponesimod (103), rabeximod (97), reltecimod (115), resiquimod (82), resiquimod pegol (122), siponimod (106), sotirimod (94), susalimod (73), tamuzimod (128), tasquinimod (93), tiprotimod (57), udifitimod (128), vibozilimod (125), vonifimod (128)

**-mapimod      mitogen-activated protein (MAP) kinase inhibitors**

USAN

- (a)      acumapimod (111), adezmapimod (124), balamapimod (96), bentamapimod (98), dilmapimod (102), doramapimod (88), emprumapimod (126), losmapimod (101), neflamapimod (116), pamapimod (96), talmapimod (99), semapimod (89)

**-tolimod**      **toll-like receptor (TLR) agonists**      USAN

(a)      agatolimod (98), cavrotolimod (124), cobitolimod (113), entolimod (108), guretolimod (124), lapretolimod (120), lefitolimod (113), motolimod (112), polvitolimod (126), rintatolimod (102), ruzotolimod (127), selgantolimod (120), telratolimod (118), tilstolimod (117), vesatolimod (113), vidutolimod (123), xempitrolimod (127)

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

S.7.0.0      (USAN: immunosuppressives)

(a)      abetimus (81), anisperimus (82), gusperimus (68), laflunimus (70), manitimus (93), napirimus (60), tresperimus (75), vidofludimus (103)

**-rolimus**      **immunosuppressants, rapamycin derivatives**      USAN

(a)      everolimus (82), olcorolimus (105), pimecrolimus (81), ridaforolimus (108), sirolimus (69), tacrolimus (66), temsirolimus (94), umirolimus (103), zotarolimus (94)

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

(a)      approximately 17.5% INN ending in *-ine* in Lists 1-119 of proposed INNs

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**-inurad**      **urate transporter inhibitors**

(a)      dotinurad (116), epaminurad (118), lesinurad (105), puliginurad (127), ruzinurad (125), verinurad (111), xininurad (127)

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**-inostat**      **see stat**

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

BAN, USAN

U.1.1.0

(a)      iobenzamic acid (14), iobitridol (68), iobutoic acid (20), iocarmic acid (22), iocetamic acid (18), iodamide (15), iodecimol (51), iodetryl (1), iodixanol (53), iodophthalein sodium (1), iodoxamic acid (26), iofendylate (12),

ioforminol (103), 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), ioproceamic acid (39), iopromide (44), iopronic acid (28), iopydol (14), iopydone (14), iosarcol (54), iocefamic acid (14), ioseric acid (33), iosimenol (88), 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), diodone (1), ethyl cartrizoate (12), methiodal sodium (1), metrizamide (26), pheniodol sodium (1), phenobutiodil (6), propyl docetrizoate (10), propyliodone (1), sodium acetrizoate (4), sodium amidotrizoate (4), sodium diprotrizoate (6), sodium metrizoate (13), sodium tyropanoate (12)

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**io(d)-/-io-      radiopharmaceuticals, iodine-contained**

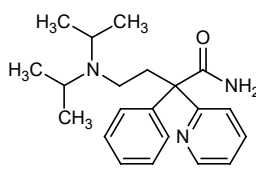
- (a) ethiodized oil (<sup>131</sup>I) (24), iobenguane (<sup>131</sup>I) (57), iocanlidic acid (<sup>123</sup>I) (77), iodinated (<sup>125</sup>I) human serum albumin (24), iodinated (<sup>131</sup>I) human serum albumin (24), iodine (<sup>131</sup>I) apamistamab (119), iodine (<sup>131</sup>I) derlotuximab biotin (113), iodine (<sup>124</sup>I) girentuximab (101), iodocetylic acid (<sup>123</sup>I) (47), iodocholesterol (<sup>131</sup>I) (39), iodofiltic acid (<sup>123</sup>I) (95), iofolastat (<sup>123</sup>I) (105), iofetamine (<sup>123</sup>I) (51), ioflubenzamide (<sup>131</sup>I) (103), ioflupane (<sup>123</sup>I) (75), iolopride (<sup>123</sup>I) (73), iomazenil (<sup>123</sup>I) (66), iometin (<sup>125</sup>I) (24), iometin (<sup>131</sup>I) (24), iometopane (<sup>123</sup>I) (76), 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

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**-irine      cytotoxic pyrrolbenzodiazepine dimers and analogues**

- a) camidanlumab tesirine (117), loncastuximab tesirine (117), mipasetamab uzoptirine (123), pivekimab sunirine (125), rolinsatamab talirine (119), rovalpituzumab tesirine (114), serclutamab talirine (120), tamrintamab pamozirine (120), vadastuximab talirine (113)

		USAN
<b>-irudin</b>	<b>hirudin derivatives</b>	
I.2.1.0	(USAN: anticoagulants (hirudin type))  bivalirudin (72), desirudin (70), lepirudin (73), pegmusirudin (77)	
		USAN
<b>-isant</b>	<b>histamine H<sub>3</sub> receptor antagonists and inverse agonists</b>	
	bavisant (103), ciplalisant (85), enerisant (113), irdabisant (105), pitolisant (100)	
		USAN
<b>-isomide</b>	<b>class I antiarrhythmics, disopyramide derivatives</b>	
H.2.0.0	(USAN: -isomide: antiarrhythmics (disopyramide derivatives))  	
(a)	actisomide (60), bidisomide (63), pentisomide (59)	
(c)	disopyramide (12)	
		BAN, USAN
<b>-ium</b>	<b>quaternary ammonium compounds</b>	
	(USAN: -ium or -onium: quaternary ammonium derivatives)	
E.3.0.0	<b>neuromuscular blocking agents with a flexible structure</b>	
(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), sofpironium bromide (115), 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 also ammonium compounds)

- (a) -curonium: alcuronium chloride (17), candocuronium iodide (70), dacuronium bromide (21), pancuronium bromide (19), pipecuronium bromide (69), rapacuronium bromide (78), rocuronium bromide (66), stercuronium iodide (21), vecuronium bromide (46)

-curium (d) (curare-like substances): atracurium besilate (42), cisatracurium besilate (73), doxacurium chloride (58), gantacurium chloride (91), mivacurium chloride (58), truxicurium iodide (22), truxipicarium iodide (22)

-others: dimethyltubocurarinium chloride (1), fazadinium bromide (32), hexafluronium bromide (12), laudexium metilsulfate (4), pentacynium chloride (6), phenactropinium chloride (8), piprocurarium iodide (11), thiazinamium metilsulfate (37), trimethidinium methosulfate (8)

- (c) tubocurarine chloride (1)

### E.1.0.0 **cholinergic agents**

- (a) aclatonium napadisilate (44), ambenonium chloride (6), benzpyrinium 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 (110), choline salicylate (15) (analgesic), choline theophyllinate (8) (smooth muscle relaxant), methacholine chloride (110), nitricholine perchlorate (110) (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) aclidinium bromide (100), 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), emepromium 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), methylbenactyziium 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), umeclidinium bromide (106), xenytrpium bromide (15)

- (c) atropine methonitrate (4), buzepide metiodide (14), chlorisondamine chloride (6), diphemanil metilsulfate (4), homatropine methylbromide (1), isopropamide 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), tibezonium iodide (32), tiodonium chloride (36), toliodium chloride (36), toloconium metilsulfate (17), tonzonium bromide (14), triclobisonium chloride (10)
- (c) domiphen bromide (23)

## other agents

alagebrium chloride (91), albitiazolium bromide (101), 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), enisamium iodide (101), famiraprinium chloride (58), feniodium chloride (23), gallium (<sup>67</sup>Ga) citrate (33), homidium bromide (36), isavuconazonium chloride (96) 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 (<sup>153</sup>Sm) lexidronam (74), sepantronium bromide (105), 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) (anthelmintic), colfosceril palmitate (64) (pulmonary surfactant), dithiazanine iodide (8) (anthelmintic), hexadimethrine bromide (8) (heparin antagonist)

USAN

### **-ixafor chemokine CXCR4 antagonists**

- (a) balixafortide (112), burixafor (104), gallium (68Ga) boclatixafortide (126), mavorixafor (118), motixafortide (120), plerixafor (93), yttrium (90Y) anditixafortide (126)

USAN

### **-ixibat ileal bile acid transporter (IBAT) inhibitors, bile acid reabsorption inhibitors**

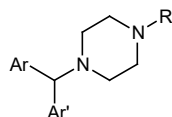
(USAN: potassium channel antagonists)

- (a) barixibat (88), elobixibat (104), linerixibat (118), maralixibat chloride (113), odevixibat (119), ritivixibat (128), volixibat (113)

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**-izine  
(-yzine)**

**diphenylmethyl piperazine derivatives**



- (a) antihistaminics: G.2.0.0: buclizine (4), cetirizine (51), chlorcyclizine (1), clocinizine (15), cyclizine (1), efletirizine (71), elbanizine (60), flotrenizine (48), levocetirizine (78), lomerizine (68), 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**

- (a) 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)

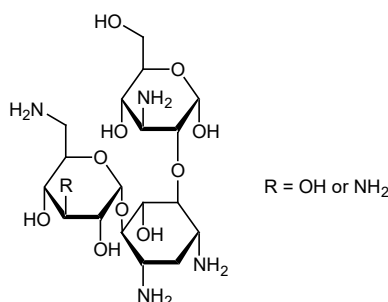
indoloquinolines (anticholinergic): metoquizine (17), toquizine (17)

- (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 (4I), 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)

USAN

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

(USAN: potassium channel antagonists)

H.2.0.0

(a)      adekalant (83), almokalant (64), bafrekalant (126), clamikalant (81), inakalant (95), nifekalant (75), pinokalant (82), terikalant (66), vernakalant (96)

BAN, USAN

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

(USAN: potassium channel agonists)

H.3.0.0

(a)      aprikalim (64), bimakalim (64), cromakalim (58), emakalim (66),

foslevcromakalim (128), levcromakalim (66), mazokalim (75), rilmakalim (65), sarakalim (81)

USAN

-kef-

**enkephalin , endorphin and dynorphin opioid  $\delta$ ,  $\mu$  and  $\kappa$  receptor agonists**

(USAN: enkephalin agonists (various indications))

(a)

amdakefalin (122), casokefamide (65), difelikefalin (113), frakefamide (81), metenkefalin (97), metkefamide (44)

USAN

-kin

**interleukin type substances**

S.7.0.0

(a)

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

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

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

IL-2 : *-leukin* interleukin-2 analogues and derivatives: adargileukin alfa (89), aldesleukin (63), bempegaldesleukin (119), celmoleukin (65), cergutuzumab amunaleukin (113), denileukin diftitox (122), efavaleukin alfa (118), melredableukin alfa (126), pegaldesleukin (74), pegenzileukin (126), rezpegaldesleukin (127), teceleukin (54), tucotuzumab celmoleukin (95)

IL-4 : *-trakin* interleukin-4 analogues and derivatives: binetrakin (82)

IL-6 : *-exakin* interleukin-6 analogues and derivatives: atexakin alfa (72)

IL-7 : *-eptakin* interleukin-7 analogues and derivatives: efineptakin alfa (118)

IL-8 : *-octakin* interleukin-8 analogues and derivatives: canoctakin (110), emoctakin (74), pimroctakin (127)

IL-10 : *-decakin* interleukin-10 analogues and derivatives: ilodecakin (81), pegilodecakin (117)

IL-11 : *-elvekin* interleukin-11 analogues and derivatives: oprelvekin (76)

IL-12 : *-dodekin* interleukin-12 analogues and derivatives: edodekin alfa (79)

IL-13:	- <i>tredekin</i>	<u>interleukin-13 analogues and derivatives:</u> cintredekin besudotox (92)
IL-15 :	- <i>pendekin</i>	<u>IL-15 analogues and derivatives :</u> avipendekin pegol (123), fbalropendekin alfa (128), nogapendekin alfa (121)
IL-18 :	- <i>octadekin</i>	<u>interleukin-18 human analogues and derivatives:</u> iboctadekin (92) tadekinig alfa (90) (fraction of IL-18 human)
IL-21	- <i>enicokin</i>	<u>interleukin -21 human analogues and derivatives:</u> denenicokin (99)
IL-22	- <i>docokin</i>	<u>interleukin-22 analogues and derivatives :</u> eflepedocokin alfa (124)
(c) IL-3:	- <i>plestim</i> :	<u>interleukin-3 analogues and derivatives:</u> muplestim (72), daniplestim (76)

USAN

**-kinra            interleukin receptor antagonists and interleukin antagonists**

S.7.0.0

IL-1	- <i>nakinra</i>	<u>interleukin-1 receptor antagonists:</u> anakinra (72), isunakinra (113)
IL-4	- <i>trakinra</i>	<u>interleukin-4 receptor antagonists:</u> pitrakinra (84)
IL-17	<i>epdekinra</i>	<u>interleukin-17 receptor antagonists:</u> erepdekinra (128)

USAN

**-kiren            renin inhibitors**

H.3.0.0

(a)	aliskiren (84), ciprokiren (69), ditekiren (84), enalkiren (84), imarikiren (116), remikiren (66), terlakiren (66), zankiren (84)
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USAN

**-laner            antagonists of GABA (gamma-aminobutyric acid) regulated chloride channels, antiparasitic agents**

S.1.0.0

	(USAN: antiparasitics (isoxazoline compounds))
(a)	afoxolaner (108), esafoxolaner (120), fluralaner (107), lotilaner (112), mivorilaner (125), modoflaner (123), sarolaner (111), tigolaner (117), umifoxolaner (124)

**-lefacept        see -cept**

**-leukin            see -kin**

		USAN
<b>-leuton</b>	<b>5-lipo-oxygenase inhibitors, anti-inflammatory</b>	
(a)	atreleuton (78), daleuton (123), diroleuton (118), epeleuton (118), fenleuton (72), setileuton (101), zileuton (63)	
		USAN
<b>-lisib</b>	<b>phosphatidylinositol 3-kinase inhibitors, antineoplastics</b>	
L.0.0.0	(USAN: phosphatidylinositol 3-kinase inhibitors)	
(a)	acalisib (109), amdizalisib (125), apitolisib (108), alpelisib (120), bimiralisib (116), buparlisib (106), copanlisib (108), dactolisib (107), dezapelisib (116), eganelisib (124), idelalisib (107), duvelisib (110), gedatolisib (111), gilmelisib (126), inavolisib (122), izorlisib (126), leniolisib (116), linperlisib (121), nemiralisib (116), omipalisib (111), panulisib (109), parsaclisib (117), paxalisib (121), pictilisib (107), pilaralisib (108), recilisib (108), risovalisib (128), samotolisib (121), seletalisib (112), serabelisib (115), tenalisib (114), umbralisib (118), vulolisib (127), zandelisib (122)	
<b>-listat</b>	<b>see -stat</b>	
		USAN
<b>-lubant</b>	<b>leukotriene B<sub>4</sub> receptor antagonists</b>	
	(USAN: leukotriene receptor antagonists (treatment of inflammatory skin disorders))	
U.3.0.0		
(a)	amelubant (85), moxilubant (78), ticolubant (76)	
<b>-lukast</b>	<b>leukotriene receptor antagonists, see -ast</b>	
		USAN
<b>-lutamide</b>	<b>non-steroid antiandrogens</b>	
Q.2.3.1		
(a)	apalutamide (113), bavdegalutamide (125), bicalutamide (70), darolutamide (115), deutenzalutamide (126), enzalutamide (107), faznolutamide (128), flutamide (33), gumelutamide (128), nilutamide (56), pruxelutamide (125), rezvilutamide (123), topilutamide (91)	
(b)	aceglutamide (15)	
<b>-lutril</b>	<b>see -tril</b>	

**-mab** **monoclonal antibodies** (see also Annex 3)  
*This stem is no longer used (see -bart-, -ment-, -mig-, -tug)*

With the adoption of the **third naming scheme** (c.f. Annex 3-b) for monoclonal antibodies in May 2017, the substem indicating the species on which the immunoglobulin sequence is based was no longer included. Each INN derived according the **third naming scheme** for a mAb includes only the stem –mab, with a prefix indicating its target.

**-ami-** for **serum amyloid protein (SAP)/amyloidosis** (previously as *-am(i)-*) (pre-substem):

<u>Third naming scheme:</u>	birtamimab (119), anselamimab (126)
<u>humanized: -zumab</u>	dezamizumab (115)

**-ba-** for **bacterial** (previously as *-b(a)-, -ba(c)-*):

<u>Third naming scheme:</u>	gremubamab (121), omodenbamab (123)
<u>mouse: -omab</u>	edobacomab (80)
<u>chimeric: -ximab</u>	pagibaximab (93)
<u>humanized: -zumab</u>	rivabazumab (114), rivabazumab pegol (113), tefibazumab (92)
<u>human: -umab</u>	nebacumab (66), panobacumab (100), raxibacumab (92)

**-ci-** for **cardiovascular** (previously as *-c(i)-, -ci(r)-*):

<u>Third naming scheme:</u>	befovacimab (121), bentracimab (123), dilpacimab (119121), ebronucimab (123), enibarcimab (123), faricimab (118), frovocimab (119), garadacimab (120), glenzocimab (120), golocdacimab (126), ivonescimab (125), marstacimab (119), nimacimab (120), olinvacimab (119), ongericimab (122), osocimab (119), pulocimab (125), recaticimab (123), tafolecimab (121), tarcocimab (125), tarcocimab tedromer (126), vulinacimab (122), zanseximab (124)
<u>mouse: -omab</u>	biciromab (66), imciromab (66)
<u>chimeric: -ximab</u>	abciximab (80), volociximab (93)
<u>chimeric-humanized/human: -xizumab</u>	navicixizumab (114)
<u>humanized: -zumab</u>	alacizumab pegol (98), bevacizumab (86), bevacizumab beta (114), bevacizumab gamma (127), bococizumab (110), brolocizumab (112), caplacizumab (106), concizumab (108), demcizumab (107), emicizumab (113), etaracizumab (99), idarucizumab (115), lodelcizumab (108), ralpancizumab (110), tadocizumab (94), vanucizumab (113)



<u>human</u> : -umab	alirocumab (107), ascrinvacumab (113), enoticumab (107), evinacumab (112), evolocumab (108), icrucumab (104), inclacumab (106), nesvacumab (108), orticumab (107), ramucirumab (110), rinucumab (113), varisacumab (116), vesencumab (104)
<b>-de-</b> for endocrine, metabolism	
<u>Third naming scheme</u> :	fazpilodemab (126), mibavademab (124), volagidemab (120)
<b>-fung-</b> for <b>fungal</b> (previously as -f(u)-):	
<u>human</u> : -umab	efungumab (95)
<b>-gro-</b> for <b>skeletal muscle mass related growth factors and receptors</b> :	
<u>humanized</u> : -zumab	domagrozumab (114), landogrozumab (113)
<u>human</u> : -umab	bimagrumab (111), trevogrumab (113)
<b>-ki-</b> for <b>interleukin</b> (previously as -k(i)-, -ki(n)-):	
<u>Third naming scheme</u> :	abrezekimab (118), avizakimab (121), bermekimab (120), camoteskimab (126), cendakimab (120), depemokimab (123), ebdarokimab (124), eblasakimab (125), etokimab (120), gumokimab (125), itepekimab (122), lusvertikimab (124), manfidokimab (125), netakimab (118), ordesekimab (124), pivekimab (125), pivekimab sunirine (125), romilkimab (118), sonelokimab (121), torudokimab (124), tozorakimab (124), xeligekimab (125), ziltivekimab (121)
<u>humanized</u> : -zumab	anrukinzumab (98), bimekizumab (110), clazakizumab (107), enokizumab (104), gevokizumab (104), ixekizumab (105), lebrikizumab (101), lutikizumab (115), mirikizumab (117), olokizumab (103), perakizumab (108), risankizumab (113), tildrakizumab (108), vunakizumab (115)
<u>human</u> : -umab	afasevikumab (113), brazikumab (115), briakinumab (101), canakinumab (97), dectrekumab (112), fezakinumab (101), fletikumab (110), guselkumab (109), secukinumab (102), sirukumab (105), tralokinumab (102), ustekinumab (99)

-li- for **immunomodulating** (previously as *-(i)-, -li(m)-*):

Third naming scheme:

acasunlimab (124), acrixolimab (126), adabrelimab (122), alomfilimab (124),  
alsevalimab (122), amlitelimab (124), anumigilimab (125), astegolimab (121),  
atibuclimab (124), avdoralimab (121), axatilimab (121), balstilimab (122),  
bapotulimab (123), barzolvolumab (125), batoclimab (121), bavunalimab (125),  
bersanlimab (118), betifisolimab (126), bexmarilimab (122), boserolimab (127),  
botensilimab (124), briquilimab (126), budigalimab (119), burfiralimab (126),  
cadonilimab (124), cemiplimab (119), cetrelimab (118),  
cifurtilimab (126), cobolimab (120), cosibelimab (121), crefmirlimab (126),  
crovalimab (119), cudarolimab (122), dafsolimab (123), dafsolimab setaritox  
(123), daxdilimab (123), divozilimab (123), domvanalimab (124), dostarlimab  
(119), dresbuxelimab (125), ecleralimab (125), encelimab (121), envafolimab  
(120), erfonrilimab (124), etigilimab (118), ezabenlimab (122), favezelimab (123),  
fianlimab (121), finotolimab (124), fladilimab (122), frexalimab (126), garivulimab  
(123), gefurulimab (126), geptanolimab (123), girolalimab (122), gratalimab (121),  
grisonilimab setaritox (123), ieramilimab (120), imaprelimab (118), imsidolimab  
(124), iparomlimab (125), iscalimab (118), ivuxolimab (121), izuralimab (123),  
lemzoparlimab (124), lesabelimab (126), letaplimab (123), leronlimab (118),  
levilimab (120), licaminlimab (124), ligufalimab (125), lirentelimab (124), litifilimab  
(126), livmoniplimab (125), lodapolimab (121), lorigerlimab (125), manelimab  
(121), melrilimab (123), magrolimab (120), miptenalimab (122), mitazalimab  
(119), mupadolimab (125), nadunolimab (122), narsoplimab (124), nipocalimab  
(122), nofazinlimab (125), nurulimab (121), obexelimab (119), ociperlimab  
(123), ontamalimab (119), onvatilimab (118), opucolimab (122), orilanolimab  
(119), otilimab (119), pacmilimab (121), penpulimab (123), peresolimab (126),  
pimivalimab (123), plonmarlimab (124), pozelimab (120), prolgolimab (119),  
pucotenlimab (124), quavonlimab (122), quetmolimab (120), quisovalimab  
(125), ragifilimab (122), ravagalimab (118), relatlimab (119), reosalimab (126)  
retifanlimab (121), revdofilimab (122), rocatinlimab (125), rosnilimab (126),  
rulonilimab (125), sabatolimab (122), sasanlimab (121), semzuvolimab (126),  
serplulimab (121), sibeprenlimab (124), simridarlimab (125), sintilimab (119),  
socazolimab (125), sotigalimab (123), spesolimab (119), suciraslimab (125),  
sudubrilimab (124), sugemalimab (122), surzebiclimab (124), sutimlimab  
(118), tagitanlimab (125), tamgibliimab (125), tavolimab (118), tecaginlimab  
(125), telazorlimab (122), temelimab (119), tebotelimab (122), tesnatilimab  
(122), tificemalimab (124) (replaces icatolimab), tinurilimab (121), tomaralimab  
(120), toripalimab (119), trinbelimab (125), tuvonralimab (125), uliledlimab  
(124), urabrelimab (122), vibostolimab (121), vilobelimab (122), vixarelimab  
(123), vopratelimab (118), vudalimab (123), zalifrelimab (122), zampilimab (119),  
zeluvalimab (123), zimberelimab (123), zirconium (<sup>89</sup>Zr) crefmirlimab berdoxam  
(127)

