



PHARMA STANDARDS

Impurity Standards

- » Specialists in isomeric impurities, degradation impurities, metabolites and Glucuronides
- » Ready to ship inventory of complex impurity standards
- » Custom Impurity Synthesis from mg to multi gram scale delivered with characterization report and COA.
- » Isolation of Impurities from APIs / Drug Products
- » Characterisation and Synthesis of isolated impurities

Labelled Standards:

- » Stable Isotope Labelled Standards of APIs, Metabolites and Glucuronides for bioanalytical studies
- » Extensive COA including quantification of unlabelled compound
- » Expertise in Deuterium Labelling of Peptide APIs and Impurities
- » Deuterium Labelled Synthesis of NCEs

Peptide Impurity Standards:

- » Custom Peptide Impurity Synthesis using natural and unnatural amino acids
- » Expertise in both cyclic and linear peptides
- » Peptide dimers, di & tri sulfide bridges
- » Large inventory of generic peptide drug impurities
- » Extensive characterisation data with COA

State-of-the-art Facility

» Synthesis R&D Facility

» Purification Facility

» US-FDA Compliant Analytical Facility



CoA from US-FDA Compliant Analytical Facility

Latest API Impurity Standards

| | | | |
|------------------------|-------------------|---------------------|--------------------|
| Abacavir | Bortezomib | Darunavir | Ergocalciferol |
| Abiraterone | Bosentan | Dasatinib | Erlotinib |
| Acalabrutinib | Bosutinib | Desogestrel | Escitalopram |
| Acenocoumarol | Brexpiprazole | Deferasirox | Ethacizine |
| Acyclovir | Brimonidine | Dehydroprogesterone | Ethinyl Estradiol |
| Adefovir | Brivaracetam | Demeclocycline | Etomidate |
| Adenosine | Bupropion | Dexamethasone | Etonogestrel |
| Adrenaline | Cabozantinib | Dexarazoxane | Favipiravir |
| Afatinib | Cabotegravir | Dexlansoprazole | Felodipine |
| Agomelatine | Carbidopa | Dexmedetomidine | Fenoterol |
| Alafosfalin | Carmustine | Dextrosimendan | Fesoterodine |
| Albendazole | Carvedilol | Dezocine | Fingolimod |
| Alcaftadine | Cefadroxil | Diazoxide | Fluconazole |
| Alfuzosin | Ceftazidime | Dibutyric acid | Flumazenil |
| Almotriptan | Cefazolin | Difluprednate | Flumethasone |
| Alvimopan | Cefalotin | Dihydro Ergotamine | Fluocinolone |
| Ambrisentan | Cefdinir | Diltiazem | Fluphenazine |
| Amiodarone | Cefepime | Dimetindene | Flurbiprofen |
| Amphotericin | Cefixime | Diltiazem | Fluxoxamine |
| Anastrozole | Cefoxitin | Dimethomorph | Formoterol |
| Androstendione | Cefuroxime | Dimetindene | Foscarnet |
| Apremilast | Cefprozil | Dolutegravir | Fosfomycin |
| Apixaban | Celecoxib | Domperidone | Frovatriptan |
| Arformoterol | Caritinib | Dorzolamide | Furosemide |
| Arginine | Chlorpromazine | Doxazosin | Fulvestrant |
| Atazanavir | Cholecalciferol | Doxepin | Fluoxamine |
| Azacitidine | Ciprofloxacin | Doxorubicin | Ganciclovir |
| Azelastine | Cilastatin | Doxycycline | Gefitinib |
| Azelnidipine | cis-Crotonic acid | Doxercalciferol | Gemicitabine |
| Azilsartan | Cisatracurium | Droxidopa | Gemifloxacin |
| Aztreonam | Citalopram | Duloxetine | Gimeracil |
| Baclofen | Clascoterone | Edoxaban | Glimepiride |
| Baricitinib | Clarithromycin | Efinaconazole | Glycopyrronium |
| Beclomethasone | Clindamycin | Elagolix | Hydrocortisone |
| Bendamustine | Clobetasol | Eletriptan | Hydroxychloroquine |
| Benfotiamine | Clomiphene | Eliglustat | Ibrutinib |
| Bepotastine | Crisaborole | Eltrombopag | Ibuprofen |
| Betamethasone | Cromolyn | Empagliflozin | Indacaterol |
| Bictegravir | Cytidine | Emtricitabine | Indometacin |
| Bilastine | Cyclophosphamide | Enalapril | Iohexol |
| Binimetinib | Dabigatran | Enrofloxacin | Iopamidol |
| Bis Hydroxy Piperazine | Daclatasvir | Enzalutamide | Isavuconazole |
| Bisoprolol | Dantrolene | Epinephrine | Isosulfan |
| Bis piperidine | Darolutamide | Eplerenone | Isotretinoin |

Latest API Impurity Standards

| | | | |
|---------------------|---------------------|----------------|-----------------|
| Istradefylline | Mirabegron | Prazosin | Tamatinib |
| Ivabradine | Molnupiravir | Prednisolone | Tamoxifen |
| Ivacaftor | Mosapride | Pregabalin | Tamsulosin |
| Ivosidenib | Nebivolol | Promethazine | Tegoprazan |
| Ixazomib | Neratinib | Propafenone | Temozolomide |
| Labetalol | Nelarabine | Propofol | Teneligliptin |
| Lacosamide | Netarsudil | Pyridostigmine | Tenofovir |
| Lamivudine | Nicardipine | Quetiapine | Tepotinib |
| Lanreotide | Niflumic Acid | Rabeprazole | Teriparatide |
| Laudanosine | Nilotinib | Raloxifene | Teriflunomide |
| Lenalidomide | Nintedanib | Raltegravir | Testosterone |
| Lenvatinib | Niratinib | Ramipril | Tetrabenazine |
| Lercanidipine | Nirmatrelvir | Ranolazine | Theophylline |
| Letermovir | Nitroso Derivatives | Rasagiline | Thiothixene |
| Levetiracetam | Norethisterone | Regadenoson | Tiagabine |
| Levonorgestrel | Norethindrone | Relugolix | Ticagrelor |
| Levosimendan | Olanzapine | Remdesivir | Tigecycline |
| Levothyroxine | Olaparib | Ribociclib | Tiotropium |
| Lifitegrast | Olmesartan | Rilpivirine | Tofacitinib |
| Linagliptin | Olopatadine | Riociguat | Tolvaptan |
| Lincomycin | Omeprazole | Risperidone | Topiramate |
| Linezolid | Ondansetron | Ritonavir | Tranylcypromine |
| Lisinopril | Ormeloxifene | Rivaroxaban | Trazodone |
| Loperamide | Orphenadrine | Rivastigmine | Trehalose |
| Lopinavir | Osetamivir | Rotigotine | Trimetazidine |
| Losartan | Osimertinib | Roxithromycin | Trihexyphenidyl |
| Loteprednol | Oxcarbazepine | Ruxolitinib | Ulipristal |
| Lovastatin | Oxybutynin | Sacubitril | Umeclidinium |
| Lumefantrine | Palbociclib | Safinamide | Valbenazine |
| Lurasidone | Palonosetron | Salbutamol | Valacyclovir |
| Macitentan | Paroxetine | Salmeterol | Valganciclovir |
| Manidipine | Pazopanib | Scopolamine | Valproate |
| Marbofloxacin | Pemetrexed | Selexipag | Valsartan |
| Mebendazole | Penciclovir | Sildenafil | Venlafaxine |
| Mebeverine | Perindopril | Sildenafil | Verapamil |
| Medetomidine | Phytonadione | Siponimod | Vericiguat |
| Medroxyprogesterone | Pilocarpine | Sitagliptin | Vilanterol |
| Melphalan | Piperacillin | Sofusuvir | Vildagliptin |
| Mepivacaine | Pirfenidone | Sorafenib | Viloxazine |
| Methazolamide | Posaconazole | Sotorasib | Voriconazole |
| Methotrexate | Pramipexole | Sparfloxacin | Vortioxetine |
| Mesalamine | Prasugrel | Sumatriptan | Zanubrutinib |
| Minocycline | Proparacaine | Sunitinib | Zileuton |
| Minoxidil | Prucalopride | Tapentadol | Ziprasidone |

