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***Pre-stems\*:  
Suffixes used in the selection of INN  
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***Programme on International Nonproprietary Names (INN)***

***Medicines and Health Products***

***World Health Organization,  
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\*The prestems given have been flagged because they may be selected as official stems ("The use of stems in the selection of International Nonproprietary Names for Pharmaceutical Substances", 2018, WHO/EMP/RHT/TSN/2018.1). At present, they are made available for information and potential guidance to the applicants.

<i>stem</i>	<i>definition</i>
-suffix	
-infix-	

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

**In bold and underlined:** pre-stems promoted as stems

<b>-afine</b>	squalene monooxygenase inhibitors, antifungals
<b>-algron</b>	$\alpha_1$ -adrenoreceptor agonists
<b>-alkib</b>	ALK (anaplastic lymphoma kinase) inhibitors
<b>-ampator</b>	$\alpha$ -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptor modulators
<b>-ase</b>	enzymes
<b>-fotase</b>	alkaline phosphatase
<b>-liase</b>	lyases (EC class 4)
<b>-ast</b>	anti-allergic and anti-inflammatory, not acting as antihistaminics
<b>-noflast</b>	<b>inflamasome protein NLRP3 inhibitors</b>
<b>-atovir</b>	see <i>vir</i>
<b>-batinib</b>	see <i>-tinib</i>
<b>-berel</b>	beta estrogen receptor agonists
<b>-caltamide</b>	T-type calcium channel blockers
<b>-camra</b>	intracellular adhesion molecule (ICAM-1) derivatives
<b>-camtiv</b>	cardiac myosin activators
<b>-capavir</b>	see <i>vir</i>
<b>-caprant</b>	<b>kappa-opioid receptor (KOR) antagonists</b>
<b>-casan</b>	caspase inhibitors

<i>-caserin</i>	serotonin receptor agonists (mostly 5-HT <sub>2</sub> )
<i>-cept</i> <i>-rpacept</i>	receptor molecules or membrane ligands, native or modified SIRPα receptor proteins
<i>-tacicept</i>	TACI (TNFRSF13B)-derived TNF receptors
<i>-cirnon</i>	CC chemokine receptor (CCR) antagonists
<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>-covatein</i></b>	<b>see <i>-vatein</i></b>
<i>-dacin</i>	antibiotics, DNA gyrase and topoisomerase IV inhibitors
<i>dar</i> <i>-codar</i>	<i>drugs used in multidrug resistance</i> pipecolinate derivatives
<i>-cridar</i>	acridinecarboxamide derivatives
<i>-spodar</i>	ciclosporin D derivatives
<i>-delpar</i>	PPAR delta agonists
<i>-depsin</i>	depsipeptide derivatives
<i>-desivir</i>	see <i>vir</i>
<i>-dirsen</i>	see <i>-rsen</i>
<b><i>-drimer</i></b>	<b>see <i>mer</i></b>
<i>-dutide</i>	see <i>-tide</i>
<i>-ectedin</i>	ecteinascidin derivatives
<i>-fadine</i>	monoamine transport inhibitors
<i>-farnib</i>	farnesyl transferase inhibitors

<b><i>-fenicol</i></b>	<b>antibacterial antibiotics, chloramphenicol analogues</b>
<i>-fibatide</i>	see <i>tide</i>
<i>-folastat</i>	see <i>-stat</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>-glanstat</i>	see <i>stat</i>
<i>-gli</i> <i>-gliatin</i> <i>-glipron</i>	antihyperglycaemics glucokinase activators <b>glucagon-like peptide 1 receptor (GLP1R) agonists</b>
<i>-gratinib</i>	see <i>-tinib</i>
<i>-grel</i> <i>-grelor</i>	platelet aggregation inhibitors P2Y12 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>	<b>epithelial sodium channel (ENaC) inhibitors, amiloride derivatives</b>
<i>mab</i> <i>-ami-</i>	<i>monoclonal antibodies</i> serum amyloid protein (SAP)/amyloidosis
<i>-melagon</i>	<b>non-peptidic melanocortin receptor agonists</b>

<i>-melanotide</i>	see <i>-tide</i>
<b><i>-menib</i></b>	<b>menin interaction inhibitors</b>
<i>-mer</i> <i>-drimer</i>	<i>polymers</i> <b>dendritic polymers (dendrimers)</b>
<i>-metkib</i>	MET (mesenchymal epithelial transition factor) kinases inhibitors
<i>-moren</i>	non-peptidic growth hormone secretagogues
<i>-nesib</i>	kinesin inhibitors
<i>-neurin</i>	neurotrophins
<i>-nexor</i>	nuclear export inhibitors
<i>-nil</i> <i>-punil</i>	<i>benzodiazepine receptor antagonists/agonists</i> mitochondrial benzodiazepine receptor (MBR)-selective agonists, also partial or inverse (purine derivatives)
<b><i>-nod</i></b>	<b>nitrogen monoxide (nitric oxide, NO) donors</b>
<b><i>-noflast</i></b>	<b>see <i>-ast</i></b>
<i>-nontrine</i>	phosphodiesterase 9 (PDE9) inhibitors
<i>-opran</i>	$\mu$ -opioid receptors antagonists
<b><i>-(o)pterin</i></b>	<b><u>pteridine derivatives</u></b>
<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 and/or low-molecular weight heparins (LMWH)
<i>-paratide</i>	see <i>tide</i>
<i>-paxar</i>	protease activated receptor type 1 (PAR1) antagonists
<i>-pertin</i>	glycine transporter inhibitors

