



COMPANY PROFILE
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VUOS

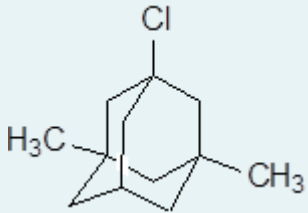
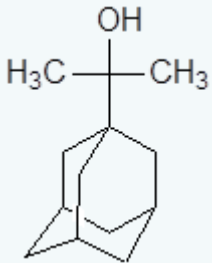
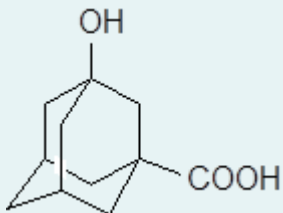
Adamantanes - Intermediates

Market Expansion
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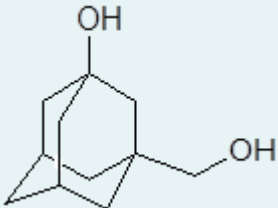
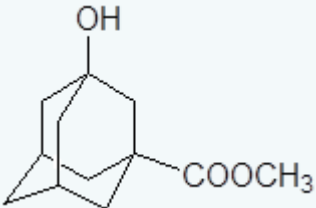
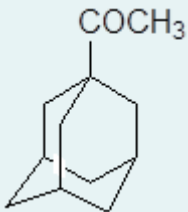


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Phone 06-6282-0174, Fax 06-6282-1718

Adamantanes

API – Intermediates CAS	Formula	API
1-Chloro-3,5-dimethyladamantane CAS 707-36-8		Memantine hydrochloride
2-(1-Adamantyl)-2-propanol CAS 775-64-4		
3-Hydroxy-adamantane-1-carboxylic acid CAS 42711-75-1		Saxagliptin



API – Intermediates CAS	Formula	API
3-Hydroxymethyl- 1-adamantanol CAS 38584-37-1		Saxagliptin
Methyl 3-hydroxy- adamantan- carboxylate CAS 68435-07-4		
1-Acetyladamantane CAS 1660-04-4		Rimantadine hydrochloride 317282





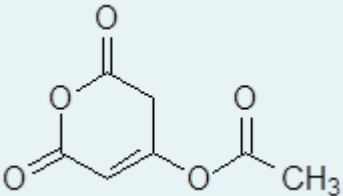
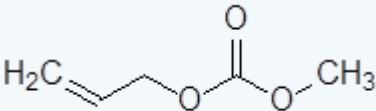
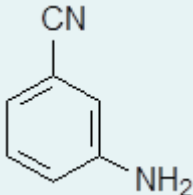
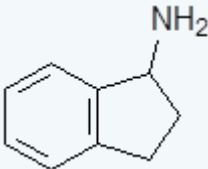
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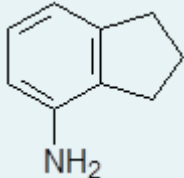
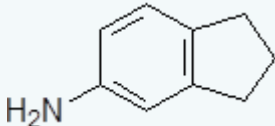
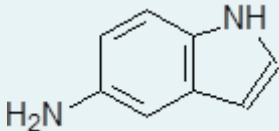
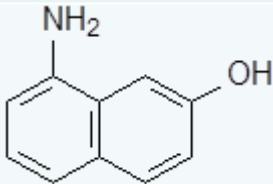
API - Intermediates

Building Blocks

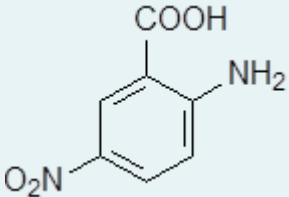
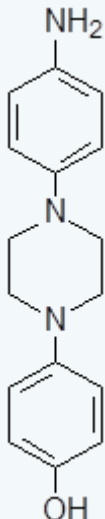
API – intermediates

API – Intermediates CAS	Formula	API
Acetic acid 2,6-dioxo-3,6-dihydro-2H-pyran-4-yl ester CAS 15997-62-3		Trelanserin
Allyl methyl carbonate CAS 35466-83-2		Indometacine Pravadoline LY-418426 ABD-0056
3-Aminobenzonitrile CAS 2237-30-1		NSC-719239 CGP-79807 KFA 1411 CGP-79807 IN-1166 YM-203558
1-Aminoindane CAS 34698-41-4		Rasagiline mesilate Ladostigil tartrate Pevonedistat

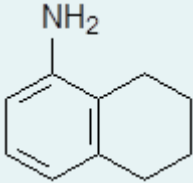
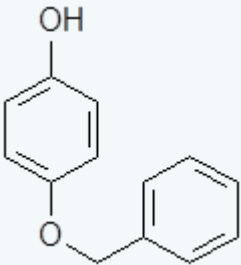
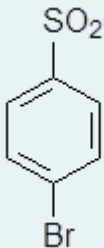
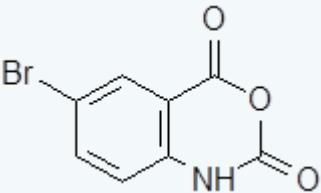