Popular Chiral Isomers and Impurities

Alafosfalin

Alafosfalin Chiral Isomers

S,S-Isomer R,R-Isomer S,R-Isomer

Brivaracetam

S, S-Isomer (Diastereomer-1)

R, R-Isomer (Diastereomer-2)

R, S-Isomer (Enantiomer)

Brivaracetam Racemic Mixture

Brivaracetam Acid Racemic Mixture

Brivaracetam Acid Impurity (S, R Isomer)

Acid impurity (R, S Isomer)

Acid impurity (S, S Isomer)

Acid impurity (R, R Isomer)

Cabotegravir

Cabotegravir Chiral Isomer

R,S-Isomer S,S-Isomer R,R-Isomer

Darunavir

Darunavir Chiral Isomers

3R,3aR,6aS-Isomer

3S,3aR,6aS-Isomer

3S,3aS,6aR-Isomer

Darunavir BIS THF Chiral Isomers

R = NHS (N-Hydroxy Succinamide)

R = 4-Nitro Phenyl Carbonate

BIS THF HNS 3R,3aR,6aS

BIS THF HNS 3S,3aR,6aS

BIS THF HNS 3S,3aS,6aR

BIS THF 4-NO₂-Ph-Carb.3R,3aR,6aS

BIS THF 4-NO₂-Ph-Carb.3S,3aR,6aS

BIS THF 4-NO₂-Ph-Carb 3S,3aS,6aR.

Darunavir Furanone Chiral Isomers

Furanone RSS Isomer

Furanone RRS Isomer

Furanone SRR Isomer

Furanone SSR Isomer

Emtricitabine

Emtricitabine Chiral isomers

S,S-Isomer R,R-Isomer S,R-Isomer

Dihydratetrabenazine

Dihydro Tetrabenazine Chiral Isomers & Impurities

(2S,3R,11bR)-DHTBZ

(2R,3R,11bR)-DHTBZ

(2R,3S,11bS)-DHTBZ

(2S,3S,11bS)-DHTBZ

β -DHTBZ-D6

α -DHTBZ-D6

9-Desmethyl α -DHTBZ 9-

Desmethyl -DHTBZ D63-

Butyl TBZ

Dolutegravir

Dolutegravir Chiral Isomers and Impurities

S,R-Isomer S,S-Isomer R,R-Isomer

Process Related & Degradation Impurities

2-Desfluoro Impurity O-Ethoxy Impurity

4-Desfluoro Impurity Openchain Impurity

Didesfluoro Impurity Openchain Methoxy

2.6-Difluoro Impurity Deshydroxy Impurity

O-Methoxy Impurity

Dorzolamide

Dorzolamide Enantiomer (EP Imp. A)

Dorzolamide Diastereomers (EP Imp. B)

Dorzolamide intermediate Diastereomers

Dorzolamide Intermediate Enantiomer

Dorzolamide N-Desethyl N-Acetyl Analog

Dorzolamide Maleic acid adduct

Efinaconazole Epoxy Intermediate

API isomer (2R,3S)-EFC-III

Enantiomer (2S,3R) -EFC-III

Diastereomer (2S,3S)-EFC-III

Diastereomer (2R,3R)-EFC-III

Popular Chiral Isomers and Impurities

Efinaconazole

Efinaconazole Enantiomer (2S,3S)
Efinaconazole Diastereomer (2S,3R)
Efinaconazole Diastereomer (2R,3S)

Efinaconazole Diol Intermediate

API isomer (2R,3R)-EFC-II
Enantiomer (2S,3S)-EFC-II
Diastereomer(2S,3R)-EFC-II
Diastereomer(2R,3S)-EFC-II

Eliglustat

Eliglustat Chiral Isomers and Impurities

| | |
|--------------------|---------------------|
| S,R-Isomer | N-Oxide Impurity N- |
| R,S-Isomer | Acetyl Impurity |
| S,S-Isomer & | Heptyl analogue Imp |
| Hemitartrate salts | Nonoyl Analogue Imp |
| Oxopropen Imp. | Decyl Analogue Imp |
| O-Octyl Impuity | |

Edoxaban

Edoxaban Chiral Isomers and Impurities

| | |
|----------------|--------------|
| Chiral Isomers | R,R,R-Isomer |
| R,S,R-Isomer | S,S,S-Isomer |
| R,S,S-Isomer | S,R,R-Isomer |
| R,R,S-Isomer | S,S,R-Isomer |

Process Related & Degradation Impurities

N-Oxide Impurity
N-Des Methyl Impurity
Carboxylic Acid Impurity
N-Des Methyl Edoxaban-coupled Impurity
pyridine N-oxide impurity in Edoxaban impurities

Edoxaban KSM Chiral Isomers

| | | |
|--------------|--------------|--------------|
| R,S,R-Isomer | R,R,R-Isomer | S,R,R-Isomer |
| R,S,S-Isomer | S,R,S-Isomer | S,S,R-Isomer |
| R,R,S-Isomer | S,S,S-Isomer | |

Lamivudine

Lamivudine Chiral Isomers

S,S-Isomer R,R-Isomer S,R-Isomer

Formoterol & Arformoterol

Formoterol & Arformoterol Chiral Isomers

R, R - Isomer S, S - Isomer
R, S - Isomer Mixture of All Isomers
S, R - Isomer

Formoterol & Arformoterol Impurities

Process Impurities

Formoterol EP impurity A
Formoterol EP impurity B
Formoterol EP impurity C
Formoterol EP impurity D
Formoterol EP Impurity E
Formoterol EP Impurity-G
N-Benzyl Formoterol (Imp H)
Formoterol EP Impurity-I
O-Benzyl N-Benzyl Formoterol (Imp-N)
Formoterol N-Methyl Impurity (Imp-1)
N-(2-(benzyloxy)-5-(1-hydroxyethyl)phenyl)formamide
N-(2-(benzyloxy)-5-ethylphenyl)formamide
Formoterol impurity-2
Formoterol impurity 3
Formoterol desphenolic hydroxy impurity
Arformoterol Diformylated Amino Impurity
Arformoterol O-Formyl
N-Acetyl Amino Impurity
Arformoterol Amino Dimer impurity

Indacaterol

Indacaterol Chiral Isomers and Impurities

Indacaterol Enantiomer
O-Benzyl Impurity
Reduced Imp of Indenamine
Di-Desethyl Indenamine
Mono-Ethyl Indenamine

Isavuconazole

Isavuconazolium Sulphate
Isomers SS, SR & RS
Isavuconazole Isomers SS, SR & RS
Hydroxy Nitrile Int. Isomers SS, RR, SR & RS
Thiamide Int. Isomers SS, RR, SR & RS

