

***Pre-stems:  
Suffixes used in the selection of INN  
March 2025***

***Programme on International Nonproprietary Names (INN)***

***Medicines and Health Products***

***World Health Organization,  
Geneva***

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*stem*

-*suffix*  
-*infix*-

*definition*

**In bold:** new pre-stems selected during the penultimate Consultation.

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- <i>adex</i>	cyclodextrines $\alpha$ - cyclodextrine $\beta$ -cyclodextrine $\gamma$ -cyclodextrines
- <i>afine</i>	squalene mono-oxygenase inhibitors, antifungals
- <i>algron</i>	$\alpha_1$ -adrenoreceptor agonists
- <i>ase</i> - <i>fosase</i> - <i>liase</i>	enzymes alkaline phosphatase lyases (EC class 4)
- <i>ast</i>  - <i>noflast</i>	<i>anti-allergic and anti-inflammatory, not acting as antihistaminics</i> inflammasome protein NLRP3 inhibitors
- <i>atovir</i>	see <i>vir</i>
- <i>batinib</i>	see <i>-tinib</i>
- <i>berel</i>	beta estrogen receptor agonists
- <i>caltamide</i>	T-type calcium channel blockers
- <i>camra</i>	intracellular adhesion molecule (ICAM-1) derivatives
- <b>camten</b>	<b>cardiac myosin inhibitors</b>
- <i>camtiv</i>	cardiac myosin activators
- <i>caprant</i>	kappa-opioid receptor (KOR) antagonists
- <i>casan</i>	caspase inhibitors
- <i>caserin</i>	serotonin receptor agonists (mostly 5-HT <sub>2</sub> )
- <i>cept</i>	receptor molecules or membrane ligands, native or modified

<i>-rpaccept</i> <i>-tacicept</i>	SIRP $\alpha$ receptor proteins TACI (TNFRSF13B)-derived TNF receptors
<i>-citide</i>	see <i>tide</i>
<i>-codar</i>	see <i>dar</i>
<i>-cridar</i>	see <i>dar</i>
<i>-corvir</i>	see <i>vir</i>
<b><i>-cotrep</i></b>	<b>see <i>-trep</i></b>
<b><i>-dacigib</i></b>	<b>diacylglycerol kinase inhibitors</b>
<i>-dacin</i>	antibiotics, DNA gyrase and topoisomerase IV inhibitors
<i>dar</i> <i>-codar</i> <i>-cridar</i> <i>-spodar</i>	<i>drugs used in multidrug resistance</i> pipercolinate derivatives acridine carboxamide derivatives ciclosporin D derivatives
<b><i>defer-</i> / <i>-defer-</i></b>	<b>deferitritin (or desferrithiocin) derivatives, iron chelating agents</b>
<i>-depsin</i>	depsipeptide derivatives
<i>-desivir</i>	see <i>vir</i>
<i>-dirsten</i>	see <i>-rsen</i>
<i>-drimer</i>	see <i>mer</i>
<i>-dutide</i>	see <i>-tide</i>
<i>-ectedin</i>	ecteinascidin derivatives
<i>-fadine</i>	monoamine transport inhibitors
<i>-farnib</i>	farnesyl transferase inhibitors
<i>-fibatide</i>	see <i>tide</i>
<i>-forant</i>	histamine H <sub>4</sub> receptor antagonists
<i>-fotase</i>	see <i>-ase</i>

<i>-fulven</i>	antineoplastics, acylfulvene derivatives
<i>-gapil</i>	neuronal apoptosis inhibitors, GAPDH
<i>-gaptide</i>	see <i>-tide</i>
<i>-glanstat</i>	see <i>stat</i>
<i>-gli</i> <i>-gliatin</i> <i>-glipron</i>	<i>antihyperglycaemics</i> glucokinase activators glucagon-like peptide 1 receptor (GLP1R) agonists
<i>-gratinib</i>	see <i>-tinib</i>
<i>-grel</i> <i>-grelor</i>	<i>platelet aggregation inhibitors</i> P2Y <sub>12</sub> purinoceptor (ADP-glucose receptor) antagonists
<i>-imepodib</i>	inosine monophosphate dehydrogenase inhibitors
<i>-inapant</i>	inhibitors of inhibition-of-apoptosis proteins (IAPs)
<i>-kalner</i>	openers of calcium-activated (maxi-K) K <sup>+</sup> -channels
<i>-leptin(e)</i>	leptin derivatives
<i>-liase</i>	see <i>-ase</i>
<i>-lintide</i>	see <i>-tide</i>
<i>-loride</i>	epithelial sodium channel (ENaC) inhibitors, amiloride derivatives
<i>mab</i> <i>-ami-</i>	<i>monoclonal antibodies</i> serum amyloid protein (SAP)/amyloidosis
<i>-melagon</i>	non-peptidic melanocortin receptor agonists
<i>-mel(a)notide</i>	see <i>-tide</i>
<i>-melteon</i>	melatonin receptor agonists
<i>-mer</i> <i>-drimer</i>	<i>polymers</i> dendritic polymers (dendrimers)
<i>-metkib</i>	MET (mesenchymal epithelial transition factor) kinase inhibitors