API – Intermediates CAS	Formula	API
4-Aminoindane CAS 32202-61-2		Indanazolin hydrochloride
5-Aminoindane CAS 24425-40-9		Flosulide CB-300907 6RS-BGC-638 CB-300907 CGP-28237
5-Aminoindole CAS 5192-03-0		LY 334370
8-Amino-2-naphthol CAS 118-46-7		Aqomelatine Ropinirole hydrochloride A-995662 ERB-196

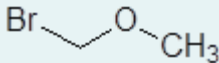
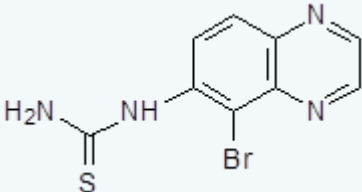
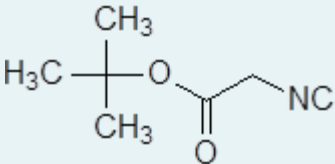


API – Intermediates CAS	Formula	API
2-Amino-5-nitrobenzoic acid CAS 616-79-5		Afloqualone CVT-11563 TKS-050
1-(4-Aminophenyl)-4-(4-hydroxyphenyl)-piperazine CAS 74853-08-0		Posaconazole Itraconazole Ketoconazole

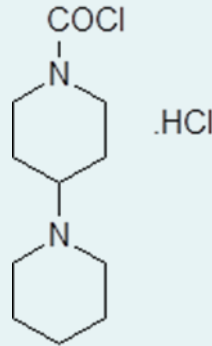
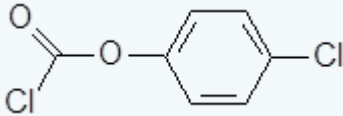
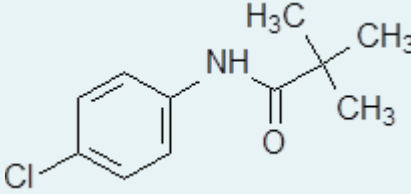


API – Intermediates CAS	Formula	API
1-Amino-5,6,7,8-tetrahydronaphthalene CAS 2217-41-6		Tramazoline NS-1231 WAY-197697
4-(Benzyloxy)phenol CAS 103-16-2		Arzoxifene hydrochloride Cicloprolol hydrochloride Prenalterol L-755507 LY-335562
4-Bromobenzene-sulfonyl chloride CAS 98-58-8		Ciluprevir, Esorubicin hydrochloride Grazoprevir Linezolid Posaconazole Ubidecazenone Vedroprevir
5-Bromoisatoic anhydride CAS 4692-98-2		BMS-214662 YIL-781

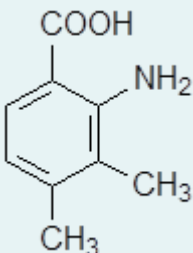
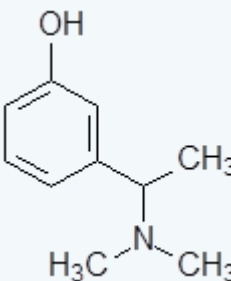
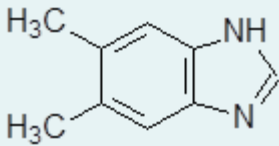


API – Intermediates CAS	Formula	API
Bromomethyl methyl ether CAS 13057-17-5		Erlotinib hydrochloride Bosutinib Ipatasertib Sarmoxicilin Tecastemizole Telapristone acetate
N-(5-Bromo-quinoxalin-6-yl)-thiourea CAS 842138-74-3		Brimonidine
tert-Butyl isocyanoacetate CAS 2769-72-4		Bretazenil Rimacalib hydrochloride Pazufloxacin Ralitoline Rimacalib hydrochloride

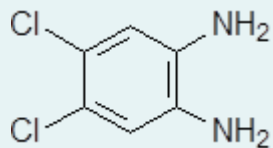
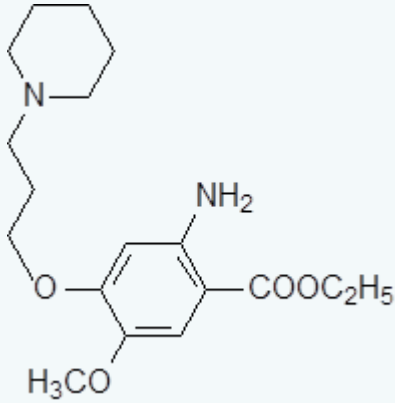