Popular Chiral Isomers and Impurities

Molnupiravir

Molnupiravir Chiral Isomers &
Process Related Impurities

Chiral Isomers

Enantiomer α -Isomer

Process Impurities

Des Isobutyl Impurity

Uridine Analogue

Cytidine Analogue

Acetonoid Impurity

Acetonoid Cytidine Impurity

Acetonoid Des Isobutyl Impurity

Nebivolol

Nebivolol Chiral Isomers

R,S,S,R-Isomer R,S,R,R-Isomer

S,R,R,S-Isomer R,R,R,R-Isomer

S,R,S,R-Isomer S,R,S,S-Isomer

S,R,R,R-Isomer R,R,S,S-Isomer

R,S,S,S-Isomer S,S,S,S-Isomer

Oxybutynine

Oxybutynine R- Isomer

Oxybutynine S- Isomer

Oxybutynine R- Isomer D10

Oxybutynine S- Isomer D10

Oxybutynine D10

Desethyl Impurity & D5

Related Compound A, B & C

Diphenyl Analogue

Ethyl Propyl Analogue

Desethoxy Oxybutynine Impurity

N-Substituted Allyl Impurity

Perindopril

S,S,S,R,S Isomer EP Impurity D

S,S,S,R,R Isomer EP impurity F

S,R,S,S,S Isomer EP Impurity H

EP Impurity B EP Impurity J

EP Impurity C

Oseltamivir

Oseltamivir Chiral Isomers & Impurities

Chiral Isomers S,S,R-Isomer

R,R,R-Isomer S,S,S-Isomer

R,S,R-Isomer S,R,S-Isomer

R,S,S-Isomer S,R,R-Isomer

Process Related &

Degradation Impurities

Monograph Pyrrol Impurities

Impurities Furan Impurities

Allyl impurities Citrate adducts

Dihydro Impurity Glucose adduct

Diamine Impurity

Phytonadione

Phytonadione Chiral Isomers & Impurities

Chiral Isomers Doble Bond Isomer

S,S,E-Isomer 1, 2 & 3

S,R,E-Isomer Peroxy Diastereomers

R,S,E-Isomer Epoxy Diastereomers

R,R,Z-Isomer **Dihydroxy**

S,S,Z-Isomer **Diastereomers**

R,S,Z-Isomer Dihydroxy Epoxy -

S,R,Z-Isomer Diastereomers

Process Related & Diacetoxym Impurity

Degradation Imp. Acetoxym Impurity

Hydroxy impurity Menadion Impurity

Peroxy impurity Menadion Epoxy

2,3-Epoxy impurity Impurity

Trans Epoxy Impurity Cyclized Menadion

Dihydroxy Impurity Cyclized Related

Dihydro Impurity Impurity

Process Related Impurities

Efinaconazole N-Oxide

4-bromo-3-fluorophenyl triazole

1-(2-bromo-5-fluorophenyl)-1H-1,2,4-triazole

Triazole Ring Isomer

Popular Chiral Isomers and Impurities

Remdesivir

Remdesivir Chiral Isomers & Impurities Chiral Isomers

| | |
|--------------|-------------------------|
| S,R,R-Isomer | n-Butyl S,S, Isomer n- |
| S,S,S-Isomer | Butyl S,R,R Isomer n- |
| S,R,S-Isomer | Butyl S,S,S Isomer |
| R,R,R-Isomer | tert-Butyl S,S,R Isomer |
| R,S,R-Isomer | Methyl S,S,R Isomer |
| R,R,S-Isomer | |
| R,S,S-Isomer | |

Degradation Impurities

| | |
|--------------------|--------------------|
| O-Des phosphate | Phenol Impurity |
| Acetonide Impurity | Phosphate Impurity |
| Acetonide Impurity | Des Phenyl |
| Des Phenyl | Alanine Impurity |
| Acid Impurity | Amide analogue |

4-Nitro & pentafluoro Phenyl Alanine

Remdesivir Side chine Isomers

R = Pentafluoro Phenyl

R = 4-Nitro Phenyl

Pentafluoro Phenyl S,S-Isomer

Pentafluoro Phenyl S,R-Isomer

Pentafluoro Phenyl R,S-Isomer

Pentafluoro Phenyl R,R-Isomer

4-Nitro Phenyl S,S-Isomer 4-

Nitro Phenyl S,R-Isomer 4-

Nitro Phenyl R,S-Isomer 4-

Nitro Phenyl R,R-Isomer

Trihydroxy Cyano Triazine Remdesivir

Side chain Impurities

| | |
|----------------------------|------------------------|
| α -Trihydroxy Cyano | Mono-O-Benzyl |
| Triazine | Impurity |
| β -Trihydroxy Cyano | Di N-Benzyl Impurity |
| Triazine | Mono N-Benzyl Impurity |
| Tri-O-Benzyl Impurity | |

Regadenoson

Regadenoson α -Anomer & Impurities

| | |
|------------------|---------------|
| Regadenoson | Carboxylic |
| α -Anomer | Acid Impurity |
| N,N-Dimethyl | Methyl Ester |
| Impurity | Impurity |

Ritonavir

Ritonavir Chiral Isomers & Impurities

Enantiomer
3R Isomer
Hydroxy Ritonavir
Hydroperoxy Ritonavir
Hydroxy Ritonavir Int.
Hydroperoxy Ritonavir Int.
Ethyl Analog
Diacyl Urea
Amino Alcohol Urea
Oxazolidinone Derivative
N-Deacylvaline Ritonavir

Hydantoin Aminoalcohol
Hydantoin-oxazolidinone
O-Acyl Isomer
Acetamidoalcohol
Boc Aminoalcohol
Isobutoxycarbonyl
Aminoalcohol
N,N-Dimethyl Carbomate Imp.
N-Methyl Carbomate Imp.
2,5-Thiazolylmethyl
Dicarbamate
Ureidovaline Isobutyl Ester
Ureidovaline Ritonavir

Sacubitril

Sacubitril Chiral Isomers

S,S-Isomer R,R-Isomer S,R-Isomer

Saxagliptin

Trihydroxy Cyano Triazine Remdesivir

Side chine Impurities

S,S-Isomer R,R-Isomer S,R-Isomer

Tranlycypromine

| | |
|-------------------|-------------------|
| R-Tranlycypromine | S-Tranlycypromine |
| S-Tranlycypromine | -D5 |
| R-Tranlycypromine | Trans Hydrazide |
| -D5 | Cis Hydrazide |

Popular Chiral Isomers and Impurities

Tenofovir Alafenamide

Tenofovir Alafenamide
Chiral Isomers & Impurities
Chiral Isomers

| | |
|--------------|--------------------|
| R,R,R-Isomer | S,R,R-Isomer |
| R,R,S-Isomer | S,S,R-Isomer |
| R,S,R-Isomer | Methyl Ester S,R,S |
| S,S,S-Isomer | Methyl Ester R,R,S |
| S,R,S-Isomer | Propyl Ester S,R,S |

Process Related & Degradation Impurities

TAF-PMPA Isopropyl Alaninate
TAF Regio isomer
PMPA Anhydride
TAF Di-Phenyl impurity
TAF Di-Isopropyl Alaninate
TAF Di-Isopropyl Impurity
TAF-Impurity-E
TAF-Impurity K

Voriconazole

Voriconazole Enantiomer (EP Imp D)
Voriconazole Diastereomers
Voriconazole Dimer impurity (Imp-15)
Voriconazole EP Imp. A
Voriconazole EP Imp. C