<u>mouse</u> : - <i>omab</i>	afelimomab (80), begelomab (111), dorlimomab aritox (66), elsilimomab (89), enlimomab (80), enlimomab pegol (77), faralimomab (81), gavilimomab (84), inolimomab (80), maslimomab (66), nerelimomab (81), odulimomab (81), telimomab aritox (66), vepalimomab (80), zolimomab aritox (80)
<u>chimeric</u> : - <i>ximab</i>	andecaliximab (115), basiliximab (81), basiliximab sarotalocan (128), clenoliximab (77), galiximab (89), infliximab (77), keliximab (81), lumiliximab (90), priliximab (80), teneliximab (87), vapaliximab (87)
<u>chimeric-humanized/human</u> : - <i>xizumab</i>	otelixizumab (99), rozanolixizumab (115)
<u>humanized</u> : - <i>zumab</i>	apolizumab (87), aselizumab (88), atezolizumab (112), benralizumab (102), cabiralizumab(114), camrelizumab (115), cedelizumab (81), certolizumab pegol (97), crizanlizumab (115), daclizumab (78), daclizumab beta (114), dapirolizumab pegol (110), eculizumab (87), efalizumab (85), erlizumab (84), etrolizumab (104), fontolizumab (87), ibalizumab (97), inebilizumab (113), itolizumab (103), lampalizumab (107), letolizumab (116), ligelizumab (107), lulizumab pegol (111), mepolizumab (81), mogamulizumab (104), monalizumab (113), natalizumab (79), nemolizumab (112), ocrelizumab (95), olendalizumab (116), omalizumab (84), ozoralizumab (105), pascolizumab (87), pateclizumab (105), pembrolizumab (110), pexelizumab (86), pidilizumab (108), plozalizumab (113), quilizumab (106), ravulizumab (117), reslizumab (85), rontalizumab (101), rovelizumab (81), ruplizumab (83), samalizumab (105), satralizumab (116), siplizumab (87), spartalizumab (117), talizumab (89), teplizumab (97), tibulizumab (117), tislelizumab (117), tocilizumab (90), toralizumab (87), tregalizumab (104), vatelizumab (105), vedolizumab (100), visilizumab (84), vobarilizumab (114), vonlerolizumab (116)
<u>human</u> : - <i>umab</i>	abrilumab (111), adalimumab (85), adalimumab beta (118), adalimumab fosimdesonide (127), anifrolumab (109), atorolimumab (80), avelumab (113), belimumab (89), bertilimumab (88), bleselumab (113), brodalumab (105), camidanlumab (117), camidanlumab tesirine (117), carlumab (104), dupilumab (108), durvalumab (112), eldelumab (109),

emapalumab (116), foralumab (103), fresolimumab (101), gimsilumab (117), golimumab (91), ianalumab (123), imalumab (111), ipilimumab (94), lanadelumab (114), lenzilumab (111), lerdelimumab (86), lirilumab (107), mavrilimumab (102), metelimumab (88), morolimumab (79), namilumab (104), nivolumab (111), oleclumab (116), oxelumab (105), pamrevlumab (113), placulumab (107), prezalumab (114), remtolumab (115), sarilumab (106), selicrelumab (116), sifalimumab (104), stamulumab (95), tabalumab (105), tesidolumab (112), tezepelumab (113), timolumab (114), tiragolumab (117), tremelimumab (97), ulocuplumab (110), urelumab (104), utomilumab (115), varlilumab (111), zanolimumab (92), ziralimumab (84)

**-ne-** for **neural** (previously as *-n(e)-*, *-ne(r)-*):

Third naming scheme: bepranemab (122), cinpanemab (120), donanemab (120), exidavnemab (125), gosuranemab (119), latozinemab (124), lecanemab (122), nadeceemab (124), pepinemab (120), posdinemab (126), semorinemab (120), tilavonemab (120), trontinemab (127), unasnemab (124), zagotenemab (125), zelminemab (121)

humanized: *-zumab* bapineuzumab (93), crenezumab (105), eptinezumab (115), fremanezumab (115), galcanezumab (114), ozanezumab (108), ponezumab (104), prasinezumab (117), refanezumab (114), solanezumab (107), tanezumab (99)

human: *-umab* aducanumab (110), atinumab (104), elezanumab (115), erenumab (115), fasinumab (107), fulranumab (104), gantenerumab (108), opicinumab (113)

**-ni-** for **enzyme targeting or inhibiting mAbs:**

Third naming scheme: galegenimab (125)

**-os-** for **bone** (previously as *-s(o)-*):

humanized: *-zumab* blosozumab (105), romosozumab (106)

human: *-umab* burosumab (115), denosumab (94), setrusumab (117)

**-ta-** for **tumour** (previous as *-t(u)-*, *-tu(m)-*; *-co(l)-*; *-go(t)-*; *-go(v)-*; *-ma(r)-*; *-me(l)-*; *pr(o)-*):

Third naming scheme:

acapatamab (124), alnuctamab (123), (121), anbenitamab (124), bafisontamab (125), barecetamab (123), belantamab (118), belantamab mafodotin (118), benufutamab (121), cevostamab (122), cibisatamab (118), coprelotamab (123),

datopotamab (123), datopotamab deruxtecan (123), demupitamab (122), disitamab (120), disitamab vedotin (120), elranatamab (125), eluvixtamag (123), emerfetamab (123), emfizatamab (126), emirodatamab (126), enapotamab (118), enapotamab vedotin (118), epcoritamab (127), etevritamab (123), felzartamab (122), fidasintamab (125), gancotamab (119), ginisortamab (125), glofitamab (121), idactamab (123), ifinatamab (126), ifinatamab deruxtecan (126), imvotamab (126), inezetamab (126), iodine (131I) apamistamab (119), ispectamab debotansine (126), ispectamag tazide (127), ivicentamab (125), izalontamab (126), lacutamab (121), linvoseltamab (126), lonigutamab (124), lonigutamab ugodotin (124), luveltamab (126), luveltamab tazevibulin (126), mecbotamab (126), mecbotamag vedotin (126), mezagitamab (121), mipasetamab (123), mipasetamab uzoptirine (123), mirzotamab (121), mirzotamab clezutoclax (121), murlentamab (119), naxitamab (120), nivatrotamab (124), obrindatamag (123), odronextamag (121), omburtamab (119), osemitamab (126), ozuriftamab (126), ozuriftamab vedotin (126), pacanalotamab (123), pavurutamab (123), pelgifatamab (126), pelgifatamab corixetan (124), petosemtamag (121), pipmurutamab (122), plamotamab (120) praluzatamab (121), praluzatamab ravtansine (121), ripertamab (122), rolinsatamab (119), rolinsatamab talirine (119), rosopatamab (122), rosopatamab tetraxetan (122), runimotamab (124), samrotamab (118), samrotamab vedotin (118), serclutamab (120), serclutamab salirine (120), sirexatamab (125), sotevtamab (125), tafasitamab (119), talquetamab (121), tamrintamab (120), tamrintamab pamozirine (120), tarlatamab (123), teclistamab (120), tepoditamab (118), tidutamab (120), tilogotamab (122), tilvestamab (121), tusamitamab (123), tusamitamab ravtansine (123), ubamatamab (125), ulenistamab (125), vepsitamab (125), vibecotamab (120), vixtimotamab (124), vobramitamab (126), vobramitamab duocarmazine (126), vofatamab (120), voxalatamab (125), zanidatamag (121), zanidatamab zovodotin (126), zilovertamab (124), zilovertamab vedotin (124), zuberitamab (122)

mouse: -omab

abagovomab (95), altumomab (80), anatumomab mafenatox (86), arcitumomab (74), bectumomab (81), blinatumomab (100), capromab (80), detumomab (80), edrecolomab (74), epitumomab (97), epitumomab cituxetan (89), ibritumomab tiuxetan (86), igovomab (86), lilotomab (112), lutetium (<sup>177</sup>Lu) lilotomab satetraxetan (112), minretumomab (80), mitumomab (82), moxetumomab pasudotox (102), nacolomab tafenatox (80), naptumomab estafenatox (96), oregovomab (86), racotumomab (100), satumomab (81), solitumab (106), taplitumomab paptox (84), technetium (<sup>99m</sup>Tc) nofetumomab merpentan (81), technetium (<sup>99m</sup>Tc) pintumomab (86), tenatumomab (99), tositumomab (80)

chimeric: -ximab

amatuximab (104), bavituximab (95), brentuximab vedotin (103), carotuximab (114), cetuximab (82), cetuximab sarotalocan (120), coltuximab ravtansine (109), dinutuximab (109), dinutuximab beta (113), echromeximab (87), ensituximab

(103), futuximab (107), girentuximab (101), indatuximab ravtansine (105), iodine (131I) derlotuximab biotin (113), iodine (<sup>124</sup>I) girentuximab (101), isatuximab (112), laprituximab (114), laprituximab emtansine (114), margetuximab (109), mirvetuximab (114), mirvetuximab soravtansine (113), modotuximab (110), naratuximab (114), naratuximab emtansine (114), rituximab (77), siltuximab (100), tabituximab (119), tabituximab barzuxetan (119), tomuzotuximab (118), ublituximab (104), vadastuximab (114), vadastuximab talirine (113)

chimeric-humanized/human: -xizumab

azintuxizumab (116), azintuxizumab vedotin (116), depatuxizumab (115), depatuxizumab mafodotin (115), duvortuxizumab (116), losatuxizumab (116), losatuxizumab vedotin (116), ontuxizumab (109), pasotuxizumab (111),

humanized: -zumab

abituzumab (109), actinium (<sup>225</sup>Ac) lintuzumab satetraxetan (121), alemtuzumab (83), alemtuzumab beta (128), bemarituzumab (117), bivatumab (86), brontictuzumab (111), cantuzumab mertansine (105), cantuzumab ravtansine (105), cergutuzumab amunaleukin (113), citatuzumab bogatox (99), clivatuzumab tetraxetan (113), codrituzumab (109), cofetuzumab (117), cofetuzumab pelidotin (117), cusatumab (118), dacetuzumab (98), dalotuzumab (107), denintuzumab mafodotin (111), duligotuzumab (110), elotuzumab (100), emactuzumab (111), emibetuzumab (111), enavatuzumab (104), enoblituzumab (116), epratuzumab (82), farletuzumab (100), farletuzumab ecteribulin (127), ficlatuzumab (105), flotetuzumab (118), gatipotuzumab (118), gemtuzumab (83), gemtuzumab ozogamicin (115), ifabotuzumab (115), iladatuzumab (117), iladatuzumab vedotin (117), imgatuzumab (107), inotuzumab ozogamicin (92), labetuzumab (85), labetuzumab govitecan (113), lacnotuzumab (116), ladiratumab (117), ladiratumab vedotin (117), lifastuzumab vedotin (110), lintuzumab (86), lorvotuzumab mertansine (103), lumretuzumab (111), matuzumab (88), milatumab (98), mosunetuzumab (117), nimotuzumab (94), obinutuzumab (109), ocaratuzumab (107), onartuzumab (104), oportuzumab monatox (100), otlertuzumab (110), parsatumab (107), pertuzumab (89), pertuzumab zovotolimod (126), pinatumab vedotin (108), polatumab vedotin (110), rosmantumab (115), rovalpituzumab (113), rovalpituzumab tesirine (113), sacituzumab (115), sacituzumab govitecan (127), sibrotuzumab (86), simtuzumab (107), sofituzumab vedotin (110), sontuzumab (94), talacotuzumab (117), telisotuzumab (115), telisotuzumab vedotin (115), tigatumab (98), timigutumab (118), trastuzumab (78), trastuzumab beta (118)trastuzumab botidotin (128), trastuzumab corixetan (126), trastuzumab deruxtecan (116), trastuzumab duocarmazine (115), trastuzumab emtansine (103), trastuzumab imbotolimod (127), trastuzumab rezetecan (127), trastuzumab vedotin (128), tucotuzumab celmoleukin (95), vandortuzumab vedotin (112), veltuzumab (98), vorsetuzumab (107), vorsetuzumab mafodotin (107), xentuzumab (114), yttrium (<sup>90</sup>Y) clivatuzumab tetraxetan (102), yttrium <sup>90</sup>Y tacatumab tetraxetan (93),



zenocutuzumab (118)

human: -umab

adecatumumab (90), anetumab ravtansine (109), anetumab corixetanglo (121), aprutumab (115), aprutumab ixadotin (115), cixutumumab (100), conatumumab (99), daratumumab (101), drozitumab (103), dusigitumab (108), elgemtumab (112), enfortumab vedotin (109), figitumumab (100), flanvotumab (106), ganitumab (103), glembatumumab (102), glembatumumab vedotin (113), indusatumab (112), indusatumab vedotin (112), intetumumab (101), iratumumab (94), istiratumab (117), lexatumumab (95), loncastuximab (117), loncastuximab tesirine (117), lucatumumab (98), lupartumab (115), lupartumab amadotin (115), mapatumumab (93), narnatumab (105), necitumumab (100), ofatumumab (93), olaratumab (103), panitumumab (96), patritumab (106), patritumab deruxtecan (127), pritumumab (89), radretumab (104), rilotumumab (101), robatumumab (100), seribantumab (108), sirtratumab (117), sirtratumab vedotin (117), tarextumab (109), teprotumumab (108), tisotumab (113), tisotumab vedotin (113), tovetumab (109), vantictumab (109), votumumab (80), zalutumumab (93), zolbetuximab (117)

**-toxa-** for **toxin** (previously as *-tox(a)-*):

<u>chimeric: -ximab</u>	obiltoxaximab (113), pritoxaximab (108), setoxaximab (108)
<u>humanized: -zumab</u>	urtoxazumab (90)
<u>human: -umab</u>	actoxumab (111), atidortoxumab (117), berlimatoxumab (117), bezlotoxumab (107), suvratoxumab (116), tosatoxumab (109)

**-vetmab** for **veterinary use**:

anivovetmab (126), bedinvetmab (121), blontuvetmab (124), cirevetmab (126), dovanvetmab (121), frunevetmab (116), gilvetmab (116), izenivetmab (126), lokivetmab (112), ranevetmab (124), relfovetmab (120), tamtuvetmab (124), tirnovetmab (124)

**-vi-** for **viral** (previously as *-v(i)-*, *-vi(r)-*):

<u>Third naming scheme:</u>	ladintrevimab (125), amubarvimab (125), ansumvimab (124), atoltivimab (120), bamlanivimab (124), bebtelovimab (126), beludavimab (125), casirivimab (124), cilgavimab (124), clesrovimab (126), docaravimab (122), elipovimab (120), enuzovimab (125), etesevimab (124), fiztasovimab (126), gontivimab (121), imdevimab (124), lenvervimab (118), maftivimab (120), mazorelvimab (125), miromavimab (122), nirsevimab (119), odesivimab (121), plutavimab (126), regdanvimab
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	(124), rimteravimab (125), romlusevimab (125), lomtegovimab (125), ormutivimab (125), sotrovimab (124), teropavimab (125), tixagevimab (124), upanovimab (125), zamerovimab (125), zinlirvimab (126)
<u>chimeric</u> : - <i>ximab</i>	cosfroviximab (116), larcaviximab (116), porgaviximab (116)
<u>humanized</u> : - <i>zumab</i>	felvizumab (77), motavizumab (95), palivizumab (79), suvizumab (102)
<u>human</u> : - <i>umab</i>	diridavumab (111), exbivirumab (91), firivumab (111), foravirumab (100), gedivumab (117), lesfavumab (117), libivirumab (91), navivumab (113), rafivirumab (100), regavirumab (80), sevirumab (66), suptavumab (115), tuvirumab (66)

Others:

**-le(s)- for inflammatory lesions** (infix no longer formally acknowledged under the current scheme):

mouse (under the previous naming scheme **-omab**):

besilesomab (92), lemalesomab (86), sulesomab (86), technetium (<sup>99m</sup>Tc) fanolesomab (86)

**humanized** (under the previous naming scheme **-zumab**):

ranibizumab (90) (treatment of patients with the exudative (wet or neovascular) form of age-related macular degeneration (AMD))

**rat-murine hybrid** (under the previous naming scheme **-axomab**):

catumaxomab (93), ertumaxomab (93)

**human** (under the previous naming scheme **-umab**):

crotedumab (114) (treatment of diabetes)

roledumab (103), (treatment of RhD(+) incompatible transfusions)

(c) muromonab-CD3 (59)

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USAN

**-madlin E3 ubiquitin-protein ligase Mdm2 (Hdm2) inhibitors**

( USAN: ubiquitin ligase inhibitors )

(a) alrizomadlin (125), brigimadlin (128), navtemadlin (124), rebemadlin (125), siremadlin (119), sulanemadlin (123)

(c) idasanutlin (111), milademetan (117), serdemetan (101)

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

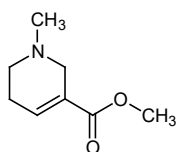
(USAN: -mantadine or -mantine: antivirals/antiparkinsonians (adamantane derivatives))



- (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) adafenoxate (48) (nootropic agent), adamexine (36) (mucolytic), adapalene (64) (antiacne agent), adaprolol (63) ( $\beta$ -adrenoreceptor antagonist), adatsersin (70) (serotonin receptor antagonist), amantanum bromide (39) (disinfectant), amantocillin (17) (antibiotic), arterolane (97) (antimalarial), bolmantalate (16) (anabolic), meclinertant (88) (neurotensin antagonist), mantabegron (88) ( $\beta_3$ -adrenoreceptor agonist), saxagliptin (92) (antidiabetic), vildagliptin (90) (antidiabetic)

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

E.1.0.0 (USAN: cholinergic agonists (arecoline derivatives used in the treatment of Alzheimer's disease))



alvameline (79), cevimeline (76), itameline (77), milameline (74), revosimeline (120), sabcomeline (76), tazomeline (77), xanomeline (70)

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**-ment**                    **immunoglobulin fragments ( new scheme for monoclonal antibodies )**

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**mer- or  
-mer- (d)**

**<sup>1</sup>mercury-containing drugs, antimicrobial or diuretic**

(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

N.1.3.0 diuretic: chlormerodrin (4), chlormerodrin (<sup>197</sup>Hg) (24), meralluride (1), mercaptomerin (1), mercuderamide (1), mercumatilin sodium (4), mercurophylline (1), merisoprol (<sup>197</sup>Hg) (24) (diagnostic), mersalyl (4)

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

(c)                    hydrargaphen (10)

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USAN

**-mer**

**polymers**

(a)                    amilomer (33), azoximer bromide (97), berdazimer sodium (117), bixalomer (103), bofelisimer (125), cadexomer (60), carbetimer (50), carbomer (21), crilanomer (53), daniluomer (127), davamotecan pegadexamer (117), demplatin pegalumer (117), dextranomer (33), eldexomer (60), exatecan alideximer (89), firtecan peglumer (108), flurimedrimer (<sup>18</sup>F) (128), hemoglobin glutamer (80), hemoglobin raffimer (89), leuciglumer (68), maletamer (14), ompinamer (108), patiromer calcium (106), pegfosimer manganese (128), poloxamer (34), porfimer sodium (64), sevelamer (126), surfomer (44), talinexomer (114), tolevamer (126), veverimer (125), vimdemer (125), zinostatin stimalamer (74)

(b)                    acetylcysteine zidrimer (127), astodrimer (110), succimer (126)

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USAN

**-meran**

**messenger RNA (mRNA)**

(a)                    abdavomeran (124)\*, acavameran (124), autogene cevumeran (122), davesomeran (128)\*, elasomeran (125)\*, enomimeran (123), famtozinameran (128)\* fazulemeran (125), ganulameran (124)\*, gindameran (123), imelasomeran (127)\*, nadorameran (113), ontasameran

(123), pidacmeran (124)\*, pomulmeran (123), riltozinameran (126), secelasomeran (128)\*, riltozinameran (126)\*, tozinameran (124)\*, ufrenmeran (127)\*, vibosameran (123), zapomeran (127)\*, zeldesmeran (127)\*, ziclumeran (127), zorecimeran (124)\*

\*additional prop.INN Lists COVID-19 (special editions)

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**-mesine**      **sigma receptor ligands** USAN

blarcamesine (120), cutamesine (100), igmesine (68), panamesine (73), siramesine (81)

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**-mestane**      **aromatase inhibitors** USAN

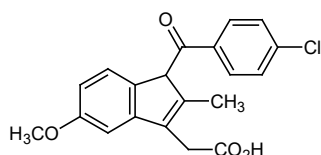
L.0.0.0      (USAN: antineoplastics, aromatase inhibitors)  
/Q.2.1.0

atamestane (54), exemestane (65), formestane (66), minamestane (64), plomestane (66)

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

A.4.2.0      (BAN: anti-inflammatory substances of the indomethacin group)  
                  (USAN: -metacin: 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), pimetacin (47),  
                  proglumetacin (35), sermetacin (36), talmetacin (46), zidometacin (39)

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

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**-met(h)asone**      **see pred**

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**-metinib**      **see -tinib**

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		USAN
<b>-micin</b>	<b>aminoglycosides, antibiotics obtained from various</b>	Micromonospora
(S.6.5.0)	(USAN: antibiotics ( <i>Micromonospora</i> strains))	
(a)	astromicin (44), betamicin (38), etisomicin (47), evernimicin (82), gemtuzumab ozogamicin (115), gentamicin (22), isepamicin (54), maduramicin (52), megalomicin (37), micronomicin (45), netilmicin (36), ozogamicin (83), pentisomicin (41), plazomicin (106), repromicin (37), semduramicin (60), sisomicin (25)	
(b)	fidaxomicin (109), rosaramicin (41) (prev. rosamicin), mirosamicin (58)	
(c)	capreomycin (12), tobramycin (28)	
<b>-mifene</b>	<b>see -ifene</b>	
<b>-mig</b>	<b>multi-specific immunoglobulins</b> ( <i>new scheme for monoclonal antibodies</i> )	
<b>-cimig</b>	<b>cardiovascular</b>	
(a)	denecimig (128), zifibancimig (127)	
<b>-prumig</b>	<b>immunosuppressive:</b>	
(a)	tarperprumig (127)	
<b>-stomig</b>	<b>immunostimulatory</b>	
(a)	danvilostomig (127), lomvastomig (127), rilvegostomig (127), sabestomig (128) tobemstomig (127), volrustomig (127)	
<b>-tamig</b>	<b>tumour</b>	
(a)	acimtamig (128), ciduvectamig (127), davutamig (128), forimtamig (127), nebratamig (128), obertamig (128), umizortamig (127), vonsetamig (128), xaluritamig (127), zeripatamig (127)	
<b>-milast</b>	<b>see -ast</b>	
<b>mito- (d)</b>	<b>antineoplastics, nucleotoxic agents</b>	
L.0.0.0		
(a)	mitobronitol (20), mitocarcin (25), mitoclomine (18), mitoflaxone (60), mitogillin (17), mitoguazone (20), mitolactol (26), mitomalcin (19),	

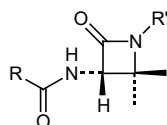
mitomycin (26), mitonafide (40), mitopodozide (17), mitoquidone (54),  
mitosper (24), mitotane (21), mitotenamine (17), mitoxantrone (44),  
mitozolomide (51)

(c) mitindomide (48)

USAN

**-monam monobactam antibiotics**

S.6.0.0



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

(c) aztreonam (48)

**-morelin see -relin**

**-mostat see -stat**

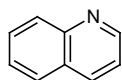
USAN

**-mostim see -stim**

USAN

**-motine antivirals, quinoline derivatives**

S.5.3.0 (USAN: antivirals (quinoline derivatives))



(a) famotine (23), memotine (22)

USAN

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

C.3.1.0

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

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

USAN

**-mulin      antibacterials, pleuromulin derivatives**

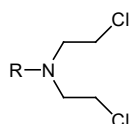
S.6.0.0

- (a) azamulin (54), lefamulin (110), pleuromulin (35), retapamulin (91), tiamulin (35), valnemulin (74)
- (b) nonathymulin (56), thymostimulin (45)

USAN

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

L.2.0.0 (USAN: antineoplastic agents (chloroethylamine 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), laromustine (98), lomustine (27), mannomustine (8), neptamustine (48) (originally pentamustine (45)), nimustine (37), prednimustine (31), ranimustine (55), semustine (27), spiromustine (47), tallimustine (68), taumustine (50), tinostamustine (116), uramustine (13)
- (c) canfosfamide (92), chlorambucil (6), chlormethine (1), chlornaphazine (1), cyclophosphamide (10), defosfamide (12), glufosfamide (77), ifosfamide (23), mafosfamide (51), melphalan (8), melphalan flufenamide (105), metamelfalan (41), mitoclomine (18), mitotenamine (17), palifosfamide (99), perfosfamide (66), sarcolysin (17), sufosfamide (36), trichlormethine (11), trofosfamide (23)

BAN, USAN

**-mycin (x)      antibiotics, produced by *Streptomyces* strains (see also -kacin)**S.6.0.0 (USAN: antibiotics, *Streptomyces* strains)

