WHO/EMP/RHT/TSN/2015.1

International Nonproprietary Names (INN) for pharmaceutical substances

Names for radicals, groups & others
Comprehensive list

2015

World Health Organization

International Nonproprietary Names (INN) Programme
Technologies Standards and Norms (TSN)
Regulation of medicines and other health technologies (RHT) Essential Medicines and Health Products (EMP)

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Printed by the WHO Document Production Services, Geneva, Switzerland

WHO'S INN PROGRAMME

GENERAL INFORMATION

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 sixty 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. INNs 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, INNs 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 INNs can be submitted directly to WHO (application forms online at http://www.who.int/medicines/services/inn/en/). In some countries where national nomenclature commissions exist, applications may also be made through the national nomenclature authority.

The INN Expert Group, consisting of selected members of the WHO Expert Panel on the International Pharmacopoeia and Pharmaceutical Preparations is 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 INNs and INN stems should not be used in trade marks. The Assembly reasoned that such practice could frustrate the rational selection of INNs and ultimately compromise the safety of patients by promoting confusion in drug nomenclature. Above all, INNs are protected for use in the public domain.

CRITERIA FOR SELECTION OF INN

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.

In addition, certain rules have been established in devising INNs 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 transliteration of Greek letters in English, French and Spanish is given in Annex 2 and on standardization of the Spanish version of INN in Annex 3.

Further information on the selection procedure and general principles in devising INNs may be found in the “Guidelines on the Use of International Nonproprietary Names (INNs) for Pharmaceutical Substances” (WHO/PHARM S/NOM 1570) available on the INN Programme website at: http://www.who.int/medicines/services/inn/publication/en/index.html.

INN STEMS

Stems define the pharmacologically related group to which the INN belongs. Whenever possible, an INN includes the "common stem" expressing the pharmacologically-related group. Names that are likely to convey an anatomical, physiological, pathological or therapeutic suggestion are avoided.
For further details on stems, please refer to "*The use of stems in the selection of International Nonproprietary Names (INN) for pharmaceutical substances*" (WHO/EMP/RHT/TSN/2013.1), which can be downloaded from the INN Programme website:
http://www.who.int/medicines/services/inn/en/

NAMES FOR RADICALS AND GROUPS

As a general rule, since 1975 INNs are selected for the active moiety of pharmaceutical substances. In the case of INNs of salts and esters it is left to the user to devise their names from the INN in conformity with normal chemical practice. Separate names for salts and esters derived from this procedure are not published. The same approach should be followed in the case of combination products. In all those situations, names are referred to as International Nonproprietary Name Modified INNM.

Some of the radicals and groups involved are, however, of such complexity that, shorter nonproprietary names are selected for these inactive moieties, and published in proposed lists under the title "names for radicals and groups". If a "radical and group name" is used in conjunction with an INN, it is also referred to as an INNM.

In some cases, a name of an INN Radical describes more than one substituent, e.g. (names in Latin) *acefuras*, *aceponas*, *enbutas*, *stinopras*,… Alphabetical list of currently used names for radicals and groups is given in the main part of the document, while the names of elements and chemical groups that were published together with INNs are given in Annex 1.

For further details on the INNM, please refer to the INN Working Document 05.167/3 "*International Nonproprietary Names Modified*" which can be downloaded from the INN Programme website.

INFORMATION ON NAMES USED FOR SPECIFIC GROUPS OF SUBSTANCES

For a few groups of substances containing certain structural features, INNs are selected using particular approaches. Designations used in such INNs are listed in Annex 4.
INNs for substances that include a carrier moiety are usually given a two-word name, describing separately the active element and the carrier part. Designations used for toxins (either active or inactivated proteins) are listed in Annex 4.1. Particular designations selected for other types of active moieties and relevant INNs are listed in Annex 4.2. It should be noted that these lists are not comprehensive.
INNs for modified insulins include, as a second word, a qualifier indicating to modifications introduced into the amino acid chain. These insulin qualifiers are listed in Annex 4.3.
INNs for substances that contain as the carrier a polyoxyethylene polymeric chain are given either a prefix *peg-* ,an infix *–peg-* or a two-word INN, using “*pegol*” as the second word. The list of INNs containing such structures and an explanatory note is given in Annex 5.

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Acknowledgements

This edition is dedicated to Prof. Henri Favre (1926-2013), Canada.

The INN Secretariat wishes to express its gratitude to Dr R. Boudet-Dalbin, France, to Dr G. Moss, United Kingdom, to Dr G. Penzlin, Germany for their assistance in the preparation of this document. A special thank goes to Mrs E. Cortés, Spain, for review and correction of the Spanish chemical definitions.

Reference to publications containing proposed Lists of INN:

List no. and reference

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

List no. and reference

46 *WHO chronicle* 35: No. 5, suppl. (1981)
47 *WHO chronicle* 36: No. 2, suppl. (1982)
48 *WHO chronicle* 36: No. 5, suppl. (1982)
49 *WHO chronicle* 37: No. 2, suppl. (1983)
50 *WHO chronicle* 37: No. 5, suppl. (1983)
51 *WHO chronicle* 38: No. 2 suppl. (1984)
52 *WHO chronicle* 38: No. 4, suppl. (1984)
53 *WHO chronicle* 39: No. 1, suppl. (1985)
54 *WHO chronicle* 39: No. 4, suppl. (1985)
55 *WHO chronicle* 40: No. l, suppl. (1986)
56 *WHO chronicle* 40: No. 5, suppl. (1986)
57 *WHO drug information* 1: No. 2 (1987)
58 *WHO drug information* 1: No. 3 (1987)
59 *WHO drug information* 2: No. 2 (1988)
60 *WHO drug information* 2: No. 4 (1988)
61 *WHO drug information* 3: No. 2 (1989)
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87 *WHO drug information* 16: No. 2 (2002)
88 *WHO drug information* 17: No. 1 (2003)
89 *WHO drug information* 17: No. 3 (2003)
90 *WHO drug information* 18: No. 1 (2004)

List no. and reference

91 *WHO drug information* 18: No. 2 (2004)
92 *WHO drug information* 18: No. 4 (2004)
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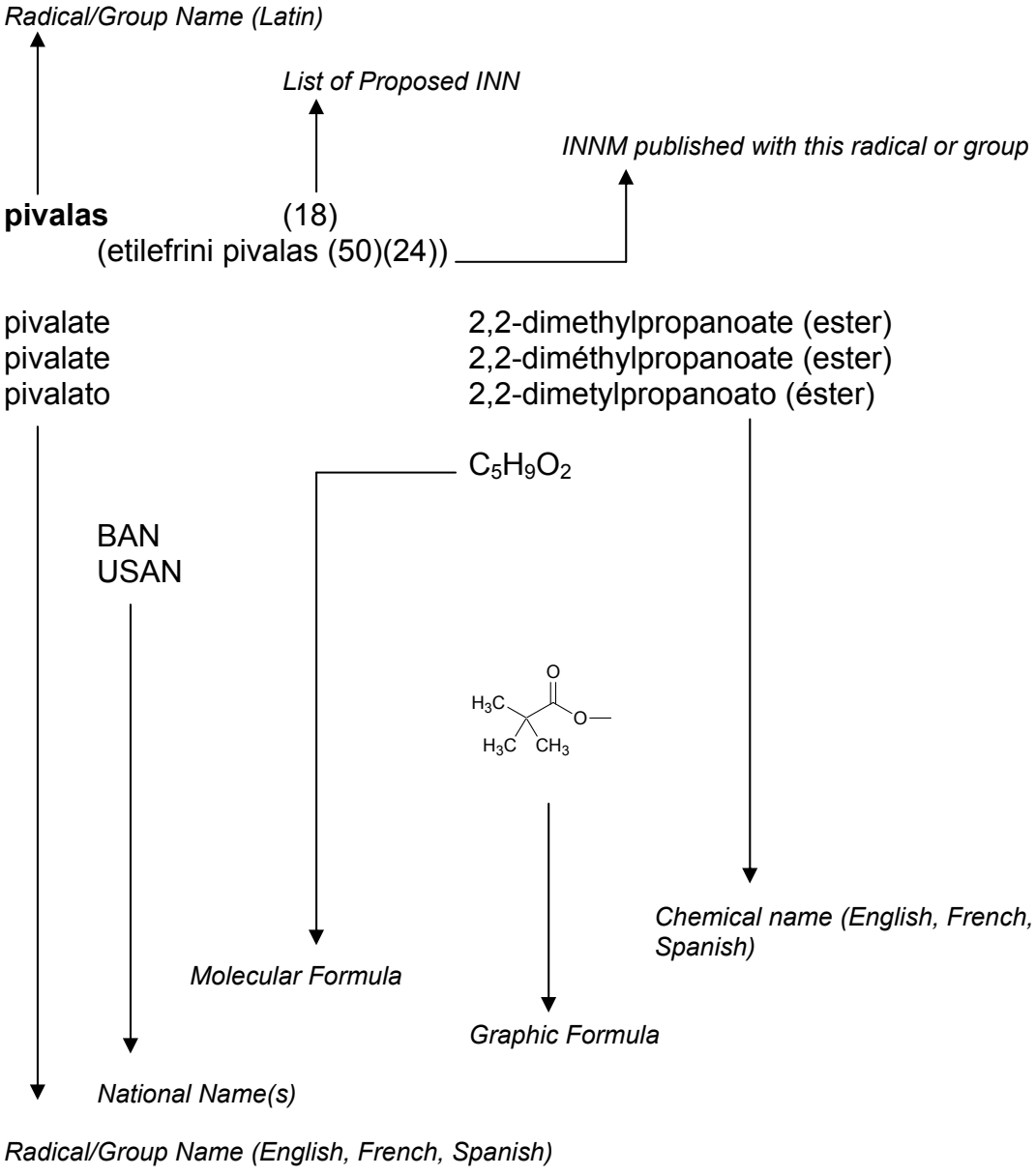
107 *WHO drug information* 26: No. 2 (2012)
108 *WHO drug information* 26: No. 4 (2012)
109 *WHO drug information* 27: No. 2 (2013)
110 *WHO drug information* 27: No. 4 (2013)
111 *WHO drug information* 28: No. 2 (2014)
112 *WHO drug information* 28: No. 4 (2014)

Layout of information



INNs: Names for radicals and groups

Comprehensive list

Explanatory Note

Some substances for which a proposed International Nonproprietary Name has been established for the active moiety may be used in the form of salts or esters and their names are devised from the INN in conformity with normal chemical practice. However, in some cases, the radicals or groups involved may be of complex composition and it is then inconvenient to refer to them in systematic chemical nomenclature. Consequently, shorter nonproprietary names for some radicals and groups have been devised or selected, and they are suggested for use with the proposed nonproprietary names.

The following list contains radicals and groups which have been published either in the section "Names for radicals and groups" in lists 1-112 of proposed INN or as part of a two-word INN in lists 1-112 of proposed and 1-74 of recommended INN, respectively. Whenever a name appeared in both lists, reference is made to its publication only in the category "radicals and groups".

Other groups and elements which have been published in two-word INN and which may now be considered as being part of the INNM (modified INN) approach are listed in ANNEX 1 of this document.

In addition, references to British Approved Name (BAN)[1], Japanese Accepted Name (JAN)[2] and United States Adopted Name (USAN)[3] have been included for the radicals, groups and adducts published or accepted for use by these national nomenclature committees.

[1] British Approved Names 2012, Names for ions and Groups, effective date: 1 January 2012
[2] Japanese Accepted Names for Pharmaceuticals (JAN), last verification: October 2014 at : http://moldb.nihs.go.jp/jan/index.aspx
[3] "USP Dictionary of USAN and International Drug names", 2014 "Organic moieties, Counterions and Solvent Molecules Used in Coining Two-Word Names", USAN Program: http://www.ama-assn.org/resources/doc/usan/radicals-and-anions-list.pdf consulted August 2015

Latin name
English name *chemical name*
Dénomination en français *molecular formula*
Denominación en español *graphic formula*
(published as INN (Proposed list number)(Recommended list number))

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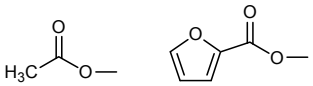
acefuras
(dexamethasoni acefuras (57)(27))

acefurate acetate (ester), furan-2-carboxylate (ester)
acéfurate acétate (ester), furane-2-carboxylate (ester)
acefurato acetato (éster), furano-2-carboxilato (éster)

$C_7H_6O_5$

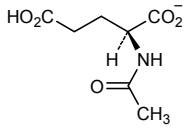
USAN



aceglumas
(deanoli aceglumas (15)(!))

aceglumate hydrogen *N*-acetyl-L-glutamate
acéglumate hydrogène *N*-acétyl-L-glutamate
aceglumato hidrógeno *N*-acetil-L-glutamato

$C_7H_{10}NO_5$

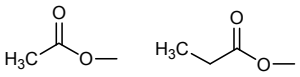


aceponas
(methylprednisoloni aceponas (52)(25))
(hydrocortisoni aceponas (54)(26))

aceponate acetate (ester), propanoate (ester)
acéponate acétate (ester), propanoate (ester)
aceponato acetato (éster), propanoato (éster)

$C_5H_8O_4$

JAN

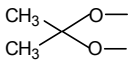


acetonidum
(fluocinoloni acetonidum (11)(05))
(flucloroloni acetonidum (22)(10))

acetonide propane-2,2-diylbis(oxy)
acétonide propane-2,2-diylbis(oxy)
acetónido propano-2,2-diilbis(oxi)

$C_3H_6O_2$

BAN
JAN
USAN

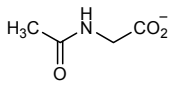


aceturas (22)

aceturate *N*-acetylglycinate
acéturate *N*-acétylglycinate
aceturato *N*-acetilglicinato

$C_4H_6NO_3$

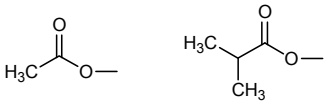
BAN
USAN



acibutas
(betamethasoni acibutas (26)(12))

acibutate acetate (ester), 2-methylpropanoate (ester)
acibutate acétate (ester), 2-méthylpropanoate (ester)
acibutato acetato (éster), 2-metilpropanoato (éster)

$C_6H_{10}O_4$

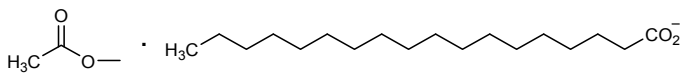


acistras (64)
(erythromycini acistras (53)(25))

acistrate acetate (ester), octadecanoate (salt)
acistrate acétate (ester), octadécanoate (sel)
acistrato acetato (éster), octadecanoato (sal)

$C_{20}H_{38}O_4$

USAN

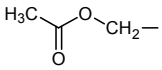


acoxilum (67)

acoxil	(acetyloxy)methyl
acoxil	(acétyloxy)méthyle
acoxilo	(acetiloxi)metilo

$C_3H_5O_2$

JAN
USAN

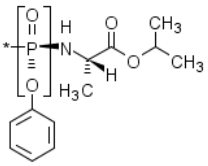


alafenamidum
(tenefovirum alafenamidum (112)(74))

alafenamide	(*S*)-*P*-[(2S)-1-oxo-1-(propan-2-yloxy)propan-2-yl]amide *P*-phenyl ester
alafénamide	(*S*)-*P*-[(2S)-1-oxo-1-(propan-2-yloxy)propan-2-yl]amide et ester *P*-phénylique (de)
alafenamida	(*S*)-*P*-[(2S)-1-oxo-1-(propan-2-iloxi)propan-2-il]amido y éster *P*-fenílico (del)

$C_{12}H_{17}NO_2$

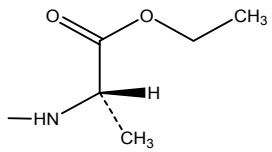
USAN



alanetilum
(managlinatum dialanetilum (97)(58))

alanetil	[(*S*)-1-ethoxy-1-oxopropan-2-yl]amino
alanétil	[(*S*)-1-éthoxy-1-oxopropan-2-yl]amino
alanetilo	[(*S*)-1-etoxi-1-oxopropan-2-il]amino