API – Intermediates CAS	Formula	API
1-Chlorocarbonyl-4-piperidinopiperidine hydrochloride CAS 143254-82-4		Irinotecan hydrochloride
4-Chlorophenyl chloroformate CAS 7693-45-0		Itameline NSC-693569 RXDX-105
4-Chloropivalanilide CAS 65854-91-3		Efavirenz Lapaquistat acetate

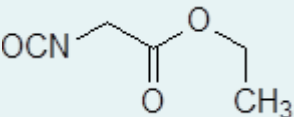
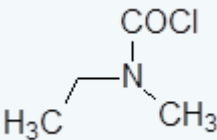
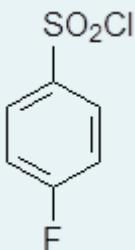
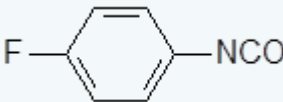


API – Intermediates CAS	Formula	API
3,4-Dimethyl-anthranilic acid CAS 50419-58-4		Vadimezan
3-[1-(Dimethylamino)-ethyl]phenol CAS 105601-04-5		Rivastigmine tartrate
5,6-Dimethyl-benzimidazole CAS 582-60-5		KW-3635

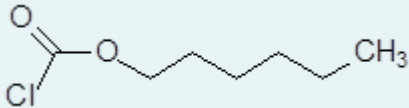
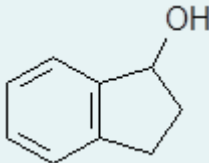
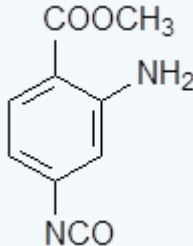


API – Intermediates CAS	Formula	API
4,5-Dichloro-1,2-phenylenediamine CAS 5348-42-5		Maribavir Licostined PD-0220245 JNJ-37654032 PD-0210293 PD-0220245
Ethyl 2-amino-5-methoxy-4-[3-(1-piperidinyloxy)propoxy]benzoate CAS unknown		Tandutinib

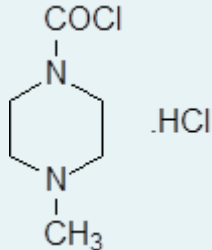
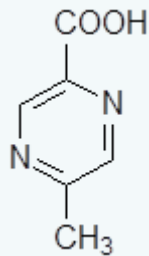
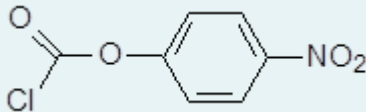


API – Intermediates CAS	Formula	API
Ethyl isocyanatoacetate CAS 2949-22-6		CT-100 249686 256320 392756
N-Ethyl-N-methyl-carbamoyl chloride CAS 42252-34-6		Rivastigmine tartrate Ladostiqil tartrate
4-Fluorobenzene-sulfonyl chloride CAS 349-88-2		Apratastat Ramatroban Linezolid, Losulazine hydrochloride, Unifiram
4-Fluorophenyl isocyanate CAS 1195-45-5		GW-9820 GR-199114X YM-92088

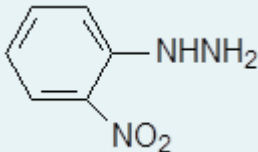
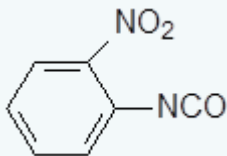
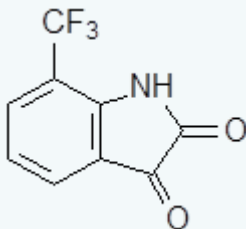


API – Intermediates CAS	Formula	API
<i>n</i>-Hexyl chloroformate CAS 6092-54-2		Dabigatran etexilate mesilate
<i>n</i>-Hexyl isocyanate CAS 2525-62-4		Carmofur Ipeidine mesylate
(+/-)-1-Indanol CAS 6351-10-6		N-[2(R)-[1(R)-indanyl]-3-sulfanylpropionyl]-L-tryptophan 317502 KRP-199
Methyl 4-isocyanatobenzoate CAS 23138-53-6		



API – Intermediates CAS	Formula	API
4-Methylpiperazine-1-carbonyl chloride hydrochloride CAS 55112-42-0		Zopiclone Eszopiclone
5-Methyl-2-pyrazinecarboxylic acid CAS 5521-55-1		Acipimox Glipizide
4-Nitrophenyl chloroformate CAS 7693-46-1		Dantrolene sodium Darunavir Efavirenz Elinogrel Perindopril Pibrozelesin Racecadotril Ritonavir Solifenacin Temozolomide