- (a) alvespimycin (96), amfomycin (12), antelmycin (15), apramycin (31), avilamycin (46), azalomycin (26), azithromycin (58), bambermycin (21), bekanamycin (24), berythromycin (26), bicozamycin (38), biniramycin (23), bluensomycin (14), carbomycin (1), cethromycin (87), clarithromycin (59), clindamycin (21), coumamycin (15), daptomycin (58), dihydrostreptomycin (1), diproleandomycin (33), dirithromycin (53), efrotomycin (53), endomycin (6), enramycin (23), enviomycin (31), erythromycin (4), estomycin (14 - deleted in List 28), flurithromycin (51), fosfomycin (25), fosmidomycin (46), gamithromycin (95), ganefromycin (68), hachimycin (23), heliomycin

(25), hydroxymycin (8 - deleted in List 28), josamycin (23), kanamycin (10), kitasamycin (13), laidlomycin (61), lexithromycin (65), lincomycin (13), lividomycin (32), maridomycin (32), midecamycin (30), mikamycin (17), mirincamycin (31), mocimycin (28), modithromycin (101), nafithromycin (114), natamycin (15), nebramycin (19), neomycin (1), neutramycin (15), oleandomycin (6), paldimycin (55), paromomycin (10), paulomycin (47), pirlimycin (47), primycin (38), pristnamycin (12), ranimycin (20), relomycin (15), retaspimycin (99), ribostamycin (27), rifamycin (13), rokitamycin (53), roxithromycin (54), salinomycin (37), sedecamycin (55), solithromycin (121), spectinomycin (13), spiramycin (6), stallimycin (30), steffimycin (20), streptomycin (1), surotomycin (107), tanespimycin (96), telithromycin (80), terdecamycin (65), 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)

(b) capreomycin (12), tobramycin (28)

(c) antibiotic, antibacterial:

aspartocin (11), azidamfenicol (14), cetofenicol (14), chloramphenicol (1), cloramfenicol pantotenat complex (14), cycloserine (6), fidaxomicin (109), mirosamicin (58), novobiocin (6), ostreogrycin (6), rifamide (15), rifampicin (17), rosaramicin (41), streptoniazid (13), streptovarycin (6), thiamphenicol (10), tylosin (16)

antibiotic, antifungal:

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

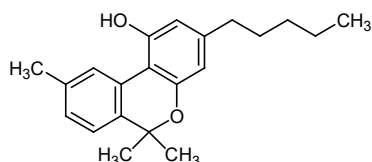
antibiotic, antineoplastic:

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

see also -rubicin

**nab**      **cannabinoid receptor agonists**

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



- (a) cannabidiol (118), cannabinol (23), dronabinol (51), lenabasum (118), menabitan (49), nabazenil (49), nabilone (49), nabitán (42), naboctate (45), nonabine (47), olorinab (119), pirnabin (41), tedalinab (103), tinabinol (49)
- (b) fenabutene (26), guanabenz (26), muromonab-CD3 (59), nabumetone (44), prinaberel (95)

**-nabant**      **cannabinoid receptor antagonists**

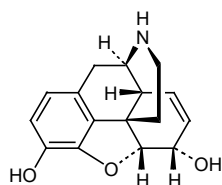
E.0.0.0

- (a) drinabant (99), giminabant (107), ibipinabant (99), otenabant (99), rimonabant (83), rosonabant (97), surinabant (93), taranabant (97)

**-nacept**      **see -cept****-nakin**      **see -kin****-nakinra**      **see -kinra****nal-**      **opioid receptor antagonists/agonists related to normorphine**

A.4.1.0 (USAN: narcotic agonists or antagonists (normorphine type))

B.2.0.0



- a) dinalbuphine sebacate (116), methylnaltrexone bromide (111), nalbuphine (21), naldemedine (105), nalfurafine (87), nalmeferne (49) (originally nalmetrene (47)), nalmexone (19), nalorphine (1), naloxegol (105), naloxone (13), naltalimide (107), naltrexone (29)
- (b) nalidixic acid (13), naluzotan (101)



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**-naritide**      **see -tide**

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**-navir**      **see vir**

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**-nepag**      **prostaglandins receptor agonists, non-prostanoids**

USAN

(a)      aganepag (104), evatanepag (101), omidenepag (114), ralinepag (112),  
simenepag (103), taprenepag (103)

(c)      selexipag (102)

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**-nermin**      **see -ermin**

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**-nercept**      **see -cept**

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**-nertant**      **see -tant**

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**-netant**      **see -tant**

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**-nicate**      **see nico-**

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**-nicline**      **nicotinic acetylcholine receptor partial agonists / agonists**

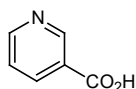
USAN

E.1.1.2

(a)      altinicline (82), bradanicline (111), cytisinicline (120), dianicline (93),  
encenicline (111), facinicline (105), ispronnicline (93), nelonicline (112),  
pozanicline (100), rivanicline (93), simpinicline (124), sofinicline (100),  
tebanicline (86), varenicline (89)

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



P.7.0.0

**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), xantinol nicotinate (16)

**nic-**: nicafeine (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),  
niprofazole (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)  
others: nifungin (24), nimidane (34), nisbuterol (38)

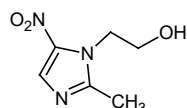
(c) **NO<sub>2</sub> - derivatives**: acenocoumarol (6) (anticoag.), azathioprine (12)  
and tiamiprine (15) (antimetabolites), bronopol (14) (antiseptic),  
chloramphenicol (1) (antibiotic), clonazepam (22) (sed.), fluranteI (25)  
(anthelmintic), flutamide (33) (nonsteroid anti-androgen)

BAN, USAN

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

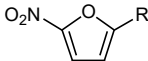
S.3.3.0 (USAN: antiprotozoal substances (metronidazole type))

Y.0.0.0



(a) abunidazole (52), azanidazole (38), bamnidazole (37), benznidazole (31),  
carnidazole (32), doranidazole (90), etanidazole (57), fexinidazole (37),  
flortanidazole (<sup>18</sup>F) (122), flunidazole (21), ipronidazole (21), metronidazole  
(11), misonidazole (38), morponidazole (125), 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)

<b>-nidine</b> H.3.0.0	<b><math>\alpha_2</math> adrenoceptor agonists</b>	
(a)	betanidine (13), indanidine (50), rilmenidine (57), tiamenidine (28)	
(b)	muscle relaxant: tizanidine (43) topical anti-infective: octenidine (43), pirtenidine (57) antibacterial: sulfaguanidine (4) veterinary coccidiostatic: robenidine (25)	
(c)	dexlofexidine (48), levlofexidine (48), lofexidine (33)	
<b>-(o)nidine</b> H.3.0.0	<b><math>\alpha_2</math> adrenoceptor agonists, clonidine derivatives</b>	
(a)	apraclonidine (59) (control of intraocular pressure), benclonidine (42), brimonidine (66), clonidine (40), flutonidine (31), moxonidine (48), piclonidine (44), povafonidine (127), tolonidine (28) related: alinidine (40) (analgesic)	
		USAN
<b>nifur- (d)</b> S.2.1.0	<b>5-nitrofuran derivatives</b>	
		
(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), nifurtimox (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)	
<b>-nil</b>	<b>see -azenil, also for -carnil, -quinil</b>	

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**nitro-  
or nitr- or nit-  
or ni- or -ni-**

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

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

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

**nitr-**: nitracrine (35), nitracrylamide (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), nidoxyzone (6), nifenalol (22), nihydrazone (10), nimesulide (44), nimorazole (22), nirdazole (17)

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

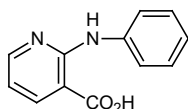
**-nidazole**: for INNs of this series see under –nidazole

USAN

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**-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)

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**(-)nonacog** **see -cog**

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**-octakin** **see -kin**

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**(-)octocog** **see -cog**

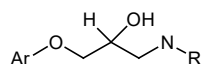
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**-ol (d)** **for alcohols and phenols**

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

E.5.2.0 (BAN: beta-adrenoreceptor antagonists)  
(USAN: beta-blockers (propranolol type))



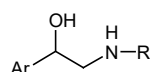
aromat. ring -O-CH<sub>2</sub>-CHOH-CH<sub>2</sub>-NH-R

- (a) acebutolol (28), adaprolol (63), adimolol (50), afurolol (40), alprenolol (19), ancarolol (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)), dexneбивolol (98), dexpropranolol (21), diacetolol (41), draquinolol (54), ecastolol (56), epanolol (52), ericolol (50), esatenolol (76), esmolol (50), exaprolol (32), falintolol (53), flestolol (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), levoneбивolol (98), mepindolol (36), metipranolol (38), metoprolol (30), moprolol (36), nadolol (34), nadoxolol (28), nafetolol (39), neбивolol (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), zenidolol (128), zoleprodolol (102)

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

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

E.5.2.0 (USAN: combined alpha and beta blockers)



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

		USAN
<b>-olone</b>	<b>see pred</b>	
<b>-onakin</b>	<b>see -kin</b>	
<b>-one (d)</b>	<b>ketones</b>	
(a)	635 (approx. 7.5 %) INNs ending in <i>-one</i> in Lists 1-105 of proposed INNs	
		BAN, USAN
<b>-onide</b>	<b>steroids for topical use, acetal derivatives</b>	
Q.3.0.0		
(a)	acrocinnonide (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 (121), fosimdesonide (127), halcinonide (29), itrocinnonide (62), nicocortonide (40), procinnonide (38), rofleponide (72), tralonide (27), triamcinolone benetonide (36), triamcinolone furetonide (36), triamcinolone hexacetonide (15), triclونide (30)	
(c)	amcinafal (25), amcinafide (25)	
<b>-onidine</b>	<b>see -nidine</b>	
<b>-onium</b>	<b>see -ium</b>	
<b>-opamine</b>	<b>see -dopa</b>	
		BAN, USAN
<b>-orex</b>	<b>anorexics</b>	
M.1.0.0	(BAN: anorexic agents, phenethylamine derivatives) (USAN: anorexiants)	
(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)	
(a)	bupropion (84) (replaces amfebutamone (31)), amfecloral (12), amfepramone (13), amfetamine (55), amfetaminil (40), benzfetamine	

(55), brolamfetamine (55), chlorphentermine (11), clortermine (22), dexamfetamine (55), dexfenfluramine (54), dimetamfetamine (38), etilamfetamine (40), fenbutrazate (12), fenfluramine (14), hexapradol (12), levamfetamine (12), levmetamfetamine (83), levofenfluramine (57), lisdexamfetamine (94), mephentermine (6), ortetamine (13), phendimetrazine (11), phenmetrazine (6), phentermine (11)

USAN

**-orexant      orexin receptor antagonists**

almorexant (98), daridorexant (120) (replaces nemorexant (118)), fazamorexant (128), filorexant (108), lemborexant (111), nivasorexant (127), seltorexant (115), suvorexant (105), tebideutorexant (127), vornorexant (125)

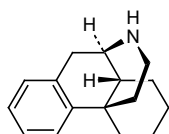
USAN

**orphan      opioid receptor antagonists/agonists, morphinan derivatives**

A.4.1.0

B.2.0.0

(USAN: -orphan: narcotic antagonists/agonists (morphinan derivatives))



(a) A.4.1.0: butorphanol (31), deudextromethorphan (114), dextromethorphan (1), dextrophan (1), dimemorfan (30), ketorfanol (49), levomethorphan (1), levophenacilmorphan (9), levorphanol (4), methylsamidorphan chloride (109), norlevorphanol (9), oxilorphan (31), phenomorphan (5), proxorphan (43), racemethorphan (1), racemorphan (1), samidorphan (107), xorphanol (48)

B.2.0.0: levallorphan (2)

**-orph-** **-orphine**: acetorphine (17), alletorphine (25), buprenorphine (29), cyprenorphine (17), desomorphine (5), diprenorphine (21), etorphine (17), homprenorphine (25), methyl-desorphine (5), methyl-dihydromorphine (5), morphine glucuronide (92), nalorphine (1), nicomorphine (7), normorphine (7)

**-orphinol**: hydromorphenol (11)

**-orphone**: asalhydromorphone (119), conorfone (46), hydromorphone (1), oxymorphone (5), pentamorphone (60), semorphone (67)

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

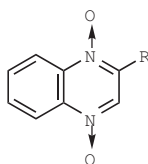
**-otermin**     **see -ermin**

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**-ox**     **antacids, aluminium derivatives (see also -aldrate)**  
**-alox**

(a)     glucalox (13), sucralox (13)

(b)     *-dox*     antibacterials, quinazoline dioxide derivatives:  
(USAN: *-adox*: antibacterials (quinoline dioxide derivatives))



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

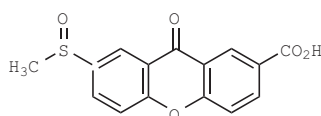
*-pirox*     antimycotics, pyridone derivatives:

USAN



ciclopirox (26), fosciclopirox (122), metipirox (26), rilopirox (56)

*-xanox*     antiallergics, tixanox group:  
(USAN: antiallergic respiratory tract drugs (xanoxic acid derivatives))



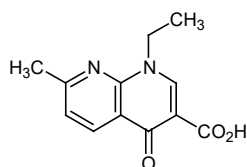
amlexanox (55), mepixanox (49), sudexanox (44), tixanox (37), traxanox (44)

others: acipimox (33) (antihyperlipidaemic), bifeprunox (87) (antipsychotic), cefminox (53) (antibiotic), deferasirox (86) (chelating agent), etofenprox (57) (insecticide), nifurtimox (21) (antiprotozoal), pardoprunox (96) (antiparkinsonian), sulbenox (37) (animal growth regulator), xanoxic acid (33) (bronchodilator)



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

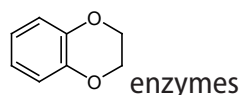
S.5.5.0    (BAN: antibacterial agents of the cinoxacin group)  
 (USAN: antibacterial (quinolone derivatives))



- (a)    alalevonadifloxacin (114), cinoxacin (32), droxacin (36), fleroxacin (56), enoxacin (49), garenoxacin (87), irloxacin (53), miloxacin (40), nemonoxacin (96), ozenoxacin (96), rosoxacin (36), tioxacin (34)  
-floxacin: alatrofloxacin (75), amifloxacin (51), acorafloxacin (111), balofloxacin (71), besifloxacin (98), binfloxacin (60), cadrofloxacin (81), cetefloxacin (68), ciprofloxacin (50), clinafloxacin (67), danofloxacin (61), delafloxacin (100), difloxacin (55), ecenofloxacin (78), enrofloxacin (56), esafloxacin (60), fandofloxacin (78), finafloxacin (85), gatifloxacin (74), gemifloxacin (81), grepafloxacin (68), ibafloxacin (60), lascufloxacin (113), levofloxacin (64), levonadifloxacin (95), lomefloxacin (58), marbofloxacin (65), merafloxacin (69), moxifloxacin (78), nadifloxacin (64), norfloxacin (46), ofloxacin (49), olamufloxacin (79), orbifloxacin (68), pazufloxacin (71), pefloxacin (45), pradofloxacin (84), premafloxacin (72), prulifloxacin (72), rufloxacin (57), sarafloxacin (62), sitafloxacin (75), sparfloxacin (63), temafloxacin (58), tosufloxacin (60), trovafloxacin (73), ulifloxacin (89), vebufloxacin (69), zabofloxacin (93)
- (b)    itarnafloxin (103)
- (c)    flumequine (34), nalidixic acid (13), oxolinic acid (15), pipemidic acid (32), piromidic acid (27), metioxate (34)

**-oxan(e)    benzodioxane derivatives**

E.5.1.0    (USAN: -oxan:  $\alpha$ -adrenoreceptor antagonists; benzodioxane derivatives)



- (a)     **$\alpha$ -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)  
**tranquillizers:** butamoxane (12), ethomoxane (12), pentamoxane (12)  
**muscle relaxant:** ambenoxan (21)

oxa, axa, ox: acoxatine (14) (cardiovascular analeptic), axamozide (53) (neuroleptic), cinepaxadil (50) (coronary vasodilator), dioxadilol (53) (slight  $\beta$ -adrenoreceptor antagonist), domoxin (14), doxazosin (47), enoxamast (52) (antiallergic), spiroxatine (14) (analgesic)  
related: dexefaroxan (76) ( $\beta$ -adrenoreceptor antagonist), efaroxan (59) ( $\alpha_2$ )

(b) amoprofan (22), nibroxane (35), razoxane (40), dexrazoxane (62), sobuzoxane (62), tolboxane (12)

(c) aplindore (92), bendacalol (59), binospirone (65), capeserod (94), eltoprazine (57), lecozotan (93), lurtotecan (50), osemozotan (87), quincarbonate (31), silibinin (38), sulamserod (82)

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**-oxanide**      **see -anide** USAN

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**-oxef**      **see cef-** USAN

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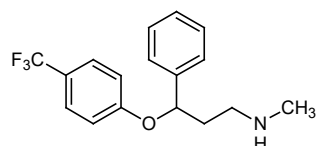
**-oxepin**      **see -pine**

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**-oxetine**      **serotonin and/or norepinephrine reuptake inhibitors, fluoxetine derivatives** USAN

(USAN: antidepressants (fluoxetine type))

C.3.0.0



(a) atomoxetine (86), amprelosetine (119), ansoxetine (58), dapoxetine (65), duloxetine (68), edivoxetine (104), esreboxetine (99), femoxetine (36), fluoxetine (34), ifoxetine (54), litoxetine (64), nisoxetine (34), omiloxetine (76), paroxetine (38), reboxetine (54), seproxetine (66), tedatioxetine (107), vortioxetine (107)

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**-oxicam**      **see -icam**

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**-oxifene**      **see -ifene**

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**-oxopine**      **see -pine**

BAN, USAN

**-pafant      platelet-activating factor antagonists**

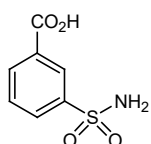
I.2.1.0

- (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)**

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

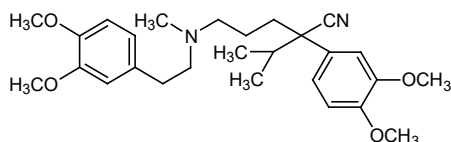


- (a) alipamide (18), besulpamide (52), clopamide (13), indapamide (29), tripamide (44), xipamide (22), zidapamide (50) (previously isodapamide (47))
- (b) chlorpropamide (8) (hypoglycemic), isopropamide iodide (8) (anticholinergic)
- (c) bumetanide (24), chlortalidone (12), clorexolone (15), furosemide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

USAN

**-pamil      calcium channel blockers, verapamil derivatives**

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



- (a) anipamil (49), dagapamil (52), devapamil (53), dexverapamil (65), emopamil (52), etripamil (113), falipamil (48), gallopamil (38), levemopamil (62), nexopamil (67), ronipamil (51), tiapamil (43), verapamil (16)

related: bertosamil (64), bisaramil (60)

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		USAN
<b>-parcin</b>	<b>glycopeptide antibiotics</b>	
S.6.0.0		
(a)	avoparcin (29), orientiparcin (72)	

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		USAN
<b>-parib</b>	<b>poly-ADP-ribose polymerase inhibitors</b>	
	amelparib (119), atamparib (124), basroparib (127), fuzuloparib (125), iniparib (103), nesuparib (126), niraparib (107), olaparib (94), pamiparib (117), rucaparib (105), saruparib (128), senaparib (123), talazoparib (110), veliparib (102), venadaparib (123)	

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		USAN
<b>-parin</b>	<b>heparin derivatives including low molecular mass heparins</b>	
I.2.0.0	(USAN: heparin derivatives and low molecular weight (or depolymerized) heparins)	
(a)	adomiparin sodium (104), ardeparin sodium (68), bemiparin sodium (75), certoparin sodium (70), dalteparin sodium (64), deligoparin sodium (89), enoxaparin sodium (52), heparin sodium (54), livaraparin calcium (85), minolteparin sodium (73), nadroparin calcium (65), parnaparin sodium (65), reviparin sodium (65), semuloparin sodium (99), sevuparin sodium (107), tafoxiparin sodium (102), tinzaparin sodium (65)	

<b>-parinux</b>	<b>synthetic heparinoids</b>	
	(USAN: antithrombotic indirect selective synthetic factor Xa inhibitors)	
(a)	fondaparinux sodium (83) (replaces fondaparin sodium (79)), idrabiotaparin sodium (97), idraparin sodium (84)	

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**-patril/-patrilat**      **see -tril/-trilat**

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**-pendyl**      **see -dil**

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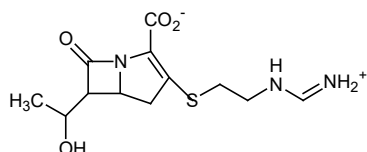
**-pendekin**    **see -kin**

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

USAN

S.6.0.0    (USAN: antibacterials, antibiotics (carbapenem derivatives))



(a)    biapenem (69), doripenem (83), ertapenem (84), faropenem (69), imipenem (50), lenapenem (73), meropenem (60), panipenem (64), razupenem (101), ritipenem (67), sulopenem (68), tacapenem (87), tebipenem pivoxil (82), tomopenem (95)

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

USAN

(USAN: blood substitutes and/or diagnostics (perfluorochemicals))

(a)    perflenapent (78), perflexane (82), perflisobutane (92), perflisopent (78), perfluamine (45), perflubrodec (87), perflubron (66), perflubutane (91) perflunafene (45), perflutren (82)

)

**-peridol**    **see -perone**

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**-peridone**    **see -perone**

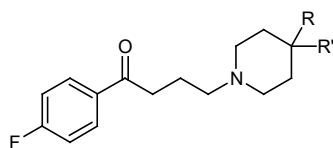
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**-perone**    **tranquillizers, neuroleptics, 4'-fluoro-4-piperidinobutyrophenone derivatives**

USAN

C.1.0.0

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



(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), lumateperone (114), 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)

**-peridol**      **antipsychotics, haloperidol derivatives**      USAN

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

**-peridone**      **antipsychotics, risperidone derivatives**      USAN

(a)      abaperidone (80), belaperidone (78), cloperidone (17), iloperidone (69), lusaperidone (82), ocaperidone (64), paliperidone (83), risperidone (57), roluperidone (119), tioperidone (37)

(b)      deudomperidone (124), domperidone (36), etoperidone (36) (antiemetic)

USAN

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

C.1.0.0

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

USAN

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

*-dipine*      see *-dipine*

(a)      dosulepin (15)

*-zepine*      antidepressant/neuroleptic: C.3.2.0: dibenzepin (14), elanzepine (35), enprazepine (30), erizepine (54), 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), eslicarbazepine (91), etazepine (51), licarbazepine (81), oxcarbazepine (41), rispenzepine (63)

	<u>hyperthermia</u> : amezepine (42)	
- <i>apine</i>	<u>psychoactive</u> : C.0.0.0: amoxapine (25), asenapine (87), batelapine (64), <u>clotiapine</u> (16), clozapine (22), esmirtazapine (93), flumezapine (47), fluperlapine (46), loxapine (22), <u>metiapine</u> (22), mirtazapine (61), olanzapine (67), <u>pentiapine</u> (56), perlapine (23), <u>quetiapine</u> (74), rilapine (52), serazapine (63), tenilapine (52), zicronapine (100)	
- <i>cilpine</i>	<u>antiepileptic</u> : 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)	
(b)	atromepine (15), noscapine (7), prozapine (14)	
(c)	clobenzepam (25), homopipramol (20), opipramol (15)	
		USAN
<b>-piprant</b>	<b>prostaglandin receptor antagonists, non-prostanoids</b> (USAN: prostaglandin receptors antagonists, non prostinoid structure)	
K.0.0.0		
(a)	asapiprant (109), fevipiprant (109), grapiprant (110), laropiprant (97), setipiprant (104), timapiprant (116), vidupiprant (104)	
<b>-piprazole</b>	<b>see -prazole</b>	
<b>-pirone</b>	<b>see -spiron</b>	
		USAN
<b>-pirox</b>	<b>see -ox/-alox</b>	
<b>-pitant</b>	<b>see -tant</b>	
<b>-pixant</b>	<b>purinoreceptor (P2X) antagonists</b>	
(a)	camlipixant (127), eliapixant (122), filapixant (122), gefapixant (118), sivopixant (123)	