$C_5H_{11}NO_2$

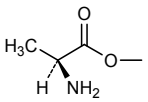


alaninas
(alaninati brivanibum (97)(59))

alaninate	L-alaninate (ester)
alaninate	L-alaninate (ester)
alaninato	L-alaninato (éster)

$C_3H_6NO_2$

JAN



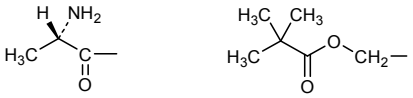
alapivoxilum

(ceftizoximum alapivoxilum (77)(39))

alapivoxil	L-alanyl, [(2,2-dimethylpropanoyl)oxy]methyl
alapivoxil	L-alanyle, [(2,2-diméthylpropanoyl)oxy]méthyle
alapivoxilo	L-alanilo, [(2,2-dimetilpropanoil)oxi]metilo

$C_9H_{17}NO_3$

JAN

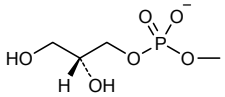


alfosceras

(cholini alfosceras (60)(29))

alfoscerate	(2*R*)-2,3-dihydroxypropyl hydrogen phosphate
alfoscérate	hydrogénophosphate de (2*R*)-2,3-dihydroxypropyle
alfoscerato	hidrógenofosfato de (2*R*)-2,3-dihidroxipropilo

$C_3H_8O_6P$

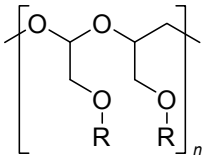


alideximerum

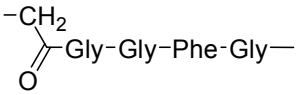
(exatecanum alideximerum (89)(51))

alideximer	poly{oxy(2-hydroxyethane-1,1-diyl)oxy[1-(hydroxymethyl)ethane-1,2-diyl]} partly *O*-etherified with carboxymethyl groups with some carboxy groups amide linked to the tetrapeptide residue (glygylglycyl-L-phenylalanylglycyl)
alideximer	poly{oxy(2-hydroxyéthane-1,1-diyl)oxy[1-(hydroxyméthyl)éthane-1,2-diyl]} partiellement *O*-éthérifié avec le groupe carboxyméthyle avec quelques groupes carboxamides liés au tétrapeptide (glygylglycyl-L-phénylalanylglycyl)
alidexímero	poli{oxi(2-hidroxietano-1,1-diil)oxi[1-(hidroximetil)etano-1,2-diil]} parcialmente *O*-eterificado con grupos carboximetilo con algunos grupos carboxamida unidos al tetrapéptido (glicilglicil-L-fenilalanilglicilglicil)

$(C_5H_{10}O_4)_n(C_2H_2O_2)_x(C_{17}H_{19}N_4O_5)_y$



−R = -H or / ou / o :
-CH_2-CO_2H
or / ou / o :

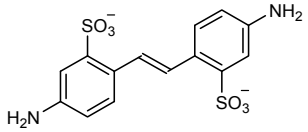


amsonas (18)
(chlorphenoctii amsonas (08)(04))

amsonate 2,2'-ethene-1,2-diylbis(5-aminobenzene-1-sulfonate)
amsonate 2,2'-éthène-1,2-diylbis(5-aminobenzène-1-sulfonate)
amsonato 2,2'-eteno-1,2-diilbis(5-aminobenceno-1-sulfonato)

$C_{14}H_{12}N_2O_6S_2$

BAN

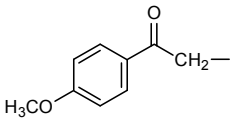


anisatilum (76)

anisatil 2-(4-methoxyphenyl)-2-oxoethyl
anisatil 2-(4-méthoxyphényl)-2-oxoéthyle
anisatilo 2-(4-metoxifenil)-2-oxoetilo

$C_9H_9O_2$

USAN

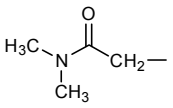


arbamelum
(tilnoprofenum arbamelum (74)(36))

arbamel 2-(dimethylamino)-2-oxoethyl
arbamel 2-(diméthylamino)-2-oxoéthyle
arbamel 2-(dimetilamino)-2-oxoetilo

C_4H_8NO

JAN
USAN

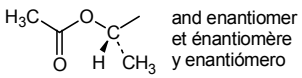


axetilum (48)

axetil — *rac*-1-(acetyloxy)ethyl
axétil — *rac*-1-(acétyloxy)éthyle
axetilo — *rac*-1-(acetiloxi)etilo

$C_4H_7O_2$

BAN
JAN
USAN

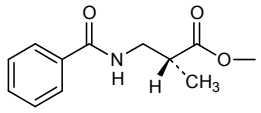


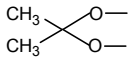
and enantiomer
et énantiomère
y enantiómero

benetonidum
(triamcinoloni benetonidum (36)(17))

benetonide — *rac*-3-benzamido-2-methylpropanoate (ester), propane-2,2-diylbis(oxy)
bénétonide — *rac*-3-benzamido-2-méthylpropanoate (ester), propane-2,2-diylbis(oxy)
benetónido — *rac*-3-benzamido-2-metilpropanoato (éster), propano-2,2-diilbis(oxi)

$C_{14}H_{18}NO_5$



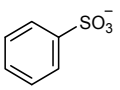
and enantiomer
et énantiomère
y enantiómero


besilas (22)
(atracurii besilas (42)(20))
(cisatracurii besilas (73)(36))
(nolpitantii besilas (75)(37))

besilate — benzenesulfonate
bésilate — benzènesulfonate
besilato — bencenosulfonato

$C_6H_5O_3S$

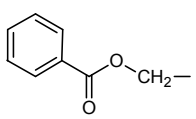
BAN
JAN
USAN: besylate



bezomilum (62)

bezomil — (benzoyloxy)methyl
bézomil — (benzoyloxy)méthyle
bezomilo — (benzoiloxi)metilo

$C_8H_7O_2$

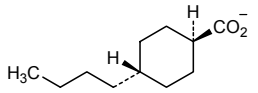


buciclas (66)

buciclate	*trans*-4-butylcyclohexanecarboxylate
buciclate	*trans*-4-butylcyclohexanecarboxylate
buciclato	*trans*-4-butilciclohexanocarboxilato

$C_{11}H_{19}O_2$

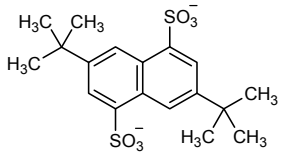
USAN



bunapsilas (24)

bunapsilate	3,7-di-*tert*-butylnaphthalene-1,5-disulfonate
bunapsilate	3,7-di-*tert*-butylnaphtalène-1,5-disulfonate
bunapsilato	3,7-di-*terc*-butilnaftaleno-1,5-disulfonato

$C_{18}H_{22}O_6S_2$

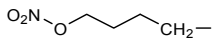


bunodum

(latanoprostenum bunodum (107))

bunod	4-(nitrooxy)butyl
bunod	4-(nitrooxy)butyl
bunod	4-(nitrooxi)butil

$C_4H_8NO_3$

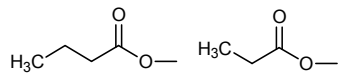


butepras (61)

buteprate	butanoate (ester), propanoate (ester)
butéprate	butanoate (ester), propanoate (ester)
buteprato	butanoato (éster), propanoato (éster)

$C_7H_{12}O_4$

USAN: probutate



camsilas (18)

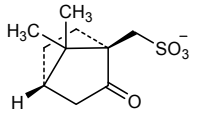
(trimetaphani camsilas (06)(03))

(amoxydramini camsilas (15)(06))

camsilate	*rac*-(7,7-dimethyl-2-oxobicyclo[2.2.1]heptan-1-yl)methanesulfonate
camsilate	*rac*- (7,7-diméthyl-2-oxobicyclo[2.2.1]heptan-1-yl)méthanesulfonate
camsilato	*rac*- (7,7-dimetil-2-oxobiciclo[2.2.1]heptan-1-il)metanosulfonato

$C_{10}H_{15}O_4S$

BAN
JAN
USAN: camsylate

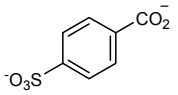


and enantiomer
et énantiomère
y enantiómero

carbesilas (35)

carbesilate	4-sulfonatobenzoate
carbésilate	4-sulfonatobenzoate
carbesilato	4-sulfonatobenzoato

$C_7H_5O_5S$

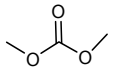


carbonas
(lodenafili carbonas (94)(56))

carbonate	carbonate (ester)
carbonate	carbonate (ester)
carbonato	carbonato (éster)

CO_3

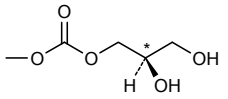
JAN



ceribas
(paclitaxelum ceribas (92)(53))

ceribate	*rac*-2,3-dihydroxypropyl carbonate (ester)
céribate	carbonate de *rac*-2,3-dihydroxypropyle (ester)
ceribato	carbonato de *rac*-2,3-dihidroxipropilo (éster)

$C_4H_7O_5$



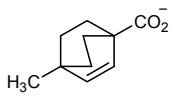
and epimer at C*
et l'épimère en C*
y el epímero en el C*

ciclotas (28)

ciclotate	4-methylbicyclo[2.2.2]oct-2-ene-1-carboxylate
ciclotate	4-méthylbicyclo[2.2.2]oct-2-ène-1-carboxylate
ciclotato	4-metilbiciclo[2.2.2]oct-2-eno-1-carboxilato

$C_{10}H_{13}O_2$

USAN: cyclotate

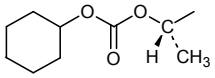


cilexetilum (73)

cilexetil	*rac*-1-{[(cyclohexyloxy)carbonyl]oxy}ethyl
cilexétil	*rac*-1-{[(cyclohexyloxy)carbonyl]oxy}}éthyle
cilexetilo	*rac*-1-{[(ciclohexiloxi)carbonil]oxi}etilo

$C_9H_{15}O_3$

BAN
JAN
USAN



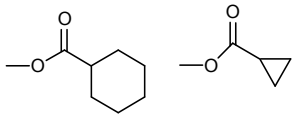
and enantiomer
et énantiomère
y enantiómero

cipecilatum
(dexamethasoni cipecilas (94)(56))

cipecilate	cyclohexanecarboxylate (ester), cyclopropanecarboxylate (ester)
cipécilate	cyclohexanecarboxylate (ester), cyclopropanecarboxylate (ester)
cipecilato	ciclohexanocarboxilato (éster), ciclopropanocarboxilato (éster)

$C_{11}H_{16}O_4$

JAN

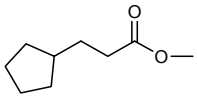


cipionas (18)
(oxaboloni cipionas (14)(06))

cipionate	3-cyclopentylpropanoate (ester)
cipionate	3-cyclopentylpropanoate (ester)
cipionato	3-ciclopentilpropanoato (éster)

$C_8H_{13}O_2$

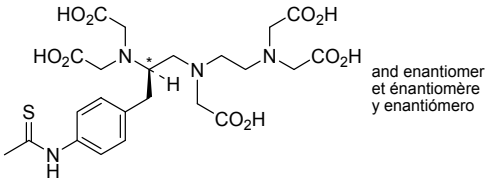
BAN
JAN
USAN: cypionate



cituxetanum
(epitumomabum cituxetanum (89)(51))

cituxetan	*rac*-*N*-(4-{2-[bis(carboxymethyl)amino]-3-[{2-[bis(carboxymethyl)amino]ethyl}(carboxymethyl)amino]propyl}phenyl)carbamothioyl
cituxétan	*rac*-*N*-(4-{2-[bis(carboxyméthyl)amino]-3-{2-[bis(carboxyméthyl)amino]éthyl}(carboxyméthyl)amino]propyl}phényl)carbamothioyle
cituxetán	*rac*-*N*-(4-{2-[bis(carboximetil)amino]-3-{2-[bis(carboximetil)amino]etil}(carboximetil)amino]propil}fenil)carbamotioilo

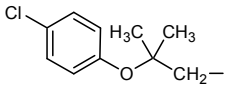
$C_{22}H_{29}N_4O_{10}S$



clofibrolum
(acefyllinum clofibrolum (44)(22))

clofibrol 2-(4-chlorophenoxy)-2-methylpropyl
clofibrol 2-(4-chlorophénoxy)-2-méthylpropyle
clofibrol 2-(4-clorofenoxi)-2-metilpropilo

$C_{10}H_{12}ClO$

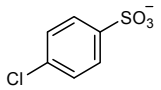


closilas (18)
(thenii closilas (12)(05))

closilate 4-chlorobenzene-1-sulfonate
closilate 4-chlorobenzène-1-sulfonate
closilato 4-clorobenceno-1-sulfonato

$C_6H_4ClO_3S$

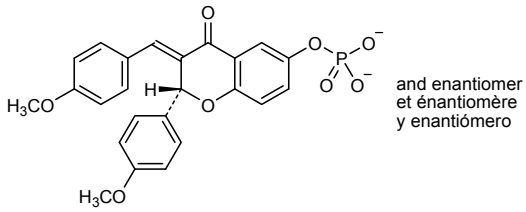
BAN
USAN: closylate



crobefas (61)

crobefate *rac*-(3*E*)-2-(4-methoxyphenyl)-3-[(4-methoxyphenyl)methylidene]-4-oxo-3,4-dihydro-2*H*-1-benzopyran-6-yl phosphate(2–)
crobéfate phosphate(2–) de *rac*-(3*E*)-2-(4-méthoxyphényl)-3-[(4-méthoxyphényl)méthylidène]-4-oxo-3,4-dihydro-2*H*-1-benzopyran-6-yle
crobefato fosfato(2-) de *rac*-(3*E*)-2-(4-metoxifenil)-3-[(4-metoxifenil)metilideno]-4-oxo-3,4-dihidro-2*H*-1-benzopiran-6-ilo

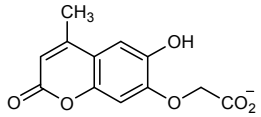
$C_{24}H_{19}O_8P$



cromacas (22)

cromacate	2-[(6-hydroxy-4-methyl-2-oxo-2*H*-1-benzopyran-7-yl)oxy]acetate
cromacate	2-[(6-hydroxy-4-méthyl-2-oxo-2*H*-1-benzopyran-7-yl)oxy]acétate
cromacato	2-[(6-hidroxi-4-metil-2-oxo-2*H*-1-benzopiran-7-il)oxi]acetato

$C_{12}H_9O_6$

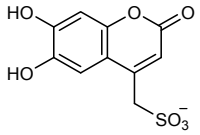


cromesilas (22)

cromesilate	(6,7-dihydroxy-2-oxo-2*H*-1-benzopyran-4-yl)methanesulfonate
cromésilate	(6,7-dihydroxy-2-oxo-2*H*-1-benzopyran-4-yl)méthanesulfonate
cromesilato	(6,7-dihidroxi-2-oxo-2*H*-1-benzopiran-4-il)metanosulfonato

$C_{10}H_7O_7S$

BAN



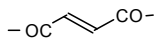
crosfumarilum

(hemoglobinum crosfumarilum (76)(38))
(hemoglobinum crosfumarilum (bovinum) (108)(70))

crosfumaril	(2*E*)-but-2-enedioyl
crosfumaril	(2*E*)-but-2-ènedioyle
crosfumarilo	(2*E*)-but-2-enodioilo

$C_4H_2O_2$

USAN

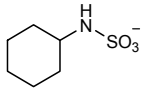


cyclamas

(aminophenazoni cyclamas (16)(!))
(natrii cyclamas (01)(01))

cyclamate	cyclohexylsulfamate
cyclamate	cyclohexylsulfamate
ciclamato	ciclohexilsulfamato

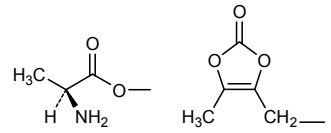
$C_6H_{12}NO_3S$



daloxatum
(cefcanelum dolaxatum (59)(29))

daloxate — L-alaninate (ester), (5-methyl-2-oxo-1,3-dioxol-4-yl)methyl
daloxate — L-alaninate (ester), (5-méthyl-2-oxo-1,3-dioxol-4-yl)méthyle
daloxato — L-alaninato (éster), (5-metil-2-oxo-1,3-dioxol-4-il)metilo