Teneligliptin

Teneligliptin Chiral Isomers
S,S-Isomer R,R-Isomer S,R-Isomer

Some Popular API Chiral isomers

Ivrosidenib isomers
Letermovir Enantiomer
Elagolix-Enantiomer
Tapentadol Diastereomer
Nelarabine α -Isomer
Adenosine α -isomer
Atazanavir enantiomer
Ibrutinib Enantiomer
Thiothixene Z-isomer
Gemifloxacin-E-isomer
Methotrexate Enantiomer
Sitagliptin Enantiomer
Acalabrutinib Enantiomer
Melphalan Enantiomer
Scopolamine Enantiomer
Ambrisentan Enantiomer
Netarsudil Enantiomer
Ibrutinib Enantiomer
Linagliptin Enantiomer
Manidipine R & S Isomer
Doxepine E & Z Isomer
Vilanterol Enantiomer

API Under Development

Mupirocin
Tocopherol
Fosamprenavir



API LABELED STANDARDS

| | | | |
|----------------------------|---------------------------|----------------------------|------------------------------|
| Abiraterone - D3 | Diazoxide - D3 | Methimazole - D3 | Resiquimod - D5 |
| Acenocoumarol-D5 | Digoxin - D3 | Methotrexate - D3 | Ritonavir - D6 |
| Acotiamide - D6 | Diltiazem - D4 | Metoclopramide - D3 | Ribociclib-D8 |
| Afatinib - D6 | Dipyridamole - D20 | Metoprolol - D6 | Rivastigmine - D6 |
| Agomelatine - D3 & D6 | Dihydroergotamine D3 | Metopimazine - D6 | Relugolix D6 |
| Albendazole - D3 | Domperidone - D6 | Midodrine - D6 | Ruxolitinib - D9 |
| Alcaftadine-D3 | Doxazosin - D8 | Milnacipran - D10 | Sacubitril - D4 |
| Alfuzosin - D6 | Duloxetine - D3 | Minoxidil - D10 | Salmeterol - D3 |
| Alvimopan - D5 | Edoxaban-D6 | Monomethyl fumarate - D5 | Sapropterin-D3 |
| Ambrisentan - D3 | Elagolix - D6 | Nadolol-D9 | Sarpogrelate-D3, D4 & D6 |
| Apremilast - D3 | Eliglustat - D15 | Nebivolol - D4 | Scopolamine - D3 |
| Aprepitant - D3 | Eluxadolone - D3 | Nintedanib - D3 | Selexipag - D6 |
| Atazanavir - D6 | Enzalutamide - D3 & D6 | Nitroso Derivatives-D3&D10 | Sildenafil - D3 & D8 |
| Avobenzone - D3 | Erlotinib - D6 | Nirmatrelvir D9 | Sildenafil - D4 |
| Axitinib - D3 | Escitalopram oxalate - D3 | Octocrylene - D10 | Sofosbuvir - D6 |
| Baclofen - D4 | Esomeprazole - D3 | Olanzapine - D3 | Sumatriptan - D6 |
| Binimetinib-D3 | Ethacizine - D5 | Omeprazole - D3 | Tadalafil - D3 |
| Biopterin - D3 | Fedratinib - D9 | Ondansetron - D3 | Tamsulosin - D4 |
| Bosentan - D4 | Fingolimod - D4 | Oseltamivir - D3 & D5 | Tasimeleone - D5 |
| Brexiprazole - D8 | Fluphenazine - D6 | Osimertinib - D6 | Tamatinib-D9 |
| Brequinar - D3 | Flurbiprofen - D3 | Oxaceprol-D3 | Tenofovir Alafenamide- D5 |
| Bupropion - D6 & D9 | Gefitinib - D3 | Palbociclib - D8 | Tetrabenazine - D3 & D6 |
| Buspirone - D8 | Glasdegib - D4 | Paroxetine - D4 | Tetrabenazine Desmethyl-D3 |
| Candesartan - D5 | Gliclazide - D4 | Pazopanib - D3 | Tepotinib-13CD3 |
| Carbimazole - D3 & D5 | Granisetron - D3 | Perospirone - D8 | Tiagabine - D5 |
| Carvedilol - D4 | Hydroxychloroquine - D5 | Phenytoin - D10 | Timolol - D9 Maleate |
| Cibenzoline - D4 | Ibrutinib - D5 | Phytonadione - D7 | Trandolapril - D5 |
| Cilostazol - D11 | Ibuprofen - D3 | Pitolisant D10 | Ulipristal acetate - D3 |
| Citalopram Hydrobromide-D3 | Imatinib - D3 | Piperidine - D4 | Ubrogepant D5 |
| Clomiphene Z-isomer-D10 | Ivosidenib-D4 | Pirfenidone - D3 | Valsartan - D9 |
| Clomiphene E-Isomer-D10 | Ketoprofen - D3 | Pitofenone - D4 | Velpatasvir - D3 |
| Cyclizine D3 | Lacosamide - D3 & D6 | Podophyllotoxin - D3 | Venlafaxine - D4 |
| Cyclosporine - D4 | Lasmiditan-D3 | Prazosin - D8 | Verapamil - D6 |
| Cyproterone Acetate - D3 | Ledipasvir - D6 | Procyclidine-D5 | Vericiguat - D3 |
| Dabigatran - D4 | Levothyroxine - D3 | Propiomazine - D6 | Vortioxetine - D8 |
| Daclatasvir - D6 | Losartan impurity 21-D4 | Promethazine - D6 | Viloxazine D5 |
| Dapagliflozin - D5 | Macitentan - D4 | Propafenone - D5 | Warfarin - D5 |
| Darolutamide - D4 | Mebeverine acid D5 | Propranolol - D7 | Zileuton-D4 |
| Dasatinib - D4 | Manidipine - D4 | Quetiapine - D4 | (R) & (S)-Tranylcypromine-D5 |
| Deferasirox - D4 | Mephenesin - D3 | Raloxifene - D4 | (R) & (S)-Oxybutynine D10 |
| Desglymidodrine-D6 | Metaxalone - D6 | Ranolazine - D3 & D8 | |

PEPTIDE Impurities

Calcitonin

Asp-26-Calcitonin
Glu-14-Calcitonin
Glu-20-Calcitonin
Asp (3)-Calcitonin
Des (32,31) Thr,
Pro-Calcitonin
Calcitonin
Parallel Dimer
Calcitoninyl glycine
Ser(Ac)5-Calcitonin
Des-(32,31) Thr-Pro Calcitonin Acid
31-Dehydro-Thr-Calcitonin
Truncated (32-27)- Calcitonin
Trisulfide-Calcitonin
1-2 Hydrolysis Calcitonin
Calcitonin Salmon D10 Impurity
1,7 bis(3-sulfo-L-Ala)-
Calcitonin salmon
1,7 bis(3-sulfo-L-Ala)-
Calcitoninyl glycine
Truncated (32-20)-Calcitonin
Truncated (32-29)-Calcitonin

Cetorelix

Cetorelix D10
Des-Amido-Cetorelix
L-Ala(10)-Cetorelix
Des-Acetyl-Cetorelix
Des-D-Ala-Cetorelix
Endo-3-D-Pal-Cetorelix

Linaclotide

Asp(7)-Linaclotide
Ac-Linaclotide
Des-Tyr(14)-Linaclotide
Cys(1)-IMD-Linaclotide

Daptomycin

Daptomycin β -Isomer
Anhydro-Daptomycin
Daptomycin (RS-1)
Daptomycin Lactone
Hydrolysis
Daptomycin impurity-1
Daptomycin Impurity-B1/II
Daptomycin Impurity-B2

Damptomycin

Damptomycin impurity-5
Daptomycin Impurity-6
Daptomycin Impurity-7
Daptomycin Impurity-8
Daptomycin Impurity-3
Daptomycin Impurity-4
Isodecyl acyl isomer