		USAN
<b>-plact</b>	<b>platelet factor 4 analogues and derivatives</b>	
(a)	iroplact (74)	
		USAN
<b>-pladib</b>	<b>phospholipase A<sub>2</sub> inhibitors</b>	
W.0.0.0		
(a)	darapladib (94), ecopladib (90), efipladib (92), fuzapladib (120), giripladib (96), goxalapladib (94), rilapladib (94), varespladib (87)	
		USAN
<b>-planin</b>	<b>glycopeptide antibacterials (<i>Actinoplanes</i> strains)</b>	
S.5.0.0	(USAN: antibacterials ( <i>Actinoplanes</i> strains))	
(a)	actaplanin (34), mideplanin (66), ramoplanin (57), teicoplanin (48)	
<b>-plase</b>	<b>see -teplase, -uplase under -ase</b>	
<b>-plasmid</b>	<b>see -gene for gene therapy substances (See also Annex 4)</b>	
		USAN
<b>-platin (x)</b>	<b>antineoplastic agents, platinum derivatives</b>	
L.0.0.0	(USAN: antineoplastics (platinum derivatives))	
(a)	carboplatin (48), cisplatin (39), demiplatin pegarglumer (117), dexormaplatin (64), enloplatin (64), eptaplatin (83), ,imifoplatin (121), 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)	
<b>-plermin</b>	<b>see -ermin</b>	
<b>-plestim</b>	<b>see -stim and -kin</b>	
		USAN
<b>-plon</b>	<b>imidazopyrimidine or pyrazolopyrimidine derivatives, used as anxiolytics, sedatives, hypnotics</b>	
A.2.2.0	(USAN: non-benzodiazepine anxiolytics, sedatives, hypnotics)	
C.1.0.0	adiplon (98), divaplon (61), fasiplon (61), indiplon (86), lorediplon (105),	



ocinaplon (72), panadiplon (65), taniplon (61), zaleplon (72)

BAN, USAN

**-poetin (x) erythropoietin type blood factors**

I.3.0.0 (USAN: erythropoietins)

- (a) darbepoetin alfa (85), epoetin alfa (62), epoetin beta (62), epoetin delta (85), epoetin gamma (67), epoetin epsilon (72), epoetin kappa (97), epoetin omega (73), epoetin theta (95), epoetin zeta (92)

USAN

**-porfin benzoporphyrin derivatives**

- (a) exeporfinium chloride (105), fimaporfin (110), lemuteporfin (91), padeliporfin (96), padoporfin (93), redaporfin (114), rostaporfin (83), stanssoporfin (79), talaporfin (84), temoporfin (70), verteporfin (71)

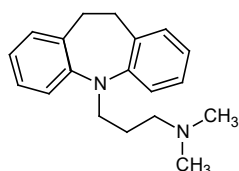
**-poride Na<sup>+</sup>/H<sup>+</sup> antiport inhibitor**

amiloride (18), cariporide (74), eniporide (79), rimeporide (92), sabiporide (84), zoniporide (85)

BAN, USAN

**-pramine substances of the imipramine group**

C.3.2.0 (USAN: antidepressants (imipramine type))



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

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

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USAN

**-prazan**      **proton pump inhibitors, not dependent on acid activation**

J.0.0.0

- (a)      fexuprazan (120) (replaces abeprazan (118)), linaprazan (92), linaprazan glurate (126), revaprazan (91), soraprazan (88), tegoprazan (113), vonoprazan (106), zastaprazan (125)

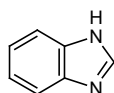
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USAN

**-prazole**      **antiulcer, benzimidazole derivatives**

J.0.0.0

(USAN: antiulcer agents (benzimidazole derivatives))

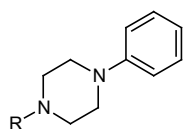


- (a)      azeloprazole (116), cinprazole (34), dexlansoprazole (93), disuprazole (56), esaprazole (45), esomeprazole (79), fuprazole (39), ilaprazole (86), lansoprazole (60), leminoprazole (68), levolansoprazole (93), nepaprazole (74), nilprazole (37), omeprazole (46), pantoprazole (62), picoprazole (46), pumaprazole (76), rabeprazole (69), saviprazole (62), tenatoprazole (80), timoprazole (35), ufiprazole (58)

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**-piprazole**      **psychotropics, phenylpiperazine derivatives** (*future use is discouraged due to conflict with the stem -prazole*)

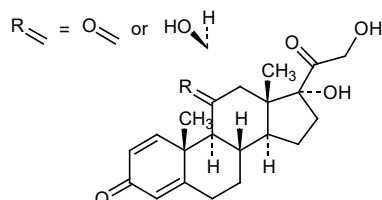
C.0.0.0



- (a)      aripiprazole (75), brexpiprazole (107), dapiprazole (45), elopiprazole (70), enpiprazole (24), lorpiprazole (60), mepiprazole (24), sonepiprazole (80), tolpiprazole (25)
-

**pred prednisone and prednisolone derivatives**

Q.3.3.0 (USAN: pred-; -pred- or -pred: prednisone and prednisolone derivatives)



- (a) chloroprednisone (12), cloprednol (31), difluprednate (21), domoprednate (47), etiprednol dicloacetate (88), 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)
- (b) various non-steroidal compounds  
citolone (23) (hepatobil. troubles), clorexolone (15) (diuretic), fenozolone (14) (psychotonic), tiozolone (16) (keratolytic), vistatolon (25) (antiviral)
- (c) **-betasol:** clobetasol (26), doxibetasol (26), ulobetasol (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), dexamethasone cipeclilate (94), flumetasone (13), halometasone (41), icometasone enbutate (70), mometasone (56), paramethasone (12)
- (c) **-olone:** steroids not used as glucocorticosteroids  
(USAN: steroids (*not* prednisolone derivatives))  
alfaxalone (27), androstanolone (125), bardoxolone (123), brexanolone (117), clocortolone (16), descinolone (17), diflucortolone (18), fluclorolone acetone (22), fluocinolone acetone (11), fluocortolone (15), fluorometholone (8), fluperolone (13), golexanolone (119), halocortolone (31), omaveloxolone (113), oxymetholone (125), posovolone (126), rimexolone (38), triamcinolone (8), triamcinolone benetonide (36), triamcinolone furetonide (36), triamcinolone hexacetone (15), vamorolone (115), xilmenolone (127), zuranolone (120)

(c) clobetasone (26), cloticasone (52), deprodone (20), dichlorisone (10), diflorasone (30), flunisolide (11), fluticasone (52), fluticasone furoate (96), meclorisone (40), timobesone (51)

### **-olone**

A.1.2.0 general anesthetics, pregnanes: alfadolone (27), eltanolone (65), ganaxolone (76), minaxolone (39), renanolone (8), sepranolone (107)

(c) alfaxalone (27)

H.2.0.0 antiarrhythmic: amafolone (40), edifolone (56)

H.4.0.0 antihyperlipidaemic: colestolone (59)

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

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

Q.2.3.0 androgens: androstanolone (4), drostanolone (13), mestanolone (10), metenolone (12), nandrolone (22), norethandrolone (6), oxandrolone (12), oxymetholone (11)

Q.2.3.1 oxendolone (42), mesterolone (15), rosterolone (59)

M.4.1.0 bolone (see bol, anabolic steroids): formebolone (31), mesabolone (29), metribolone (17), oxabolone cipionate (14), quinbolone (14), roxibolone (40), stebolone (17), tibolone (22), trenbolone (24)

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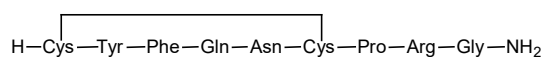
**-prenaline**    **see -terol**

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USAN

**-pressin**    **vasopressin analogues**

Q.1.2.0



(a) argipressin (13), desmopressin (33), felypressin (13), lypressin (13), ornipressin (22), selepressin (105), terlipressin (46), vasopressin injection (16), velmupressin (122)

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**-previr**

**see vir**

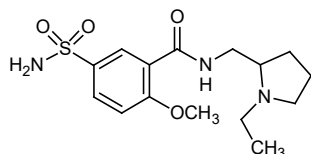
BAN, USAN

**-pride**

**sulpiride derivatives and analogues**

C.0.0.0

J.1.0.0



(a) C.0.0.0: alizapride (43), alpiropride (49), amisulpride (44), aramisulpride (122), batanopride (61), broclepride (43), cisapride (49), dazopride (50), denipride (58), esamisulpride (122), etacepride (52), eticlopride (52), flubepride (35), nemonapride (63) (previously emonapride (61)), peralopride (43), prosulpride (43), prucalopride (78), relenopride (111), 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), minesapride (117), mosapride (66), naronapride (104), pancopride (62), raclopride (52), remoxipride (49), renzapride (60), revexepride (108), tiapride (28), ticalopride (83), tinoisulpride (44), trazolopride (51), tropapride (48), usmarapride (124), 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)

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BAN, USAN

**-pril (x)**

**angiotensin-converting enzyme inhibitors**

H.3.0.0 (BAN: inhibitors of angiotensin-converting enzyme)  
(USAN: antihypertensive (ACE inhibitors))

(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), zabcipril (58), zofenopril (51)

**-prilat (x)** USAN

(USAN: antihypertensives (ACE inhibitors) (diacid analogs of the -pril entity))

(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), zabciprilat (64), zofenoprilat (63)

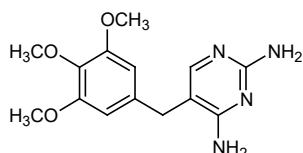
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**-prim** USAN

**antibacterials, dihydrofolate reductase (DHFR) inhibitors, trimethoprim analogues**

(USAN: antibacterials (trimethoprim type))

S.5.5.0



(a) aditoprim (49), baquiloprim (56), brodimoprim (44), epiroprim (44), iclaprim (88), metioprim (42), ormetoprim (21), talmetoprim (41), tetroxoprim (33), trimethoprim (11), vanepirim (48)

(c) diaveridine (18)

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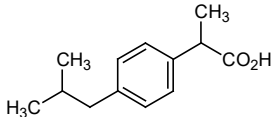
**-pris-** USAN

**steroidal compounds acting on progesterone receptors (excluding -gest- compounds)**

Q.2.0.0 (USAN: -prisnil: selective progesterone receptor modulators (SPRM); -pristone: progesterone receptor antagonists)

(a) aglepristone (70), asoprisnil (88), asoprisnil ecamate (89), lilopristone (54), lonaprisan (115), mifepristone (54), onapristone (58), telapristone (103), toripristone (61), ulipristal (107), vilaprisan (109)

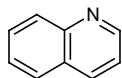
(c) epristeride (69), saprisartan (72), and the stem *-pristin* selected for antibacterials, streptogramins, protein-synthesis inhibitors, pristinamycin derivatives

		USAN
<b>-pristin</b>	<b>antibacterials, streptogramins, protein-synthesis inhibitors, pristinamycin derivatives</b>	
S.6.0.0	(USAN: antibacterials, pristinamycin derivatives)	
(a)	dalfopristin (67), efepristin (75), flopristin (98), quinupristin (65), linopristin (98), volpristin (80)	
<b>-prodil</b>	<b>N-methyl-D-aspartate (NMDA) receptor antagonists</b>	
S.6.0.0	(USAN: antibacterials, pristinamycin derivatives)	
(a)	dalfopristin (67), efepristin (75), flopristin (98), quinupristin (65), linopristin (98), volpristin (80)	
		BAN, USAN
<b>-profen (x)</b>	<b>anti-inflammatory agents, ibuprofen derivatives</b>	
A.4.2.0	(USAN: anti-inflammatory/analgesic agents (ibuprofen type))	
		
(a)	alminoprofen (40), araprofen (65), atliprofen (74), bakeprofen (61), benoxaprofen (34), bermoprofen (57), bifeoprofen (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), odaloprofen (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 (128) (antispasm. coron. vasodil.), diprofene (12) (antispasm. blood vessels)	
(c)	brofezil (31), protizinic acid (27), tiaprofenic acid (30)	

		BAN, USAN
<b>prost (x)</b>	<b>prostaglandins</b>	
Q.0.0.0	(USAN: -prost- or -prost: prostaglandins)	
(a)	alfaprostol (45), alprostadil (39), ataprost (62), beraprost (106), bimatoprost (85), butaprost (55), carboprost (36), cicaprost (54), ciprostone (51), clinprost (68), cloprostenol (33), cobiprostone (98), delprostenate (42), dimoxaprost (52), dinoprost (26), dinoprostone (26), doxaprost (34), ecraprost (83), eganoprost (84), enisoprost (50), epoprostenol (44), eptaloprost (56), esuberaprost (111), etiproston (46), fenprostalene (42), flunoprost (53), fluprostenol (33), froxiprost (55), gemeproston (42), iloprost (48) (originally ciloprost (46)), lanprostol (72), latanoprost (67), latanoprostene bunod (107), limaprost (56), lubiprostone (89), luprostitol (44), metenoprost (45), misoprostol (47), naxaprostene (58), nileprost (45), nobiprostolan (109), nocloprost (51), oxoprostol (44), penprostene (37), pimilprost (71), piriproston (51), posaraprost (97), prostalene (34), remiproston (65), rivenprost (93), rosaprostol (48), sepetaprost (110), sulprostone (37), taprostene (58), tiaproston (41), tafluproston (89), tilsuproston (51), tiprostanide (48), travoproston (80), treprostiniol (87), unoprostone (66), vapiproston (58), viprostol (53)	
<b>-prostil</b>	<b>prostaglandins, anti-ulcer</b>	
(a)	arbaprostil (35), deprostil (32), enprostil (50), mexiprostitol (52), ornoprostil (56), rioprostitol (49), spiriprostitol (63), trimoprostitol (49)	
		USAN
<b>-(o)pterin</b>	<b>pteridine derivatives</b>	
(a)	aminopterin sodium (04), fosdenopterin (121), ronopterin (113), sapropterin (63), sepiapterin (126)	
<b>-quidar</b>	<b>drugs used in multidrug resistance; quinoline derivatives</b>	
L.0.0.0	(USAN: multidrug resistance inhibitors (quinoline derivatives))	
	dofequidar (88), encequidar (119), laniquidar (85), tariquidar (86), zosuquidar (86)	



**-quine (d)      quinoline derivatives**



- (a) antimalarial: amodiaquine (1), amopyroquine (8), bulaquine (82), chloroquine (4), ferroquine (95), hydroxychloroquine (8), mefloquine (33), moxipraquine (26), pamaquine (4), pentaquine (4), primaquine (1), quinocide (34), tafenoquine (80), tebuquine (49)

Other related substances: acequinoline (22), actinoquinol (15), aminoquinol (22), amquinat (21), amiquinsin (17), aminoquinuride (45), benzoxiquine (18), broquinaldol (17), buquineran (40), buquinolate (16), clamoxyquine (16), cletoquine (20), chlorquinaldol (1), cinoquidox (40), ciproquinat (22), clioquinol (16), cloquinat (11), cloxiquine (30), debrisoquine (15), decoquinat (20), diiodohydroxyquinoline (1), esproquine (31), flumequine (34), guanisoquine (15), hedaquinium chloride (8), intiquinatine (99), iquindamine (34), isotiquimide (49), leniquinsin (18), mebiquine (29), nequinat (22), nifuroquine (36), olaquinox (31), oxamniquine (28), peraquinsin (29), pirquinozol (43), proquinolate (17), quinaldine blue (17), quincarbonate (31), quindecamine (15), quinoxin (26), quinetalate (16), quinfamide (40), quinisocaine (4), quinprenaline (17), quinuclium bromide (40), quipazine (17), sitamaquine (80), tilbroquinol (45), tiliquinol (45), tiquinamide (35), tiquizium bromide (47), toquizine (17), tretoquinol (21), viquidil (25)

- (c) broxaldine (12), cinchocaine (1), cinchophen (I), climiqualine (33), dehydroemetine (15), dequalinium chloride (8), dimethyltubocurarinium chloride (1), dimoxyline (1), drotaverine (17), ethaverine (4), euprocine (22), famotidine (23), flucarbril (14), glafenine (15), laudexium metilsulfate (4), laurolinium acetate (12), memotidine (22), metofoline (12), neocinchophen (I), niceverine (15), nitroxoline (15), noscapine (7), octaverine (18), oxolinic acid (15), oxycinchophen (6), pyrvinium chloride (6), trethinium tosilate (14), tritoqualine (14), tubocurarine chloride (1)

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**-quinil      see -azenil**

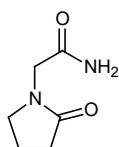
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BAN, USAN

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

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



(a)      aloracetam (62), aniracetam (44), brivaracetam (93), cebaracetam (66), coluracetam (86), dimiracetam (68), doliracetam (53), dupracetam (38), etiracetam (40), fasoracetam (79), fonturacetam (104), imuracetam (42), levetiracetam (62), molracetam (55), nebracetam (62), nefiracetam (64), nicoracetam (63), omberacetam (117), oxiracetam (43), piracetam (22), pramiracetam (46), rolziracetam (54), seletracetam (93)

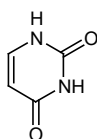
related: tenilsetam (51)

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USAN

**-racil      uracil type antineoplastics**

L.0.0.0



(a)      eniluracil (77), fluorouracil (13), gimeracil (80), oteracil (80)

**-thiouracil      uracil derivatives used as thyroid antagonists**

M.7.3.0      (USAN: -uracil: uracil derivatives used as thyroid antagonists and as antineoplastics)

(a)      iodothiouracil (01), methylthiouracil (01), propylthiouracil (01)

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USAN

**-rafenib      Raf (rapidly accelerated fibrosarcoma) kinase inhibitors**

(a)      agerafenib (115), belvarafenib (118), dabrafenib (105), encorafenib (109), exarafenib (127), lifirafenib (117), naporafenib (123), plixorafenib (128), sorafenib (88), regorafenib (100), tinlorafenib (127), tovorafenib (126), vemurafenib (103)

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**-rasib      Ras protein inhibitors**

USAN

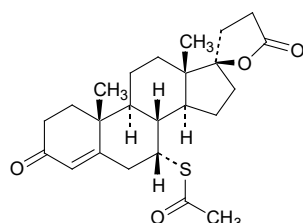
(a)      adagrasib (124), divarasib (127), fulzerasib (128), garsorasib (126), opnurasib (128), salirasib (97), sotorasib (123)

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		BAN, USAN
<b>-relin (x)</b>	<b>pituitary hormone-release stimulating peptides</b>	
Q.0.0.0	(BAN: hypophyseal hormone release-stimulating peptides) (USAN: prehormones or hormone-release stimulating peptides)	
(a)	<u>LHRH-release-stimulating peptides</u> : avorelin (74), buserelin (36), deslorelin (61), gonadorelin (32), goserelin (55), histrelin (53), leuprorelin (47), lutrelin (51), nafarelin (50), peforelin (93), triptorelin (56), zoaptarelin doxorubicin (107)	
<b>-morelin</b>	<u>growth hormone release-stimulating peptides</u> :	USAN
(a)	anamorelin (97), capromorelin (83), dumorelin (59), examorelin (72), ipamorelin (78), lenomorelin (106), macimorelin (100), pralmorelin (77), relamorelin (110), rismorelin (74), sermorelin (56), tabimorelin (80), tesamorelin (96), ulimorelin (103)	
(c)	somatorelin (57)	
<b>-tirelin</b>	<u>thyrotropin releasing hormone analogues</u> :	USAN
(a)	azetirelin (60), fertirelin (42), montirelin (58), orotirelin (58), posatirelin (60), protirelin (31), rovatirelin (111), taltirelin (75)	
	<u>other</u> : corticorelin (64) (diagnostic agent)	
(c)	thyrotropin alfa (113) (thyroid stimulating hormone (TSH) analogue)	
		USAN
<b>-relix</b>	<b>gonadotropin-releasing-hormone (GnRH) inhibitors, peptides</b>	
Q.0.0.0	(USAN: -relix: hormone-release inhibiting peptides)	
(a)	abarelix (78), cetorelix (66), degarelix (86), detirelix (56), ganirelix (65), iturelix (79), ozarelix (94), prazarelix (81), ramorelix (69), teverelix (78)	

**-renone      mineralocorticoid receptor (MR, MCR aldosterone receptor) antagonists**

N.1.8.0      (USAN: aldosterone antagonists (spironolactone type))



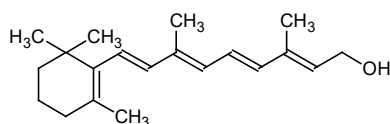
- (a)      apararenone(115), balcinrenone (126), canrenoic acid (20) and potassium canrenoate (20), canrenone (20), dicirenone (50), drospirenone (63), esaxerenone (116), eplerenone (77), finerenone (108), mespirenone (51), spirorenone (45)
- (b)      bromchlorenone (12) (antifungal), menatetrenone (28) (antihemorrhagic), teprenone (50), ubidecarenone (48) (in congestive heart failure)
- (c)      oxprenoate potassium (53), prorenoate potassium (32), spironolactone (11), spiroxasone (14)

**-reotide      see -tide**

**-restat      see -stat**

**retin      retinol derivatives**

P.1.0.0      (USAN: -retin- or -retin: retinol derivatives)



- (a)      acitretin (56) (previously etretin (51)), alitretinoin (80), doretinel (60), etretinate (41), fenretinide (51), isotretinoin (41), motretinide (38), pelretin (60), peretinoin (98), retinol (18), tretinoin (25), tretinoin tocoferil (66), zuretinol acetate (112)
- (b)      noretynodrel (13), secretin (1), trethinium tosilate (14)

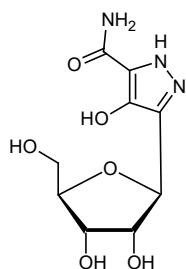
**-rev**      **therapeutic viruses**

Prefix	Infix 1: virus type	Infix 2:	Suffix
random, to contribute to euphonious and distinctive name	<i>-adeno-</i>	adenovirus	<i>-tu-</i> for oncolytic  <i>-rev</i> (therapeutic virus)
	<i>-arna-</i>	arenavirus	
	<i>-cana-</i>	canarypox virus	
	<i>-foli-</i>	fowlpox virus	
	<i>-erpa-</i>	herpes virus	
	<i>-lenti-</i>	lentivirus	
	<i>-morbilli-</i>	Paramyxoviridae morbillivirus	
	<i>-parvo-</i>	adeno-associated virus (Parvoviridae)	
	<i>-pol-</i>	poliovirus	
	<i>-retro-</i>	other retrovirus	
	<i>-sax-</i>	Coxsackievirus	
<i>-vaci-</i>	vaccinia virus		

**-turev**      **oncolytic viruses**

- (a) canerpaturev (117), gebasaxturev (126), lerapolturev (125), suratadenoturev (123), tasadenoturev (117), teserpaturev (119)
- (c) enadenotucirev (111)

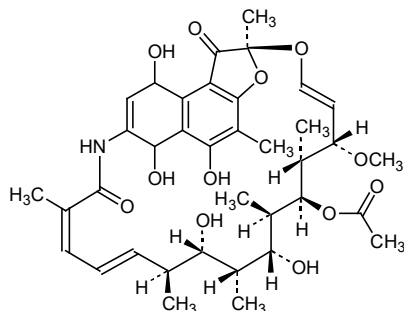
USAN

**-ribine**      **ribofuranyl-derivatives of the “pyrazofurin” type**L.O.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)

**rifa-            antibiotics, rifamycin derivatives**

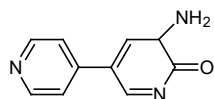
S.6.4.0



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

**-rinone        cardiac stimulants, amrinone derivatives**

H.1.0.0        (USAN: cardiotonics (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)

**-ritide        see -tide****-rixin        chemokine CXCR receptor antagonists**

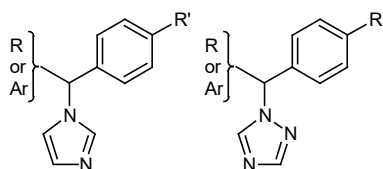
S.7.0.0        (USAN: CXCR2 modulators)

dazirixin (107), elubrixin (107), ladarixin (105), navarixin (105), reparixin (91), vimnerixin (127)

**-rize        see -izine****-rolimus     see -imus**

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

L.0.0.0



- (a) anastrozole (72), fadrozole (64), finrozole (81), leflutrozole (117), letrozole (70), liarozole (64), talarozole (99), vorozole (64)
- (b) aminitrozole (4), sulfatrozole (24), tenonitrozole (47)

**-rsen**      **antisense oligonucleotides**

- (a) aganirsen (101), apatorsen (110), alicaforsen (118), anivamersen (105), aprinocarsen (89), atesidorsen (116), baliforsen (116), beclanorsen (01), bezeparsen (127), brogidirsen (127), casimersen (115), cenersen (97), cimdelsen (125), cobomarsen (117), cofirasersen (124), custirsen (99), danvatirsen (117), dematirsen (116), donidalorsen (124), drisapersen (106), eluforsen (119), eplontersen (123), eteplirsen (103), evazarsen (127), fesomersen (124), frenlosirsen (125), gataparsen (103), golodirsen (115), inotersen (115), lademirsen (120), lufepirsen (125), mipomersen (99), mongersen (111), mulnitorsen (126), obeversen (126), oblimersen (87), olezarsen (125), pelacarsen (122), pofarsen (121), prexigebersen (114), remlarsen (117), renapersen (117), rimigorsen (116), sapablursen (124), sepofarsen (121), tofersen (119/120), tonlamarsen (127), trabedersen (97), ultevursen (127), varodarsen (116), vesleteplirsen (125), viltolarsen (118), volanesorsen (113), vupanorsen (121)