$C_8H_{11}NO_5$

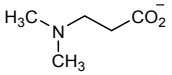


daropas (74)

daropate — 3-(dimethylamino)propanoate
daropate — 3-(diméthylamino)propanoate
daropato — 3-(dimetilamino)propanoato

$C_5H_{10}NO_2$

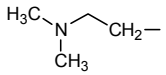
JAN
USAN: dapropate



deanil (40)

deanil — 2-(dimethylamino)ethyl
déanil — 2-(diméthylamino)éthyle
deanilo — 2-(dimetilamino)etilo

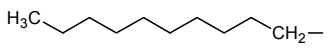
$C_4H_{10}N$



decil (40)

decil — decyl
décil — décyle
decilo — decilo

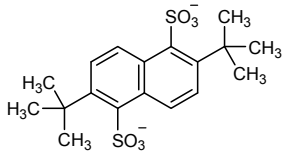
$C_{10}H_{21}$



dibudinas (25)

dibudinate — 2,6-di-*tert*-butylnaphthalene-1,5-disulfonate
dibudinate — 2,6-di-*tert*-butylnaphtalène-1,5-disulfonate
dibudinato — 2,6-di-*terc*-butilnaftaleno-1,5-disulfonato

$C_{18}H_{22}O_6S_2$

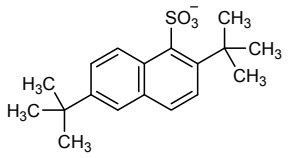


dibunas (48)
(ethylis dibunas (12)(05))
(natrii dibunas (12)(05))

dibunate	2,6-di-*tert*-butylnaphthalene-1-sulfonate
dibunate	2,6-di-*tert*-butylnaphtalène-1-sulfonate
dibunato	2,6-di-*terc*-butilnaftaleno-1-sulfonato

$C_{18}H_{23}O_3S$

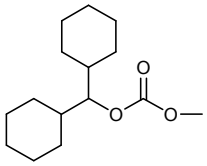
JAN



dicibas
(locicortoloni dicibas (60)(29))

dicibate	dicyclohexylmethyl carbonate (ester)
dicibate	carbonate de dicyclohexylméthyle (ester)
dicibato	carbonato de diciclohexilmetilo (éster)

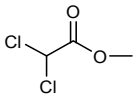
$C_{14}H_{23}O_3$



dicloacetas
(etiprednoli dicloacetas (88)(50))

dicloacetate	2,2-dichloroacetate (ester)
dicloacétate	2,2-dichloroacétate (ester)
dicloacetato	2,2-dicloroacetato (éster)

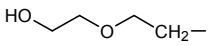
$C_2HCl_2O_2$



digolilum (59)

digolil	2-(2-hydroxyethoxy)ethyl
digolil	2-(2-hydroxyéthoxy)éthyle
digolilo	2-(2-hidroxietoxi)etilo

$C_4H_9O_2$

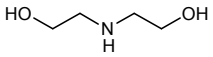


diolaminum (22)

diolamine	2,2'-azanediyldiethanol
diolamine	2,2'-azanediyldiéthanol
diolamina	2,2'-azanodiildietanol

$C_4H_{11}NO_2$

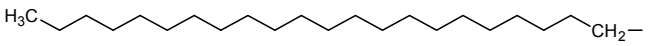
USAN



docosilum (63)

docosil	docosyl
docosil	docosyle
docosilo	docosilo

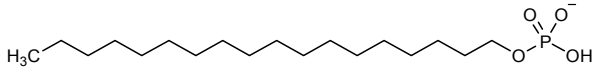
$C_{22}H_{45}$



dofosfatum (65)

dofosfate	octadecyl hydrogen phosphate
dofosfate	hydrogénophosphate d'octadécyle
dofosfato	hidrógenofosfato de octadecilo

$C_{18}H_{38}O_4P$

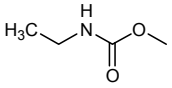


ecamas

(asoprisnili ecamas (89)(50))

ecamate	*N*-ethylcarbamate (ester)
écamate	*N*-éthylcarbamate (ester)
ecamato	*N*-etilcarbamato (éster)

$C_3H_6NO_2$

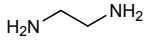


edaminum (70)

edamine	ethane-1,2-diamine
édamine	éthane-1,2-diamine
edamina	etano-1,2-diamina

$C_2H_8N_2$

USAN

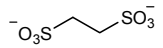


edisilas (18)

edisilate	ethane-1,2-disulfonate
édisilate	éthane-1,2-disulfonate
edisilato	etano-1,2-disulfonato

$C_2H_4O_6S_2$

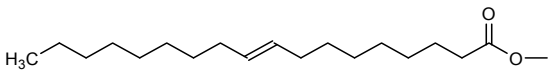
BAN
USAN: edisylate



elaidas
(gemcitabini elaidas (106)(68))

elaidate	(9*E*)-octadec-9-enoate (ester)
elaidate	(9*E*)-octadéc-9-énoate (ester)
elaidato	(9*E*)-octadec-9-enoato (éster)

USAN $C_{18}H_{33}O_2$

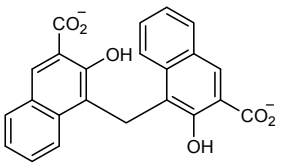


embonas (18)
(cycloguanili embonas (13)(05))
(pararosanilini embonas (15)(06))

embonate	4,4'-methylenebis(3-hydroxynaphthalene-2-carboxylate)
embonate	4,4'-méthylènebis(3-hydroxynaphtalène-2-carboxylate)
embonato	4,4'-metilenbis(3-hidroxinaftaleno-2-carboxilato)

$C_{23}H_{14}O_6$

BAN
USAN: pamoate

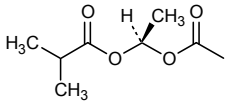


enacarbilum
(gabapentinum enacarbilum (94)(56))

enacarbil {*rac*-1-[(2-methylpropanoyl)oxy]ethoxy}carbonyl
énacarbil {*rac*-1-[(2-méthylpropanoyl)oxy]éthoxy}carbonyle
enacarbilo {*rac*-1-[(2-metilpropanoil)oxy]etoxi}carbonilo

$C_7H_{11}O_4$

JAN



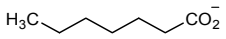
and enantiomer
et énantiomère
y enantiómero

enantas (18)

enantate heptanoate
énantate heptanoate
enantato heptanoato

$C_7H_{13}O_2$

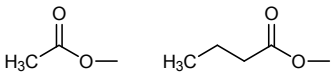
BAN
JAN: enanthate
USAN: enanthate



enbutas
(icometasoni enbutas (70)(34))

enbutate acetate (ester), butanoate (ester)
enbutate acétate (ester), butanoate (ester)
enbutato acetato (éster), butanoato (éster)

$C_6H_{10}O_4$

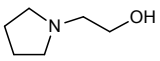


epolaminum (69)

epolamine 2-(pyrrolidin-1-yl)ethanol
épolamine 2-(pyrrolidin-1-yl)éthanol
epolamina 2-(pirrolidin-1-il)etanol

$C_6H_{13}NO$

USAN

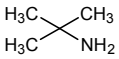


erbuminum (62)

erbumine 2-methylpropan-2-amine
erbumine 2-méthylpropan-2-amine
erbumina 2-metilpropan-2-amina

$C_4H_{11}N$

BAN
JAN
USAN



esilas (18)
(trazii esilas (54)(26))

esilate ethanesulfonate
ésilate éthanesulfonate
esilato etanosulfonato

$C_2H_5O_3S$

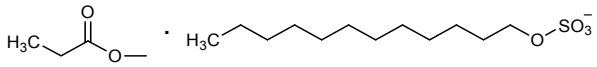
BAN
USAN: esylate

estolas (28)

estolate propanoate (ester), dodecyl sulfate (salt)
estolate propanoate (ester), sulfate de dodécyle (sel)
estolato propanoate (éster), sulfato de dodecilo (sal)

$C_{15}H_{30}O_6S$

USAN

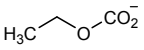


etabonas (64)
(remogliflozini etabonas (98)(60))
(sergliflozini etabonas (98)(59))

etabonate ethyl carbonate (ester)
étabonate carbonate d'éthyle (ester)
etabonato carbonato de etilo (éster)

$C_3H_5O_3$

BAN
JAN
USAN

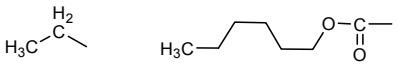


etexilatum
(dabigatranum etexilatum (87)(49))

etexilate ethyl (ester), (hexyloxy)carbonyl
étexilate éthyle (ester), (hexyloxy)carbonyle
etexilato etilo (éster), (hexiloxi)carbonilo

$C_9H_{18}O_2$

JAN
USAN

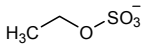


etilsulfas
(mecetronii etilsulfas (51)(24))

etilsulfate	ethyl sulfate
étilsulfate	sulfate d'éthyle
etilsulfato	sulfato de etilo

$C_2H_5O_4S$

USAN: ethylsulfate

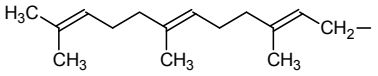


farnesilum (61)

farnesil	(2*E*,6*E*)-3,7,11-trimethyldodeca-2,6,10-trien-1-yl
farnésil	(2*E*,6*E*)-3,7,11-triméthyldodéca-2,6,10-trién-1-yle
farnesilo	(2*E*,6*E*)-3,7,11-trimetildodeca-2,6,10-trien-1-ilo

$C_{15}H_{25}$

JAN

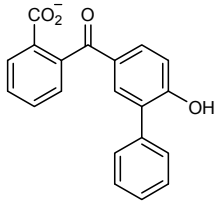


fendizoas (64)

fendizoate	2-(6-hydroxy[1,1'-biphenyl]-3-carbonyl)benzoate
fendizoate	2-(6-hydroxy[1,1'-biphényl]-3-carbonyl)benzoate
fendizoato	2-(6-hidroxi[1,1'-bifenil]-3-carbonil)benzoato

$C_{20}H_{13}O_4$

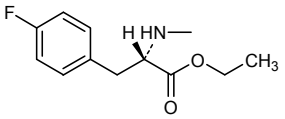
JAN



flufenamidum
(melphalanum flufenamidum (105)(67))

flufenamide	[(2*S*)-1-ethoxy-3-(4-fluorophenyl)-1-oxopropan-2-yl]amino
flufénamide	[(2*S*)-1-éthoxy-3-(4-fluorophényl)-1-oxopropan-2-yl]amino
flufenamida	[(2*S*)-1-etoxi-3-(4-fluorofenil)-1-oxopropan-2-il]amino

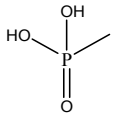
$C_{11}H_{13}FNO_2$



fosamilum
(ceftarolinum fosamilum (99)(60))

fosamil	phosphono (linked to an amino group)
fosamil	phosphono (lié à un groupe amino)
fosamilo	fosfono (unido a un grupo amino)

PO_3H_2

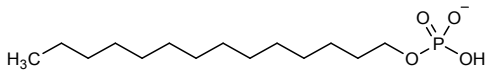


fostedatum (70)

fostedate	tetradecyl hydrogen phosphate
fostédate	hydrogénophosphate de tétradécyle
fostedato	hidrógenofosfato de tetradecilo

$C_{14}H_{30}O_4P$

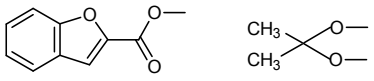
USAN



furetonidum
(triamcinoloni furetonidum (36)(17))

furetonide	1-benzofuran-2-carboxylate (ester), propane-2,2-diylbis(oxy)
furétonide	1-benzofurane-2-carboxylate (ester), propane-2,2-diylbis(oxy)
furetónido	1-benzofurano-2-carboxilato (éster), propano-2,2-diilbis(oxi)

$C_{12}H_{11}O_5$

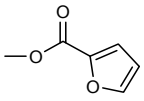


furoas
(fluticasoni furoas (96)(57))

furoate	furan-2-carboxylate (ester)
furoate	furane-2-carboxylate (ester)
furoato	furano-2-carboxilato (éster)

$C_5H_3O_3$

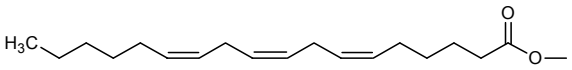
JAN
USAN



gamolenas
(ascorbyli gamolenas (79)(41))

gamolenate	(6*Z*,9*Z*,12*Z*)-octadeca-6,9,12-trienoate (ester)
gamolénate	(6*Z*,9*Z*,12*Z*)-octadéca-6,9,12-triénoate (ester)
gamolenato	(6*Z*,9*Z*,12*Z*)- octadeca-6,9,12-trienoato (éster)

$C_{18}H_{29}O_2$

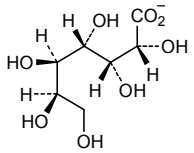


gluceptas (18)

gluceptate	D-*glycero*- D-*gulo*-heptonate
gluceptate	D-*glycéro*- D-*gulo*-heptonate
gluceptato	D-*glicero*-D-*gulo*-heptonato

$C_7H_{13}O_8$

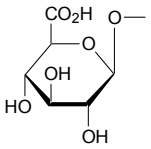
BAN
USAN



glucuronidum
(morphini glucuronidum (92)(54))

glucuronide	β-D-glucopyranosiduronic acid (glycoside)
glucuronide	acide β-D-glucopyranosiduronique (glycoside)
glucurónido	ácido β-D-glucopiranosidurónico (glicósido)

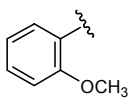
$C_6H_9O_7$



guacilum
(amtolmetinum guacilum (65)(32))

guacil	2-methoxyphenyl (ester)
guacil	2-méthoxyphényle (ester)
guacilo	2-metoxifenilo (éster)

C_7H_7O

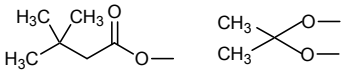


hexacetonidum
(triamcinoloni hexacetonidum (15)(06))

hexacetonide	3,3-dimethylbutanoate (ester), propane-2,2-diylbis(oxy)
hexacétonide	3,3-diméthylbutanoate (ester), propane-2,2-diylbis(oxy)
hexacetónido	3,3-dimetilbutanoato (éster), propano-2,2-diilbis(oxi)

$C_9H_{17}O_4$

USAN

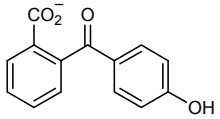


hibenzas (18)

hibenzate	2-(4-hydroxybenzoyl)benzoate
hibenzate	2-(4-hydroxybenzoyl)benzoate
hibenzato	2-(4-hidroxibenzoil)benzoato

$C_{14}H_9O_4$

JAN
USAN: hybenzate



hyclas (62)

hyclate	ethanol—hydrogen chloride—water (0.5/1/0.5)
hyclate	éthanol—chlorure d'hydrogène—eau (0.5/1/0.5)
hiclato	etanol—cloruro de hidrógeno—agua (0.5/1/0.5)

$0.5\ C_2H_5OH \bullet HCl \bullet 0.5\ H_2O$

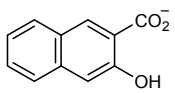
USAN

hydroxynaphthoas
(bephenii hydroxynaphthoas (11)(05))

hydroxynaphthoate	3-hydroxynaphthalene-2-carboxylate
hydroxynaphthoate	3-hydroxynaphtalène-2-carboxylate
hidroxinaftoato	3-hidroxinaftaleno-2-carboxilato

$C_{11}H_7O_3$

BAN

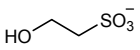


isetionas (18)
(stilbamidini isetionas (04)(03))

isetionate	2-hydroxyethane-1-sulfonate
isétionate	2-hydroxyéthane-1-sulfonate
isetionato	2-hidroxietano-1-sulfonato

$C_2H_5O_4S$

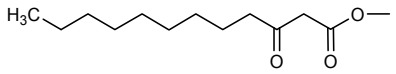
BAN
JAN
USAN: isethionate



ketolauras
(testosteroni ketolauras (16)(07))

ketolaurate	3-oxododecanoate (ester)
kétolaurate	3-oxododécanoate (ester)
cetolaurato	3-oxododecanoato (éster)