Lanreotide

Lanreotide D8 TFA salt
Des-Thr(8)-Lanreotide
N-Ac-Lanreotide
L-Nal-Lanreotide
Lanreotide Acid

Icatibant

| | |
|------------------------|------------------|
| Des-D-Arg(1)-Icatibant | (1-6)-Icatibant |
| Des-L-Arg(2)-Icatibant | (7-10)-Icatibant |
| L-Arg(1)-Icatibant | Ac-Icatibant |

Octreotide

| | |
|---------------------|---------------------|
| D-Thr(6)-Octreotide | Lys(Ac)-Octreotide |
| D-Cys(2)-Octreotide | Des-Threoninol- |
| Ac-Octreotide | Octreotide |
| Trp(4)-Octreotide | D-Cys(7)-Octreotide |
| | Threoninol(Ac) |
| | 8-Octreotide |

PEPTIDE Impurities

Leuprolide

Leuprolide- Impurity-12
D-Trp-Leuprolide
Leuprolide- Impurity-6
Leuprolide- Impurity-8
D-Ser-Leuprolide
D-His-Leuprolide
Leuprolide-Metabolite(pentapeptide)
(O-Acetyl-L-Ser)-Leuprolide
L-Leu (6)-Leuprolide
D-Leu-Leuprolide
Ac(2-9) Leuprolide
D-Tyr-Leuprolide
Leuprolide D10 (labelled)
Ser(Ac)-Leuprolide
Leuprolide impurity(1-5)
Leuprolide impurity(1-8)
Des-Ser(4)-Leuprolide

Octreotide D8

Linear octreotide L-
Phe(1)-Octreotide
Des-D-Phe(1)-Octreotide
Des-D-Trp(4)-Octreotide
Des-Lys(5)-Octreotide
Octreotide Acid
D-Phe(3)-Octreotide
D-allo-Thr(6)-Octreotide
(N-O) acyl isomer of Octreotide
Trisulfide Octreotide

Teriparatide

Under Development
Met(O) 8-Teriparatide
Met(O) 18-Teriparatide
Met(O) 8,18 -Teriparatide
Met(O) 8, Ser(tBu) 1 - Teriparatide
Met(O) 18, Ser(tBu) 1- Teriparatide

Miscellaneous

Des-Asn(1)-Plecanatide
N,N'-dimethyl-Gly-Desmopressin

Oxytocin

| | |
|-----------------|-----------------------------|
| Ac-Oxytocin | D-Asn 5-Oxytocin |
| Asp 5- Oxytocin | Ala (3-CN) 5-Oxytocin |
| Glu 4-Oxytocin | Parallel Dimer- Oxytocin |
| Leu 3-Oxytocin | Antiparallel Dimer Oxytocin |
| Oxytocic Acid | |

Semaglutide

Semaglutide WRS
Semaglutide D5
Des-Glu(3)-Semaglutide
Endo-Gly(4)-Semaglutide

Vasopressin

Gly-OH-AVP/Gly 9-Vasopressin
Glu4- AVP
Asp5- AVP
Di-sulfonic acid- AVP
Des-Gly-Vasopressin
Endo-Gly-Vasopressin
Ac-Vasopressin
Vasopressin D5 (labelled)
Trisulfide AVP
D-Asn-Vasopressin
Des-Pro-Vasopressin
Gln(Acm)-Vasopressin
His(2)-Vasopressin
D-Tyr-Vasopressin
D-Arg(8)-Vasopressin
D-Cys(1)-Vasopressin
D-Cys(6)-Vasopressin
D-Pro(7)-Vasopressin
Des-Gly-OH-Vasopressin
D-Phe(3)-Vasopressin
Parallel Dimer
Antiparallel Dimer
 β -Asp(5)-Vasopressin
Ac-Asp(5)-Vasopressin
Leu(7)-Vasopressin
Glu(4)-Gly-OH-Vasopressin

Note: Liraglutide and Semaglutide Impurities under development

Popular API Impurities

Acyclovir Impurities

Acyclovir Acid Impurity
Acyclovir EP Impurity-K
Acyclovir L-Alaninate

Acalabrutinib Impurities

Acalabrutinib M27 (ACP-5862)
Acetoacetyl carbamate imp (Imp-2)
Dibutynoyl impurity
Pyridine N-Oxide Impurity
Piperidine N-Oxide Impurity
Dimer Impurity R-Isomer
(Enantiomer)

Anastrozole

Anastrozole Diacid
Anastrozole Dimer (EP Imp-B)
Anastrozole α -Desmethyl
Impurity (EP Imp-A)

Afatinib

4-Hydroxy 4-Dedimethylamino Afatinib
Afatinib Bis-dimethylamino Impurity
2-Hydroxy 3-dimethylamino Afatinib Impurity
3-Hydroxy Afatinib Impurity
Afatinib Impurity E
Afatinib Impurity B

Baricitinib Impurity

Acetic Acid Impurity
Acetamide Impurity
N-7-Hydroxymethyl Impurity
Lactone Impurity
SEM Impurity
KSM Impurity

Bupropion Impurities

(3S,5R,6R)- Bupropion Impurity
(3S,5S,6S)- Bupropion Impurity

Cefuroxime axetil Impurities

Dimer Impurity
Delta-3 Impurity
E-Isomer

Cefoxitin Impurities

Cefalotin lactone
Cefoxitin Lactone

Clindomycine & Clindamycine Phosphate

Isopropylidene Clindamycin Phosphate
7- Epi Lincomycine (EP Imp. D)
7- Epi Clindamycin (EP Imp. C)
Clindamycin phosphate sulfoxide
Clindamycin Propyldiene Impurity
(EP Imp. E)
Clindamycin (2R-Cis)-Diastereomer (EP
Imp.F)
Isopropylidene Clindamycin
Lincomycin 2-Phosphate (Clindamycin
Phosphate EP Imp-F)
2,4-phosphatidyl lincomycin (Clindamycin
Phosphate EP Imp-G)

Cefazolin Impurities

7- aminocephalosporanic acid
Tetrazolyl Acetamide Acetal
Cefazolin 3-hydroxy methyl Impurity

Popular API Impurities

Bendamustine Impurities

Bendamustine Glycerol Ester Impurity
Bendamustine Acetate Impurity
Dihydroxy Impurity (RC A)
Dihydroxy Ethyl Ester Impurity (RC C)
Bendamustine N-Alkylated Impurity (RC D)
Ether Impurity (RC B)
Monohydroxy Acid Impurity (HP-1 Imp) (RC E)
Mannitol Ester Impurity (RC F)
Dimer Impurity (RC H)
Ethyl Ester Impurity (RC I)
Bendamustine Isopropyl Ester
Bendamustine methyl ester

Cefadroxil Impurities

7-Ethoxycarbonyl 7-ADCA
Diketopiperazine derivative
Cefadroxil S-Isomer (RC D)
N-Phenylglycyl delta-3 cefadroxil
N-Phenylglycyl cefadroxil
Ethyl cefadroxil Impurity
EP Impurity-A
EP Impurity-H

Ceftazidime Impurities

Desacetylceftazidime Lactone Impurity
Ceftazidime EP impurity G

Cyclophosphamide Impurities

Closed Ring Ethanol Adduct (Imp-F)
Open Ring Ethanol Adduct (Imp-G)

Carbidopa Impurities

L-methyldopa (EP Imp-A)
3-Methoxy Impurity (EP Imp-C)
Methyl Ester (EP Imp-E)
Ethyl Ester (EP Imp F)
4-Methoxy Impurity (EP Imp-H)
3-Bromo Impurity (EP Imp-I) 2-Bromo Impurity (EP Imp-J)