**-dirsen**      **targeting muscular dystrophies**

- (a) brogidirsen (127), golodirsen (115), renadirsen (120) ( replaces renapersen (117)), suvodirsen (121)
- (c) baliforsen (116), casimersen (115), dematirsen (116), drisapersen (106), eteplirsen (103), rimigorsen (116), suvodirsen (121), varodarsen (116), viltolarsen (118)

**-nersen**      **targeting neurological functions**

- (a) lexanersen (125), movronersen (125), nusinersen (112), rovanersen (125), rugonersen (125), tominersen (121), tadnersen (124), ulefnersen (127), zilganersen (126), zorevunersen (125)

- (b) cenersen (97)
- (c) baliforsen (116), casimersen (115), dematirsen (116), drisapersen (106), eteplirsen (103), golodirsen (115), inotersen (115), plenotersen (123), renadirsen (120), rimigorsen (116), sepfarsen (121), suvodirsen (121), varodarsen (116)

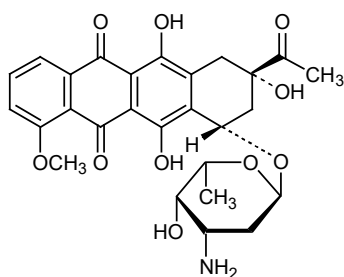
**-virsen (antivirals)**

- (a) afovirsen (97), amlivirsen (119), bepirovirsen (124), fomivirsen (97), miravirsen (101), pepirovirsen (124), radavirsen (106), temavirsen (117), trecovirsen (97)

USAN

**-rubicin antineoplastics, daunorubicin derivatives**

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

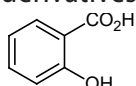


- (a) aclarubicin (44), aldoxorubicin (108), amrubicin (65), berubicin (98), camsirubicin (119), carubicin (40), daunorubicin (20), detorubicin (41), doxorubicin (25), epirubicin (48) (originally pidorubicin (47)), esorubicin (47), galarubicin (80), idarubicin (47), ladirubicin (83), leurubicin (64), medorubicin (47), nemorubicin (71), pirarubicin (55), rodorubicin (54), sabarubicin (90), valrubicin (79), zorubicin (39), zopectarelin doxorubicin (107)

USAN

**sal salicylic acid derivatives**

(USAN: -sal-; -sal; or sal-: anti-inflammatory agents (salicylic acid derivatives))



- (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

salafibrate (41) (antihyperlipidaemic), salantel (29) (anthelmintic), salcaprozic acid (88) (absorption promotor), salclobuzic acid (92) (pharmaceutical aid), salinazid (8) (antituberculosis agent), salirasib (97) (antineoplastic)

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

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

antithrombotic

flufosal (42)

various: antituberculosis

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

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

acetaminosalol (1), asalhydromorphone (119), carbasalate calcium (27), carsalam (13), etersalate (50), etosalamide (14), isalmadol (92), parsalmide (32), talosalate (43)

various

amotosalen (85), calcium benzamidosalicylate (10), homosalate (28) (sunscreens agent), isalsteine (63) (mucolytic), lasalocid (30) (antibiotic (veterinary)), mersalyl (4) (mercurial diuretic), octisalate (83) (sunscreens), osalimid (15) (choleric), susalimod (73) (immunomodulator), xenosalate (12) (antiseborrheic)

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

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

**-salazine/-salazide**

crisdesalazine (120), dersalazine (86), mesalazine (52), olsalazine (52), sulfasalazine (55), balsalazide (48), ipsalazide (48)

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

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

(b)

non-salicylic acid derivatives

fosaludine tidoxil (95), macrosalb (<sup>99m</sup>Tc) (33), rusalotide (96), trioxysalen (16) (pigmenting agent)

bronchodilators

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), gentisic acid (01), 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.I.2.0: xipamide (22) (sulfamoyl derivative),

mercurial diuretics N.I.3.0: mercuderamide (1)

anthelmintics S.3.I.0: bromoxanide (31), clioxanide (19), niclosamide (13), rafoxanide (24)

cloxantel (36), flurantel (25), resorantel (23)

antifungals S.4.0.0: buclosamide (16), exalamide (37), pentalamide (13)

See also Pharm S/Nom 557

USAN

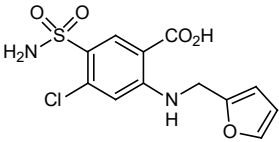
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**-sartan (x)     **angiotensin II receptor antagonists, antihypertensive (non-peptidic)****

H.3.0.0     (USAN: -sartan: angiotensin II receptor antagonists)

(a)     abitesartan (73), azilsartan (95), azilsartan medoxomil (97), azilsartan mepixetil (126), azilsartan mopivabil (126), candesartan (71), elisartan (72), embusartan (78), eprosartan (71), fimasartan (94), forasartan (74), irbesartan (71), losartan (66), milfasartan (76), olmesartan (93), olmesartan medoxomil (86), pomisartan (73), pratosartan (85), ripisartan (73), saprisartan (72), tasosartan (72), telmisartan (70), valsartan (68), zolasartan (70)

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		USAN
<b>-semide</b>	<b>diuretics, furosemide derivatives</b>	
N.1.1.0		
(a)	azosemide (35), furosemide (14), galosemide (33), sulosemide (49), torasemide (35)	
<b>-sermin</b>	<b>see -ermin</b>	
		USAN
<b>-serod</b>	<b>serotonin receptor antagonists and partial agonists</b>	
J.0.0.0		
(a)	capeserod (94), piboserod (79), sulamserod (82), tegaserod (79)	
		USAN
<b>-serpine (d)</b>	<b>derivatives of <i>Rauwolfia</i> alkaloids</b>	
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)	
		USAN
<b>-sertib</b>	<b>serine/threonine kinase inhibitors</b>	
L.0.0.0		
(a)	adavosertib (117), afuresertib (108), alisertib (104), amcasertib (113), azenosertib (127), barasertib (102), berzosertib (117), camonsertib (127), capivasertib (117), cenisertib (104), ceralasertib (119), danusertib (99), darovasertib (123), defosbarasertib (124), delcasertib (105), eclitasertib (124), edecesertib (127), elimusertib (123), emavusertib (124), empesertib (116), fidrisertib (126), flizasertib (128), galunisertib (109), gartisertib (125), ibcasertib (127), ilorasertib (108), ipatasertib (108), itacnosertib (122), lartesertib (128), luvixasertib (127), miransertib (116), monzosertib (127), ocifisertib (127), oditrasertib (128), onatasertib (122), onvansertib	

(121), padnarsertib (126), pifusertib (127), pimasertib (105), piposertib (120) (replaces nedisertib (118)), plogosertib (127), prexasertib (114), rabusertib (107),122), rigosertib (106), sapanisertib (112), selonsertib (113), silmitasertib (103), simurosertib (120), tanzisertib (106), tilpisetib (123), tilpisetib fosmecarbil (127), tinodasertib (128), tomivosertib (118), tozasertib (100), tuvusertib (127), uprosertib (111),(a) uzansertib(122), vactosertib (117), vevorisertib (123), vistusertib (113), volasertib (102), zabedosertib (124), zilurgisertib (126), zimlovisertib (125)

BAN, 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 antihypertensives)  
(USAN: serotonin 5-HT<sub>3</sub> antagonists)

- (a)      alosetron (66), arazasetron (118), 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)

USAN

**-siban**      **oxytocin antagonists**

- (a)      atosiban (60), barusiban (88), cligosiban (118), epelsiban (105), nolasiban (114), retosiban (98)

USAN

**-sidenib**      **isocitrate dehydrogenase inhibitors**

- (a)      enasidenib (113), ivosidenib (114), olutasidenib (120), safusidenib (126), vorasidenib (117)

USAN

**-siran**      **small interfering RNA including siRNA, miRNA and piRNA**  
(USAN: small interfering RNA (siRNA))

- (a)      asvasiran (111), bamosiran (106), belcesiran (125), bevasiranib (108), cemdisiran (114), cosdosiran (116), daplusiran (124), eldocasiran (127), elebsiran (127), fazirsiran (126), fitusiran (113), givosiran (114), inclisiran126inclisiran (115), lixadesiran (125), lumasiran(117), manusiran (127), nedosiran (1234, olpasiran (122), patisiran (118), pixofisiran (125), revusiran (111), sentisiran (114), teprasiran (116), tivanisiran (117), tomligisiran (124), vutrisiran (119123, xalnesiran (127), zerlasiran (127), zifcasiran (127), zilebesiran (126)

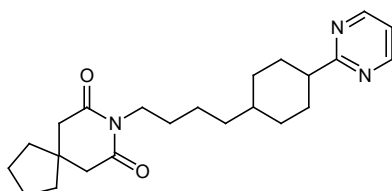
**som-**      **growth hormone derivatives**

Q.0.0.0      (USAN: growth hormone derivatives)  
 (USAN: som- -bove: bovine somatotropin derivatives)  
 (USAN: som- -por: porcine somatotropin derivatives)

- (a)      -bove: bovine type substances: somagrebove (63), somavubove (63),  
 sometribove (74), somidobove (58)  
-por: porcine-type substances: somalapor (62), somenopor (62),  
 somfasepor (66), sometripopor (55)  
-salm: salmon-type substances: somatosalm (69)  
Others: albusomatropin (114), efpegsomatropin (115), eftansomatropin  
 alfa (118), inpegsomatropin (128), lonapegsomatropin (118), somapacitan  
 (114), somatrogon (115), somatrem (54), somatropin (56), somatropin  
 pegol (103), somavaratan (112)
- (b)      somatorelin (57), somantadine (51), somatostatin (46)

**-sopine**      **see -pine****-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)

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

*-becestat*      beta secretase inhibitors  
 (a)      atabecestat (117), elenbecestat (117), umibecestat (119), lanabecestat  
 (116), verubecestat (112)

*-castat*      dopamine  $\beta$ -hydroxylase inhibitors  
 (a)      etamicastat (101), nepicastat (78), zamicastat (108)

-demstat (a)	<u>lysine-specific histone demethylase inhibitors</u> bomedemstat (122), iadademstat (119), pulrodemstat (124), seclidemstat (118), vafidemstat (119), zavondemstat (128)
-dustat (a)	<u>hypoxia inducible factor (HIF) prolyl hydroxylase inhibitors</u> daprodustat (113), desidustat (117), enarodustat (117), izilendustat (126), molidustat (108), roxadustat (108), vadadustat (114)
-elestat (a)	<u>elastase inhibitors</u> alvelestat (104), depelestat (97), freselestat (89), sivelestat (78), tiprelestat (103)
-folastat (a)	<u>inhibitors of folate hydrolase 1 (prostate-specific membrane antigen, PSMA)</u> flotufolastat ( <sup>18</sup> F) (123), iofolastat ( <sup>123</sup> I) (105), piflufolastat ( <sup>18</sup> F) (126), technetium ( <sup>99m</sup> Tc) trofolastat chloride (109), vidoflufolastat ( <sup>18</sup> F) (127)
-gacestat (a)	<u>gamma-secretase inhibitors</u> avagacestat (104), begacestat (97), crenigacestat (117), nirogacestat (115), semagacestat (99)
-inostat (a)	<u>histone deacetylase inhibitors</u> abexinostat (105), alteminostat (119), belinostat (97), citarinoestat (116), dacinostat (89), domatinostat (118), entinostat (99), fimepinostat (118), givinostat (101), ivaltinostat (121), mocetinostat (101), panobinostat (96), pracinostat (119), quisinostat (107), remetinostat (115), resminostat (102), tefinostat (105), tinostamustine (116), tucidinostat (115), vorinostat (94), zabadinostat (127)
-listat (a)	<u>gastrointestinal lipase inhibitors</u> cetilistat (91), orlistat (66)
-mastat (a)	<u>matrix metalloproteinase inhibitors</u> aderamastat (128), aldumastat (123), batimastat (70), cipemastat (81), ilomastat (73), marimastat (75), otaplimastat (118), prinomastat (82), rebimastat (89), ricolinostat (109), solimastat (80), tanomastat (82)
-metostat (a)	<u>histone N-methyltransferase inhibitors</u> lirametostat (123), onametostat (123), pemrametostat (123), pinometostat (112), tazemetostat (112), tulmimetostat (126), valemestostat (118)
-mostat (a)	<u>proteolytic enzyme inhibitors:</u> camostat (46), nafamostat (53), patamostat (69), sepimostat (68), upamostat (110)

(c) aloxistatin (57), ulinastatin (56)

-restat or  
-restat- aldose reductase inhibitors

#### M.5.0.0

(a) alrestatin (37), caficrestat (124), epalrestat (55), fidarestat (78), imirestat (59), lidorestat (87), minalrestat (76), ponalrestat (58), ranirestat (91), risarestat (82), tolrestat (51), zenarestat (64), zopolrestat (64)

various:

abrucomstat (124)	methyl coenzyme M reductase inhibitor
acebilustat (114)	leukotriene A4 hydrolase inhibitor
afegostat (101)	$\beta$ -glucocerebrosidase inhibitor
alicapistat (115)	calpain cysteine protease inhibitor
apratostat (93)	inhibition of TNF- $\alpha$ converting enzyme
atuzaginstat (124)	bacterial protease lysine gingipain inhibitor
avoralstat (112)	kallikrein inhibitor
azalanstat (73)	lanosterol 14 $\alpha$ -demethylase inhibitor
baxdrostat (125)	aldosterone synthase inhibitor
benurestat (31)	urease inhibitor
berotralstat (120)	kallikrein inhibitor
cavosonstat (116)	alcohol dehydrogenase inhibitor
cilastatin (50)	renal dehydropeptidase inhibitor
cindinustat (107)	nitric oxide synthase inhibitor
clesacostat (124)	acetyl CoA carboxylase (ACC) inhibitor
cobicistat (103)	cytochrome P450 3A4 (CYP3A4) inhibitor
conendostatin (122)	angiogenesis inhibitor, antineoplastic
conestat alfa (98)	human plasma protease C1 inhibitor
cutaxestat (126)	autotaxin inhibitor
dazcapistat (124)	calpain inhibitor
denifanstat (126)	fatty acid synthase inhibitor
devimistat (120)	antineoplastic
dexfadrostat (126)	aldosterone synthase (CYP 11B2) inhibitor
dociparstat (114)	heparanase inhibitor
elcubragistat (126)	monoacylglycerol lipase inhibitor
emixustat (108)	retinol isomerase inhibitor
emvododstat (124)	dihydroorotate dehydrogenase (DHODH) inhibitor
ervogastat (124)	diacylglycerol acyltransferase (DGAT2) inhibitor
ezatiostat (98)	glutathione-S-transferase inhibitor
ezurpimtrostat (125)	palmitoyl protein thioesterase 1 (PPT-1) inhibitor
farudodstat (125)	dihydroorotate dehydrogenase (DHODH)

	inhibitor
feniralstat (126)	kallikrein inhibitor
febuxostat (85)	xanthine oxydase and xanthine dehydrogenase inhibitor
firsocostat (118)	allosteric inhibitor of acetyl-CoA carboxylase (ACC)
fulacimstat (117)	chymase inhibitor
ibezapolstat (123)	bacterial DNA polymerase III inhibitor
imetelstat (101)	antineoplastic, telomerase inhibitor
iofolastat (123I) (105)	radiopharmaceutical
icerguastat (122)	protein phosphatase 1 inhibitor
irosustat (104)	antineoplastic
lanabecestat (116)	beta secretase inhibitor
lapaquistat (96)	squalene synthase inhibitor
lenumlostat (128)	lysyl oxidase homolog 2 (LOXL2) inhibitor, antifibrotic
linrodostat (119)	antineoplastic
lonodelestat (121)	elastase inhibitor
lorundrostat (127)	aldosterone synthase inhibitor
lucerastat (106)	ceramide glucosyltransferase inhibitor
luvadaxistat (122)	D-amino acid oxidase (DAAO) inhibitor
migalastat (95)	alpha-galactosidase A enzyme inhibitor
miglustat (85)	glucosyltransferase
mitiperstat (126)	myeloperoxidase inhibitor
ninerafxstat (124)	3-ketoacyl-CoA thiolase inhibitor
niraxostat (99)	xanthine oxydase inhibitor
zinostatin (40)	antineoplastic
zinostatin stimalamer (74)	
ziritaxestat (120)	autotaxin inhibitor

(b) nystatin (6)

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

H.4.0.0

(a) atorvastatin (71), bervastatin (72), cerivastatin (74), crilvastatin (63), dalvastatin (64), fluvastatin (62), glenvastatin (70), lovastatin (57), mevastatin (44), pitavastatin (86) (replaces itavastatin (80)), pravastatin (57), rosuvastatin (94), simvastatin (58), tenvastatin (85)



		BAN
<b>-steine</b>	<b>mucohydric, other than bromhexine derivatives</b>	
K.0.0.0	(BAN: substances of the acetylcysteine group)	
(a)	acetylcysteine (13), bencisteine (30), carbocisteine (34), cartasteine (72), dacisteine (49), danosteine (53), erdoosteine (56), fudoosteine (77), guaisteine (57), isalsteine (63), letoosteine (38), mecyosteine (13), midesteine (63), moguisteine (61), nesosteine (52), omonasteine (40), preniosteine (42), salmiosteine (58), tauroosteine (63), telmeosteine (63)	
		USAN
<b>-ster-</b>	<b>androgens/anabolic steroids</b>	
Q.2.3.1		
(a)	<b>-testosterone:</b> cloxotestosterone (12), methyltestosterone (4), testosterone (4), testosterone ketolaurate (16)	
	<b>-sterone:</b> bolasterone (13), fluoxymesterone (6), oxymesterone (12), prasterone (23), tiomesterone (14)	
	<b>-ster-:</b> mesterolone (15), penmesterol (14), rosterolone (59)	
(b)	<u>progestational steroids</u>	
	<b>-gesterone:</b> dydrogesterone (12), haloprogesterone (11), hydroxyprogesterone (8), medroxyprogesterone (10), norgesterone (14), progesterone (4), segesterone (89)	
	<b>-sterone:</b> dimethisterone (8), ethisterone (4), norethisterone (6), norvinisterone (10)	
<u>various:</u>	<b>-sterone:</b> aldosterone (6) (corticosteroid), calusterone (23) (antineoplastic)	
	<b>-sterol:</b> azacosterol (16) (hypocholesterolemic), dihydrotachysterol (1) (antihypoparathyroid), iodocholesterol ( <sup>131</sup> I) (39), larsucosterol (124)	
	<b>ster:</b> nisterime (38) (contraceptive agent), stercuronium iodide (21) (neuromuscular blocking agent)	
<b>-steride</b>	<b>testosterone reductase inhibitors</b>	USAN
	bexlosteride (81), dutasteride (78), epristeride (69), finasteride (62), izonsteride (81), lapisteride (85), turosteride (67)	

**-stigmine (d) acetylcholinesterase inhibitors**

- E.1.2.0 (USAN: cholinesterase inhibitors (physostigmine type))
- (a) distigmine bromide (16), eptastigmine (62), ganstigmine (81), neostigmine bromide (4), pyridostigmine bromide (6), quilostigmine (76), rivastigmine (77), terestigmine (77)
- (c) eseridine (53)

**-stim colony stimulating factors**

- I.5.0.0
- (a) ancestim (79) (cell growth factor), garnocestim (85) (immunomodulator), pegacaristim (80) (megakaryocyte growth factor), romiplostim (97) (platelet stimulating factor)

**-distim combination of two different types of colony stimulating factors**  
(USAN: conjugates of two different types of colony-stimulating factors)

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

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

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

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

- (a) balugrastim (107), efbemalenograstim alfa (124), eflapegrastim (112), eflenograstim alfa (117), empegfilgrastim (107), filgrastim (64), lenograstim (64), lipegfilgrastim (105), mecapegfilgrastim (113), nartograstim (66), pegbovigrastim (109), pegfilgrastim (85), pegnartograstim (80), pegteograstim (109), telpegfilgrastim (123)

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

- (a) cilmostim (71), lanimostim (91), mirimostim (65)

**-plestim interleukin-3 analogues and derivatives**  
(USAN: interleukin-3 derivatives, pleiotropic colony-stimulating factors)

- (a) daniplestim (76), muplestim (72)

**-stinel**      ***N*-methly-D-aspartate (NMDA) receptor co-agonists**

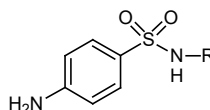
(USAN: *N*-methyl-D-aspartate (NMDA) receptor antagonists/agonists, glycine recognition site)

- (a)      apimostinel (115), gavestinel (77), licostinel (77), rapastinel (111),  
zelquistinel (121)

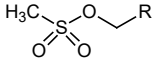
BAN, USAN

**sulfa-**      **anti-infectives, sulfonamides**

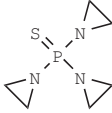
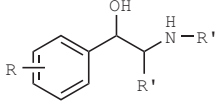
- S.5.1.0      (BAN: sulpha-)  
(USAN: antimicrobials (sulfonamides derivatives))



- (a)      sulfabenz (17), sulfabenzamide (27), sulfacarbamide (12), sulfacecole (30), sulfacetamide (1), sulfachlorpyridazine (10), sulfachrysoidine (1), sulfacitine (23), sulfacloamide (17), sulfaclozole (25), sulfaclozine (25), sulfadiazulfone 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 (I), sulfatolamide (10), sulfatroxazole (29), sulfatrozole (24)
- (b)      galsulfase (92), idursulfase (90), sulfarsphenamine (4)
- (c)      benzylsulfamide (1), glucosulfamide (1), maleylsulfathiazole (1), mesulfamide (41), nitrosulfathiazole (1), phthalylsulfamethizole (6), phthalylsulfathiazole (1), salazodine (22), salazosulfadimidine (11), salazosulfamide (1), salazosulfathiazole (1), stearyl-sulfamide (1), succinylsulfathiazole (4), sulfisomidine (1), vanyl-disulfamide (1), mafenide (1) (sulfonamide, but not sulfanilamide)