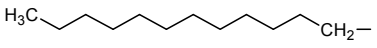
$C_{12}H_{21}O_3$



lauril (41)

lauril	dodecyl
lauril	dodécyle
laurilo	dodecilo

$C_{12}H_{25}$

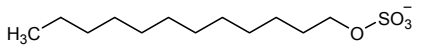


laurilsulfas (24)

laurilsulfate	dodecyl sulfate
laurilsulfate	sulfate de dodécyle
laurilsulfato	sulfato de dodecilo

$C_{12}H_{25}O_4S$

JAN: laurylsulfate

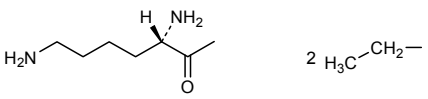


lisetilum
(cromoglicas lisetilum (72)(35))

lisetil	L-lysyl (ester), diethyl (ester)
lisétil	L-lysyl (ester), diéthyl (ester)
lisetilo	L-lisilo (éster), dietilo (éster)

$C_{10}H_{23}N_2O_2$

JAN

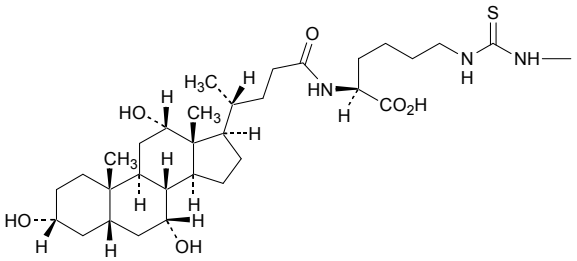


lisicolum

(fluoresceinum lisicolum (89)(51))

lisicol	{*N*-[(5*S*)-5-carboxy-5-(3α,7α,12α-trihydroxy-5β-cholan-24-amido)pentyl]carbamothioyl}amino
lisicol	{*N*-[(5*S*)-5-carboxy-5-(3α,7α,12α-trihydroxy-5β-cholan-24-amido)pentyl]carbamothioyl}amino
lisicol	{*N*-[(5*S*)-5-carboxi-5-(3α,7α,12α-trihidroxi-5β-colan-24-amido)pentil]carbamotioil}amino

$C_{31}H_{52}N_3O_6S$



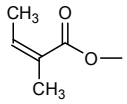
mebutatum

(ingenoli mebutas (106)(67))

mebutate	(2*Z*)-2-methylbut-2-enoate (ester)
mébutate	(2*Z*)-2-méthylbut-2-énoate (ester)
mebutato	(2*Z*)-2-metilbut-2-enoato (éster)

$C_5H_7O_2$

USAN



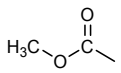
mecarbilum

(omecamtivum mecarbilum (102)(64))

mecarbil	methoxycarbonyl
mécarbil	méthoxycarbonyle
mecarbilo	metoxicarbonilo

$C_2H_3O_2$

USAN

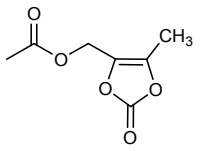


medocarilum

(ceftobiprolum medocarilum (92)(54))

medocaril	[(5-methyl-2-oxo-1,3-dioxol-4-yl)methoxy]carbonyl
médocaril	[(5-méthyl-2-oxo-1,3-dioxol-4-yl)méthoxy]carbonyl
medocarilo	[(5-metil-2-oxo-1,3-dioxol-4-il)metoxi]carbonilo

$C_6H_5O_5$

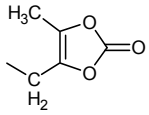


medoxomilum
(olmesartanum medoxomilum (86)(48))
(azilsartanum medoxomilum (98)(59))

medoxomil	(5-methyl-2-oxo-1,3-dioxol-4-yl)methyl
médoxomil	(5-méthyl-2-oxo-1,3-dioxol-4-yl)méthyle
medoxomilo	(5-metil-2-oxo-1,3-dioxol-4-il)metilo

$C_5H_5O_3$

JAN
USAN

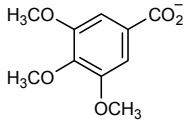


megallas (33)

megallate	3,4,5-trimethoxybenzoate
mégallate	3,4,5-triméthoxybenzoate
megallato	3,4,5-trimetoxibenzoato

$C_{10}H_{11}O_5$

BAN

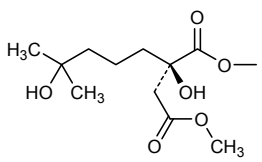


mepesuccinatum
(omacetaxini mepesuccinas (98)(60))

mepesuccinate	(2*R*)-2,6-dihydroxy-2-(2-methoxy-2-oxoethyl)-6-methylheptanoate (ester)
mépésuccinate	(2*R*)-2,6-dihydroxy-2-(2-méthoxy-2-oxoéthyl)-6-méthylheptanoate (ester)
mepesuccinato	(2*R*)-2,6-dihidroxi-6-metil-2-(2-metoxi-2-oxoetil)heptanoato (éster)

$C_{11}H_{19}O_6$

USAN

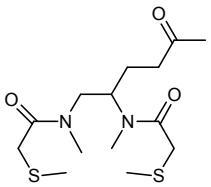


merpentanum
(technetium (^{99m}Tc) nofetumomabum merpentanum (81)(42))

merpentan oligo{[*rac*-4,5-bis(2-sulfanyl-κ^2*S*-acetamido-κ^2*N*)pentanoyl](4–)}
merpentan oligo{[*rac*-4,5-bis(2-sulfanyl-κ^2*S*-acétamido-κ^2*N*)pentanoyle](4–)}
merpentán oligo{[*rac*-4,5-bis(2-sulfanil-κ^2*S*-acetamido-κ^2*N*)pentanoilo](4–)}

$C_9H_{11}N_2O_3S_2$

USAN



mesilas (18)
(amidefrini mesilas (15)(06))
(sevitropii mesilas (56)(27))

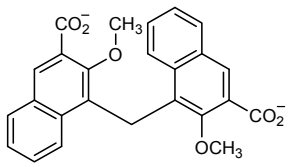
mesilate methanesulfonate
mésilate méthanesulfonate
mesilato metanosulfonato

BAN CH_3O_3S
JAN
USAN: mesylate

metembonas (27)

metembonate 4,4'-methylenebis(3-methoxynaphthalene-2-carboxylate)
métembonate 4.4'-méthylènebis(3-méthoxynaphtalène-2-carboxylate)
metembonato 4,4'-metilenobis(3-metoxinaftaleno-2-carboxilato)

$C_{25}H_{18}O_6$

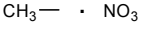


methonitras
(atropini methonitras (04)(03))

methonitrate *N*-methyl, nitrate (salt)
méthonitrate *N*-méthyl, nitrate (sel)
metonitrato *N*-metil, nitrato (sal)

CH_3NO_3

JAN



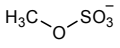
metilsulfas (18)

(laudexii metilsulfas (04)(03))
(diphemanili metilsulfas (04)(03))
(hexocyclii metilsulfas (06)(03))
(poldini metilsulfas (13)(!))
(toloconii metilsulfas (17)(07))
(bevonii metilsulfas (19)(10))
(fenclexonii metilsulfas (20)(08))
(pentapiperii metilsulfas (26)(12))
(rimazolii metilsulfas (26)(12))
(roxolonii metilsulfas (33)(15))
(amezinii metilsulfas (36)(17))
(thiazinamii metilsulfas (36)(17))
(mefenidramii metilsulfas (52)(25))
(tematropii metilsulfas (64)(31))

metilsulfate	methyl sulfate
métilsulfate	sulfate de méthyle
metilsulfato	sulfato de metilo

CH_3O_4S

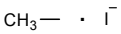
BAN
JAN



metiodidum
(buzepidi metiodidum (14)(06))

metiodide	*N*-methyl, iodide (salt)
métiodure	*N*-méthyl, iodure (sel)
metioduro	*N*-metilo, ioduro (sal)

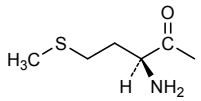
CH_3I



methionilum
(pomaglumetadum methionilum (104)(66))

methionil	(2*S*)-2-amino-4-(methylsulfanyl)butanoyl (L-methionyl)
méthionil	(2*S*)-2-amino-4-(méthylsulfanyl)butanoyl (L-méthionyl)
metionilo	(2*S*)-2-amino-4-(metilsulfanil)butanoil (L-metionil)

USAN $C_5H_{10}NOS$



metoxilum
(atecegatranum metoxilum (105)(67))

metoxil	methoxy
métoxil	méthoxy
metoxilo	metoxi

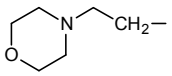
CH_3O

mofetilum (65)

mofetil	2-(morpholin-4-yl)ethyl
mofétil	2-(morpholin-4-yl)éthyle
mofetilo	2-(morfolin-4-il)etilo

$C_6H_{12}NO$

BAN
JAN
USAN

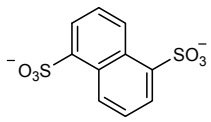


napadisilas (18)
(aclatonii napadisilas (44)(20))

napadisilate	naphthalene-1,5-disulfonate
napadisilate	naphtalène-1,5-disulfonate
napadisilato	naftaleno-1,5-disulfonato

$C_{10}H_6O_6S_2$

BAN
JAN
USAN: napadisylate

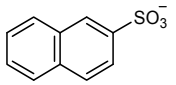


napsilas (18)

napsilate	naphthalene-2-sulfonate
napsilate	naphtalène-2-sulfonate
napsilato	naftaleno-2-sulfonato

$C_{10}H_7O_3S^-$

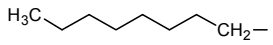
BAN
USAN: napsylate



octilum (65)

octil	octyl
octil	octyle
octilo	octilo

C_8H_{17}

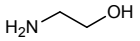


olaminum (22)

olamine	2-aminoethanol
olamine	2-aminoéthanol
olamina	2-aminoetanol

C_2H_7NO

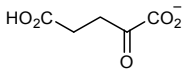
JAN
USAN



oxogluras (22)

oxoglurate	hydrogen 2-oxopentanedioate
oxoglurate	hydrogéno-2-oxopentanedioate
oxoglurato	hidrógeno-2-oxopentanodioato

$C_5H_5O_5$

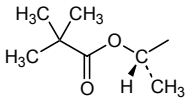


pamoate -> see embonate

pentexilum (65)

pentexil	*rac*-1-[(2,2-dimethylpropanoyl)oxy]ethyl
pentexil	*rac*-1-[(2,2-diméthylpropanoyl)oxy]éthyle
pentexilo	*rac*-1-[(2,2-dimetilpropanoil)oxi]etilo

$C_7H_{13}O_2$



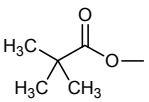
and enantiomer
et énantiomère
y enantiómero

pivalas (18)
(etilefrini pivalas (50)(24))

pivalate	2,2-dimethylpropanoate (ester)
pivalate	2,2-diméthylpropanoate (ester)
pivalato	2,2-dimetilpropanoato (éster)

$C_5H_9O_2$

BAN
JAN
USAN

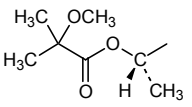


pivoxetilum (54)

pivoxetil	*rac*-1-[(2-methoxy-2-methylpropanoyl)oxy]ethyl
pivoxétil	*rac*-1-[(2-méthoxy-2-méthylpropanoyl)oxy]éthyle
pivoxetilo	*rac*-1-[(2-metoxi-2-metilpropanoil)oxi]etilo

$C_7H_{13}O_3$

BAN
USAN



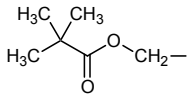
and enantiomer
et énantiomère
y enantiómero

pivoxil (44)
(tebipenemum pivoxilum (87)(46))
(valproatum pivoxilum (51)(24))

pivoxil	[(2,2-dimethylpropanoyl)oxy]methyl
pivoxil	[(2,2-diméthylpropanoyl)oxy]méthyle
pivoxilo	[(2,2-dimetilpropanoil)oxi]metilo

$C_6H_{11}O_2$

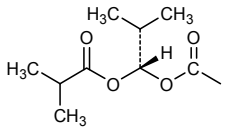
BAN
JAN



placarbilum
(arbaclofenum placarbilum (97)(59))

placarbil	{(1*R*)-2-methyl-1-[(2-methylpropanoyl)oxy]propoxy}carbonyl (linked to an amino group)
placarbil	{(1*R*)-2-méthyl-1-[(2-méthylpropanoyl)oxy]propoxy}carbonyl (lié à un groupe amino)
placarbilo	{(1*R*)-2-metil-1-[(2-metilpropanoil)oxi]propoxi}carbonil (unido a un grupo amino)

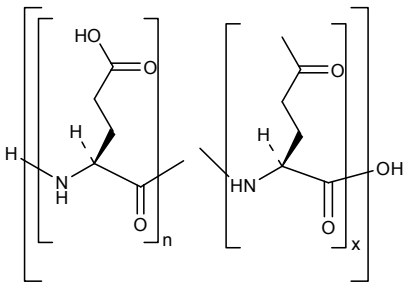
$C_9H_{15}O_4$



poliglumexum
(paclitaxelum poliglumexum (90)(52))

poliglumex	[poly(L-glutamic acid)]oligo-γ-oyl (ester)
poliglumex	[poly(acide L-glutamique)]oligo-γ-oyle (ester)
poliglumex	[poli(ácido L-glutámico)]oligo-γ-oilo (ester)

$(C_5H_7NO_3)_n(C_5H_6NO_3)_xH_2O$



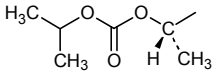
probutate -> see buteprate

proxetilum (58)

proxetil *rac*-1-{[(propan-2-yloxy)carbonyl]oxy}ethyl
proxétil *rac*-1-{[(propan-2-yloxy)carbonyl]oxy}éthyle
proxetilo *rac*-1-{[(propan-2-iloxi)carbonil]oxi}etilo

$C_6H_{11}O_3$

BAN
JAN
USAN

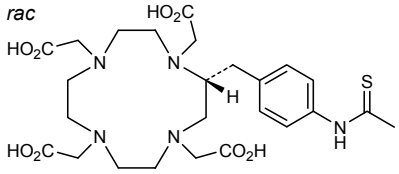


and enantiomer
et énantiomère
y enantiómero

satetraxetanum
(lutetium (^{177}Lu) lilotomabum satetraxetanum (112)(74))

satetraxetan *rac*-(4-{[(2*R*)-1,4,7,10-tetrakis(carboxymethyl)-1,4,7,10-tetraazacyclododecan-2-yl]methyl}phenyl)carbamothioyl
satétraxétan *rac*-(4-{[(2*R*)-1,4,7,10-tétrakis(carboxyméthyl)-1,4,7,10-tétraazacyclododécan-2-yl]méthyl}phényl)carbamothioyle
satetraxetán *rac*-(4-{[(2*R*)-1,4,7,10-tetrakis(carboximetil)-1,4,7,10-tetraazaciclododecan-2-il]metil}fenil)carbamotioilo

$C_{24}H_{34}N_5O_8S$

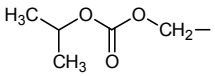


soproxilum (82)

soproxil {[(propan-2-yloxy)carbonyl]oxy}methyl
soproxil {[(propan-2-yloxy)carbonyl]oxy}méthyle
soproxilo {[(propan-2-iloxi)carbonil]oxi}metilo

$C_5H_9O_3$

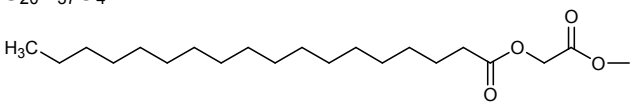
BAN
JAN



steaglas (18)
(prednisoloni steaglas (16)(07))

steaglate 2-(octadecanoyloxy)acetate (ester)
stéaglate 2-(octadécanoyloxy)acétate (ester)
esteaglato 2-(octadecanoiloxi)acetato (éster)