Carvedilol

EP Impurity A
EP Impurity B
EP Impurity C
EP Impurity D
Biscarbazole Impurity
N-Isopropyl Carvedilol
Carvedilol Ether Dimer Impurity

Cefprozil Impurity

Cefprozil Dimer
Cefprozil delta-3 Isomer
Cefprozil Amide
Cefprozil EP Impurity C
Cefprozil E
Impurity H

Cefdinir Impurities

3-Methyl Cefdinir
Sulfoxide impurity
E-Cefdinir
E-Cefdinir Lactone
Glyoxalic Analogue
Decarboxy Open Ring
Lactone A & B
Thiazolyl Acetyl Glycine
Oxime
Open ring lactone a,b,c and d (RC imp-A)
Isoxazole Analog
Dimer impurity
Thiazolyl acetyl glycine oxime acetal

Popular API Impurities

Cisatracurium Besilate

Cisatracurium EP impurity-A
Cisatracurium EP impurity-B
Cisatracurium EP impurity-C
Cisatracurium EP impurity-D
Cisatracurium EP impurity-E
Cisatracurium EP impurity-F
Cisatracurium EP impurity-N
Cisatracurium EP impurity-R
Cisatracurium EP impurity-W

Clobetasol Propionate Impurities

Despropionate Impurity (EP Imp-A)
17-O-Sulfonate Impurity (EP Imp-B)
Delta-16(17)-dehydro Clobetasol Propionate
Delta-17(18)-dehydro Clobetasol Propionate

Difluprednate

Difluoroprednisolone Difluoroprednisolone
Trimethylortobutyrate Difluoroprednisolone 11-
butyrate, 21-Acetate Difluoroprednisolone 21-
butyrate Difluoroprednisolone 17-Butyrate
Difluoroprednisolone-17,21-Diacetate
Difluoroprednisolone 17-Acetate
Difluoroprednisolone 21-Acetate

Doxycycline Impurity

6-Epimer Impurity (EP Imp-A)
Metacycline Impurity (EP Imp-B)
4-Epimer Impurity (EP Imp-C) 4,6-
Di Epimer Impurity (EP Imp-D)

Fingolimod Impurities

3-Phenethyl Fingolimod Impurity
2-Phenethyl Fingolimod Impurity
Fingolimod Phosphate

Demeclocycline Impurities

Demethyltetracycline (EP Imp-A)
4-Epimer demeclocycline (EP Imp-B) 4-
Epianhydrodemeclocycline (EP Imp-F)
Anhydrodemeclocycline
(EP Imp-G)
4-Epidemethyltetracycline

Dexamethasone sodium phosphate impurities

16(17) α -Homobetamethasone
Sodium Phosphate (Imp-D)
13(17) α -Homodexamethasone
Phosphate (Imp F)
Fluoroandrostadiene
Carboxylic acid (EP Imp-G)
Dexamethasone sodium
phosphate diester (EP Imp-I)
Dexamethasone 21-Aldehyde
& Dihydrate Imp

Desogestrel

Δ^3 -Isomer (Imp-A)
18-Methyl Impurity (Imp-B)
17 Keto Impurity (Imp-C) 3-
Keto Impurity (Imp-D)
3- β -Hydroxy Impurity (Imp-E)
3- α -Hydroxy Impurity
6 β -Hydroperoxide Etonogestrel

Eplerenone

Di-Carbollactone Impurity (EP Imp-A)
11 α ,12 α -Epoxy Impurity (EP Imp-B)
Acid Impurity (EP Imp-C)
9,11-Diene Impurity (EP Imp-D)

Popular API Impurities

Ethinylestradiol Impurities

6- α -Hydroxy Impurity (Imp-E)
6- β -Hydroxy Impurity (Imp-F)
6-Oxo impurity (Imp-G)
16-Oxo Impurity (Imp-H)
5,6-Diene Impurity (Imp-I)
2-Methyl Impurity (Imp-J)
4-Methyl Impurity (Imp-K)
1-Methyl Impurity (Imp-M)
1-Methyl Estrone
2-Methyl Estrone
4-Methyl Estrone Dimer Impurity
Delta-9(11)-Dehydro Ethinyl Estradiol
Delta-8(9)-Dehydro Ethinyl Estradiol
Delta-8(9)-Dehydro Estrone
Delta-8(9)-Dehydro Estradiol

Elagolix Impurities

N-Debutanoic Acid Impurity
Methyl Ester Impurity
Ethyl Ester Impurity
Lactum Impurity
Di-Butanoic Acid Impurity N,N-
Dibutyl Ethanoate Impurity Keto
Impurity
N-Boc Des Butanoic Acid Impurity
N-Formyl Des Butanoic
Acid Impurity
O-Des Methyl Impurity
Desfluoro Impurity-1
Desfluoro Impurity-2
Di Desfluoro Impurity
C-Methyl Impurity
N-Methyl Impurity

Ivabradine

5-Hydroxy Ivabradine Ivabradine Reduced
Chloro Ivabradine mpurity (Imp B)

Fesoterodine Impurities

Fesoterodine Symmetrical Dimer (Ether Imp.)
Fesoterodine Unsymmetrical Dimer
Fesoterodiny (4-Hydroxy-
tolterodine phenoxy) Ether
Fesoterodine Diol Impurity

Fosfomycin Impurities

Fosfomycin EP Impurity-A
Fosfomycin EP Impurity-B
Fosfomycin EP Impurity-C
Fosfomycin EP Impurity-D

Hydrocortisone Impurities

Hydrocortisone-20-acid
Hydrocortisone Z-enol aldehyde
Hydrocortisone E-enol aldehyde
Symmetrical dimer (EP Imp-N)
Un-symmetrical dimer
Hydrocortisone (9B, 11B-Epoxyde)
21-Dehydrocortisol (EP Imp-G)

Ibrutinib Impurities

Diamine impurity
Dimer Impurity-1
Dimer Impurity-2
Keto Impurity
Keto Impurity
Acetyl Impurity
Chloro Impurity
Methoxy Impurity
Dihydro Impurity (PCI-45227)
Hydroxy Impurity (M 35)
TPP Adduct (IBT7A)
Deacryl TPP Adduct (IBT6A)

Ivacaftor

Hydroxymethyl Ivacaftor
Ivacaftor Carboxylic Acid

Popular API Impurities

Iohexol

EP Impurity F, G, H, I & M

Iopamidol

Iso iso iopamidol

O-Acetyl iopamidol

Bis dimethyl amino iopamidol

Hydroxy ethyl derivative (EP Imp J)

Mono carboxylic acid (EP Imp D)

2,3- Dihydroxy propyl isomer (EP Imp D)

N,N-Dimethyl amino derivative (EP Imp F)

Levonorgestrel Impurities

8,14-Dehydronorgestrol (EP Imp-A)

13-ethylgon-4-ene-3,17-dione (EP Imp-L)

5,10-Dehydro Impurity (EP Imp-B)

Medroxyprogesterone

6- β -hydroxy medroxyprogesterone

17 α -Methyl-17-Keto-D-Homo Impurity

17 β -Methyl-17-Keto

D-Homo Impurity

D-Homo analogous

Minocycline Impurity

4-Epimer Impurity(EP Imp-A)

Sancycline (EP Imp-B)

7-Monomethyl Impurity (EP Imp-C)

7-Amino Sancycline (EP Imp-D)

12-Imino-delta-minocycline (EP Imp-E)

N2-Hydroxymethyl Impurity (EP Imp-F)

9-Dimethylamino Impurity (EP Imp-G)

5,6 α -Dehydro Impurity (EP Imp-H)