<i>-pirdine</i>	serotonin receptor antagonists
<b><i>-pivot</i></b>	<b>pyruvate kinase activators</b>
<i>-pixant</i>	purinoreceptor (P2X) antagonists
<b><i>-plam</i></b>	<b>SMN2 gene splicing modulators (small molecules)</b>
<i>-plasinin</i>	inhibitors of plasminogen activator inhibitors-type 1 (PAI-1)
<i>-podect</i>	phosphodiesterase 10A (PDE10A) inhibitors
<i>-plenib</i>	Spleen tyrosine kinase (Syk) inhibitors
<i>-prinim</i>	nootropic agents, purine derivatives
<b><i>-prodil</i></b>	<b><u>N-methyl-D-aspartate (NMDA) receptor antagonists</u></b>
<i>-protafib</i>	protein tyrosine phosphatase (HPTP) inhibitors
<b><i>-pultide</i></b>	<b>see <i>-tide</i></b>
<i>-punil</i>	see <i>nil</i>
<i>-ralstat</i>	see <i>-stat/-stat</i>
<i>-rasib</i>	Ras protein inhibitors
<i>-rocin</i>	aminoacyl-tRNA synthetase inhibitors
<i>-rogant</i>	retinoic acid receptor-related orphan receptor gamma (ROR $\gamma$ ) antagonists and inverse agonists
<i>-rpacept</i>	see <i>-cept</i>
<i>-rsen</i> <i>-dirsen</i>	<i>antisense oligonucleotides</i> splice-switching oligonucleotides, muscular dystrophies
<b><i>-scein(e)</i></b>	<b>fluorescent imaging agents, fluorescein derivatives</b>
<i>-saicin</i>	analgesics, capsaicin analogues
<i>-setrag</i>	serotonin (5-HT3/4) receptor agonists, prokinetics
<b><i>-sidenib</i></b>	<b><u>isocitrate dehydrogenase inhibitors</u></b>

<i>-sopasem</i>	superoxide dismutase (SOD) mimetics
<i>-spodar</i>	see <i>dar</i>
<i>-stat/-stat</i> <i>-costat</i> <i>-dodstat</i> <i>-drostat</i> <i>-folastat</i> <i>-glanstat</i> <i>-ralstat</i>	<i>enzymes inhibitors</i> acetyl-CoA carboxylase inhibitors dihydroorotate dehydrogenase (DHODH) inhibitors aldosterone and cortisol synthesis inhibitors inhibitors of folate hydrolase 1 (prostate-specific membrane antigen, PSMA) <b>prostaglandin synthase inhibitors</b> kallikrein inhibitors
<i>-sulind</i>	antineoplastics, sulindac metabolites
<i>-tacicept</i>	see -cept
<i>-terkib</i>	ERK (extracellular signal-regulated kinases) inhibitors
<i>-terone</i> <i>-teronel</i>	<i>antiandrogens</i> non-steroid antiandrogens
<i>-texafin</i>	texaphyrin derivatives
<i>-tide</i> <i>-citide</i>  <b><u>-dutide</u></b>  <i>-fibatide</i> <i>-lintide</i> <i>-melanotide</i>  <b><u>-netide</u></b>  <i>-paratide</i>  <b><u>-pultide</u></b>	<i>peptides and glycopeptides</i> cardiovascular  <b><u>oxyntomodulin analogues and other dual agonists of glucagon-like peptide receptor 1 (GLP-1R) and glucagon receptor (GCGR)</u></b>  platelet aggregation inhibitor (GPIIb/IIIa receptor antagonist) amylin derivatives and analogues melanocortin receptor agonists  <b><u>neurological</u></b>  parathyroid hormone analogues  <b><u>peptides and proteins, used in pulmonary surfactants</u></b>

<i>-votide</i>	PSMA (prostate-specific membrane antigen, glutamate carboxypeptidase 2)-binding peptides
<i>-tinib</i> <i>-batinib</i> <i>-gratinib</i>	<i>tyrosine kinase inhibitors</i> BCR-ABL kinases inhibitors fibroblast growth factor receptors (FGFR) inhibitors
<i>-toran</i>	<i>toll-like receptor antagonists</i>
<i><u>-trep</u></i>	<b><u>transient receptor potential antagonists</u></b>
<b><u>-trombopag</u></b>	<b><u>thrombopoietin agonists</u></b>
<i>-vancin</i>	<i>vancomycin</i> related compounds
<i>-vatein</i> <i>-covatein</i>	<i>protein vaccine substances</i> <b>coronavirus</b>
<i>vir</i> <i>-atovir</i> <i>-capavir</i> <i>-corvir</i> <i>-desivir</i> <i>-trelvir</i> <i>-virenz</i> <i>-virimat</i>	<i>antivirals (undefined group)</i> RSV fusion protein inhibitors viral capsid and nucleocapsid inhibitors core protein (Cp) inhibitors RNA polymerase inhibitors, adenosine analogues, antivirals antiviral 3CL proteases inhibitors benzoxazinone derivatives antivirals, disruptors of viral maturation
<i>-votide</i>	see <i>tide</i>
<b><i>-xian</i></b>	<b>blood coagulation factor XI inhibitors</b>

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