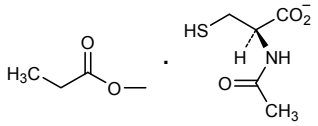
$C_{20}H_{37}O_4$



stinopras
(erythromycini stinopras (58)(27))

stinoprate	*N*-acetyl-L-cysteinate (salt), propanoate (ester)
stinoprate	*N*-acétyl-L-cystéinate (sel), propanoate (ester)
estinoprato	*N*-acetil-L-cisteinato (sal), propanoato (éster)

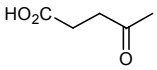
$C_8H_{13}NO_5S$



succinilum
(norfloxacinum succinilum (58)(28))

succinil	3-carboxypropanoyl
succinil	3-carboxypropanoyle
succinilo	3-carboxipropanoilo

$C_4H_5O_3$

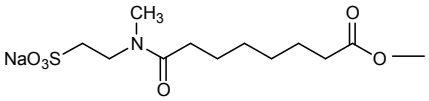


suleptanas
(methylprednisoloni suleptanas (56)(27))

suleptanate	8-[methyl(2-sulfoethyl)amino]-8-oxooctanoate (ester), monosodium salt
suleptanate	8-[méthyl(2-sulfoéthyl)amino]-8-oxooctanoate (ester), sel monosodique
suleptanato	8-[metil(2-sulfoetil)amino]-8-oxooctanoato (éster), sal monosódica

$C_{11}H_{19}NNaO_6$

BAN
JAN
USAN



sulfoxylas
(phenarsoni sulfoxylas (01)(!))

sulfoxylate	sulfinomethyl, monosodium salt
sulfoxylate	sulfinométhyle, sel monosodique
sulfoxilato	sulfinometilo, sal monosódica

CH_2NaO_2S

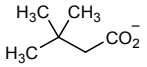
$– CH_2 –SO_2Na$

tebutas (22)

tebutate 3,3-dimethylbutanoate
tébutate 3,3-diméthylbutanoate
tebutato 3,3-dimetilbutanoato

$C_6H_{11}O_2$

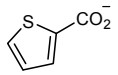
JAN
USAN



tenoas (52)

tenoate thiophene-2-carboxylate
ténoate thiophène-2-carboxylate
tenoato tiofeno-2-carboxilato

$C_5H_3O_2S$

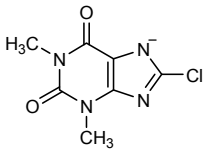


teoclas (18)
(promethazini teoclas (10)(04))

teoclate 8-chloro-1,3-dimethyl-2,6-dioxo-1,2,3,6-dihydro-7*H*-purin-7-ide
téoclate 8-chloro-1,3-diméthyl-2,6-dioxo-1,2,3,6-dihydro-7*H*-purin-7-ure
teoclato 8-cloro-1,3-dimetil-2,6-dioxo-1,2,3,6-dihidro-7*H*-purin-7-uro

$C_7H_6ClN_4O_2$

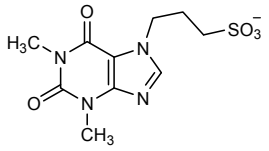
BAN
JAN



teprosilas (29)

teprosilate 3-(1,3-dimethyl-2,6-dioxo-1,2,3,6-tetrahydro-7*H*-purin-7-yl)propane-1-sulfonate
téprosilate 3-(1,3-diméthyl-2,6-dioxo-1,2,3,6-tétrahydro-7*H*-purin-7-yl)propane-1-sulfonate
teprosilato 3-(1,3-dimetil-2,6-dioxo-1,2,3,6-tetrahidro-7*H*-purin-7-il)propano-1-sulfonato

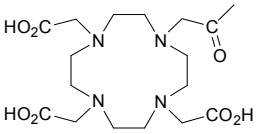
$C_{10}H_{13}N_4O_5S$



tetraxetanum (92)
(yttrium (^{90}Y) tacatuzumabum tetraxetanum (93)(55))
(yttrium (^{90}Y) clivatuzumabum tetraxetanum (102)(64))

tetraxetan	2-[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclodecan-1-yl]acetyl
tétraxétan	2-[4,7,10-tris(carboxyméthyl)-1,4,7,10-tétraazacyclodécan-1-yl]acétyle
tetraxetán	2-[4,7,10-tris(carboximetil)-1,4,7,10-tetraazaciclodecan-1-il]acetilo

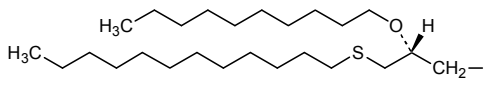
$C_{16}H_{27}N_4O_7$



tidoxilum
(fozivudinum tidoxilum (73)(36))
(fosfluridinum tidoxilum (93)(55))
(fosalvudinum tidoxilum (95)(57))

tidoxil	*rac*-2-(decyloxy)-3-(dodecylsulfanyl)propyl
tidoxil	*rac*-2-(décyloxy)-3-(dodécylsulfanyl)propyle
tidoxilo	*rac*-2-(deciloxi)-3-(dodecilsulfanil)propilo

$C_{25}H_{51}OS$

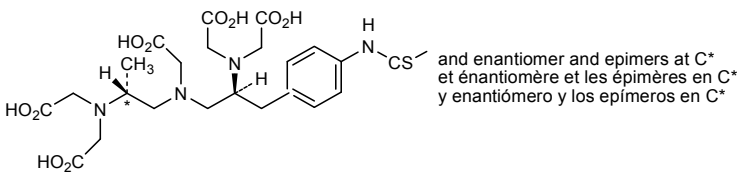


tiuxetanum
(ibritumomabum tiuxetanum (86)(48))

tiuxetan	*rac*-*N*-(4-{(2*S*)-2-[bis(carboxymethyl)amino]-3-[{(2*RS*)-2-[bis(carboxymethyl)amino]propyl}(carboxymethyl)amino]propyl}phenyl)carbamothioyl
tiuxétan	*rac*-*N*-(4-{(2*S*)-2-[bis(carboxyméthyl)amino]-3-[{(2*RS*)-2-[bis(carboxyméthyl)amino]propyl}(carboxyméthyl)amino]propyl}phényl)carbamothioyle
tiuxetán	*rac*-*N*-(4-{(2*S*)-2-[bis(carboximetil)amino]-3-[{(2*RS*)-{2-[bis(carboximetil)amino]propil}(carboximetil)amino]propil}fenil)carbamotioilo

$C_{23}H_{31}N_4O_{10}S$

BAN
JAN
USAN

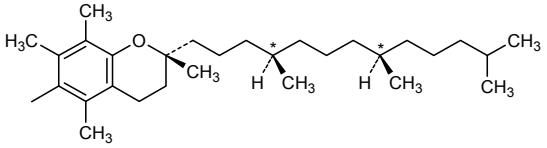


tocoferilum
(tretinoinum tocoferilum (66)(32))

tocoferil	*rac*-(2*R*)-2,5,7,8-tetramethyl-2-[(4Ξ,8Ξ)-4,8,12-trimethyltridecyl]-3,4-dihydro-2*H*-1-benzopyran-6-yl
tocoféril	*rac*-(2*R*)-2,5,7,8-tétraméthyl-2-[(4Ξ,8Ξ)-4,8,12-triméthyltridécyl]-3,4-dihydro-2*H*-1-benzopyran-6-yl
tocoferilo	*rac*-(2*R*)-2,5,7,8-tetrametil-2-[(4Ξ,8Ξ)-4,8,12-trimetiltridecil]-3,4-dihidro-2*H*-1-benzopiran-6-ilo

$C_{29}H_{49}O$

JAN

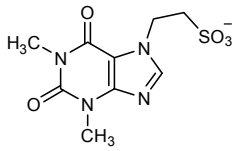


and enantiomer and epimers at C*
et énantiomère et épimères en C*
y enantiómero y epimeros en C*

tofesilas (27)

tofesilate	2-(1,3-dimethyl-2,6-dioxo-1,2,3,6-tetrahydro-7*H*-purin-7-yl)ethane-1-sulfonate
tofésilate	2-(1,3-diméthyl-2,6-dioxo-1,2,3,6-tétrahydro-7*H*-purin-7-yl)éthane-1-sulfonate
tofesilato	2-(1,3-dimetil-2,6-dioxo-1,2,3,6-tetrahidro-7*H*-purin-7-il)etano-1-sulfonato

$C_9H_{11}N_4O_5S$



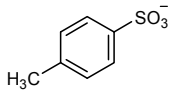
tosilas (18)

(bretylii tosilas (10)(04))	(trethinii tosilas (14)(06))
(itramini tosilas (13)(05))	(xylamidini tosilas (17)(!))
(troxonii tosilas (13)(05))	(emilii tosilas (37)(17))
(troxypyrrolii tosilas (13)(05))	(suplatasti tosilas (104)(65))

tosilate	4-methylbenzene-1-sulfonate
tosilate	4-méthylbenzène-1-sulfonate
tosilato	4-metilbenceno-1-sulfonato

$C_7H_7O_3S$

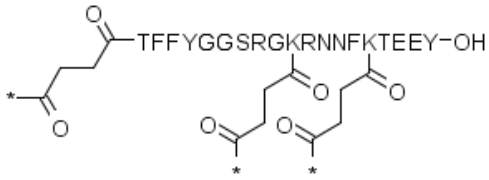
BAN
JAN
USAN: tosylate



trevatidum
(paclitaxelum trevatidum (109)(71))

trevatide	[([318-L-threonine(P>T[1]),324-L-serine(C>S[7]), 325-L-arginine(G>R[8]),327-L-lysine(N>K[10]),332-L-lysine(N>K[15])] human amyloid beta A4 protein precursor-(318-336)-peptide)-$N^{2.1}$,$N^{6.10}$,$N^{6.15}$-triyl]tris(1,4-dioxobutane-4,1-diyl)
trévatide	[([318-L-thréonine(P>T[1]),324-L-sérine(C>S[7]), 325-L-arginine(G>R[8]),327-L-lysine(N>K[10]),332-L-lysine(N>K[15])] précurseur de la protéine amyloïde bêta A4 humaine-(318-336)-peptide)-$N^{2.1}$,$N^{6.10}$,$N^{6.15}$-triyl]tris(1,4-dioxobutane-4,1-diyle)
trevatida	[([318-L-treonina(P>T[1]),324-L-serina(C>S[7]), 325-L-arginina(G>R[8]),327-L-lisina(N>K[10]),332-L-lisina(N>K[15])] precursor de la proteína amiloide beta A4 humana-(318-336)-péptido)-$N^{2.1}$,$N^{6.10}$,$N^{6.15}$-triil]tris(1,4-dioxobutano-4,1-diilo)

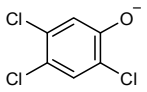
$C_{116}H_{158}N_{29}O_{37}$



triclofenas (18)
(alazanini triclofenas (13)(05))

triclofenate	2,4,5-trichlorophenolate
triclofénate	2,4,5-trichlorophénolate
triclofenato	2,4,5-triclorofenolato

$C_6H_2Cl_3O$

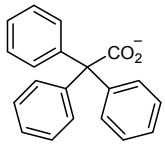


trifenatas (104)

trifenatate	triphenylacetate
triféna tate	triphénylacétate
trifenatato	trifenilacetato

$C_{20}H_{15}O_2$

USAN



triflutas (64)

triflutate trifluoroacetate
triflutate trifluoroacétate
triflutato trifluoroacetato

$C_2F_3O_2$

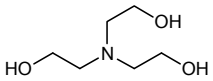
USAN

trolaminum (25)

trolamine 2,2',2''-nitrilotriethanol
trolamine 2,2',2''-nitrilotriéthanol
trolamina 2,2',2''-nitrilotrietanol

$C_6H_{15}NO_3$

USAN

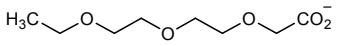


troxundas (46)

troxundate [2-(2-ethoxyethoxy)ethoxy]acetate
troxundate [2-(2-éthoxyéthoxy)éthoxy]acétate
troxundato [2-(2-etoxietoxi)etoxi]acetato

$C_8H_{15}O_5$

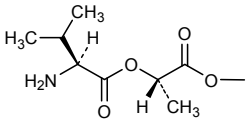
BAN



valactas (101)

valactate (2*S*)-2-{[(2*S*)-2-amino-3-methylbutanoyl]oxy}propanoate (ester)
valactate (2*S*)-2-{[(2*S*)-2-amino-3-méthylbutanoyl]oxy}propanoate (ester)
valactato (2*S*)-2-{[(2*S*)-2-amino-3-metilbutanoil]oxi}propanoato (éster)

$C_8H_{14}NO_4$

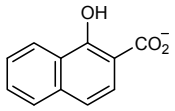


xinafoas (63)

xinafoate	1-hydroxynaphthalene-2-carboxylate
xinafoate	1-hydroxynaphtalène-2-carboxylate
xinafoato	1-hidroxinaftaleno-2-carboxilato

$C_{11}H_7O_3$

BAN
JAN
USAN



* * * * * * * * *

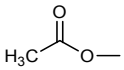
ANNEX 1

The following groups and elements have also been published together with INNs:

acetas

acetate	ethanoate (ester)
acétate	éthanoate (ester)
acetato	etanoato (éster)

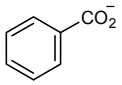
$C_2H_3O_2$



benzoas

benzoate
benzoate
benzoato

$C_7H_5O_2$



bromidum

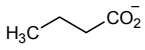
bromide
bromure
bromuro

Br^-

butyras

butyrate	butanoate
butyrate	butanoate
butirato	butanoato

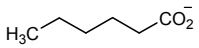
$C_4H_7O_2$



caproas

caproate	hexanoate
caproate	hexanoate
caproato	hexanoato

$C_6H_{11}O_2$



chloridum

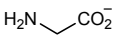
chloride
chlorure
cloruro

Cl^-

glycinas

glycinate	2-aminoacetate
glycinate	2-aminoacétate
glicinato	2-aminoacetato

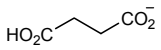
$C_2H_4NO_2$



hemissuccinas

hemisuccinate	hydrogen butanedioate
hémisuccinate	hydrogénobutanedioate
hemisuccinato	hidrógenobutanodioato

$C_4H_5O_4$



iodidum

iodide
iodure
ioduro

I^-

isopropylis

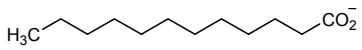
isopropyl	propan-2-yl
isopropyle	propan-2-yle
isopropilo	propan-2-ilo

C_3H_7

lauras

laurate	dodecanoate
laurate	dodécanoate
laurato	dodecanoato

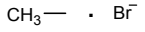
$C_{12}H_{23}O_2$



methylbromidum

methylbromide	*N*-methyl, bromide (salt)
méthylbromure	*N*-méthyl, bromure (sel)
metilbromuro	*N*-metil, bromuro (sal)

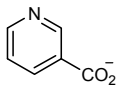
CH_3Br



nicotinas

nicotinate	pyridine-3-carboxylate
nicotinate	pyridine-3-carboxylate
nicotinato	piridina-3-carboxilato

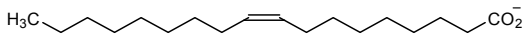
$C_6H_4NO_2$



oleas

oleate	(9*Z*)-octadec-9-enoate
oléate	(9*Z*)-octadéc-9-énoate
oleato	(9*Z*)-octadec-9-enoato

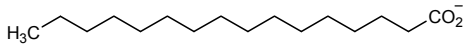
$C_{18}H_{33}O_2$



palmitas

palmitate	hexadecanoate
palmitate	hexadécanoate
palmitato	hexadecanoato

$C_{16}H_{31}O_2$



perchloras

perchlorate
perchlorate
perclorato

ClO_4^-

potassii (preferred Latin name **:** kalii)

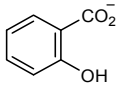
potassium
(de) potassium
(de) potasio

K^+

salicylas

salicylate	2-hydroxybenzoate
salicylate	2-hydroxybenzoate
salicilato	2-hidroxibenzoato

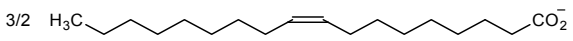
$C_7H_5O_3$



sesquioleas

sesquioleate	(9*Z*)-octadec-9-enoate (1:1.5)
sesquioléate	(9*Z*)-octadéc-9-énoate (1:1,5)
sesquioleato	(9*Z*)-octadec-9-enoato (1:1,5)