		USAN
<b>-sulfan</b>	<b>antineoplastic, alkylating agents, methanesulfonates</b>	
L.2.0.0		
(a)	busulfan (6), improsulfan (35), mannosulfan (24), pipsulfan (15), ritrosulfan (33), treosulfan (26)	
<b>-tacept</b>	<b>see -cept</b>	
<b>-tadekin</b>	<b>see -kin</b>	
		USAN
<b>-tadine</b>	<b>histamine-H<sub>1</sub> receptor antagonists, tricyclic compounds</b>	
G.2.1.0	(USAN: -(a)tadine: tricyclic histaminic-H <sub>1</sub> receptor antagonists, loratadine derivative)	
(a)	alcaftadine (94), azatadine (18), cyproheptadine (10), desloratadine (80), loratadine (54), napactadine (46), olopatadine (72), rupatadine (74), vapitadine (95)	
(b)	amantadine (15), carmantadine (31), rimantadine (17), somantadine (51), tromantadine (28) (see –mantadine)	
		USAN
<b>-tansine</b>	<b>maytansinoid derivatives, antineoplastics</b>	
	<u>emtansine</u> (such as laprituximab emtansine (114), naratuximab emtansine (114), trastuzumab emtansine (103))	
	<u>maitansine</u> (40)	
	<u>mertansine</u> (such as cantuzumab mertansine (105), lorvotuzumab mertansine (103))	
	<u>ravtansine</u> (such as anetumab ravtansine (109), cantuzumab ravtansine (105), coltuximab ravtansine (109), indatuximab ravtansine (105))	
	<u>soravtansine</u> (such as mirvetuximab soravtansine (113))	
	tapatansine (127)	
		USAN
<b>-tant</b>	<b>neurokinin (tachykinin) receptor antagonists</b>	
<b>-pitant</b>	<u>neurokinin NK<sub>1</sub> (substance P) receptor antagonist</u>	
(a)	aprepitant (84), befetupitant (91), burapitant (101), casopitant (94), dapitant (74), ezlopitant (82), figopitant (82), fosaprepitant (94), fosnetupitant (113), imnopitant (121), lanepitant (77), maropitant (90), netupitant (90), nolpitantium besilate (75), orvepitant (94), rolapitant (97),	

	serlopitant (100), telmapitant (108), tradipitant (111), vestipitant (91), vofopitant (82)	
<i>-dutant</i>	<u>neurokinin NK<sub>2</sub> receptor</u>	
(a)	ibodutant (98), nepadutant (78), saredutant (75)	
<i>-nertant</i>	<u>neurotensin receptor antagonist</u>	
(a)	meclinetant (88) (replaces reminertant (85))	
<i>-netant</i>	<u>neurokinin NK<sub>3</sub> and dual NK<sub>3</sub>-NK<sub>1</sub> receptor antagonist</u>	
(a)	elinzanetant (122), fezolinetant (115), osanetant (74), pavinetant (118), talnetant (81)	
<hr/>		USAN
<b>-tapide</b>	<b>microsomal triglyceride transfer protein (MTP) inhibitors</b>	
H.4.0.0	dirlotapide (91), granotapide (104), implitapide (82), mitratapide (90), lomitapide (101), usistapide (104)	
<hr/>		USAN
<b>-taxel</b>	<b>antineoplastics, taxane derivatives</b>	
L.0.0.0	cabazitaxel (98), docetaxel (71), larotaxel (94), milataxel (91), ortataxel (87), paclitaxel (68), paclitaxel ceribate (91), paclitaxel obaluronate (126), paclitaxel poliglumex (90), paclitaxel trevatide (112), simotaxel (94), sudocetaxel zendusortide (126), tesetaxel (93)	
<hr/>		USAN
<b>-tecan</b>	antineoplastics, topoisomerase I inhibitors	
L.0.0.0	(USAN: antineoplastics (camptothecine derivatives))  afeletecan (85), atiratecan (101), belotecan (91), cositecan (100), davamotecan pegadexamer (117), delimotecan (97), diflomotecan (84), elemotecan (92), etirinotecan pegol (107), exatecan (81), exatecan alideximer (89), firtecan peglumer (108), firtecan pegol (107), gimatecan (86), irinotecan (64), labetuzumab govitecan (113), locnartecan (124), lurtotecan (74), mureletecan (85), namitecan (100), pegamotecan (91), rubitecan (82), sacituzumab govitecan (113), tenifatecan (102), topotecan (65), trastuzumab deruxtecan (116)	

		USAN
<b>-tepa</b>	<b>antineoplastics, thiotepa derivatives</b>	
L.2.0.0		
(a)	azatepa (12), pumitepa (48), thiotepa (10)	
<b>-tepine</b>	<b>see -pine</b>	
<b>-teplase</b>	<b>tissue type plasminogen activators, see -ase</b>	USAN
<b>-termin</b>	<b>see -ermin</b>	USAN
<b>-terol</b>	<b>bronchodilators, phenethylamine derivatives</b>	BAN, USAN
	(previously -prenaline or -terenol unofficial)	
E.4.0.0		
(a)	<p>abediterol (104), amiterol (26), arformoterol (90), batefenterol (110), bitolterol (34), broxaterol (51), carmoterol (91), cimaterol (54), colterol (36), difeterol (36), etanterol (53), fenoterol (26), formoterol (44), imoxiterol (52), indacaterol (91), milveterol (97), naminterol (53), nardeterol (62), navafenterol (121), olodaterol (106), picumeterol (64), procaterol (37), reproterol (30), rimiterol (26), salmeterol (55), sulfonterol (31), vilanterol (103), zilpaterol (60), zinterol (38)</p> <p><u>-buterol</u>: bambuterol (49), carbuterol (29), clenbuterol (28), divabuterol flerobuterol (59), ibuterol (31), mabuterol (46), nisbuterol (38), pirbuterol (30), tobuterol (45), tulobuterol (40)</p> <p><u>cardiac stimulants</u>: metaterol (43), prenalterol (38), xamoterol (48)</p> <p><u>previously -prenaline or -terenol</u>: clorprenaline (17), hexoprenaline (21), isoprenaline (1), levisoprenaline (10), metiprenaline (24), orciprenaline (14), quinprenaline (17), deterenol (25), soterenol (20)</p>	

- (b) azacosterol (16), dihydrotachysterol (1), penmesterol (14)
- (c) dioxethedrine (6), isoetarine (13), methoxyphenamine (1), pseudoephedrine (11), salbutamol (20), salmefamol (23), terbutaline (22)

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**-terone      antiandrogens**

(Q.2.3.1)

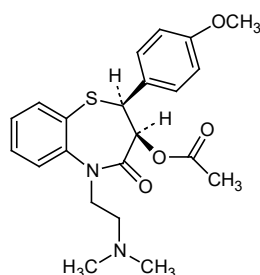
- (a) abiraterone (74), benorterone (15), clascoterone (120), cyproterone (16), delanterone (42), galeterone (105), inocoterone (54), ludaterone (123), osaterone (68), topterone (39), zanoterone (67)
- (b) clometerone (15) (antiestrogen)
- (c) cioteronel (62), orteronel (104), oxendolone (42), rosterolone (60),

USAN

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

F.2.1.0



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

USAN

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**-tibant      bradykinin receptor antagonists**  
(USAN : antiasthmatics (bradykinin antagonists))

anatibant (88), deltibant (75), fasitibant chloride (103), icatibant (67), safotibant (105)

USAN

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

**-dutide      oxyntomodulin analogues and other dual agonists of glucagon-like peptide receptor 1 (GLP-1R) and glucagon receptor (GCGR)**

- (a) bamadutide (119), cotadutide (119), efinopegdutide (120), mazdutide (126), pegapamodutide (116), pemvidutide (126), survodutide (128)

<b>-enatide</b>	<b>glucagon-like peptide-1 receptor (GLP1R) agonists, exenatide (exendin-4) and analogues</b>	
(a)	albenatide (114), efpeglenatide (111), exenatide (89), langlenatide (111), lixisenatide (99), pegloxenatide (125), pegsebrenatide (127), pegloxenatide (125), vurolenatide (126)	
<b>-glutide</b>	<b>glucagon-like Peptide (GLP) analogues</b>	USAN
	albiglutide (97), apraglutide (120), beinaglutide (117), dulaglutide (103), ecnoglutide (126), elsiglutide (104), froniglutide (127), glepaglutide (116), liraglutide (87), maridebart cafraglutide (128), semaglutide (101), taspoglutide (99), teduglutide (90), utreglutide (126)	
<b>-motide</b>	<b>immunological agents for active immunization</b>	
	abecomotide (109), adeggramotide (115), alicdamotide (109), alrefimotide (125), amilomotide (105), asudemotide (107), baloramotide (120), disomotide (94), ederimotide (128), elpamotide (103), etimumotide (128), graunimotide (113), imsamotide (128), latromotide (107), marlumotide (128), nelatimotide (115), onilcamotide (124), ovemotide (94), pradimotide (107), quasomotide (128), riletamotide (125), sultimotide alfa (117), tanurmotide (109), tapderimotide (125), tecemotide (108), tertomotide (98), tiplimotide (82), trempamotide (107), vorumotide (128), zastumotide (110)	
<b>-netide</b>	<b>neurological</b>	
(a)	alirinetide (117), cibinetide (114), davunetide (100), orenetide (125), nerinetide (119), orenetide (125), trofinetide (112)	
(b)	diamfenetide (28)	
(c)	doreptide (59), ebiratide (56), nemifitide (87), obinepitide (96), pareptide (38), vanutide cridificar (100)	
<b>-paratide</b>	<b>parathyroid hormone analogues</b>	
(a)	abaloparatide (109), eneboparatide (127), palopegteriparatide (128), semparatide (80), teriparatide (50)	
<b>-pultide</b>	<b>peptides and proteins, used in pulmonary surfactants</b>	
(a)	elopultide (121), lusupultide (80), obelpultide (121), redipultide (119), sinapultide (78), zelpultide alfa (126)	
<b>-reotide</b>	<b>somatostatin receptor agonists/antagonists</b>	
	depreotide (80), edotreotide (84), ilatreotide (68), lanreotide (64), lutetium ( <sup>177</sup> Lu) nendratareotide (124), nendratareotide uzatansine (124), oxodotreotide (116), octreotide (52), pasireotide (90), pentetreotide (66), satoreotide (115), satoreotide trizoxetan (114), vapreotide (62), veldoreotide (117)	



**-ritide****natriuretic peptides**

anaritide (57), carperitide (65), cenderitide (105), navepegritide (127), nesiritide (80), ularitide (69) vosoritide (112)

**various:**

analgesic: leconotide (86), ziconotide (78)

antibacterial: ropocamptide (121)

antifungals: pezadeftide (126)

angiogenesis inhibitor: cilengitide (81), gersizangitide (126)

anti-fibrosis: efocipegtrutide (128)

anti-inflammatory: brimapitide (114), dusquetide (113), icrocaptide (89)

antianaemic: peginesatide (108), pegmolsatide (125)

antidepressant: nemifitide (87)

antidiabetic: amlintide (76), dalazatide (111), davalintide (101), livoletide (118), pramlintide (74), retatrutide (128), seglitide (57), tirzepatide (120)

antineoplastic: certepetide (127), fexapotide (114), lutetium (<sup>177</sup>Lu) edotreotide (128), (<sup>177</sup>Lu) vivipotide tetraxetan (127), lutetium (<sup>177</sup>Lu) zadavotide guraxetan (125), onvitrelin ucalontide (128), ruxotemitide (119), vivipotide tetraxetan (120), zendusortide (126)

antiviral: bulevirtide (118), enfuvirtide (85), labuvirtide (124), tifuvirtide (91)

autoimmune disorders: dalazatide (111), dirucotide (100)

calcium sensing receptor agonist: etelcalcetide (112)

cardiovascular indications: aclerastide (110), cavutilide (127), danegaptide (101), elamipretide (113), enlicitide chloride (128), ensereptide (107), eptifibatide (78), mibenratide (111) milpocitide (127), odatrotide (125), rotigaptide (94), rusalatide (96), sovateltide (122), teprotide (36)

chemokine CXCR4 receptor antagonist: balixafortide (112)

decoy receptor: nangibotide (117)

diagnostic: betiatide (58), bibapcitide (78), ceruletide (34), flotegatide (<sup>18</sup>F) (108), fluciclatide (<sup>18</sup>F) (103), gallium (<sup>68</sup>Ga) boclatixafortide (125), gallium (<sup>68</sup>Ga) gozetotide (123), maraciclalide (103), mertiatide (60), pendetide (70), technetium (<sup>99m</sup>Tc) apcitide (78), technetium (<sup>99m</sup>Tc) etarfolatide (107), tozuleristide (115), yttrium (90Y) anditixafortide (125)

endocrine disorders: cagrilintide (123)

expectorant (in cystic fibrosis): lancovutide (99)

gastrointestinal indications: avexitide (120), dolcanatide (114), lagatide (75), larazotide (99), linaclotide (96), ociltide (52), plecanatide (104), renacacotide (115), sulglicotide (29), triletide (50)

growth stimulant-veterinary: nosiheptide (35)

hormone analogues: rusfertide (125)

immunological agents - antineoplastic: almurtide (74), brimapitide (114), delmitide (92), edratide (89), goralatide (72), mifamurtide (95), murabutide (49), paclitaxel trevatide (109), pentigetide (60), pimelautide (53), prezatide copper acetate (67), rolipoltide (94), romurtide (61), tabilautide (60), temurtide (60), tigapotide (95)

kallicrein inhibitor: ecallantide (93)

melanocortin receptor agonists: afamelanotide (100), bremelanotide (95), modimelanotide (111), setmelanotide (112)

sedative: emideltide (70)

sodium channel activator: solnatide (113)

transforming growth factor inhibitor: disitertide (99)

urokinase plasminogen activator receptor (uPAR) inhibitor: cenupatide (119)

others: selcopintide (126), talfirastide (128)

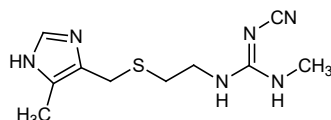
(b) defibrotide (44) (nucleotide), diamfenetide (28) (fasciolicide), diclometide (19) (behaviour modifier), fludroxycortide (12), glisentide (58)

(c) angiotensin II (65), angiotensinamide (12)

BAN, USAN

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

G.2.2.0 (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) azacitidine (40) (antineoplastic), benzethidine (9), furethidine (9), guanethidine (11), hexetidine (6), hydroxypethidine (5), pethidine (4), propinetidine (12)
- (c) metiamide (30)

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**-tiline**      **see -triptyline**

USAN

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**-tinib**      **tyrosine kinase inhibitors**

L.0.0.0

**-brutinib**    **agammaglobulinaemia tyrosine kinase (Bruton tyrosine kinase) inhibitors**

- (a) acalabrutinib (113), atuzabrutinib (125), branebrutinib (121), edralbrutinib (123), elsubrutinib (121), evobrutinib (115), fenebrutinib (118), ibrutinib (107), milrebrutinib (128), nemtabrutinib (124), orelabrutinib (122), pirtobrutinib (125), remibrutinib (121), rilzabrutinib (121), sofnobrutinib (128), spebrutinib (112), tirabrutinib (115), tolebrutinib (122), vecabrutinib (120), zanubrutinib (117)

**-citinib**    **Janus kinase inhibitors**

- (a) abrocitinib (120), atinvicitinib (126), baricitinib (107), beprocitinib (121), delgocitinib (117), deucravacitinib (123), fosifidancitinib (122), golidocitinib (125), gusacitinib (120), ifidancitinib (122), ilunocitinib (125), itacitinib (115), ivarmacitinib (126), izencitinib (121), lorpucitinib (122), nezulcitinib (124), nimucitinib (128), oclacitinib (105), peficitinib (112), povorcitinib (126), pumecitinib (128), ritlecitinib (121), ropsacitinib (125), rovadicitinib (128), solcitinib (112), tofacitinib (105), upadacitinib (115), zasocitinib (128)

**-ertinib**    **epidermal growth factor receptor (EGFR) inhibitors**

- (a) abivertinib (119), aumolertinib (124), befotertinib (123), canertinib (87), epertinib (115), lazertinib (117), mavelertinib (118), mifanertinib (128), mobocertinib (121), olafertinib (121), osimertinib (113), rezivertinib (122), sacibertinib (127), sunvozertinib (125), tuxobertinib (125), xiliertinib (121), zipalertinib (126), zongertinib (128), zorifertinib (121)
- (b) ulixertinib (113), ravoxertinib (115) (Erk inhibitors)

- (c) afatinib (104), olmutinib (114), erlotinib (85), gefitinib (85), mubritinib (90), nazartinib (114), mubritinib (90), nazartinib(114)

### **-metinib MEK (MAPK<sup>#</sup> kinase) tyrosine kinase inhibitors**

<sup>#</sup> MAPK: mitogen activated protein kinase

- (a) avutometinib (126), binimetinib (109), cobimetinib (107), darizmetinib (128), mirdametinib (122), pexmetinib (110), ralimetinib (109), refametinib (106), selumetinib (100), trametinib (105), tunlametinib (125), zapnometinib (125), zunsemetinib (125)

### **-trectinib tropomyosin receptor kinase (TRK) inhibitors**

- (a) anizatrectinib (127), boditreectinib (128), emzeltreectinib (128), entrectinib (113), larotrectinib (115), paltimatrectinib (126), repotrectinib (120), selitreectinib (123), taletrectinib (123), utatreectinib (126), zurletrectinib (128)

#### Others:

adrixetinib (128), afatinib (104), alectinib (108), altiratinib (113), amuvatinib (103), ansornitinib (127), avapritinib (117), axitinib (94), bafetinib (101), belizatinib (113), bemcentinib (117), bezuclastinib (126), bosutinib (94), brigatinib (113), cabozantinib (105), capmatinib (111), catequentinib (121), cerdulatinib (111), ceritinib (109), conteltinib (118), crizotinib (103), dacomitinib (103), dalmelitinib (127), dasatinib (94), decernotinib (110), defactinib (111), denfivontinib (127), derazantinib (116), deuruxolitinib (124), dovitinib (97), dubermatinib (120), ebezotinib (126), edicotinib (118), elenestinib (128), elzovatinib (126), ensartinib (115), entospletinib (110), erdafitinib (113), erlotinib (85), famitinib (125), fedratinib (108), filgotinib (110), fisogatinib (120), flumbatinib (125), foretinib (102), fostamatinib (100), fruquintinib (116), futibatnib (119), gandotinib (108), gefitinib (85), gemnelatinib (125), gilteritinib (112), glesatinib (115), golvatinib (107), gumarontinib (127), gunagratinib (125), ifebemtinib (128), ilginatinib (119), imatinib (86), infigratinib (112), lapatinib (89), larotrectinib (115), lenvatinib (104), lestaurtinib (91), linsitinib (104), lirafugratinib (128), lorlatinib (114), luxeptinib (125), masitinib (96), mavelertinib (118), merestinib (113), mivavotinib (119), momelotinib (107), mubritinib (90), naquotinib (115), narmafotinib (128), nazartinib (114), neratinib (97), nilotinib (95), olverembatinib (122), orantinib (103), pacritinib (104), pamufetinib (121), pegcantratinib (113), pelitinib (93), pemigatinib (118), pexidartinib (112), ponatinib (104), poseltinib (116), poziotinib (108), pralsetinib (120), quizartinib (104), radotinib (104), rebastinib (107), resencatinib (128), ripretinib (119), risvodetinib (128), roblitinib (118), rociletinib (111), rogaratinib (115), ruserontinib (127),

ruxolitinib (103), sacibertinib (127), sapitinib (106), saracatinib (99), savolitinib (111), selpercatinib (120), seralutinib (122), sitravatinib (114), sotuletinib (125), sunitinib (93), surufatinib (118), tamnorzatinib (127), tandutinib (91), tarloxotinib bromide (114), tasurgratinib (124), telatinib (96), tepotinib (111), tesevatinib (113), tinengotinib (126), tivantinib (103), tucatinib (113), tuspetinib (127), unecritinib (127), vamotinib (127), varlitinib (102), vebreltinib (125), vepafestinib (125), vimseltinib (123), vodobatinib (123), zanzalintinib (127), zeteletinib (124), zidesamtinib (128), zoligratinib (122)

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**-tirelin**      **see -relin**

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**-tirom**      **antihyperlipidaemics, thyromimetic derivatives**

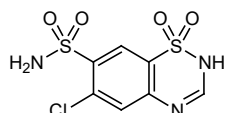
(a)      acetiomate (30), axitirome (82), bentiromide (41), eprotirome (99), omzotirome (125), resmetirom (119), sobetirome (126)

USAN

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

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)

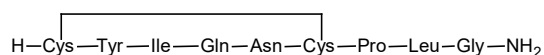
(c)      bendroflumethiazide (11), benzthiazide (10), chlorothiazide (8), cyclopenthiazide (12), cyclothiazide (12), disulfamide (11), ethiazide (14), flumethiazide (10), hydrochlorothiazide (10), hydroflumethiazide (10), methyclothiazide (11), polythiazide (12), teclothiazide (12), trichlormethiazide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

USAN

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

Q.1.2.0



(a)      argiprestocin (13), aspartocin (11), carbetocin (45), cargutocin (35), demoxytocin (22), merotocin (111), nacartocin (49), oxytocin (13)

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**-toclax**      **B-cell lymphoma 2 (Bcl-2) inhibitors**

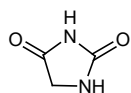
(a)      imlatoclax (115), lisaftoclax (125), mirzotamab clezutoclax (121),

murizatoclast (122), navitoclast (103), obatoclast (94), pelcitoclast (122), sonrotoclast (128), tapotoclast (121), venetoclast (111)

USAN

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

A.3.1.1



(a) albutoin (13), doxenitoin (31), ethotoin (6), fosphenytoin (62), imepitoin (96), mephenytoin (1), metetoin (12), phenytoin (4)

ropitoin (40) (H.2.0.0.)

(b) clodantoin (13) (antifungal), nitrofurantoin (11) (antibacterial)

**-tolimod see -imod**

**-trakin see -kin**

**-trakinra see -kinra**

USAN

**-traline serotonin reuptake inhibitors**

dasotraline (110), indatraline (54), lometraline (28), sertraline (48), tametraline (46)

**-tredekin see -kin**

USAN

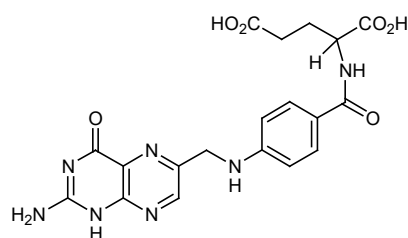
**-trep transient receptor potential antagonists**

(a) asivatrep (117), elismetrep (118), evifacotrep (125), libvatrep (124), mavatrep (111), motugivatrep (126)

USAN

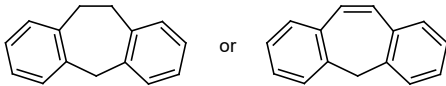
**-trexate folic acid analogues**

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



(a) edatrexate (61), ketotrexate (50), methotrexate (10), pralatrexate (92),

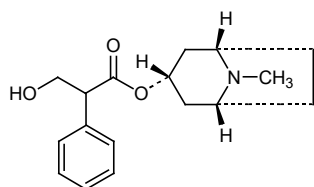
(c)	trimetrexate (46) aminopterin sodium (04)	
		USAN
<b>-trexed</b>	<b>antineoplastics; thymidylate synthetase inhibitors</b>	
L.0.0.0		
(a)	ideltrexed (122), nolatrexed (78), pemetrexed (78), plevitrexed (89), raltitrexed (94)	
		USAN
<b>-tricin</b>	<b>antibiotics, polyene derivatives</b>	
S.6.2.0		
(a)	amcipatricin (120), 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)	
		USAN
<b>- trigine</b>	<b>sodium channel blockers, signal transduction modulators</b>	
C.2.0.0		
(a)	bliretrigine (126), elpetrigine (101), lamotrigine (52), palatrigine (58), vixotrigine (116), raxatrigine (114), relutrigine (128), sipatrigine (74), suzetrigine (128), zandatrigine (127)	
		USAN
<b>tril/trilat</b>	<b>endopeptidase inhibitors</b>	
H.3.0.0		
(a)	candoxatril (62), candoxatrilat (62), sacubitril (109), sacubitrilat (113)	
<i>-dotril</i>	dexecadotril (73), ecadotril (68), fasidotril (74), racecadotril (73)	
<i>-lutril</i>	daglutril (90)	
<i>-patril/-patrilat</i>	gemopatrilat (84), ilepatril (95), omapatrilat (78), sampatrilat (74)	

		USAN
<b>-triptan</b>	<b>serotonin (5-HT<sub>1</sub>) receptor agonists, sumatriptan derivatives</b>	
C.0.0.0		
(a)	almotriptan (76), avatriptan (76), donitriptan (82), eletriptan (74), frovatriptan (78), naratriptan (69), oxitriptan (39), rizatriptan (75), sumatriptan (59), zolmitriptan (74)	
(c)	alniditan (72)	
		USAN
<b>-triptyline</b>	<b>antidepressants, dibenzo[<i>a,d</i>]cycloheptane or cycloheptene derivatives</b>	
C.3.2.0	(USAN: antidepressants (dibenzo[ <i>a,d</i> ]cycloheptane derivatives))	
		
(a)	amitriptyline (11), amitriptylinoxide (36), butriptyline (16), cotriptyline (26), intriptyline (26), nortriptyline (12), octriptyline (33), protriptyline (14)	
(b)	oxitriptyline (21) (anticonvulsant)	
(c)	demexiptiline (43), hepzidine (15), levoprotiline (56), noxiptiline (20), oxaprotiline (45), setiptiline (56)	
	see also Pharm S/Nom 970	
		USAN
<b>-troban</b>	<b>thromboxane A<sub>2</sub>-receptor antagonists; antithrombotic agents</b>	
I.2.1.0	(USAN: antithrombotics (thromboxane A <sub>2</sub> receptor antagonists))	
(a)	argatroban (57), daltroban (57), domitroban (73), ifetroban (71), linotroban (69), mipitroban (73), ramatroban (73), sulotroban (55), terutroban (93)	
<b>-trokast</b>	<b>see -ast</b>	
<b>-trombopag</b>	<b>thrombopoietin agonists</b>	
(a)	avatrombopag (107), eltrombopag (94), lusutrombopag (104), rafutrombopag (127), totrombopag (97)	