<b>-mistat</b>	<b>see stat</b>
<i>-moren</i>	non-peptidic growth hormone secretagogues
<b>-nectide</b>	<b>see -tide</b>
<i>-nesib</i>	kinesin inhibitors
<i>-neurin</i>	neurotrophins
<i>-nexor</i>	nuclear export inhibitors
<i>-ngitide</i>	see <i>-tide</i>
<b>-nicant</b>	<b>nicotinic acetylcholine receptor antagonists and negative allosteric modulators</b>
<i>-nil</i> <i>-punil</i>	<i>benzodiazepine receptor antagonists/agonists</i> mitochondrial benzodiazepine receptor (MBR)-selective agonists, also partial or inverse agonists (purine derivatives)
<i>-nod</i>	nitrogen monoxide (nitric oxide, NO) donors
<i>-noflast</i>	see <i>-ast</i>
<i>-nontrine</i>	phosphodiesterase 9 (PDE9) inhibitors
<i>-opran</i>	$\mu$ -opioid receptor (MOR/MOP) antagonists
<i>-orexton</i>	orexin receptor agonists
<i>-osuran</i>	urotensin receptor antagonists
<i>-otilate</i>	hepatoprotectants, di(propan-2-yl-2-(2 <i>H</i> -1,3-dithiol-2-ylidene)propanedioate and analogues
<i>-parantag</i>	antagonists of heparin, including low-molecular weight heparins (LMWH)
<b>-patide</b>	<b>see -tide</b>
<i>-paxar</i>	protease activated receptor type 1 (PAR1) antagonists
<i>-pertin</i>	glycine transporter inhibitors

<b>-pilone</b>	<b>microtubulin stabilizing epothilone derivatives, antineoplastics</b>
<i>-pirdine</i>	serotonin receptor antagonists
<i>-pivat</i>	pyruvate kinase activators
<i>-plam</i>	SMN2 gene splicing modulators (small molecules)
<i>-plenib</i>	Spleen tyrosine kinase (SYK) inhibitors
<i>-podect</i>	phosphodiesterase 10A (PDE10A) inhibitors
<i>-prinin</i>	nootropic agents, purine derivatives
<i>-punil</i>	see <i>nil</i>
<i>-ralstat</i>	see <i>-stat/-stat</i>
<b>-relaxin</b>	<b>relaxin derivatives</b>
<i>-rocin</i>	aminoacyl-tRNA synthetase inhibitors
<i>-rpaccept</i>	see <i>-cept</i>
<i>-scein(e)</i>	fluorescent imaging agents, fluorescein derivatives
<i>-saicin</i>	analgesics, capsaicin analogues
<i>-setrag</i>	serotonin (5-HT <sub>3/4</sub> ) receptor agonists, prokinetics
<i>-sopasem</i>	superoxide dismutase (SOD) mimetics
<b>-sotine</b>	<b>non-peptidic somatostatin receptor agonists</b>
<i>-spodar</i>	see <i>dar</i>
<i>-stat/-stat</i> <i>-costat</i> <i>-dodstat</i> <i>-glanstat</i> <i>-mistat</i>  <i>-ralstat</i> <i>-taxestat</i>	<i>enzyme inhibitors</i> acetyl-CoA carboxylase inhibitors dihydro-orotate dehydrogenase (DHODH) inhibitors prostaglandin synthase inhibitors <b>mitochondrial enzymes involved in aerobic respiration inhibitors</b> kallikrein inhibitors autotaxin inhibitors

<i>-xostat</i>	<b>xanthine oxydase and/or xanthine dehydrogenase inhibitors</b>
<i>-stinag</i>	stimulator of interferon genes (STING) agonists, antineoplastics
<i>-sulind</i>	antineoplastics, sulindac metabolites
<i>-tacicept</i>	see -cept
<i>-taxestat</i>	see -stat
<i>-terkib</i>	extracellular signal-regulated kinase (ERK) inhibitors
<i>-terone</i> <i>-teronel</i>	<i>antiandrogens</i> non-steroid antiandrogens
<i>-texafin</i>	texaphyrin derivatives
<i>-tide</i> <i>-citide</i> <i>-fibatide</i> <i>-gaptide</i> <i>-lintide</i>  <i>-melanotide</i> (to shorten to <i>-melnotide</i> ) <i>-nectide</i> <i>-ngitide</i> <i>-patide</i>  <i>-votide</i>	<i>peptides and glycopeptides</i> cardiovascular platelet aggregation inhibitors (GPIIb/IIIa receptor antagonists) gap junction modulators amylin receptor agonists including dual amylin / calcitonin receptor agonists melanocortin receptor agonists  <b>nectins</b> angiogenesis regulating peptides <b>glucose-dependent insulintropic polypeptide (GIP) receptor agonists</b> PSMA (prostate-specific membrane antigen, glutamate carboxypeptidase 2)-binding peptides
<i>-tifan</i>	hypoxia inducible factor (HIF)-2alpha (HIF-2α) inhibitors
<i>-tinib</i> <i>-batinib</i> <i>-gratinib</i>	<i>tyrosine kinase inhibitors</i> BCR-ABL kinase inhibitors fibroblast growth factor receptors (FGFR) inhibitors
<i>-tomidate</i>	hypnotics/sedatives, GABA receptor agonists
<i>-toran</i>	toll-like receptor antagonists
<i>-trep</i> <i>-cotrep</i>	<i>transient receptor potential antagonists</i> <b>transient receptor potential canonical channel 5 (TRPC5) antagonists</b>

