Pre-stems*:
Suffixes used in the selection of INN
September 2019

Programme on International Nonproprietary Names (INN)

Health Products Policy and Standards

World Health Organization, Geneva

*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", 2013, WHO/EMP/RHT/TSN/2013.1). At present, they are made available for information and potential guidance to the applicants.
<table>
<thead>
<tr>
<th>stem</th>
<th>definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>-suffix</td>
<td></td>
</tr>
<tr>
<td>-infix</td>
<td></td>
</tr>
<tr>
<td><strong>In bold:</strong></td>
<td>new pre-stems selected during the last Consultation.</td>
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<tr>
<td><strong>In bold and underlined:</strong></td>
<td>pre-stems newly promoted as stems.</td>
</tr>
<tr>
<td>-adenant</td>
<td>adenosine receptors antagonists</td>
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<tr>
<td>-algron</td>
<td>$\alpha_1$-adrenoreceptor agonists</td>
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<tr>
<td>-alkib</td>
<td>ALK (anaplastic lymphoma kinase) inhibitors</td>
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<tr>
<td>-ampator</td>
<td>$\alpha$-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptor modulators</td>
</tr>
<tr>
<td>-atovir</td>
<td>see <strong>vir</strong></td>
</tr>
<tr>
<td>-batinib</td>
<td>see <strong>tinib</strong></td>
</tr>
<tr>
<td>-becestat</td>
<td>see <strong>stat</strong></td>
</tr>
<tr>
<td>-bep</td>
<td>engineered or synthetic protein scaffolds, non-immunoglobulin variable domain derived</td>
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<tr>
<td>-berel</td>
<td>beta estrogen receptor agonists</td>
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<tr>
<td>-bresib</td>
<td>inhibitors of the bromodomain and extra-terminal motif (BET) family of bromodomain (BRD) proteins, antineoplastics</td>
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<tr>
<td>-caftor</td>
<td>cystic fibrosis transmembrane regulator (CFTR) protein modulators</td>
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<tr>
<td>-camra</td>
<td>intracellular adhesion molecule (ICAM-1) derivatives</td>
</tr>
<tr>
<td>-camtiv</td>
<td>cardiac myosin activators</td>
</tr>
<tr>
<td>-capavir</td>
<td>see <strong>vir</strong></td>
</tr>
<tr>
<td>-casan</td>
<td>caspase inhibitors</td>
</tr>
<tr>
<td>-caserin</td>
<td>serotonin receptor agonists (mostly 5-HT$_2$)</td>
</tr>
<tr>
<td>-cerfont</td>
<td>corticotropin-releasing factor (CRF) receptor antagonist</td>
</tr>
<tr>
<td>-closporin</td>
<td>ciclosporin derivatives</td>
</tr>
</tbody>
</table>
-codar  see dar

-copan complement receptor antagonists/ complement inhibitors

-corat glucocorticoid receptor agonists

cridar  see dar

dacin antibiotics, DNA gyrase and topoisomerase IV inhibitors
dar drugs used in multidrug resistance

cridar acridinecarboxamide derivatives
codar pipecolinate derivatives

cridar ciclosporin D derivatives
demstat see stat
depsin depsipeptide derivatives
dil

dil vasodilators

sudil Rho protein kinase inhibitors
ectedin ecteinascidin derivatives

erkib ERK (extracellular signal-regulated kinases) inhibitors

espib heat shock protein (HSP) 90 inhibitors (other than mycin), antineoplastics

estrant estrogen antagonists

fadine monoamine transport inhibitors

farnib farnesyl transferase inhibitors

-fexor farnesoid X receptor agonists

fibatide see tide

fulven antineoplastic, acylfulvene derivatives
ganan antimicrobial, bactericidal permeability increasing polypeptides
gapil neuronal apoptosis inhibitors, GAPDH
-gratinib  
see -tinib

-imepodib  
inosine monophosphate dehydrogenase inhibitors

-inurad  
urate transporter inhibitors

-ixafor  
chemokine CXCR4 antagonists

-kalner  
openers of calcium-activated (maxi-K) $K^+$-channels

-leptin(e)  
leptin derivatives

mab  
monoclonal antibodies

under targets

-ami-  
serum amyloid protein (SAP)/amyloidosis

-gr(o)-  
skeletal muscle mass related growth factors and receptors

-melanotide  
see tide

-meran  
messenger RNA (mRNA)

-metinib  
see tinib

-metkib  
MET (mesenchymal epithelial transition factor) kinases inhibitors

-metostat  
see stat

-moren  
non-peptidic growth hormone secretagogues

-nesib  
kinesin inhibitors

-neurin  
neurotrophins

-nexor  
nuclear export inhibitors

nil  
benzodiazepine receptor antagonists/agonists

-punil  
mitochondrial benzodiazepine receptor (MBR)-selective agonists, also partial or inverse (purine derivatives)

-opran  
$\mu$-opioid receptors antagonists

-osuran  
urotensin receptor antagonists

-otilate  
hepatoprotectants, di(propan-2-yl) 2-(2H-1,3-dithiol-2-ylidene)propanedioate and analogues
-parantag antagonists of heparin and/or low-molecular weight heparins (LMWH)
-paxar protease activated receptor type 1 (PAR1) antagonists
-pirdine serotonin receptor antagonists
-plasinin inhibitors of plasminogen activator inhibitors-type 1 (PAI-1)
-plenib Spleen tyrosine kinase (Syk) inhibitors
-primim nootropic agents, purine derivatives
-protafib protein tyrosine phosphatase (HPTP) inhibitors
-pultide see -tide
-punil see nil
-setrag serotonin (5-HT3/4) receptor agonists, prokinetics
-sidenib isocitrate dehydrogenase inhibitors
-spodar see dar
-stat/-stat enzymes inhibitors
-becestat beta secretase inhibitors
-demstat histone lysine specific demethylase inhibitors
-metostat histone N-methyltransferases inhibitors
-stinel NMDA receptor co-agonists
-sudil see dil
-sulind antineoplastics, sulindac metabolites
-terone antiandrogens
-teronel non-steroid antiandrogens
-texafin texaphyrin derivatives
-tide peptides and glycopeptides
-fibatide platelet aggregation inhibitor (GPIIb/IIIa receptor antagonist)
-melanotide melanocortin receptor antagonists
-pultide peptides used in pulmonary surfactants
-tinib tyrosine kinase inhibitors
  -ertinib epidermal growth factor receptor (EGFR) inhibitors
  -gratinib fibroblast growth factor (FGFR) inhibitors
  -trectinib tropomyosin receptor kinase (TRK) inhibitors

-toclan B-cell lymphoma 2 (Bcl-2) inhibitors, antineoplastics

-trep transient receptor potential antagonists

-trombopag thrombopoietin agonists

-vancin vancomycin related compounds

vir antivirals (undefined group)
  -atovir RSV fusion protein inhibitors
  -capavir viral capsid inhibitors
  -virenz benzoaxazinone derivatives

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