1.5 ($C_{18}H_{33}O_2$)



sodii (preferred Latin name: natrii)

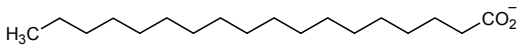
sodium
(de) sodium
(de) sodio

Na^+

stearas

stearate	octadecanoate
stéarate	octadécanoate
estearato	octadecanoato

$C_{18}H_{35}O_2$



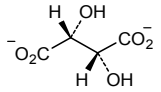
sulfas

sulfate
sulfate
sulfato

tartras

tartrate	(2*R*,3*R*)-2,3-dihydroxybutanedioate
tartrate	(2*R*,3*R*)-2,3-dihydroxybutanedioate
tartrato	(2*R*,3*R*)-2,3-dihidroxibutanodioato

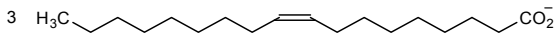
$C_4H_4O_6$



trioleas

trioleate	tris[(9*Z*)-octadec-9-enoate]
trioléate	tris[(9*Z*)-octadéc-9-énoate]
trioleato	tris[(9*Z*)-octadec-9-enoato]

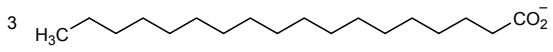
$3 \cdot (C_{18}H_{33}O_2)$



tristearas

tristearate	tris(octadecanoate)
tristéarate	tris(octadécanoate)
triéstearato	tris(octadecanoato)

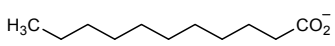
$3 \cdot (C_{18}H_{35}O_2)$



undecylas

undecylate	undecanoate
undécylate	undécanoate
undecilato	undecanoato

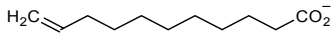
$C_{11}H_{21}O_2$



undecylenas

undecylenate undec-10-enoate
undécylénate undéc-10-énoate
undecilenato undec-10-enoato

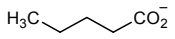
$C_{11}H_{19}O_2$



valeras

valerate pentanoate
valérate pentanoate
valerato pentanoato

$C_5H_9O_2$



* * * * * * * * *

ANNEX 2

Transliteration of Greek letters in English, French and Spanish

Upper case	Lower case	English	French	Spanish
Α	α	alfa (and **not** alpha)	alfa (and **not** alpha)	alfa
Β	β	beta	bêta	beta
Γ	γ	gamma	gamma	gamma
Δ	δ	delta	delta	delta
Ε	ε	epsilon	epsilon	épsilon
Ζ*	ζ*	zeta	zêta	**dseta**
Η	η	eta	êta	eta
Θ*	θ*	theta	thêta	**zeta**
Ι	ι	iota	iota	iota
Κ	κ	kappa	kappa	kappa
Λ	λ	lambda	lambda	lambda
Μ	μ	mu	mu	mi
Ν	ν	nu	nu	ni
Ξ	ξ	xi	xi	xi
Ο	ο	omicron	omicron	ómicron
Π	π	pi	pi	pi
Ρ	ρ	rho	rhô	ro
Σ	σ	sigma	sigma	sigma
Τ	τ	tau	tau	tau
Υ	υ	upsilon	upsilon	ípsilon
Φ	φ	phi	phi	fi
Χ	χ	chi	khi	ji
Ψ	ψ	psi	psi	psi
Ω	ω	omega	oméga	omega

* Due to possible confusion of the transliteration of these two Greek letters, the future use of the Greek letters ζ and θ is discouraged.

ANNEX 3

Standardization of the Spanish version of INN

The spelling of the Spanish version of the INN has been standardized in collaboration with a Spanish nomenclature group and the WHO Secretariat (1, 2).

The criteria for standardization may be summarized as follows:
1. keep as close as possible to the present INN (minimum changes)
2. keep "stems" uniform
3. avoid lengthening of words
4. base changes on a combination of:
   - 4.1 acceptance wherever possible of the English and/or French (original) name
   - 4.2 acceptance wherever possible of the existing Spanish name
   - 4.3 consideration of the Spanish phonetics and spelling in special cases.

To be more concise, the Spanish endings similar to the English endings are not shown in this list, even for unusual cases in Spanish (i.e. –cept).

Rules for the Spanish version of the INN

English	***Spanish***	
-ac	-aco	
-ame	-amo	
-an	-án	except: -orfano, -sulfano, -oxano
-ane	-ano	except: insulina defalana/insulina isofana
-ase	-asa	
-ate	-ato	
-barb	-barbo	
benze	bence	
benzi	benci	
chlo	clo	
-el	-el	
-en(e)	-eno	except: -bén, -bufén, -gén (for –gene in English), -rsén (for –rsen in English)
-er	-ero	
-fos or -phos	-fos	
-ic	-ico	
-ide	-ida	except: -óxido, -ósido, -glusido, iodide (ioduro), chloride (cloruro), etc.
-il (e) and –yl	–ilo	except: -dil, -pril, -guanil, -azenil
-ime	-ima	
-imus	-imús	
-in (e)	-ina	except: -dipino, -nixino, -oxacino, -platino
-it(e)	-ita	except: -arit
-ium	-io	
k-	k-	
-ka-	-ca-	except: -kacina, -kalim, -lukast
-ke-	-que-	except: -kefamide
-kefalin	-cefalina	
khe	ke	
-ki-	-qui-	except: leukina, rokitamicina
-kin-	-kin-	in monoclonal antibodies, no change to –k(i)(in)-
-ko-	-co-	

-ku-	-cu-	
-ky-	-qui-	
-ll-	-l-	
-mf-	-mf-[1]	except: anfetaminas (derivatives), alcanfor (derivatives), cloranfenicol (derivatives and analogues)
-nb-	-nb-[1]	
-np-	-np-[1]	
-ol(e)	-ol	
-ome	-omo	except: cef..oma
-on	-on	
-one	-ona	
-ou-	-u-	
-pafant	-pafant	
ph	f	
-prim	-prima	
qua-	qua-	
-qua-	-cua-	
quo-	quo-	
-quo-	-cuo-	
sf-	esf-	
sp-	esp-	
st-	est-	
th	t	
y	i	

[1]While *st-* and *sp-* are changed into *est-* and *esp-* respectively, the letter sequences *–mf-, -nb-,* and *–np-*, although unusual in Spanish have been retained for the following reasons:
(a) international linguistic requirements; the established philosophy takes precedence over spelling
(b) correspondence with the English and French versions; fewer changes to the first Spanish versions (previous cumulative lists).

Last update: June 2015

References

1. Dal Re Saavedra, M.A. et al. Propuesta de unificación de las denominaciones comunes internacionales de las sustancias farmacéuticas en lengua española. [Proposal for unification of the international nonproprietary names for pharmaceutical substances in the Spanish language.] *Anales de la Real Academia de Farmacia*, 1985, **51**:289-300:
2. Comments on Appendix to: article on "Unificación de las denominaciones comunes internacionales de las sustancias farmacéuticas" and on listing received in Madrid in September 1985 (Pharm S/Nom 1105 and 1105 Add: 1).

ANNEX 4

4.1. Names for toxins (active or inactivated proteins)

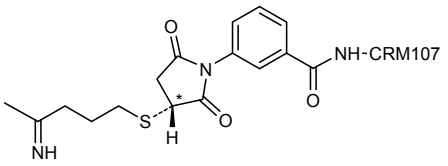
aldifitoxum

(transferrinum aldifitoxum (95)(56))

aldifitox 3-{*rac*-3-[(4-imino-4-ylobutyl)sulfanyl]-2,5-dioxopyrrolidin-1-yl}benzoyl attached to a primary amine group of diphtheria [550-L-phenylalanine]toxin from *Corynebacterium diphtheriae*-(26-560)-peptide

aldifitox 3-{*rac*-3-[(4-imino-4-ylobutyl)sulfanyl]-2,5-dioxopyrrolidin-1-yl}benzoyle lié à une amine primaire du [550-L-phénylalanine]toxine diphtérique de *Corynebacterium diphteriae*-(26-560)-peptide

aldifitox 3-{*rac*-3-[(4-imino-4-ilobutil)sulfanil]-2,5-dioxopirrolidin-1-il}benzoilo ligado a una amina primaria de la [550-L-fenilalanina]toxina diftérica del *Corynebacterium diphteriae*-(26-560)-péptido



and epimer at C*
et l'épimère en C*
y el epímero al C*

H_2N-CRM107= GADDVVDSSK SFVMENFSSY HGTKPGYVDS IQKGIQKPKS
GTQGNYDDDW KGFYSTDNKY DAAGYSVDNE NPLSGKAGGV
VKVTYPGLTK VLALKVDNAE TIKKELGLSL TEPLMEQVGT
EEFIKRFGDG ASRVVLSLPF AEGSSSVEYI NNWEQAKALS
VELEINFETR GKRGQDAMYE YMAQACAGNR VRRSVGSSLS
CINLDWDVIR DKTKTKIESL KEHGPIKNKM SESPNKTVSE
EKAKQYLEEF HQTALEHPEL SELKTVTGTN PVFAGANYAA
WAVNVAQVID SETADNLEKT TAALSILPGI GSVMGIADGA
VHHNTEEIVA QSIALSSLMV AQAIPLVGEL VDIGFAAYNF
VESIINLFQV VHNSYNRPAY SPGHKTQPFL HDGYAVSWNT
VEDSIIRTGF QGESGHDIKI TAENTPLPIA GVLLPTIPGK
LDVNKSKTHI SVNGRKIRMR CRAIDGDVTF CRPKSPVYVG
NGVHANLHVA FHRSSSEKIH SNEISSDSIG VLGYQKTVDH
TKVNFKLSLF FEIKS

aritoxum

(dorlimomabum aritoxum (66)(32))
(telimomabum aritoxum (66)(32))
(zolimomabum aritoxum (80)(41))

aritox ricin A chain
aritox chaîne A de la ricine
aritox cadena A de la ricina

besudotoxum

(cintredekinum besudotoxum (92)(54))

besudotox L-lysyl-L-alanyl-L-serylglycylglycine (linker) fusion protein with des-(365-380)-[Asn^{364},Val^{407},Ser^{515},Gln^{590},Gln^{606},Arg^{613}]exotoxin A (*Pseudomonas aeruginosa*)-(251-613)-peptide (toxin with region IA and first 16 residues of region IB deleted)

bésudotox L-lysyl-L-alanyl-L-sérylglycylglycine (peptide de liaison) protéine de fusion avec le dès-(365-380)-[Asn^{364},Val^{407},Ser^{515},Gln^{590},Gln^{606},Arg^{613}]exotoxine A (*Pseudomonas aeruginosa*)-(251-613)-peptide (toxine dont la région IA et les 16 premiers résidus de la région IB ont été supprimés)

besudotox L-lisil-L-alanil-L-serilglicilglicina (péptido de enlace) proteína de fusión con el des-(365-380)-[Asn^{364},Val^{407},Ser^{515},Gln^{590},Gln^{606},Arg^{613}]exotoxina A (*Pseudomonas aeruginosa*)-(251-613)- péptido (toxina de la que se han suprimido la región IA y les 16 primeros restos de la región IB)

$C_{1668}H_{2604}N_{492}O_{520}S_2$

```
KASGGPEGGS  LAALTAHQAC  HLPLETFTRH  RQPRGWEQLE  QCGYPVQRLV   50
ALYLAARLSW  NQVDQVIRNA  LASPGSGGDL  GEAIREQPEQ  ARLALTLAAA  100
ESERFVRQGT  GNDEAGAANG  PADSGDALLE  RNYPTGAEFL  GDGGDVSFST  150
RGTQNWTVER  LLQAHRQLEE  RGYVFVGYHG  TFLEAAQSIV  FGGVRARSQD  200
LDAIWRGFYI  AGDPALAYGY  AQDQEPDARG  RIRNGALLRV  YVPRSSLPGF  250
YRTSLTLAAP  EAAGEVERLI  GHPLPLRLDA  ITGPEEEGGR  LETILGWPLA  300
ERTVVIPSAI  PTDPRNVGGD  LDPSSIPDQE  QAISALPDYA  SQPGQPPRED  350
LR                                                         352
```

Disulfide bridge location / Position du pont disulfure / Posición del puente disulfuro

20-42

bogatoxum

(citatuzumabum bogatoxum (99)(61))

bogatox 12-mer linker [furin proteolytic cleavage site from *Pseudomonas* exotoxin A (298-309 precursor fragment)] (1-12) -*Bougainvillea spectabilis* Willd bouganin [rRNA N-glycosidase, type I ribosome inactivating protein (RIP)] fragment (27-276 from precursor, V149>A, D153>A, Y159>N, I178>A) (13-262)

bogatox 12-mer linker [site de clivage protéolytique par la furine, de *Pseudomonas* exotoxine A (fragment 298-309 du précurseur)] (1-12) -fragment de la bouganine [N-glycosidase de l'ARNr, protéine de type I inactivant le ribosome (RIP)] de *Bougainvillea spectabilis* Willd (27-276 du précurseur, V149>A, D153>A, Y159>N, I178>A) (13-262)

bogatox 12-mero de enlace [secuencia de ruptura proteolítica por furina, de la exotoxina A de *Pseudomonas* (fragmento 298-309 del precursor)] (1-12) -fragmento de la buganina [N-glicosidasa de ARNr, proteína de tipo I inactivadora de ribosomas (RIP)] de *Bougainvillea spectabilis* Willd (27-276 del precursor, V149>A, D153>A, Y159>N, I178>A) (13-262)

```
TRHRQPRGWE  QLYNTVSFNL  GEAYEYPTFI  QDLRNELAKG  TPVCQLPVTL   50
QTIADDKRFV  LVDITTTSKK  TVKVAIDVTD  VYVVGYQDKW  DGKDRAVFLD  100
KVPTVATSKL  FPGVTNRVTL  TFDGSYQKLV  NAAKADRKAL  ELGVNKLEFS  150
IEAIHGKTIN  GQEAAKFFLI  VIQMVSEAAR  FKYIETEVVD  RGLYGSFKPN  200
FKVLNLENNW  GDISDAIHKS  SPQCTTINPA  LQLISPSNDP  WVVNKVSQIS  250
PDMGILKFKS  SK                                             262
```

cridificarum

(vanutidum cridificarum (100)(62))

cridificar oligo[$N^{6\text{-Lys}}$-(sulfanylacetyl)]-[52-glutamic acid(G>E)]diphtheria toxin *Corynebacterium diphtheriae*

cridificar oligo[$N^{6\text{-Lys}}$-(sulfanylacétyl)]-[52-acide glutamique(G>E)]toxine diphtérique *Corynebacterium diphtheriae*

cridificar oligo[$N^{6\text{-Lys}}$-(sulfanilacetil)]-[52-ácido glutámico G>E)]toxina diftérica *Corynebacterium diphtheriae*

```
GADDVVDSSK  SFVMENFSSY  HGTKPGYVDS  IQKGIQKPKS  GTQGNYDDDW   50
KEFYSTDNKY  DAAGYSVDNE  NPLSGKAGGV  VKVTYPGLTK  VLALKVDNAE  100
TIKKELGLSL  TEPLMEQVGT  EEFIKRFGDG  ASRVVLSLPF  AEGSSSVEYI  150
NNWEQAKALS  VELEINFETR  GKRGQDAMYE  YMAQACAGNR  VRRSVGSSLS  200
CINLDWDVIR  DKTKTKIESL  KEHGPIKNKM  SESPNKTVSE  EKAKQYLEEF  250
HQTALEHPEL  SELKTVTGTN  PVFAGANYAA  WAVNVAQVID  SETADNLEKT  300
TAALSILPGI  GSVMGIADGA  VHHNTEEIVA  QSIALSSLMV  AQAIPLVGEL  350
VDIGFAAYNF  VESIINLFQV  VHNSYNRPAY  SPGHKTQPFL  HDGYAVSWNT  400
VEDSIIRTGF  QGESGHDIKI  TAENTPLPIA  GVLLPTIPGK  LDVNKSKTHI  450
SVNGRKIRMR  CRAIDGDVTF  CRPKSPVYVG  NGVHANLHVA  FHRSSSEKIH  500
SNEISSDSIG  VLGYQKTVDH  TKVNSKLSLF  FEIKS                  535
```

diftitoxum

(denileukinum diftitoxum (78)(40))

diftitox *N*-L-methionyl[387-L-histidine-388-L-alanine]-(1-388)-toxin (*Corynebacterium diphtheriae* strain C7) (388→…) (fusion protein component)

diftitox *N*-L-méthionyl[387-L-histidine-388-L-alanine]-(1-388)-toxine (souche C7 de *Corynebacterium diphtheriae*)-(388→…) (composante de protéine de fusion)

diftitox *N*-L-metionil[387-L-histidina-388-L-alanina]-(1-388)-toxina (cepa C7 de *Corynebacterium diphtheriae*) (388→…) (componente de proteína de fusión)