<i>-vancin</i>	<i>vancomycin</i> related compounds
<i>vir</i> <i>-atovir</i> <i>-corvir</i> <i>-desivir</i>  <i>-virenz</i> <i>-virimat</i> <i>-xavir</i>	<i>antivirals (undefined group)</i> RSV fusion protein inhibitors core protein (Cp) inhibitors adenosine analogues acting as RNA polymerase inhibitors, antivirals benzoxazinone derivatives antivirals, disruptors of viral maturation influenza CAP-dependent endonuclease inhibitors
<i>-votide</i>	see <i>tide</i>
<i>-xavir</i>	see <i>vir</i>
<i>-xian</i>	blood coagulation factor XI inhibitors
<i>-xostat</i>	see <i>stat</i>

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## Bifunctional proteolysis-targeting substances (reviewed during 79<sup>th</sup> INN Consultation)

### Naming scheme under elaboration

new	target
-bruti-deg	Bruton's tyrosine kinase
-raf-deg	Raf (rapidly accelerated fibrosarcoma) kinase
-serti-deg	IRAK4 belongs to <b>serine/threonine kinases</b> group
-bli-deg	BCL6
-luta-deg	androgen <i>receptor</i> ( <i>-luta-</i> OR <i>-andr-</i> ?) under discussion

### Old naming scheme

The scheme will be as follows: *-deg*(+ a vowel if necessary)- and the stem of the target (see below)

INN (PL)(RL)	construction	target
<i>bavdegalutamide (125)(87)</i>	-dega-lutamide	androgen receptor
<i>luxdegalutamide (129)(91)</i>	-dega-lutamide	androgen receptor
<i>vepdegestrant (127)(89)</i>	-deg-estrant	estrogen receptor
<i>lirodegimod (130)(92)</i>	-deg-imod	signal transducer and activator of transcription 3
<i>sendegobresib (130) (92)</i>	-dego-bresib	bromodomain-containing protein

<i>setidegrasib</i> (130) (92)	-deg-rasib	G12D-mutated GTPase KRas
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### Other type of targeted protein degraders, thalidomide derivatives:

The scheme will be as follows:

Under the *-domide* stem (for *antineoplastics, thalidomide derivatives*), the infix will indicate the target

INN (PL)(RL)	construction	target
<i>eragidomide</i> (127)(87) <i>sontigidomide</i> (129)(91)	-gi-domide	G1 to S phase transition protein 1 (GSPT1)
<i>zomiradomide</i> (130) (92)	-ira-domide	interleukin-1 receptor-associated kinase 4 (IRAK4)

*under (c) category: mezigdomide* (125)(87), *golcadomide* (127)(89), *cemsidomide* (128)(90)

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### Deuterated compounds

The prefix or infix *deu-/deu-* is used for the designation of deuterated compounds. The prefix *deu-* is preferred in the case of an already existing name, e.g. *tolperisone* (28)(13) and *deutolperisone* (92)(54). When no parent compound has already been named, the infix *-deu-* may then be preferred such as in *vodudeutentan* (127)(89), etc..

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### Tau-binding for diagnostic substances

The infix *-tau-* is used for the designation of Tau-binding for diagnostic substances *flortaucipir* (<sup>18</sup>F) (114)(76), *izafloortaucipir* (<sup>18</sup>F) (122)(84), *florquinitau* (<sup>18</sup>F) (126)(88), *florzolotau* (<sup>18</sup>F) (127)(89)

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**-prefix:** indicates syllables at beginning of the word, usually in INN the prefix is random/fantasy

**-infix:** indicates the syllable in the middle of the word; usually when this term is mentioned in an INN it means that most likely it has meaning (e.g. the target infixes from monoclonal antibodies, *-ba-*, *-ci-*, *-li-*, *-ta-*, etc.)

**-substem:** infix under a stem. Used to differentiate between different related groups of substances, but in this case the syllable is protected (resolution WHA46.19) and it should not be used in trade marks

**-suffix:** a syllable at the end of a name, that usually has a meaning for the INN group, but the meaning is not published yet and it is also not protected yet

**-prestem:** it is similar to stem, but it didn't reach the stage of stem yet, it has just been flagged and it may be selected as official stem in the future

**-stem:** syllable or syllables that is/are used to group pharmacologically related substances, which is/are protected (resolution WHA46.19) and it should not be used in trade marks. In most of the cases, appears as a suffix, at the end of a name, but it can also be in the beginning or middle of a name.

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