9-Aminominocycline (EP Imp-I)

9-Monomethyl Impurity

7-Ethyl Methyl amino Impurity

Related impurity (Impurity RRT 0.88)

Levothyroxine Impurities

Liothyronine (EP Imp-A)

3'-Monochloro Impurity (EP Imp-B)

3-Monochloro Impurity (USP Imp)

T3-Acetic Acid (EP Imp-C)

T4-Acetic Acid (EP Imp-D)

Diiodothyronine (EP Imp-E)

T6-Impurity (EP Imp-F) T4-

Formic Acid (EP Imp-H)

T4-Formic Acid N-Methylamide

T4-Aldehyde (EP Imp-I)

T2-Impurity (EP Imp-J)

T3 Impurity (EP Imp-K)

T4- β -Hydroxy Impurity (USP A)

T4-Hydroxyacetic Acid (USP-B)

N-Formyl-T4 Impurity USP-C)

T4-Acetamide (USP-D)

N-Acetyl T4 Impurity (USP-E)

N-Methylamide Impurity

O-Methyl Amine Impurity

O-Methyl T4-Impurity

T4-Lactic acid Impurity

3,5-diiodo-L-tyrosine

Levothyroxine N-Lactose Adduct

Thyroxamine Hydrochloride

Methylprednisolone Impurities

Methylprednisolone glyoxal

Symmetrical Dimer

Un-Symmetrical Dimer

21-Acetate Impurity (EP Imp-B)

Methylprednisolone Impurity D (Mix. Isomer)

Methylprednisolone Impurity D (E-Isomer)

Methylprednisolone Impurity D (Z-Isomer)

11-Keto Impurity (EP Imp-K)

Popular API Impurities

Mometasone Furoate Impurities

Mometasone Furoate Imp-D
Mometasone Furoate Imp-J
Mometasone Furoate Imp-K
Mometasone Furoate Imp-L
Mometasone Furoate Imp-Q

Melphalan Impurities

Dihydroxy Melphalan (EP Imp-A)
Morpholine Impurity (EP Imp-B)
Mono-Chloroethyl Impurity (EP Imp-C)
Monohydroxy Impurity (EP Imp-D)
3-Chloromelphalan (EP Imp-F)
Dimer Impurity (EP Imp-G)
Methyl Ester Impurity (EP Imp-H)
Methoxy Dechloromelphalan (EP Imp-I)
2-Chloroethoxy
Dechloromelphalan (EP Imp-J)
D-Isomer Melphalan (R-Isomer)
Melphalan Ethyl Ester
Melphalan Isopropyl Ester
Melphalan Phthalimide Impurity
Melphalan Morpholine
Phthalimide Impurity

Nintedanib

Acid Impurity
Ethyl ester Impurity
N-Methyl Impurity
N-Oxide Impurity (EP Imp-H)
N-Oxide Impurity (EP Imp-I)
N-Acetyl Impurity

Nirmatrelvir

| | |
|--------------------------|------------------|
| Nirmatrelvir D9 | Acid Impurity |
| Methyl Ester Impurity | Amide Impurity |
| Ethyl Ester Impurity | Nitrile Impurity |
| Isopropyl Ester Impurity | Chloro Impurity |

Nitroso Compounds

Cinacalcet Nitroso
Dabigatran Nitroso
Dabigatran Nitroso
Duloxetine Nitroso
Lumefantrine Des-butyl Nitroso
Nitroso aryl piperazine (Quetiapine)
Nortriptyline Nitroso
Nebivolol Nitroso
Nortriptyline Nitroso
Oseltamivir tert-Butyl Nitroso
Oseltamivir Di-allyl tert-Butyl Nitroso
Orphenadrine Nitroso
Orphenadrine Nitroso
Oseltamivir tert-Butyl Nitroso
Oseltamivir Di-allyl tert-Butyl Nitroso
Palbociclib Nitroso
Rasagiline Nitroso
Ramipril Nitroso
Sertraline Nitroso
Tigecycline Nitroso
Trimetazidine Nitroso
Vildagliptin Nitroso
Vildagliptin Nitroso
Valsartan Des-valeryl nitroso
Zolmitriptan N-Desmethyl Nitroso
Zanubrutinib N-Nitroso impurity
1-nitroso-1,2,3,6-tetrahydropyridine

Olopatadine

E-Isomer Carbaldehyde
Impurity Acetaldehyde
Impurity α -Hydroxy Imp
(RC-A) N-Oxide Impurity
(RC-B)
Isoxepac Impurity (RC-C)
Methyl Ester Impurity
Ethyl Ester Impurity

Popular API Impurities

Norethindrone Impurities

5,6-Dehydro Impurity (EP Imp C)
5,10-Dehydro Impurity (EP Imp D)
6 β -Acetyl Norethindrone acetate
6-Hydroxy Norethindrone acetate

Nilotinib Impurities

Nilotinib N-Oxide
Nilotinib Regio Isomer
Nilotinib Ethyl Impurity
Nilotinib Desmethyl Impurity
2,4-Dimethyl NTB Amine
N Benzyl Impurity
4-Methyl nitro NTB

Olanzapine Impurities

Olanzapine Related Compound A
Olanzapine Related Compound B
N-Demethyl Olanzapine
Olanzapine Thiolactam Impurity
Olanzapine Ketolactam Impurity
(BP Impurity-3)

Pemetrexed

N-Methyl Impurity (EP Imp-A)
Dimer R-Isomer (EP Imp-B)
Dimer S-Isomer (EP Imp-C)
Di glutamate Impurity (EP Imp-D)
D-Glutamate Impurity (EP Imp-E)
Alpha Dipeptide Impurity
PMD acid oxidation Impurity
Ketopemetrexed
Hydroxy pemetrexed
Pemetrexed desglutamate
Methyl 4-(4-Oxobutyl) benzoate

Pramipexole Impurities

(7S)-N-Dimer (Dimer-1)
(7R)-N-Dimer (Dimer-1I)
2-N-Propyl Pramipexole (EP Imp-B)
C-C Dimer (EP Imp-C)
(R)-Pramipexole (EP Imp-D)
N6-Propionoyl Pramipexole (EP Imp-E)
N2-Dipropyl Promipexole (EP Imp-F)
N2,N6-Dipropionoyl Promipexole

Piperacillin Impurities

Piperacillin EP Imp-J (PNO WYE1258631)
Piperacillin EP Imp-K (WYE-131,175)
Piperacillin impurity (PNO CL-115428)
Cefepime sulfoxides
Aztreonam tert-butyl ester

Pregabalin Impurities

Pregabalin 4-Ene Impurity
Pregabalin 5-Ene Impurity
4-Isobutyl piperidin-2,6-dione (Dione)
4-Isobutylpyrrolidin-2-one (lactam)
PGN Monoamide impurity
PGN Diamine impurity
Pregabalin 4-Ene Dimer Impurity
Pregabalin Dimer Impurity
Pregabalin cyclized diamide impurity
Pregabalin Lactose adduct
(PD224378)
Lactam Dimer Impurity 3-(2-amino-2-oxoethyl)-5-methylhexanoic acid
3-isobutylpentanedioic acid
Isopropyl 2-hydroxy-2-phenyl-acetate

Popular API Impurities

Palbociclib Impurities

Palbociclib Aldehyde Impurity
Palbociclib Styryl Impurity
Palbociclib-N-Alkylation Impurity
Palbociclib-N-Formyl Impurity
Palbociclib 2-Oxoethane-1-sulfonic acid
Palbociclib Glycosamine
6-desacetyl-N-Boc-Palbociclib
Palbociclib Sulphonation Impurity
PBC Amine nitro impurity
PBC Amine Isomer Impurity