USAN

estafenatoxum

(naptumomabum estafenatoxum (96)(58))

estafenatox glycylglycyl-L-proline (linker) fusion protein with enterotoxin type A (*Staphylococcus aureus*)-(1-33)-peptidyl-L-seryl[Ser^{36},Ser^{37},Glu^{38},Lys^{39},Ala^{41}, Thr^{46},Thr^{71},Ala^{72},Ser^{75},Glu^{76},Glu^{78},Ser^{80},Ser^{81},Thr^{214},Ser^{217},Thr^{219},Ser^{220}, Ser^{222},Ser^{224}]enterotoxin type E (*Staphylococcus aureus*)-(32-230)-peptide (synthetic superantigen SEA/E-120)

estafénatox glycylglycyl-L-proline (peptide de liaison) protéine de fusion avec l'entérotoxine type A (*Staphylococcus aureus*)-(1-33)-peptidyl-L-séryl[Ser^{36},Ser^{37},Glu^{38},Lys^{39}, Ala^{41},Thr^{46},Thr^{71},Ala^{72},Ser^{75},Glu^{76},Glu^{78},Ser^{80},Ser^{81},Thr^{214},Ser^{217},Thr^{219},Ser^{220}, Ser^{222},Ser^{224}]entérotoxine type E (*Staphylococcus aureus*)-(32-230)-peptide (superantigène SEA/E-120 synthétique)

estafenatox glicilglicil-L-prolina (péptido de enlace) proteína de fusión con la enterotoxina típo A (*Staphylococcus aureus*)-(1-33)-peptidil-L-seril[Ser^{36},Ser^{37},Glu^{38},Lys^{39}, Ala^{41},Thr^{46},Thr^{71},Ala^{72},Ser^{75},Glu^{76},Glu^{78},Ser^{80},Ser^{81},Thr^{214},Ser^{217},Thr^{219}, Ser^{220},Ser^{222},Ser^{224}]enterotoxina tipo E (*Staphylococcus aureus*)-(32-230)-péptido (superantígeno SEA/E-120 sintético)

$C_{1173}H_{1805}N_{305}O_{374}S_3$

```
GGPSEKSEEI  NEKDLRKKSE  LQGTALGNLK  QIYYYNSKAI  TSSEKSADQF   50
LTNTLLFKGF  FTGHPWYNDL  LVDLGSTAAT  SEYEGSSVDL  YGAYYGYQCA  100
GGTPNKTACM  YGGVTLHDNN  RLTEEKKVPI  NLWIDGKQTT  VPIDKVKTSK  150
KEVTVQELDL  QARHYLHGKF  GLYNSDSFGG  KVQRGLIVFH  SSEGSTVSYD  200
LFDAQGQYPD  TLLRIYRDNT  TISSTSLSIS  LYLYTT                 236
```

Disulfide bridge location / Position du pont disulfure / Posición del puente disulfuro
99-109

mafenatoxum
(anatumomabum mafenatoxum (86)(48))

mafenatox [227-L-alanine]enterotoxin A (*Staphylococcus aureus*) (C-terminal fusion protein component)
mafénatox [227-L-alanine]entérotoxine A (*Staphylococcus aureus*) (composante C-terminale de protéine de fusion)
mafenatox [227-L-alanina]enterotoxina A de *Staphylococcus aureus* (componente C-terminal de proteína de fusión)

monatoxum
(oportuzumabum monatoxum (100)(62))

monatox 20-mer linker (1-20) -*Pseudomonas aeruginosa* exotoxin A (ETA) fragment [277-633 precursor fragment, containing domain II (281-393) with furin proteolytic cleavage site (298-309), domain Ib I432>V (394-433), domain III (434-633)] (21-377) -hexahistidyl-lysyl-aspartyl-glutamyl-leucyl (378-387)

monatox 20-mer linker (1-20) -fragment de l'exotoxine A de *Pseudomonas aeruginosa* (ETA) [fragment 277-633 du précurseur, comprenant le domaine II (281-393) dont le site de clivage protéolytique par la furine (298-309), le domaine Ib I432>V (394-433), le domaine III (434-633)] (21-377) -hexahistidyl-lysyl-aspartyl-glutamyl-leucyl (378-387)

monatox 20-mero de enlace (1-20) -fragmento de la exotoxina A de *Pseudomonas aeruginosa* (ETA) [fragmento 277-633 del precursor, que comprende el dominio II (281-393), que incluye la secuencia de ruptura proteolítica por furina (298-309), el dominio Ib I432>V (394-433), el dominio III (434-633)] (21-377) -hexahistidil-lisil-aspartil-glutamil-leucil (378-387)

```
EFGGAPEFPK  PSTPPGSSGL  EGGSLAALTA  HQACHLPLET  FTRHRQPRGW   50
EQLEQCGYPV  QRLVALYLAA  RLSWNQVDQV  IRNALASPGS  GGDLGEAIRE  100
QPEQARLALT  LAAAESERFV  RQGTGNDEAG  AASADVVSLT  CPVAAGECAG  150
PADSGDALLE  RNYPTGAEFL  GDGGDVSFST  RGTQNWTVER  LLQAHRQLEE  200
RGYVFVGYHG  TFLEAAQSIV  FGGVRARSQD  LDAIWRGFYI  AGDPALAYGY  250
AQDQEPDARG  RIRNGALLRV  YVPRSSLPGF  YRTGLTLAAP  EAAGEVERLI  300
GHPLPLRLDA  ITGPEEEGGR  LETILGWPLA  ERTVVIPSAI  PTDPRNVGGD  350
LDPSSIPDKE  QAISALPDYA  SQPGKPPHHH  HHHKDEL               387
```

paptoxum
(taplitumomabum paptoxum (84)(46))

paptox pokeweed (*Phytolacca americana*) antiviral protein PAP (disulfide with another protein)
paptox protéine antivirale du *Phytolacca americana* (PAP) (disulfure avec une autre protéine)
paptox proteína antiviral de *Phytolacca americana* (PAP) (disulfuro con otra proteína)

pasudotoxum
(moxetumomabum pasudotoxum (102)(64))

pasudotox 6-mer linker (1-6) -*Pseudomonas aeruginosa* exotoxin A (ETA) PE38 fragment [276-638 precursor fragment with del 390-405, containing domain II S389>N (281-389) with furin proteolytic cleavage site (298-309), domain Ib I432>V (406-433), domain III (434-638)] (7-353)

pasudotox 6-mer linker (1-6) -fragment PE38 de l'exotoxine A de *Pseudomonas aeruginosa* (ETA) [fragment 276-638 du précurseur avec del 390-405, comprenant le domaine II S389>N (281-389) dont le site de clivage protéolytique par la furine (298-309), le domaine Ib I432>V (406-433), le domaine III (434-638)] (7-353)

pasudotox 6-mero de enlace (1-6)-fragmento PE38 de la exotoxina A de *Pseudomonas aeruginosa* (ETA) [fragmento 276-638 del precursor con del 390-405, que comprende el dominio II S389>N (281-389), que incluye la secuencia de ruptura proteolítica por furina (298-309), el dominio Ib I432>V (406-433), el dominio III (434-638)] (7-353)

```
AKASGGPEGG   SLAALTAHQA   CHLPLETFTR   HRQPRGWEQL   EQCGYPVQRL   50
VALYLAARLS   WNQVDQVIRN   ALASPGSGGD   LGEAIREQPE   QARLALTLAA   100
AESERFVRQG   TGNDEAGAAN   GPADSGDALL   ERNYPTGAEF   LGDGGDVSFS   150
TRGTQNWTVE   RLLQAHRQLE   ERGYVFVGYH   GTFLEAAQSI   VFGGVRARSQ   200
DLDAIWRGFY   IAGDPALAYG   YAQDQEPDAR   GRIRNGALLR   VYVPRSSLPG   250
FYRTSLTLAA   PEAAGEVERL   IGHPLPLRLD   AITGPEEEGG   RLETILGWPL   300
AERTVVIPSA   IPTDPRNVGG   DLDPSSIPDK   EQAISALPDY   ASQPGKPPRE   350
DLK
```

sudotoxum
(alvirceptum sudotoxum (69)(34))

sudotox [248-L-histidine-249-L-methionine-250-L-alanine-251-L-glutamic acid]-(248-613)-exotoxin A (*Pseudomonas aeruginosa* reduced)

sudotox [248-L-histidine-249-L-méthionine-250-L-alanine-251-acide L-glutamique]-(248-613)-exotoxine A (*Pseudomonas aeruginosa* réduite)

sudotox [248-L-histidina-249-L-metionina-250-L-alanina-251-ácidoL-glutámico]-(248-613)-exotoxina A (*Pseudomonas aeruginosa* reducida)

tafenatoxum
(nacolomabum tafenatoxum (80)(41))

tafenatox enterotoxin A (*Staphylococcus aureus*)
tafénatox entérotoxine A (*Staphylococcus aureus*)
tafenatox enterotoxina A (*Staphylococcus aureus*)

4.2. Designations for selected active moieties*

emtansinum

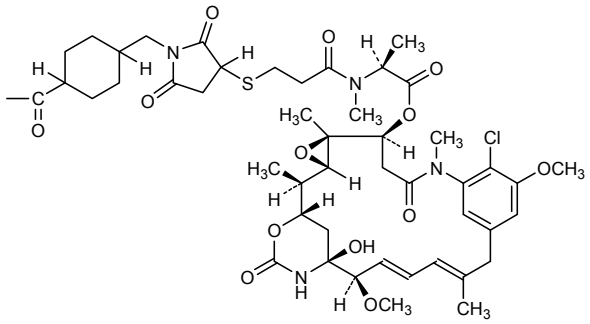
(trastuzumabum emtansinum (103)(65))

emtansine — 4-({3-[(3-{[(2*S*)-1-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-chloro-21-hydroxy-12,20-dimethoxy-2,5,9,16-tetramethyl-8,23-dioxo-4,24-dioxa-9,22-diazatetracyclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaen-6-yl]oxy}-1-oxopropan-2-yl](methyl)amino}-3-oxopropyl) sulfanyl]-2,5-dioxopyrrolidin-1-yl}methyl)cyclohexanecarbonyl

emtansine — 4-({3-[(3-{[(2*S*)-1-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-chloro-1-hydroxy-12,20-diméthoxy-2,5,9,16-tétraméthyl-8,23-dioxo-4,24-dioxa-9,22-diazatétracyclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaén-6-yl]oxy}-1-oxopropan-2-yl](méthyl)amino}-3-oxopropyl) sulfanyl]-2,5-dioxopyrrolidin-1-yl}méthyl)cyclohexanecarbonyle

emtansina — 4-({3-[(3-{[(2*S*)-1-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-cloro-21-hidroxi-2,5,9,16-tetrametil-12,20-dimetoxi-8,23-dioxo-4,24-dioxa-9,22-diazatetraciclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaen-6-il]oxi}-1-oxopropan-2-il](metil)amino}-3-oxopropil)sulfanil]-2,5-dioxopirrolidin-1-il}metil)ciclohexancarbonilo

$C_{47}H_{62}ClN_4O_{13}S$



mafodotinum

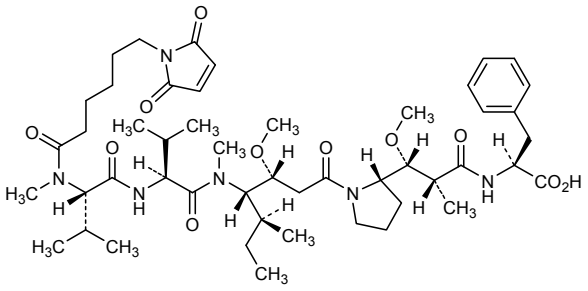
(denintuzumabum mafodotinum (111)(73))
(vorsetuzumabum mafodotinum (107)(69))

mafodotin — *N*-{(2*R*,3*R*)-3-[(2*S*)-1-[(3*R*,4*S*,5*S*)-4-({*N*-[6-(2,5-dioxo-2,5-dihydro-1*H*-pyrrol-1-yl)hexanoyl]-*N*-methyl-L-valyl-L-valyl}methylamino)-3-methoxy-5-methylheptanoyl]pyrrolidin-2-yl]-3-methoxy-2-methylpropanoyl}-L-phenylalanine

mafodotine — *N*-{(2*R*,3*R*)-3-[(2*S*)-1-[(3*R*,4*S*,5*S*)-4-({*N*-[6-(2,5-dioxo-2,5-dihydro-1*H*-pyrrol-1-yl)hexanoyl]-*N*-méthyl-L-valyl-L-valyl}méthylamino)-3-méthoxy-5-méthylheptanoyl]pyrrolidin-2-yl]-3-méthoxy-2-méthylpropanoyl}-L-phénylalanine

mafodotina — *N*-{(2*R*,3*R*)-3-[(2*S*)-1-[(3*R*,4*S*,5*S*)-4-({*N*-[6-(2,5-dioxo-2,5-dihidro-1*H*-pirrol-1-il)hexanoil]-*N*-metil-L-valil-L-valil}metilamino)-3-metoxi-5-metilheptanoil]pirrolidin-2-il]-3-metoxi-2-metilpropanoil}-L-fenilalanina

$C_{49}H_{76}N_6O_{11}$



mertansinum

(cantuzumabum mertansinum (105)(66))
(lorvotuzumabum mertansinum (103)(65))

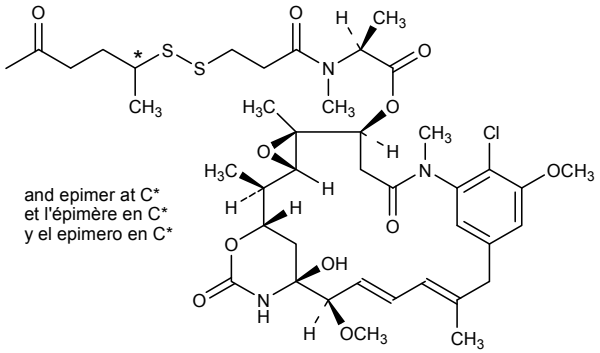
mertansine {(4*RS*)-4-[(3-{[(2*S*)-1-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-chloro-21-hydroxy-12,20-dimethoxy-2,5,9,16-tetramethyl-8,23-dioxo-4,24-dioxa-9,22-diazatetracyclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaen-6-yl]oxy}-1-oxopropan-2-yl](methyl}amino}-3-oxopropyl)disulfanyl]pentanoyl}

mertansine {(4*RS*)-4-[(3-{[(2*S*)-1-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-chloro-21-hydroxy-12,20-diméthoxy-2,5,9,16-tétraméthyl-8,23-dioxo-4,24-dioxa-9,22-diazatétracyclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaén-6-yl]oxy}-1-oxopropan-2-yl](méthyl)amino}-3-oxopropyl)disulfanyl]pentanoyle}

mertansina {(4*RS*)-4-[(3-{[(2*S*)-1-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-cloro-21-hidroxi-2,5,9,16-tetrametil-12,20-dimetoxi-4,24-dioxa-8,23-dioxo-9,22-diazatetraciclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaen-6-il]oxi}-1-oxopropan-2-il](metil)amino}-3-oxopropil)disulfanil]pentanoilo}

