Pre-stems*:
Suffixes used in the selection of INN
December 2020

Programme on International Nonproprietary Names (INN)

Health Products Policy and Standards (HPS)

Access to Medicines and Health Products (MHP)

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

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

| -adenant | antagonists of adenosine receptors                                                           |
| -algron  | α₁-adrenoreceptor agonists                                                                   |
| -alkib   | ALK (anaplastic lymphoma kinase) inhibitors                                                   |
| -ampator | α-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptor modulators               |
| -atovir  | see *vir*                                                                                    |
| -batinib | see *tinib*                                                                                  |
| -bactam  | β-lactamase inhibitors                                                                         |
| -borbactam | **β-lactamase inhibitors, boronic acid derivatives**                                                         |
| -bep     | engineered or synthetic protein scaffolds, non-immunoglobulin variable domain derived         |
| -berel   | beta estrogen receptor agonists                                                                |
| -borbactam | see -bactam                                                                                   |
| -bresib  | inhibitors of the bromodomain and extra-terminal motif (BET) family of bromodomain (BRD) proteins, antineoplastics |
| -camra   | intracellular adhesion molecule (ICAM-1) derivatives                                            |
| -camtiv  | cardiac myosin activators                                                                      |
| -capavir | see *vir*                                                                                    |
| -casan   | caspase inhibitors                                                                             |
| -caserin | serotonin receptor agonists (mostly 5-HT₂)                                                     |
| -cianine | indocyanine fluorescence dye group                                                             |
| -closporin | ciclosporin derivatives                                                                        |
-codar see dar
-corat glucocorticoid receptor agonists
-cridar see dar
-dacrin antibiotics, DNA gyrase and topoisomerase IV inhibitors
-dar drugs used in multidrug resistance
-cri dar acridinecarboxamide derivatives
-codar pipecolinate derivatives
-spodar ciclosporin D derivatives
-demstat see stat
-depsin depsipeptide derivatives
-dil vasodilators
-sudil Rho protein kinase inhibitors
-ectedin ecteinascidin derivatives
-espib heat shock protein (HSP) 90 inhibitors (other than –mycin)
-estrant estrogen antagonists, including estrogen receptor down-regulators
-fadine monoamine transport inhibitors
-farnib farnesyl transferase inhibitors
-fenicol antibacterial antibiotics, chloramphenicol analogues
-fibatide see tide
-folastat see -stat
-fulven antineoplastic, acylfulvene derivatives
-ganan antimicrobial, bactericidal permeability increasing polypeptides
-gapil neuronal apoptosis inhibitors, GAPDH
-gratinib see -tinib
-imepodib inosine monophosphate dehydrogenase inhibitors
inapant  inhibitors of inhibition-of-apoptosis proteins (IAPs)
inurad  urate transporter inhibitors

**-irine**  cytotoxic pyrrolobenzodiazepine dimers and analogues

ixafor  chemokine CXCR4 antagonists
kalner  openers of calcium-activated (maxi-K) $K^+$-channels
leptin(e)  leptin derivatives
lintide  See -tide

mab  monoclonal antibodies
under targets

-ami-  serum amyloid protein (SAP)/amyloidosis
madlin  E3 ubiquitin-protein ligase Mdm2 (Hdm2) inhibitors
melanotide  see tide
meran  messenger RNA (mRNA)
metkib  MET (mesenchymal epithelial transition factor) kinases inhibitors
metostat  see stat
moren  non-peptidic growth hormone secretagogues
nersen  see -rsen
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)

**(0)pterin**  pteridine 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
-pertin  **glycine transporter inhibitors**
-pirdine  serotonin receptor antagonists
-pixant  purinoreceptor (P2X) antagonists
-plasinin inhibitors of plasminogen activator inhibitors-type 1 (PAI-1)
-plenib  Spleen tyrosine kinase (Syk) inhibitors
-prinim  nootropic agents, purine derivatives
-protafib  protein tyrosine phosphatase (HPTP) inhibitors
-pultide  see -tide
-punil  see nil
-rasib  Ras protein inhibitors
-rsen  *antisense oligonucleotides* targeting neurological functions
-nersen  
-saicin  analgesics, capsaicin analogues
-setrag  serotonin (5-HT3/4) receptor agonists, prokinetics
-sidenib  isocitrate dehydrogenase inhibitors
-sopasem  superoxide dismutase (SOD) mimetics
-spodar  see dar
-stat/-stat  enzymes inhibitors
-demstat histone lysine specific demethylase inhibitors
-folastat inhibitors of folate hydrolase 1 (prostate-specific membrane antigen, PSMA)
metostat  histone N-methyltransferases inhibitors

-stinel  NMDA receptor co-agonists
-sudil  see dil
-sulind  antineoplastics, sulindac metabolites
-terkib  ERK (extracellular signal-regulated kinases) inhibitors
-terone  antiandrogens
-teronel  non-steroid antiandrogens
-texafin  texaphyrin derivatives
-tide  peptides and glycopeptides
-fibatide  platelet aggregation inhibitor (GPIIb/IIIa receptor antagonist)
-lintide  amylin derivatives and analogues
-melanotide  melanocortin receptor antagonists
-pultide  peptides used in pulmonary surfactants
-tinib  tyrosine kinase inhibitors
-batinib  BCR-ABL kinases inhibitors
-gratinib  fibroblast growth factor (FGFR) inhibitors
-trectinib  tropomyosin receptor kinase (TRK) inhibitors
-toran  toll-like receptor antagonists
-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
-virenza  benzoxazinone derivatives
-vivint  Wnt signaling inhibitors

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