**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), darotropium bromide (99), flutropium bromide (50), homatropine methylbromide (1), ilmetropium iodine (115), ipratropium bromide (28), octatropine methylbromide (10), oxitropium bromide (36), phenactropinium chloride (8), ritropirronium bromide (33), sevotropium mesilate (56), sintropium bromide (47), sultroponium (18), tematropium metilsulfate (64), tiotropium bromide (67), tipetropium bromide (42), tropenziline bromide (11), xentropium bromide (15)
- various:  
 clobenztropine (13) (antihistaminic), cyheptropine (15) (antiarrhythmic), deptropine (12) (antiasthmatic), revatropate (74) (bronchodilator), tropabazate (41) (tranquillizer), tropanserine (55) (serotonin receptor antagonist), tropantol (97) (chelating agent), tropapride (48) (antipsychotic), tropirine (20) (respiratory disorders), tropisetron (62) (serotonin antagonist)
- (b)      choriogonadotropin beta (120), dextropropoxyphene (7), eftansomatropin alfa(118), follitropin delta (112), follitropin epsilon (115), lonapgsomatropin(127), ripafollitropin alfa (122), somatropin (56), somatropin pegol (103), varfollitropin alfa (101)
- (c)      parasympatholytic/anticholinergic, tertiary amines:  
 poskine (8), prampine (11), tigloidin (14)
- various:  
 zepastine (26) (antihistaminic)

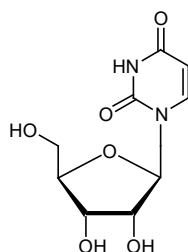
<b>-tug</b>	<b>unmodified immunoglobulins (new scheme for monoclonal antibodies)</b>
<b>-batug</b>	<b>bacterial:</b> calpurbatug (127)
<b>-citug</b>	<b>cardiovascular</b> suvemcitug (128)
<b>-detug</b>	<b>metabolic or endocrine pathways</b> ersodetug (128)
<b>-grotug</b>	<b>muscular</b> veligrotug (128)
<b>-kitug</b>	<b>cytokine and cytokine receptor</b> casdozokitug (127), duvakitug (128), falbikitug (128), nisevokitug (127), vilamakitug (127), vopikitug (128)
<b>-netug</b>	<b>neural</b> devextinetug (127), remternetug (128), sabirnetug (128)
<b>-prutug</b>	<b>immunosuppressive</b> eglatoprutug (127)
<b>-stotug</b>	<b>immunostimulatory</b> belrestotug (127), danburstotug (127), dargistotug (127), firastotug (128), muzastotug (128), ralzapastotug (127), nelistotug (128), zovostotug (128)
<b>-tatug</b>	<b>tumour</b> becotatug (127), nezutatug (128), oberotatug (128 oberotatug ravtansine (128), puxittug (128), puxitatug samrotecan (128), raludotatug (127), raludotatug deruxtecan (127), upinitatug (128), upinitatug rilsodotin (128)
<b>-vitug</b>	<b>viral</b> canrivitug (128), gorivitug (127), lafuvitug (128), nisfvitug (128)
<b>-uplase</b>	<b>urokinase type plasminogen activator, see -ase</b>

USAN

**-uridine** **uridine derivatives used as antiviral agents and as antineoplastics**  
(USAN: antivirals; antineoplastics (uridine derivatives))

S.5.3.0

L.4.0.0



(a) L.4.0.0: broxuridine (30), doxifluridine (44)

related: carmofur (45), clanfenur (58), tegafur (41)

S.5.3.0: fialuridine (68), floxuridine (16), fosfluridine tidoxil (93), fosifloxuridine nafalbenamide (127), idoxuridine (17), navuridine (84), ropidoxuridine (97), trifluridine (37), uridine triacetate (103)

**-vudine** (USAN: -vudine: antineoplastics; antivirals (zidovudine type))

(a) alovudine (68), brivudine (59), cedazuridine (118), censavudine (110), clevudine (78), epervudine (61), fosalvudine tidoxil (95), fosclevudine alafenamide (127), fosifloxuridine nafalbenamide (119), fozivudine tidoxil (73), lamivudine (66), netivudine (72), sorivudine (64), stavudine (65), telbivudine (88), valnivudine (115), zidovudine (56)

(c) edoxudine (52)

USAN

**-vaptan (x) vasopressin receptor antagonists**

H.0.0.0

(a) balovaptan (116), conivaptan (82), lixivaptan (83), mozavaptan (87), nelivaptan (98), relcovaptan (82), ribuvaptan (110), satavaptan (93), tolvaptan (83)

**-vastatin see -stat**

**-vec see -gene** for gene therapy substances

BAN, USAN

**-verine spasmolytics with a papaverine-like action**

F.1.0.0 (USAN: spasmolytic agents (papaverine type))

(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), febuverine (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)

Related:

fempiverinium bromide (26), pinaverium bromide (32)

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

- (c) spasmolytics chemically related to some of the above INN (not ending in *-verine*)

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

USAN

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

**vinca alkaloids**

(USAN: vin-; or -vin-)

- (a) B.1.0.0 stimulation of cerebrovascular circulation  
apovincamine (48), brovincamine (42), vinburnine (45), vincamine (22), vincanol (37), vincantril (51), vinconate (47), vindeburnol (49), vinmegallate (59), vinpocetine (36), vinpoline (35), vintoperol (61)

L.5.0.0 cytostatic

vinblastine (12), vincristine (13), vindesine (35), vinepidine (50), vinflunine (75), vinformide (38), vinfosiltine (64), vinglycinate (16), vinleucinol (64), vinleurosine (13), vinorelbine (57), vinrosidine (13), vintafolide (107), vintriptol (51), vinzolidine (46)

- (b) barbiturates  
vinbarbital (I), vinylbital (12)  
others: vincofos (28) (phosphate, anthelmintic), vintiamol (16) (vitamin B derivative, antineuralgic)

BAN, USAN

**vir** **antivirals (undefined group)**

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

- (a) abimtrelovir (126), alisporivir (100), alvircept sudotox (69), amdoxovir (85), amenamevir (100), amitivir (67), atevirdine (69), balapiravir (100), baloxavir marboxil (116), bevirimat (96), bofutrelvir (127), delavirdine (71), denotivir (70), depulfavirine (127), efavirenz (78), enfuvirtide (85), ensitrelvir (126), enviroxime (44), enzaplatoxvir (115), favipiravir (98), fipravirimat (128), firzacorvir (124), fostemsavir (115), galidesivir (114), inarigivir soproxil (116), islatravir (120), letermovir (104), litomeglovir (84), lincencorvir (126), loviroxime (70), lufotrelvir (125), maribavir (80), mindeudesivir (128), molnupiravir (126), neracorvir (128), nevirapine (66), nirmatrelvir (126), obeldesivir (127), onradivir (126), opaviralin (83), pimodivir (115), pirodavir (63), pocapavir (107), pomotrelvir (127), presatovir (111), pritelivir (106), remdesivir (116), riamilovir (117), ribavirin (31), rilematovir (122), rupintrivir (88), sisunatrovir (122), taribavirin (95),

- talviraline (75), tecovirimat (99), temsavir (112), teslexivir (116), tifuvirtide (91), tivrapipe (74), tomeglovir (84), trovirdine (73), umifenovir (103), vapendavir (106), vebicorvir (122), viroxime (49), zegrupirimat (127), zinviroxime (44), ziresovir (120)
- amivir*      neuraminidase inhibitors: laninamivir (100), oseltamivir (80), peramivir (86), zanamivir (72)
- asvir*      antivirals, hepatitis C Virus (HCV) NS5A inhibitors: coblopasvir (119), daclatasvir (115), elbasvir (111), ledipasvir (109), odalasvir (111), ombitasvir (112), pibrentasvir (119), ravidasvir (113), ruzasvir (114), samatasvir (110), velpatasvir (112)
- buvir*      RNA polymerase (NS5B) inhibitors: adafosbuvir (117), beclabuvir (111), bemnifosbuvir (125), dasabuvir (109), deleobuvir (108), filibuvir (101), lomibuvir (107), nesbuvir (98), radialbuvir (112), setrobuvir (106), sofosbuvir (108), tegobuvir (103), uprifosbuvir (115)
- capavir*      bersacapavir (122), canocapavir (127), claficapavir (126), pocapavir (107), lenacapavir (121)
- (c)              pirodavir (63), vapendavir (106)
- cavir*      carbocyclic nucleosides: abacavir (76), entecavir (82), lobucavir (72)
- ciclovir*      bicyclic heterocycle compounds: aciclovir (42), buciclovir (52), desciclovir (55), detivaciclovir (86), eprociclovir (112), famciclovir (61), filociclovir (111), ganciclovir (56), lagociclovir (101), lagociclovir valactate (101), omaciclovir (84), penciclovir (61), rodociclovir (62), tivaciclovir (86), valaciclovir (69), valganciclovir (78), valomaciclovir (84)
- fovir*      phosphonic acid derivatives: adefovir (72), alamifovir (89), besifovir (105), brincidofovir (110), cidofovir (72), pradefovir (93), rovafovir etalafenamide (119), tenofovir (82), tenofovir alafenamide (111), tenofovir amibufenamide (123), tenofovir exalidex (115)
- gosivir*      glucoside inhibitors: celgosivir (77)
- navir*      HIV protease inhibitors: amprenavir (79), atazanavir (88), brecanavir (94), darunavir (88), droxinavir (74), elunonavir (125), fosamprenavir (83), indinavir (74), lasinavir (76), lopinavir (80), mozenavir (84), nelfinavir (76), palinavir (74), ritonavir (74), saquinavir (69), telinavir (73), tipranavir (80)
- previr*      Hepatitis Virus C (HVC) protease inhibitors: asunaprevir (105), boceprevir (97), ciluprevir (90), danoprevir (102), deldeprevir (110), faldaprevir (106), furaprevir (111), glecaprevir (114), grazoprevir (111), narlaprevir (102), paritaprevir (111), simaprevir (105), sovaprevir (106), telaprevir (94),

	vaniprevir (103), vedroprevir (112), voxilaprevir (113)
-tegravir	<u>HIV integrase inhibitors</u> : bictegavir (113), cabotegavir (111), dolutegavir (105), elvitegravir (97), pirmitegravir (126), raltegravir (97)
-virine	<u>Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTI)</u> : capravirine (83), dapivirine (86), doravirine (109), elsulfavirine (117), emivirine (82), etravirine (88), fosdevirine (103), lersivirine (101), rilpivirine (82), ulonivirine (127)
-viroc	<u>CCR5 (Chemokine CC motif receptor 5) receptor antagonists</u> : ancriviroc (92), aplaviroc (94), cenicriviroc (103), maraviroc (94), vicriviroc (94)
-virsen	see -rsen
-vi(.)mab	see mab
(b)	virginiamycin (18), viridofulvin (16)
(c)	aranotin (21), arildone (38), avridine (50), didanosine (64), disoxaril (55), dimepranol (42), foscarnet sodium (42), fosfonet sodium (35), ketoxal (22), impacarzine (36), inosine (42), lodenosine (75), metisazone (14), moroxydine (22), pleconaril (77), tilorone (24), xenazoic acid (11)

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**-vircept**      **see -cept**

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**-virine**      **see -vir**

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**-viroc**      **see -vir**

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**-virsen**      **see -rsen**

---

**-vi(.)mab**      **see -mab**

USAN

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**-vivint**      **Wnt signalling inhibitors**

( USAN: Wnt (Wingless type mouse mammary tumor virus) pathway inhibitors )

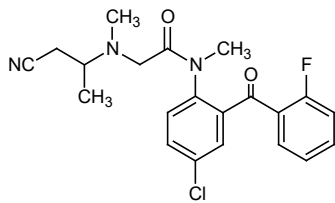
(a) cirtuvivint (123), foscenvivint (124), ipivivint (123), lorecivivint (119), tegavivint (118), teplinovivint (123)

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**-vos**      **see -fos**

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**-vudine**      **see -uridine**

		USAN
<b>-xaban</b>	<b>blood coagulation factor X<sub>A</sub> inhibitors, antithrombotics</b>	
(a)	apixaban (93), betrixaban (98), darexaban (104), edoxaban (99), eribaxaban (98), fidexaban (91), letaxaban (104), otamixaban (86), razaxaban (90), rivaroxaban (90)	
<b>-xanox</b>	<b>see -ox/-alox</b>	
		USAN
<b>-xetan</b>	<b>chelating agents</b>	
	actinium ( <sup>225</sup> Ac) lintuzumab satetraxetan (121), anetumab corixetan (121), cabiotraxetan (103), clivatuzumab tetraxetan (113), epitumomab cituxetan (89), gallium ( <sup>68</sup> Ga) rofapitide tetraxetan (128), ibritumomab tiuxetan (86), lutetium ( <sup>177</sup> Lu) lilotomab satetraxetan (112), lutetium ( <sup>177</sup> Lu) rofapitide tetraxetan (128), lutetium ( <sup>177</sup> Lu) vipivotide tetraxetan (127), pelgifatamab corixetan (126), rosopatamab tetraxetan (122), satoreotide tetraxetan (118), satoreotide trizoxetan (114), tabituximab barzuxetan (119), tetraxetan (92), tezatabep matraxetan (122), trastuzumab corixetan (126), vipivotide tetraxetan (120), yttrium ( <sup>90</sup> Y) clivatuzumab tetraxetan (102), yttrium ( <sup>90</sup> Y) tacatuzumab tetraxetan (93), zalsenertant tetraxetan (127)	
<b>-yzine</b>	<b>see -izine</b>	
<b>-zafone</b>	<b>alozafone derivatives</b>	
C.1.0.0		
(a)	alozafone (40), avizafone (64), ciprazafone (50), dinazafone (46), dulozafone (56), lorzafone (48), oxazafone (45), rilmazafone (55)	
<b>-zepine</b>	<b>see -pine</b>	
<b>-zolast</b>	<b>see -ast</b>	

		USAN
<b>-zolid</b>	<b>oxazolidinone antibacterials</b>	
	cadazolid (104), contezolid (118), delpazolid (116), eperezolid (76), furazolidone (13), linezolid (76), posizolid (88), radezolid (99), sutezolid (106), tedizolid (104), vinzolidine (46)	
		USAN
<b>zomib</b>	<b>proteasome inhibitors</b>	
L.0.0.0	(USAN: proteozome inhibitors)	
	bortezomib (88), carfilzomib (97), delanzomib (105), ixazomib (104), marizomib (102), oprozomib (107)	
		USAN
<b>-zone</b>	<b>see -buzone</b>	
		USAN
<b>-zotan</b>	<b>serotonin 5-HT<sub>1A</sub> receptor agonists/antagonists acting primarily as neuroprotectors</b>	
C.0.0.0	ebalzotan (72), lecozotan (93), naluzotan (101), osemozotan (87), piclozotan (92), robalzotan (90), sarizotan (94)	



# Annex 1

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## Procedure for the selection of recommended international nonproprietary names for pharmaceutical substances<sup>1</sup>

The following procedure shall be followed by the World Health Organization (hereinafter also referred to as “WHO”) in the selection of recommended international nonproprietary names for pharmaceutical substances, in accordance with resolution WHA3.11 of the World Health Assembly, and in the substitution of such names.

### Article 1

Proposals for recommended international nonproprietary names and proposals for substitution of such names shall be submitted to WHO on the form provided therefor. The consideration of such proposals shall be subject to the payment of an administrative fee designed only to cover the corresponding costs of the Secretariat of WHO (“the Secretariat”). The amount of this fee shall be determined by the Secretariat and may, from time to time, be adjusted.

### Article 2

Such proposals shall be submitted by the Secretariat to the members of the Expert Advisory Panel on the International Pharmacopoeia and Pharmaceutical Preparations designated for this purpose, such designated members hereinafter referred to as “the INN Expert Group”, for consideration in accordance with the “General principles for guidance in devising International Nonproprietary Names for Pharmaceutical Substances”, annexed to this procedure.<sup>2</sup> 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.

### Article 3

Subsequent to the examination provided for in article 2, the Secretariat shall give notice that a proposed international nonproprietary name is being considered.

- a. Such notice shall be given by publication in *WHO Drug Information*<sup>3</sup> and by letter to Member States and to national and regional pharmacopoeia commissions or other bodies designated by Member States.

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<sup>1</sup> See Annex 1 in WHO Technical Report Series, No. 581, 1975. The original text was adopted by the Executive Board in resolution EB15.R7 and amended in resolution EB43.R9.

<sup>2</sup> See Annex 2

<sup>3</sup> Before 1987, lists of international nonproprietary names were published in the *Chronicle of the World Health Organization*.

- (i) Notice shall also be sent to the person who submitted the proposal (“the original applicant”) and other 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 the 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 WHO is acting and refer to these rules of procedure.
- c. In forwarding the notice, the Secretariat 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 WHO.

#### **Article 4**

Comments on the proposed name may be forwarded by any person to WHO within four months of the date of publication, under article 3, of the name in *WHO Drug Information*.

#### **Article 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 *WHO Drug Information*.

Such objection shall:

- (i) identify the person objecting;
- (ii) state his or her interest in the name;
- (iii) set forth the reasons for his or her objection to the name proposed.

#### **Article 6**

Where there is a formal objection under article 5, WHO 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 WHO of a substitute name or names, a name shall not be selected by WHO as a recommended international nonproprietary name while there exists a formal objection thereto filed under article 5 which has not been withdrawn.

#### **Article 7**

Where no objection has been filed under article 5, or all objections previously filed have been withdrawn, the Secretariat shall give notice in accordance with subsection (a) of article 3 that the name has been selected by WHO as a recommended international nonproprietary name.

## Article 8

In forwarding a recommended international nonproprietary name to Member States under article 7, the Secretariat 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 and to prohibit registration of the name as a trademark or trade name.

## Article 9

- a. In the extraordinary circumstance that a previously recommended international nonproprietary name gives rise to errors in medication, prescription or distribution, or a demonstrable risk thereof, because of similarity with another name in pharmaceutical and/or prescription practices, and it appears that such errors or potential errors cannot readily be resolved through other interventions than a possible substitution of a previously recommended international nonproprietary name, or in the event that a previously recommended international nonproprietary name differs substantially from the nonproprietary name approved in a significant number of Member States, or in other such extraordinary circumstances that justify a substitution of a recommended international nonproprietary name, proposals to that effect may be filed by any interested person. Such proposals shall be submitted on the form provided therefore and shall:
  - (i) identify the person making the proposal;
  - (ii) state his or her interest in the proposed substitution; and
  - (iii) set forth the reasons for the proposal; and
  - (iv) describe, and provide documentary evidence regarding, the other interventions undertaken in an effort to resolve the situation, and the reasons why these other interventions were inadequate.

Such proposals may include a proposal for a new substitute international nonproprietary name, devised in accordance with the General principles, which takes into account the pharmaceutical substance for which the new substitute international nonproprietary name is being proposed.

The Secretariat shall forward a copy of the proposal, for consideration in accordance with the procedure described in subsection (b) below, to the INN Expert Group and the original applicant or its successor (if different from the person bringing the proposal for substitution and provided that the original applicant or its successor is known or can be found through diligent effort, including contacts with industry associations).

In addition, the Secretariat shall request comments on the proposal from:

- (i) Member States and national and regional pharmacopoeia commissions or other bodies designated by Member States (by including a notice to that effect in the letter referred to in article 3(a), and

(ii) any other persons known to be concerned by the proposed substitution.

The request for comments shall:

- (i) state the recommended international nonproprietary name that is being proposed for substitution (and the proposed substitute name, if provided);
- (ii) identify the person who submitted the proposal for substitution (if so requested by such person);
- (iii) identify the substance to which the proposed substitution relates and reasons put forward for substitution;
- (iv) set forth the time within which comments will be received and the person and place to whom they should be directed; and
- (v) state the authority under which WHO is acting and refer to these rules of procedure.

Comments on the proposed substitution may be forwarded by any person to WHO within four months of the date of the request for comments.

- b. After the time period for comments referred to above has elapsed, the Secretariat shall forward any comments received to the INN Expert Group, the original applicant or its successor and the person bringing the proposal for substitution. If, after consideration of the proposal for substitution and the comments received, the INN Expert Group, the person bringing the proposal for substitution and the original applicant or its successor all agree that there is a need to substitute the previously recommended international nonproprietary name, the Secretariat shall submit the proposal for substitution to the INN Expert Group for further processing.

Notwithstanding the foregoing, the original applicant or its successor shall not be entitled to withhold agreement to a proposal for substitution in the event the original applicant or its successor has no demonstrable continuing interest in the recommended international nonproprietary name proposed for substitution.

In the event that a proposal for substitution shall be submitted to the INN Expert Group for further processing, the INN Expert Group will select a new international nonproprietary name in accordance with the General principles referred to in article 2 and the procedure set forth in articles 3 to 8 inclusive. The notices to be given by the Secretariat under article 3 and article 7, respectively, including to the original applicant or its successor (if not the same as the person proposing the substitution, and provided that the original applicant or its successor is known or can be found through diligent effort, including contacts with industry associations), shall in such event indicate that the new name is a substitute for a previously recommended international nonproprietary name and that Member States may wish to make transitional arrangements in order to accommodate existing products that use the previously recommended international nonproprietary name on their label in accordance with national legislation.

If, after consideration of the proposal for substitution and the comments received

in accordance with the procedure described above, the INN Expert Group, the original applicant or its successor and the person bringing the proposal for substitution do not agree that there are compelling reasons for substitution of a previously recommended international nonproprietary name, this name shall be retained (provided always that the original applicant or its successor shall not be entitled to withhold agreement to a proposal for substitution in the event that the original applicant or its successor has no demonstrable continuing interest in the recommended international nonproprietary name proposed to be substituted). In such an event, the Secretariat shall advise the person having proposed the substitution, as well as the original applicant or its successor (if not the same as the person proposing the substitution, and provided that the original applicant or its successor is known or can be found through diligent effort, including contacts with industry associations), Member States, national and regional pharmacopoeia commissions, other bodies designated by Member States, and any other persons known to be concerned by the proposed substitution that, despite a proposal for substitution, it has been decided to retain the previously recommended international nonproprietary name (with a description of the reason(s) why the proposal for substitution was not considered sufficiently compelling).



# ANNEX 2

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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.\* 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, ibufenac derivatives
-adolum	-adol )	analgesics
-adol-	-adol- )	
-astum	-ast	antiasthmatic, antiallergic substances not acting primarily as antihistaminics
-astinum	-astine	antihistaminics
-azepamum	-azepam	diazepam derivatives
bol	bol	anabolic steroids
-cain-	-cain-	class I antiarrhythmics, procainamide and lidocaine derivatives
-cainum	-caine	local anaesthetics
cef-	cef-	antibiotics, cephalosporanic acid derivatives
-cillinum	-cillin	antibiotics, 6-aminopenicillanic acid derivatives
-conazolium	-conazole	systemic antifungal agents, miconazole derivatives
cort	cort	corticosteroids, except prednisolone derivatives
-coxibum	-coxib	selective cyclo-oxygenase inhibitors
-entanum	-entan	endothelin receptor antagonists
gab	gab	gabamimetic agents
gado-	gado-	diagnostic agents, gadolinium derivatives
-gatranum	-gatran	thrombin inhibitors, antithrombotic agents
gest	gest	steroids, progestogens
gli	gli	antihyperglycaemics
io-	io-	iodine-containing contrast media
-metacinum	-metacin	anti-inflammatory, indometacin derivatives
-mycinum	-mycin	antibiotics, produced by <i>Streptomyces</i> strains
-nidazolium	-nidazole	antiprotozoals and radiosensitizers, metronidazole derivatives
-ololum	-olol	β-adrenoreceptor antagonists
-oxacinum	-oxacin	antibacterials, nalidixic acid derivatives
-platinum	-platin	antineoplastic agents, platinum derivatives
-poetinum	-poetin	erythropoietin type blood factors



<i>-pril(at)um</i>	<i>-pril(at)</i>	angiotensin-converting enzyme inhibitors
<i>-profenum</i>	<i>-profen</i>	anti-inflammatory agents, ibuprofen derivatives
<i>prost</i>	<i>prost</i>	prostaglandins
<i>-relinum</i>	<i>-relin</i>	pituitary hormone release-stimulating peptides
<i>-sartanum</i>	<i>-sartan</i>	angiotensin II receptor antagonists, antihypertensive (non-peptidic)
<i>-vaptanum</i>	<i>-vaptan</i>	vasopressin receptor antagonists
<i>vin-</i>	<i>vin-</i> )	vinca alkaloids
<i>-vin-</i>	<i>-vin-</i> )	

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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.



# Annex 3

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## Annex 3-a Current scheme for monoclonal antibodies (From proposed INN List 127)

This monoclonal antibody nomenclature scheme is used for all substances that contain an immunoglobulin variable domain that binds to a defined target, and that is composed of only immunoglobulin-derived pharmacologically active components. The suffix is preceded by an infix that indicates the target class.