$C_{40}H_{55}ClN_3O_{11}S_2$

USAN



ravtansinum

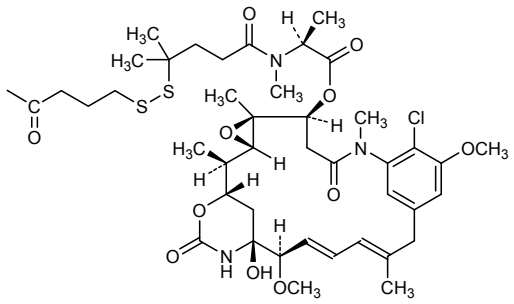
(anetumabum ravtansinum (109)(71))
(coltuximabum ravtansinum (109)(71))
(cantuzumabum ravtansinum (105)(67))
(indatuximabum ravtansinum (105)(67))

ravtansine — 4-[(5-{[(2*S*)-1-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-chloro-21-hydroxy-12,20-dimethoxy-2,5,9,16-tetramethyl-8,23-dioxo-4,24-dioxa-9,22-diazatetracyclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaen-6-yl]oxy}-1-oxopropan-2-yl](methyl)amino}-2-methyl-5-oxopentan-2-yl)disulfanyl]butanoyl

ravtansine — 4-[(5-{[(2*S*)-1-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-chloro-21-hydroxy-12,20-diméthoxy-2,5,9,16-tétraméthyl-8,23-dioxo-4,24-dioxa-9,22-diazatétracyclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaèn-6-yl]oxy}-1-oxopropan-2-yl](méthyl)amino}-2-méthyl-5-oxopentan-2-yl)disulfanyl]butanoyle

ravtansina — 4-[(5-{[(2*S*)-1-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-cloro-21-hidroxi-2,5,9,16-tetrametil-12,20-dimetoxi-8,23-dioxo-4,24-dioxa-9,22-diazatetraciclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaen-6-il]oxi}-1-oxopropan-2-il](metil)amino}-2-metil-5-oxopentan-2-il)disulfanil]butanoilo

$C_{42}H_{59}ClN_3O_{11}S_2$



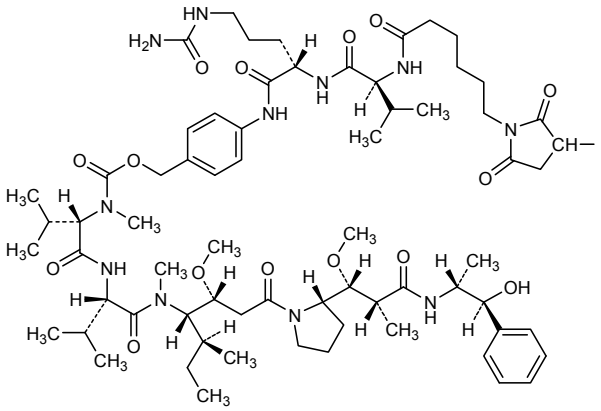
vedotinum

(brentuximabum vedotinum (103)(65))
(enfortumabum vedotinum (109)(71))
(indusatumabum vedotinum (112)(74))
(lifastuzumabum vedotinum (110)(72))
(pinatuzumabum vedotinum (108)(70))
(polatuzumabum vedotinum (110)(71))
(sofituzumabum vedotinum (110)(72))
(vandortuzumabum vedotinum (112)(74))

vedotin — (3*RS*)-1-(6-{[(2*S*)-1-{[(2*S*)-5-(carbamoylamino)-1-{4-[({[(2*S*)-1-{[(2*S*)-1-{[(3*R*,4*S*,5S)-1-{(2*S*)-2-[(1*R*,2*R*)-3-{[(1*S*,2*R*)-1-hydroxy-1-phenylpropan-2-yl]amino}-1-methoxy-2-methyl-3-oxopropyl]pyrrolidin-1-yl}-3-methoxy-5-methyl-1-oxoheptan-4-yl](methyl)amino}-3-methyl-1-oxobutan-2-yl]amino}-3-methyl-1-oxobutan-2-yl]methylcarbamoyl}oxy)methyl]anilino}-1-oxopentan-2-yl]amino}-3-methyl-1-oxobutan-3-yl]amino}-6-oxohexyl)-2,5-dioxopyrrolidin-3-yl

védotine	(3*RS*)-1-(6-{[(2*S*)-1-{[(2*S*)-5-(carbamoylamino)-1-{4-[({[(2*S*)-1-{[(2*S*)-1-{[(3*R*,4*S*,5S)-1-{(2*S*)-2-[(1*R*,2*R*)-3-{[(1*S*,2*R*)-1-hydroxy-1-phénylpropan-2-yl]amino}-1-méthoxy-2-méthyl-3-oxopropyl]pyrrolidin-1-yl}-3-méthoxy-5-méthyl-1-oxoheptan-4-yl](méthyl)amino}-3-méthyl-1-oxobutan-2-yl]amino}-3-méthyl-1-oxobutan-2-yl]méthylcarbamoyl}oxy)méthyl]anilino}-1-oxopentan-2-yl]amino}-3-méthyl-1-oxobutan-3-yl]amino}-6-oxohexyl)-2,5-dioxopyrrolidin-3-yle
vedotina	(3*RS*)-1-(6-{[(2*S*)-1-{[(2*S*)-5-(carbamoilamino)-1-{4-[({[(2*S*)-1-{[(2*S*)-1-{[(3*R*,4*S*,5S)-1-{(2*S*)-2-[(1*R*,2*R*)-3-{[(1*S*,2*R*)-1-fenil-1-hidroxipropan-2-il]amino}-1-metoxi-2-metil-3-oxopropil]pirrolidin-1-il}-3-metoxi-5-metil-1-oxoheptan-4-il](metil)amino}-3-metil-1-oxobutan-2-il]amino}-3-metil-1-oxobutan-2-il]metilcarbamoil}oxi)metil]anilino}-1-oxopentan-2-il]amino}-3-metil-1-oxobutan-3-il]amino}-6-oxohexil)-2,5-dioxopirrolidin-3-ilo

$C_{68}H_{106}N_{11}O_{15}$



* Kindly note that this list is not exhaustive.

4.3. Insulin qualifiers

arginum
(insulinum arginum (58)(28))

argine	B30-yl-L-arginyl-L-arginine
argine	B30-yl-L-arginyl-L-arginine
argina	B30-il-L-arginil-L-arginina
	$C_{12}H_{25}N_8O_3$

USAN

aspartum
(insulinum aspartum (76)(38))

aspart	[B28-L-aspartic acid]
asparte	[B28-L-acide aspartique]
asparta	[B28-L-ácido aspártico]

JAN
USAN

dalanatum
(insulinum dalanatum (104)(65))

dalanated	des-B30-alanine
dalanatée	dés-B30-alanine
dalanatada	des-B30-alanina

degludecum
(insulinum degludecum (101)(63))

degludec	$N^{6,\,B29}$-[*N*-(15-carboxypentadecanoyl)-L-γ-glutamyl]-des-30B-L-threonine
dégludec	$N^{6,\,B29}$-[*N*-(15-carboxypentadécanoyl)-L-γ-glutamyl]-dès-30B-L-thréonine
degludec	$N^{6,\,B29}$-[*N*-(15-carboxipentadecanoil)-L-γ-glutamil]-des-30B-L-treonina

JAN

defalanum
(insulinum defalanum (37)(!))

defalan	des-B1-phenylalanine
défalan	dés-B1-phénylalanine
defalán	des-B1-fenilalanina

detemirum
(insulinum detemirum (80)(42))

detemir	$N^{6,B29}$-tetradecanoyl-des-B30-L-threonine
détémir	$N^{6,B29}$-tétradécanoyl-dés-B30-L-thréonine
detemir	$N^{6,B29}$-tetradecanoil-des-B30-L-treonina

BAN
JAN
USAN

glarginum
(insulinum glarginum (76)(38))

glargine	[A21-glycine], B30-yl-L-arginyl-L-arginine
glargine	[A21-glycine], B30-yl-L-arginyl-L-arginine
glargina	[A21-glicina], B30-il-L-arginil-L-arginina

BAN
JAN
USAN

glulisinum
(insulinum glulisinum (84)(46))

glulisine	[B3-lysine, B29-glutamic acid]
glulisine	[B3-lysine, B29-acide glutamique]
glulisina	[B3-lisina, B29-ácido glutámico]

JAN
USAN

lisprum
(insulinum lisprum (72)(35))

lispro	[B28-L-lysine, B29-L-proline]
lispro	[B28-L-lysine, B29-L-proline]
lispro	[B28-L-lisina, B29-L-prolina]

BAN
JAN
USAN

tregopilum
(insulinum tregopilum (103)(65))

tregopil	$N^{6,B29}$-(4,7,10,13-tetraoxatetradecanoyl)
trégopil	$N^{6,B29}$-(4,7,10,13-tétraoxatétradécanoyl)
tregopil	$N^{6,B29}$-(4,7,10,13-tetraoxatetradecanoil)

ANNEX 5:

Names for substances with polyethylene glycol (PEG) polymeric chains

Names with *peg-* prefix

firtecanum peglumerum (108)(70)
firtecan peglumer
firtécan péglumère
firtecán peglúmero

insulinum peglisprum (107)(69)
insulin peglispro
insuline péglispro
insulina peglispro

pegacaristimum (80)(42)
pegacaristim
pégacaristim
pegacaristim

pegademasum (63)(31)
pegademase
pégadémase
pegademasa

pegadricasum (105)(67)
pegadricase
pégadricase
pegadricasa

pegaldesleukinum (74)(36)
pegaldesleukin
pégaldesleukine
pegaldesleukina

pegamotecanum (91)(53)
pegamotecan
pégamotécan
pegamotecán

pegaptanibum (88)(49)
pegaptanib
pégaptanib
pegaptanib

pegargiminasum (111)(73)
pegargiminase
pégargiminase
pegargiminasa

pegaspargasum (64)(31)
pegaspargase
pégaspargase
pegaspargasa

pegbovigrastimum (109)(71)
pegbovigrastim
pegbovigrastim
pegbovigrastim

pegcrisantaspasum (111)(73)
pegcrisantaspase
pegcrisantaspase
pegcrisantaspasa

pegdinetanibum (103)(65)
pegdinetanib
pegdinétanib
pegdinetanib

pegfilgrastimum (86)(47)
pegfilgrastim
pegfilgrastim
pegfilgrastim

peginesatidum (108)(69)
peginesatide
péginésatide
peginesatida

peginterferonum alfa-2a (84)(46)
peginterferon alfa-2a
péginterféron alfa-2a
peginterferón alfa-2a

peginterferonum alfa-2b (84)(46)
peginterferon alfa-2b
péginterféron alfa-2b
peginterferón alfa-2b

peginterferonum beta-1a (108)(70)
peginterferon beta-1a
péginterféron bêta-1a
peginterferón beta-1a

peginterferonum lambda-1a (105)(67)
peginterferon lambda-1a
péginterféron lambda-1a
peginterferón lambda-1a

pegloticasum (98)(60)
pegloticase
pégloticase
pegloticasa

pegmusirudinum (77)(39)
pegmusirudin
pegmusirudine
pegmusirudina

pegnartograstimum (80)(42)
pegnartograstim
pégnartograstim
pegnartograstim

pegnivacoginum (106)(67)
pegnivacogin
pégnivacogin
pegnivacogina

pegorgoteinum (72)(35)
pegorgotein
pégorgotéine
pegorgoteína

pegoteratum (31)(14)
pegoterate
pégotérate
pegoterato

pegpleranibum (112)(74)
pegpleranib
pegpléranib
pegpleranib

pegsunerceptum (95)(49)
pegsunercept
pegsunercept
pegsunercept

pegteograstimum (109)(71)
pegteograstim
pegtéograstim
pegteograstim

pegvaliasum (111)(73)
pegvaliase
pegvaliase
pegvaliasa

pegvisomantum (82)(44)
pegvisomant
pegvisomant
pegvisomant

Names with *pegol* as second word

abaciparum pegolum (108)(70)
abicipar pegol
abicipar pégol
abicipar pegol

alacizumabum pegolum (98)(60)
alacizumab pegol
alacizumab pégol
alacizumab pegol

calaspargasum pegolum (105)(67)
calaspargase pegol
calaspargase pégol
calaspargasa pegol

certolizumabum pegolum (97)(59)
certolizumab pegol
certolizumab pégol
certolizumab pegol

damoctocog alfa pegol (109)(71)
damoctocog alfa pegol
damoctocog alfa pégol
damoctocog alfa pegol

dapirolizumabum pegolum (110)(72)
dapirolizumab pegol
dapirolizumab pégol
dapirolizumab pegol

egaptivonum pegolum (111)(72)
egaptivon pegol
egaptivon pégol
egaptivón pegol

emapticapum pegolum (108)(70)
emapticap pegol
émapticap pégol
emapticap pegol

enlimomabum pegolum (77)(39)
enlimomab pegol
enlimomab pégol
enlimomab pegol

eptacogum alfa pegolum (activatum) (101)(63)
eptacog alfa pegol (activated)
eptacog alfa pégol (activé)
eptacog alfa pegol (activado)

etirinotecanum pegolum (107)(69)
etirinotecan pegol
étirinotécan pégol
etirinotecán pegol

firtecanum pegolum (107)(69)
firtecan pegol
firtécan pégol
firtecán pégol

lexaptepidum pegolum (108)(70)
lexaptepid pegol
lexaptépid pégol
lexaptepid pegol

lulizumabum pegolum (111)(73)
lulizumab pegol
lulizumab pégol
lulizumab pegol

nonacogum beta pegolum (103)(65)
nonacog beta pegol
nonacog bêta pégol
nonacog beta pegol

olaptesedum pegolum (109)(70)
olaptesed pegol
olaptésed pégol
olaptesed pegol

rurioctocogum alfa pegolum (111)(73)
rurioctocog alfa pegol
rurioctocog alfa pégol
rurioctocog alfa pegol

somatropinum pegolum (104)(65)
somatropin pegol
somatropine pégol
somatropina pegol

turoctocogum alfa pegolum (108)(70)
turoctocog alfa pegol
turoctocog alfa pégol
turoctocog alfa pegol

Names with *-peg-* as an infix

cepeginterferonum alfa-2b (105)(67)
cepeginterferon alfa-2b
cépeginterféron alfa-2b
cepeginterferón alfa-2b

eflapegrastimum (112)(73)
eflapegrastim
éflapégrastim
eflapegrastim

efpeglenatidum (111)(73)
efpeglenatide
efpèglénatide
efpeglenatida

empegfilgrastimum (107)(69)
empegfilgrastim
empegfilgrastim
empegfilgrastim

lipegfilgrastimum (107)(68)
lipegfilgrastim
lipegfilgrastim
lipegfilgrastim

ropeginterferonum alfa-2b (109)(71)
ropeginterferon alfa-2b
ropéginterféron alfa-2b
ropeginterferon alfa-2b

Explanatory note:

INNs for substances which contain, as part of their structure, polyethylene glycol (PEG) polymeric chains are given either a *peg-* prefix or, when a two-word construction is used, include *pegol* as the second word. Both approaches are equivalent, the choice in the selection process depending on linguistic considerations. As there is a considerable variation in ways in which the PEG moiety is linked to the other part of the structure, and as there are considerable differences in the average molecular mass of the PEG moiety, structures of individual substances have not been reproduced in the document, but can be consulted in relevant INN lists which are accessible on-line at http://www.who.int/medicines/publications/druginformation/innlists/en/index.html
Furthermore, it should be noted that INN *macrogol* has been selected for polyethylene glycol as an individual polymeric substance. Each such macrogol name is followed by a number corresponding approximately to the average molecular mass of the product.

WHY INNs?

Since the number of drug substances being registered during the last decades is constantly increasing, there is a strong need to ensure the identification of each pharmaceutical compound by a unique, universally available and accepted name. The existence of an international nomenclature system for pharmaceutical products is crucial for the clear identification, safe prescription and dispensing of medicines to patients, and for communication and exchange of information among health professionals and scientists worldwide.

An **International Nonproprietary Name (INN)** identifies a pharmaceutical substance by a **unique name that is globally recognized and is public property**. A nonproprietary name is also known as a generic name. Generic names are intended to be used in pharmacopoeias, labeling, advertising, drug regulation and scientific literature.