Relugolix

Amine impurity
Nitro Impurity
N-Oxide Impurity
O-Desmethyl Impurity
Hydrazine Dimer Impurity
Urea Dimer Impurity
Des Fluoro Impurity

Retinoic acid Impurities

4-Oxo-13-cis-retinoic acid
4-Hydroxy-13-cis-retinoic acid
5,6-Epoxy-13-cis-retinoic acid
11,13-di-cis-retinoic acid
9-cis-retinoic acid
4-Oxo-9-cis-retinoic acid
4-Hydroxy-9-cis-retinoic acid
rac-5,6-epoxyretinoic acid

Salbutamol Impurities

Salbutamol EP Impurity K
5-Hydroxy Salbutamol
Salbutamol Impurity L
Salbutamol EP Imp-C
Salbutamol Impurity P
Salbutamol Head and tail dimer

Ruxolitinib

Ruxolitinib Racemic Mixture
Ruxolitinib Enantiomer
Ruxolitinib D9
Impurity A, B, C, D, E, F, H,
Acrylopyrimidine impurity
SEM Impurity
Ruxolitinib M18 Metabolite
Ruxolitinib M27 Metabolite

Sumatriptan Impurities

Dimer Impurity-1 (EP Imp-A)
Dimer Impurity-2
(Related impurity)
N-Desmethyl Impurity (EP Imp-B)
N-Oxide Imp (EP Imp-D)
Amino Impurity (EP Imp-E)
EP Impurity F
3-Hydroxy-2-oxo Impurity
Pyrroloindolium analogue

Sartan Azide

AZBA AZBT
AZBX Losartan Azide & D4
AZBC Losartan Nitrile Azide & D4

Testosterone Impurities

Delta-9(11)-Dehydro Testosterone
Delta-8(9)- Dehydro Testosterone

Tigecycline Impurities

4-Epimer Impurity
Tricyclic Analogue
Quinoline Analogue
12-Oxo-11-Hydroxy Impurity

Valacyclovir Impurities

Bis Valacyclovir

Popular API Impurities

Valganciclovir Impurities

Isovalganciclovir
Iso Ganciclovir (RC A)
9-Methoxymethyl Guanine (RC C)
Mono des valine
valganciclovir dimer
Valganciclovir Dimer K,L,M
Impurity (Mixture of stereoisomers A, B & C)
Ganciclovir dimer
Ganciclovir related compound A
Ganciclovir Divalinate (RC F)
Ganciclovir Mono N-Methyl Valinate (RC N)
Valganciclovir Chloro Analogue
Ganciclovir Monoacetate (RC E)
Ganciclovir Monopropionate (RC J)
Valganciclovir N-Valyl Impurity (Amide Analogue)

Vilanterol Impurities

S-Isomer of Vilanterol
Aldehyde Impurity of Vilanterol
Dimer impurity of Vilanterol

Critical Impurities of Some Popular API

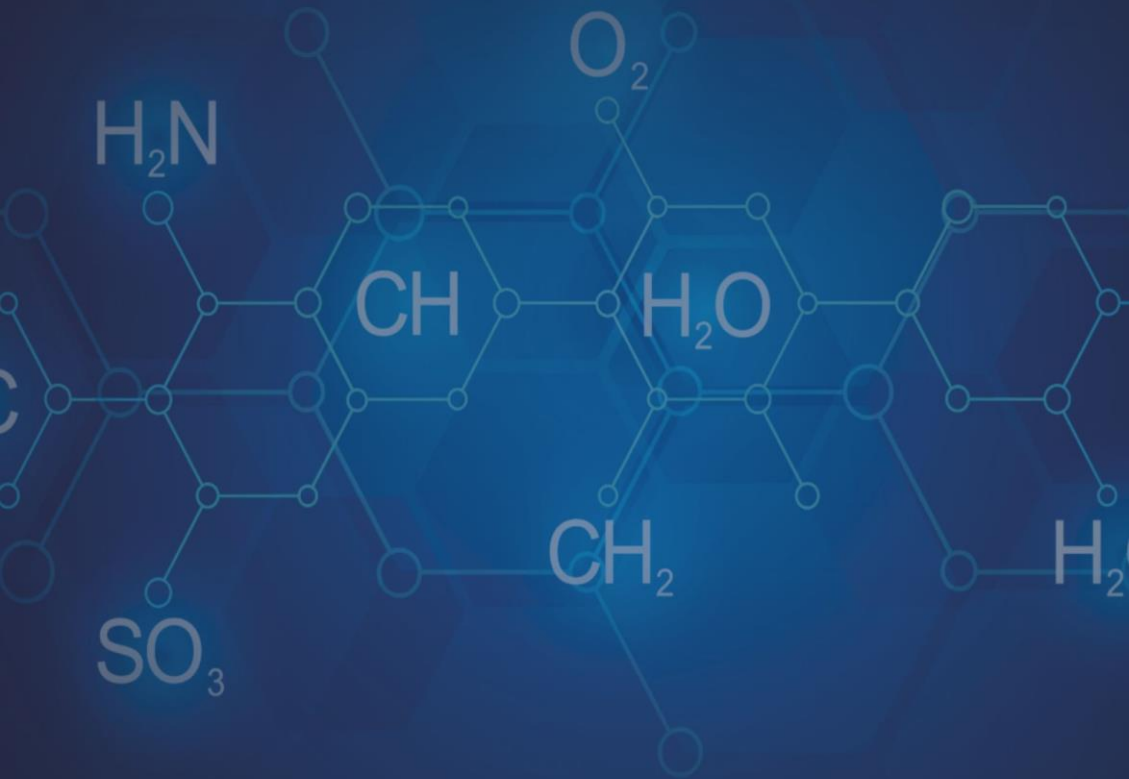
Cromolyn tricarboxylic acid
Salmeterol Dimer
Raloxifene Dimer
Paroxetine Dimer (EP Imp-F)
Mesalamine Impurity 1 (Pyrrole Aldehyde Imp)

Tenofovir Disoproxil Impurities

S-Tenofovir Disoproxil Fumarate
Tenofovir Mono-Poc Dimer (Imp-F) (Dimer-III)
Tenofovir Disoproxil Dimer (Dimer-I)
Tri-POC Tenofovir Dimer (Dimer-II)
Hydroxy Methyl Tenofovir Monoproxil
Hydroxy methyl Tenofovir Disoproxil
Tenofovir 9-Allyl impurity
Tenofovir Disoproxil Carbamate (RC H) Mono-POC Tenofovir
6-Isopropyl Carbamate
Tenofovir Isoproxil Monoester (Impurity A)
Isopropyl Tenofovir Impurity
Ethyl Tenofovir Impurity
Mono-POC Isopropyl Tenofovir (Imp B)
Emtricitabine Tenofovir Disoproxil
Tenofovir emtricitabine FT1
Emtricitabine Tenofovir Monoisoproxil FT5
Diethylaminocarboxy methyl POC tenofovir
Tenofovir Monoproxil Propyl Ester
(nPOC-POC Tenofovir)
Tenofovir Monoproxil Ethyl Ester (Imp-M)
PMPA Anhydride Impurity (Tenofovir Dimer)
Tenofovir Dimer (T5 Impurity)

API Under Development

Mupirocin
Tocopherol
Fosamprenavir



Aquigen Bio Science Pvt. Ltd.

📍 281/1 Plot, 41, Hinjewadi - Pirangut Road, Kasar Amboli,

Pirangut, Pune , Maharashtra 412108 India

📞 +91 7030123794