Immunoglobulin fusions are only included in this nomenclature scheme if both domains have immunoglobulin derived variable domains (eg. mAb fused with a cytokine is under the -fusp nomenclature scheme).

Up to the 72nd INN Consultation and Proposed INN List 126, the common stem for monoclonal antibodies was -mab, placed as a suffix. In 2021, the monoclonal antibody nomenclature scheme was revised and from 73rd INN Consultation and Proposed INN List 127, the new nomenclature scheme divides the substances that contain an immunoglobulin variable domain into four groups, there being three groups with three different stems (-tug, -bart and -ment) for monospecific immunoglobulins, and a fourth stem (-mig) for bi- and multi-specific immunoglobulins, independent of their type, shape and form.

### Suffixes

- **-tug** for *unmodified immunoglobulins*

The suffix **-tug** is used for monospecific full-length immunoglobulins with unmodified constant regions and identical sets of CDRs that recognize the same epitope. This includes monospecific full-length immunoglobulins of any species and of any class (IgG, IgA, IgM, IgD, IgE), for which the amino acid sequence of the constant region of the heavy and light chains is encoded by a single naturally occurring allele. However, they may have engineered glycans and/or deleted C-terminal lysine codon (introduced for homogeneity since this is generally clipped in vivo and often during expression). Basically, this group includes all natural immunoglobulin molecules (which might occur as such in humoral responses of the immune system, including the Camelidae heavy-chain-only antibodies), as well as chimeric and humanized antibodies. It also includes immunoglobulins that use identical sets of CDRs to target multiple different epitopes or molecules.

- **-bart** for **artificial immunoglobulins**  
The suffix **-bart** is used for monospecific full-length immunoglobulins with engineered amino acid changes in the constant regions and identical sets of CDRs that recognize the same epitope. This includes monospecific full-length immunoglobulins of any species and of any class (IgG, IgA, IgM, IgD, IgE) that contain any amino acid change introduced by engineering for any reason anywhere in the constant regions, including hinge (e.g., IGHG4 hinge with Serine>Proline amino acid change), new glycan attachment site, mixed allelic variants that would not occur in nature, altered complement binding, altered neonatal Fc receptor (FcRn) binding, altered fragment crystallizable (Fc)-gamma receptor binding, and stabilized IgA. It also includes immunoglobulins with attachments of further variable domains with identical CDRs and that recognize the same epitope.
- **-ment** for **immunoglobulin fragments**  
The suffix **-ment** is used for monospecific fragments of any kind that do not fall under stem -tug or -bart, containing at least one immunoglobulin variable domain that contributes to binding, and feature a complete, partial, or absent constant region (e.g., monospecific immunoglobulin-derived constructs without an Fc domain, scFv-Fc constructs).
- **-mig** for **multi-specific immunoglobulins**  
The suffix **-mig** is used for bispecific and multispecific immunoglobulins, regardless of the format (conventional or engineered), type (full-length or fragments) or shape (extensions or not). This group includes immunoglobulins with a bi- or multi-specificity conferred by different variable domains with different sets of CDRs. It does not include monoclonal antibodies that have multiple specificities through a single set of CDRs (cross-reactivity, e.g., bimekizumab).

## Infixes

The mechanisms of monoclonal antibodies are complex, may be different for different indications and might not be completely understood during development. Therefore, the infix is assigned according to the proposed known mode of action at the time of the INN request submission.

### Current nomenclature scheme for monoclonal antibodies (mAb).

Prefix	Infix for target class	Suffix	
Random	-ami-	serum amyloid protein (SAP)/amyloidosis	-tug
	-ba-	bacterial	-bart
	-ci-	cardiovascular	-ment
	-de-	metabolic or endocrine pathways	-mig
	-eni-	enzyme inhibition	
	-fung-	fungal	
	-gro-	growth factor and growth factor receptor	
	-ki-	cytokine and cytokine receptor	
	-ler-	allergen	
	-sto-	immunostimulatory	
	-pru-	immunosuppressive	
	-ne-	neural	
	-os-	bone	
	-ta-	tumour	
	-toxa-	toxin	
-vet-	veterinary use		
-vi-	viral		

#### Second word

If the monoclonal antibody is conjugated to another protein or to a chemical (e.g. chelator), identification of the conjugate is accomplished by use of a separate, second word or acceptable chemical designation. For mAbs conjugated to a toxin, the suffix -tox is used in the second word. Please also consult the document International nonproprietary names (INN) for pharmaceutical substances: names for radicals, groups & others (Comprehensive list)[32].

If the monoclonal antibody is radiolabelled, the radioisotope is listed first in the INN, e.g. *technetium (<sup>99m</sup>Tc) nofetumomab merpentan (81)*.

#### Pegylation:

For pegylated monoclonal antibodies see item 2.5: General policy for pegylated substances.

#### Glycosylation:

For glycosylated monoclonal antibodies see item 2.3: General policy for glycosylated substances.

For information on monoclonal antibodies fused to other proteins and for more details, please refer to the "INN for biological and biotechnological substances, a review", available on the WHO INN Programme website: <http://www.who.int/medicines/services/inn/en/>.

## Annex 3-b Third scheme for monoclonal antibodies (From proposed INN Lists 117 to 126)

- INN for monoclonal antibodies (mAb) are composed by a random prefix, an infix, which indicates the target (molecule, cell and organ) class, and by the stem **-mab** as a suffix (Table 1).
- The stem **-mab** is to be used for all substances containing an immunoglobulin variable domain which binds to a defined target.

**Table 1: Nomenclature scheme for monoclonal antibodies (mAb).**

Prefix:	Infix: target class	Stem:
random	-ami- serum amyloid protein (SAP)/amyloidosis ( <i>pre-substem</i> )	-mab
	-ba- bacterial	
	-ci- cardiovascular	
	-fung- fungal	
	-gros- skeletal muscle mass related growth factors and receptors ( <i>pre-substem</i> )	
	-ki- interleukin	
	-li- immunomodulating	
	-ne- neural	
	-os- bone	
	-ta- tumour	
	-toxa- toxin	
	-vet- veterinary use	
	-vi- viral	

### Second word

If the monoclonal antibody is conjugated to another protein or to a chemical (e.g. chelator), identification of this conjugate is accomplished by use of a separate, second word or acceptable chemical designation. For instance, for mAbs conjugated to a toxin, the suffix **-tox** is used in the second word.

If the monoclonal antibody is radiolabelled, the radioisotope is listed first in the INN, e.g. *technetium (<sup>99m</sup>Tc) nofetumomab merpentan (81)*.

## Annex 3-c Second naming scheme for monoclonal antibodies

### (From proposed INN Lists 103 up to 117)

- INN for monoclonal antibodies (mAb) are composed of a prefix, a substem A, a substem B and a suffix.
- The common stem for mAbs is **-mab**, placed as a suffix.
- The stem **-mab** is to be used for all products containing an immunoglobulin variable domain which binds to a defined target.
- **Substem B** indicates the species on which the immunoglobulin sequence of the mAb is based (shown in Table 1).

**Table 1: Substem B for the species.**

-a-	rat
-axo-	rat-mouse (pre-substem)
-e-	hamster
-i-	primate
-o-	mouse
-u-	human
-vet-	veterinary use (pre-substem)
-xi-	chimeric
-xizu-	chimeric-humanized
-zu-	humanized

The distinction between chimeric and humanized antibodies is as follows:

**Chimeric:** A chimeric antibody is one for which both chain types are chimeric as a result of antibody engineering. A chimeric chain is a chain that contains a foreign variable domain (originating from one species other than human, or synthetic or engineered from any species including human) linked to a constant region of human origin. The variable domain of a chimeric chain has a V region amino acid sequence which, analysed as a whole, is closer to non-human species than to human.

**Humanized:** A humanized antibody is one for which both chain types are humanized as a result of antibody engineering. A humanized chain is typically a chain in which the complementarity determining regions (CDR) of the variable domains are foreign (originating from one species other than human, or synthetic) whereas the remainder of the chain is of human origin. Humanization assessment is based on the resulting amino acid sequence, and not on the methodology per se, which allows protocols other than grafting to be used. The variable domain of a humanized chain has a V region amino acid sequence which, analysed as a whole, is closer to human than to other species.

Note: The infix

- xizu**- is used for an antibody having both chimeric and humanized chains.
- axo**- is used for an antibody having both rat and mouse chains.

- **Substem A** indicates the target (molecule, cell and organ) class (shown in Table 2).

**Table 2: Substem A for target class.**

- <i>b(a)</i> -	bacterial
- <i>am(i)</i> -	serum amyloid protein (SAP)/amyloidosis (pre-substem)
- <i>c(i)</i> -	cardiovascular
- <i>f(u)</i> -	fungal
- <i>gr(o)</i> -	skeletal muscle mass related growth factors and receptors (pre-substem)
- <i>k(i)</i> -	interleukin
- <i>l(i)</i> -	immunomodulating
- <i>n(e)</i> -	neural
- <i>s(o)</i> -	bone
- <i>tox(a)</i> -	toxin
- <i>t(u)</i> -	tumour
- <i>v(i)</i> -	viral

In principle, a single letter, e.g. -*b*- for bacterial is used as substem A. Whenever substem B starts with a consonant (e.g. *x* or *z*), to avoid problems in pronunciation, an additional vowel indicated in the table, e.g. -*ba*- is inserted.

### Prefix

The prefix should be random, i.e. the only requirement is to contribute to a euphonious and distinctive name.

### Second word

If the monoclonal antibody is conjugated to another protein or to a chemical (e.g. chelator), identification of this conjugate is accomplished by use of a separate, second word or acceptable chemical designation. For instance, for mAbs conjugated to a toxin, the suffix -*tox* is used in the second word.

If the monoclonal antibody is radiolabelled, the radioisotope is listed first in the INN, e.g. *technetium* (<sup>99m</sup>Tc) *nofetumomab merpentan* (81).



## Annex 3-d: First naming scheme for monoclonal antibodies (up to proposed INN List 102)

- The common stem for monoclonal antibodies is -mab..
- Sub-stems for source of product: .

<i>a</i>	rat
<i>axo (pre-sub-stem)</i>	rat-murine hybrid
<i>e</i>	hamster
<i>i</i>	primate
<i>o</i>	mouse
<i>u</i>	human
<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.

- Sub-stems for disease or target class.

<i>-ba(c)-</i>	bacterial
<i>-ci(r)-</i>	cardiovascular
<i>-fung-</i>	fungal
<i>-ki(n)- (pre-sub-stem)</i>	interleukin
<i>-le(s)-</i>	inflammatory lesions
<i>-li(m)-</i>	immunomodulator
<i>-os-</i>	bone
<i>-vi(r)-</i>	viral

tumours

-co(l)-	colon
-go(t)-	testis
-go(v)-	ovary
-ma(r)-	mammary
-me(l)-	melanoma
-pr(o)-	prostate
-tu(m)-	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.

**Prefix:**

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

**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.

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* (86).

**-toxa- infix**

For monoclonals conjugated to a toxin, the infix -toxa- can be inserted either into the first (main) name or included in the second word.

**References**

World Health Organization. International Nonproprietary Names (INN) Working Group Meeting on Nomenclature for Monoclonal Antibodies (mAb), Geneva, October 2008, Meeting report, INN Working Document 08.242 \*

World Health Organization. International Nonproprietary Names (INN) for biological and biotechnological substances (a review), INN Working Document 05.179, update November 2009\*

World Health Organization. The use of stems in the selection of International Nonproprietary Names (INN) for pharmaceutical substances, 2009, WHO/PSM/QSM/2009.3\*

\* These documents are available on the INN Programme Website at:

<https://www.who.int/teams/health-product-and-policy-standards/inn/>

# Annex 4

## INN for gene therapy substances

In 2005, a two-word nomenclature scheme for substances for gene therapies was formally adopted by the members of the INN Expert Group designated to deal with the selection of nonproprietary names. The 2016 updated scheme for substances for gene therapies using vectors based on recombinant nucleic acid sequences (DNA vectors, e.g. plasmid DNA, naked or complexed), genetically modified micro-organisms (bacterial vectors) or viruses (replication defective, replication competent or replication conditional viral vectors) as shown in Table 1. This scheme does not apply to gene therapies based on administration of genetically modified cells, although a vector might be used *ex-vivo* or *in-vitro* for manufacturing of those cells prior to administration.

**Table 1: Two-word scheme for substances for gene therapies (plasmid-, viral vector- and bacteria-based).**

	Prefix	Infix	Suffix
<b>word 1</b> (gene component)	random to contribute to euphonious and distinctive name	to identify the gene using, when available, existing infixes for biological products, e.g.:  <i>-cima-</i> cytosine deaminase <i>-ermin-</i> growth factor <i>-kin-</i> interleukin <i>-lim-</i> immunomodulator <i>-lip-</i> human lipoprotein lipase <i>-mul-</i> multiple gene <i>-stim-</i> colony stimulating factor <i>-tima-</i> thymidine kinase <i>-tusu-</i> tumour suppression	-(a vowel) <i>gene</i> e.g. -(o) <i>gene</i>
<b>word 2</b> (vector component)	random to contribute to euphonious and distinctive name	to identify the viral vector type, e.g.:  <i>-adeno-</i> adenovirus <i>-cana-</i> canarypox virus <i>-foli-</i> fowlpox virus <i>-erpa-</i> herpes virus <i>-lenti-</i> lentivirus <i>-morbilli-</i> Paramyxoviridae morbillivirus <i>-parvo-</i> adeno-associated virus (Parvoviridae dependovirus) <i>-retro-</i> other retrovirus <i>-vaci-</i> vaccinia virus  to identify the bacterial vector type, e.g.:  <i>-lis-</i> <i>Listeria monocytogenes</i> <i>-eco-</i> <i>Escherichia coli</i>  (none)	<i>-vec</i> (non-replicating viral vector)  <i>-reptec</i> (replicating viral vector)   <i>-bac</i> (bacteria vector)  <i>-plasmid</i> (plasmid vector)

In the case of substances for gene therapy based on plasmid DNA, there is at present no need for a word 2 infix in the name.



# Annex 5

## Reference to publications containing Proposed INN lists

List no. and reference	List no. and reference
1	<i>Chron. Wld Hlth Org.</i> <b>7</b> : 299 (1953)
2	<i>Chron. Wld Hlth Org.</i> <b>8</b> : 216 (1954)
3	<i>Chron. Wld Hlth Org.</i> <b>9</b> : 313 (1954)
4	<i>Chron. Wld Hlth Org.</i> <b>10</b> : 28 (1956)
5	<i>Chron. Wld Hlth Org.</i> <b>11</b> : 231 (1957)
6	<i>Chron. Wld Hlth Org.</i> <b>12</b> : 102 (1958)
7	<i>WHO Chronicle</i> <b>13</b> : 105 (1959)
8	<i>WHO Chronicle</i> <b>13</b> : 152 (1959)
9	<i>WHO Chronicle</i> <b>14</b> : 168 (1960)
10	<i>WHO Chronicle</i> <b>14</b> : 244 (1960)
11	<i>WHO Chronicle</i> <b>15</b> : 314 (1961)
12	<i>WHO Chronicle</i> <b>16</b> : 385 (1962)
13	<i>WHO Chronicle</i> <b>17</b> : 389 (1963)
14	<i>WHO Chronicle</i> <b>18</b> : 433 (1964)
15	<i>WHO Chronicle</i> <b>19</b> : 446 (1965)
16	<i>WHO Chronicle</i> <b>20</b> : 216 (1966)
17	<i>WHO Chronicle</i> <b>21</b> : 70 (1967)
18	<i>WHO Chronicle</i> <b>21</b> : 478 (1967)
19	<i>WHO Chronicle</i> <b>22</b> : 112 (1968)
20	<i>WHO Chronicle</i> <b>22</b> : 407 (1968)
21	<i>WHO Chronicle</i> <b>23</b> : 183 (1969)
22	<i>WHO Chronicle</i> <b>23</b> : 418 (1969)
23	<i>WHO Chronicle</i> <b>24</b> : 119 (1970)
24	<i>WHO Chronicle</i> <b>24</b> : 413 (1970)
25	<i>WHO Chronicle</i> <b>25</b> : 123 (1971)
26	<i>WHO Chronicle</i> <b>25</b> : 415 (1971)
27	<i>WHO Chronicle</i> <b>26</b> : 121 (1972)
28	<i>WHO Chronicle</i> <b>26</b> : 414 (1972)
29	<i>WHO Chronicle</i> <b>27</b> : 120 (1973)
30	<i>WHO Chronicle</i> <b>27</b> : 380 (1973)
31	<i>WHO Chronicle</i> <b>28</b> : 133 (1974)
32	<i>WHO Chronicle</i> <b>28</b> : No. 9, suppl. (1974)
33	<i>WHO Chronicle</i> <b>29</b> : No. 3, suppl. (1975)
34	<i>WHO Chronicle</i> <b>29</b> : No. 9, suppl. (1975)
35	<i>WHO Chronicle</i> <b>30</b> : No. 3, suppl. (1976)
36	<i>WHO Chronicle</i> <b>30</b> : No. 9, suppl. (1976)
37	<i>WHO Chronicle</i> <b>31</b> : No. 3, suppl. (1977)
38	<i>WHO Chronicle</i> <b>31</b> : No. 9, suppl. (1977)
39	<i>WHO Chronicle</i> <b>32</b> : No. 3, suppl. (1978)
40	<i>WHO Chronicle</i> <b>32</b> : No. 9, suppl. (1978)
41	<i>WHO Chronicle</i> <b>33</b> : No. 3, suppl. (1979)
42	<i>WHO Chronicle</i> <b>33</b> : No. 9, suppl. (1979)
43	<i>WHO Chronicle</i> <b>34</b> : No. 3, suppl. (1980)
44	<i>WHO Chronicle</i> <b>34</b> : No. 9, suppl. (1980)
45	<i>WHO Chronicle</i> <b>35</b> : No. 3, suppl. (1981)
46	<i>WHO Chronicle</i> <b>35</b> : No. 5, suppl. (1981)
47	<i>WHO Chronicle</i> <b>36</b> : No. 2, suppl. (1982)
48	<i>WHO Chronicle</i> <b>36</b> : No. 5, suppl. (1982)
49	<i>WHO Chronicle</i> <b>37</b> : No. 2, suppl. (1983)
50	<i>WHO Chronicle</i> <b>37</b> : No. 5, suppl. (1983)
51	<i>WHO Chronicle</i> <b>38</b> : No. 2, suppl. (1984)
52	<i>WHO Chronicle</i> <b>38</b> : No. 4, suppl. (1984)
53	<i>WHO Chronicle</i> <b>39</b> : No. 1, suppl. (1985)
54	<i>WHO Chronicle</i> <b>39</b> : No. 4, suppl. (1985)
55	<i>WHO Chronicle</i> <b>40</b> : No. 1, suppl. (1986)
56	<i>WHO Chronicle</i> <b>40</b> : No. 5, suppl. (1986)
57	<i>WHO Drug Information</i> <b>1</b> : No. 2 (1987)
58	<i>WHO Drug Information</i> <b>1</b> : No. 3 (1987)
59	<i>WHO Drug Information</i> <b>2</b> : No. 2 (1988)
60	<i>WHO Drug Information</i> <b>2</b> : No. 4 (1988)
61	<i>WHO Drug Information</i> <b>3</b> : No. 2 (1989)
62	<i>WHO Drug Information</i> <b>3</b> : No. 4 (1989)
63	<i>WHO Drug Information</i> <b>4</b> : No. 2 (1990)
64	<i>WHO Drug Information</i> <b>4</b> : No. 4 (1990)
65	<i>WHO Drug Information</i> <b>5</b> : No. 2 (1991)
66	<i>WHO Drug Information</i> <b>5</b> : No. 4 (1991)
67	<i>WHO Drug Information</i> <b>6</b> : No. 2 (1992)
68	<i>WHO Drug Information</i> <b>6</b> : No. 4 (1992)
69	<i>WHO Drug Information</i> <b>7</b> : No. 2 (1993)
70	<i>WHO Drug Information</i> <b>7</b> : No. 4 (1993)
71	<i>WHO Drug Information</i> <b>8</b> : No. 2 (1994)
72	<i>WHO Drug Information</i> <b>8</b> : No. 4 (1994)
73	<i>WHO Drug Information</i> <b>9</b> : No. 2 (1995)
74	<i>WHO Drug Information</i> <b>9</b> : No. 4 (1995)
75	<i>WHO Drug Information</i> <b>10</b> : No. 2 (1996)
76	<i>WHO Drug Information</i> <b>10</b> : No. 4 (1996)
77	<i>WHO Drug Information</i> <b>11</b> : No. 2 (1997)
78	<i>WHO Drug Information</i> <b>11</b> : No. 4 (1997)
79	<i>WHO Drug Information</i> <b>12</b> : No. 2 (1998)
80	<i>WHO Drug Information</i> <b>12</b> : No. 4 (1998)
81	<i>WHO Drug Information</i> <b>13</b> : No. 2 (1999)
82	<i>WHO Drug Information</i> <b>13</b> : No. 4 (2000)
83	<i>WHO Drug Information</i> <b>14</b> : No. 2 (2000)
84	<i>WHO Drug Information</i> <b>14</b> : No. 4 (2000)
85	<i>WHO Drug Information</i> <b>15</b> : No. 2 (2001)
86	<i>WHO Drug Information</i> <b>16</b> : No. 1 (2002)
87	<i>WHO Drug Information</i> <b>16</b> : No. 2 (2002)
88	<i>WHO Drug Information</i> <b>17</b> : No. 1 (2003)
89	<i>WHO Drug Information</i> <b>17</b> : No. 3 (2003)

List no. and reference		List no. and reference	
90	WHO Drug Information <b>18</b> : No. 1 (2004)	110	WHO Drug Information 27: No. 4 (2013)
91	WHO Drug Information <b>18</b> : No. 2 (2004)	111	WHO Drug Information 28: No. 2 (2014)
92	WHO Drug Information <b>18</b> : No. 4 (2004)	112	WHO Drug Information 28: No. 4 (2014)
93	WHO Drug Information <b>19</b> : No. 2 (2005)	113	WHO Drug Information 29: No. 2 (2015)
94	WHO Drug Information <b>19</b> : No. 4 (2005)	114	WHO Drug Information 29: No. 4 (2015)
95	WHO Drug Information <b>20</b> : No. 2 (2006)	115	WHO Drug Information 30: No. 2 (2016)
96	WHO Drug Information <b>20</b> : No. 4 (2006)	116	WHO Drug Information 30: No. 4 (2016)
97	WHO Drug Information <b>21</b> : No. 2 (2007)	117	WHO Drug Information 31: No. 2 (2017)
98	WHO Drug Information <b>21</b> : No. 4 (2007)	118	WHO Drug Information 31: No. 4 (2017)
99	WHO Drug Information <b>22</b> : No. 2 (2008)	119	WHO Drug Information 32: No. 2 (2018)
100	WHO Drug Information <b>22</b> : No. 4 (2008)	120	WHO Drug Information 32: No. 4 (2018)
101	WHO Drug Information <b>23</b> : No. 2 (2009)	121	WHO Drug Information 33: No. 4 (2019)
102	WHO Drug Information <b>23</b> : No. 4 (2009)	122	WHO Drug Information 33: No. 4 (2019)
103	WHO Drug Information <b>24</b> : No. 2 (2010)	123	WHO Drug Information 34: No. 2 (2020)
104	WHO Drug Information <b>24</b> : No. 4 (2010)	124&COVID	WHO Drug Information 34: No. 3&4 (2020)
105	WHO Drug Information <b>25</b> : No. 2 (2011)	125&COVID	WHO Drug Information 35: No. 2 (2021)
106	WHO Drug Information <b>25</b> : No. 4 (2011)	126&COVID	WHO Drug Information 35: No. 4 (2021)
107	WHO Drug Information <b>26</b> : No. 2 (2012)	127&COVID	WHO Drug Information 36: No. 2 (2022)
108	WHO Drug Information <b>26</b> : No. 4 (2012)	128&COVID	WHO Drug Information 36: No. 4 (2022)
109	WHO Drug Information <b>27</b> : No. 2 (2013)		

Lists 1-117 of proposed INN are included in Cumulative List No. 17, WHO, Geneva, 2017 (available in CD-ROM only)

# Annex 6

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## Why INN?

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 10682 names have been designated as INN, and this number is growing every year by some 200-240 new INN.

INN 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, INN 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 INN 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 INN 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 INN 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.

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