API – Intermediates CAS	Formula	API
2-Nitrophenyl- hydrazine CAS 3034-19-3		PNTI AH-10407
2-Nitrophenyl isocyanate CAS 3320-86-3		Itasetron BIMU-1 BIMU-8 SDZ-NKT-343 290462
4-Nitrophenyl isocyanate CAS 100-28-7		Gemcitabine hydrochloride YM17E PD-176252 TAK-456 KN 1022
7-Trifluoromethyl- isatin CAS 391-12-8		Mefloquine PSI-421



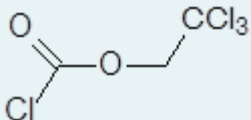


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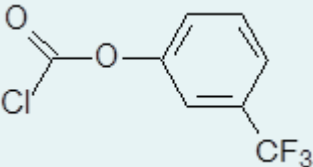
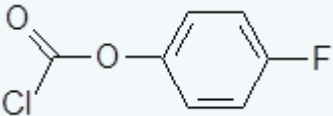
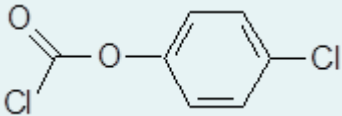
VUOS

Chloroformates - Intermediates

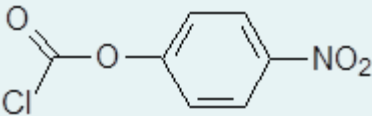
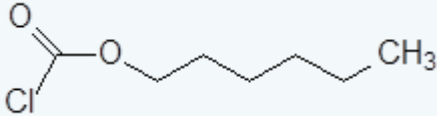
Chloroformates

API – Intermediates CAS	Formula	API
2,2,2-Trichloroethyl chloroformate CAS 17341-93-4		Cabergoline Pergolide mesylate Teicoplanin Artemisinin Omacetaxine mepesuccinate Paclitaxel Quinocarcin citrate Trabectedin Docetaxel Duloxetine hydrochloride Baogongteng A Mycalamide A Osutidine Epibatidine Epothilone A Patupilone Ezetimibe Brasofensine sulfate Afegostat tartrate Rosuvastatin calcium

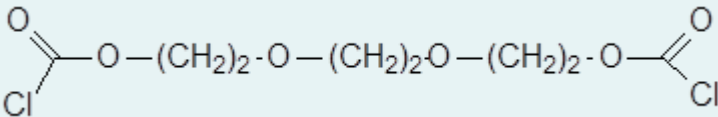


API – Intermediates CAS	Formula	API
3-Trifluoromethyl- phenyl chloroformate CAS 95668-29-4		
4-Fluorophenyl chloroformate CAS 38377-38-7		365513 280778
4-Chlorophenyl chloroformate CAS 7693-45-0		Itameline NSC-693569 RXDX-105



API – Intermediates CAS	Formula	API
4-Nitrophenyl chloroformate CAS 7693-46-1		Dantrolene sodium Darunavir Efavirenz Elinogrel Perindopril Pibrozelesin Racecadotril Ritonavir Solifenacin Temozolomide
n-Hexyl chloroformate CAS 6092-54-2		Dabigatran etexilate mesilate



API – Intermediates CAS	Formula
Triethyleneglycol bischloroformate CAS 17134-17-7	 <chem>ClC(=O)OCCOCCOCCOCC(=O)Cl</chem>



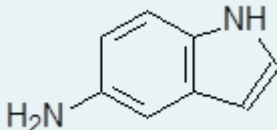
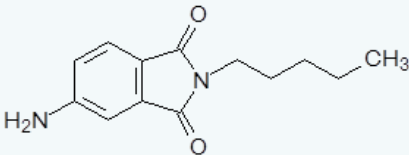
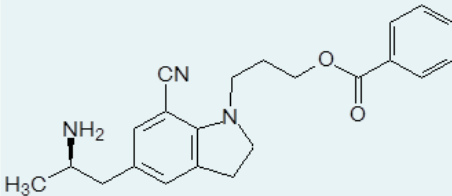


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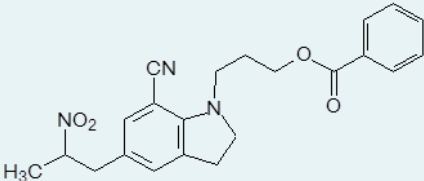
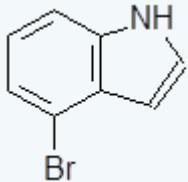
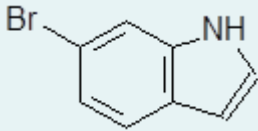
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Indoles - Intermediates

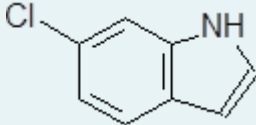
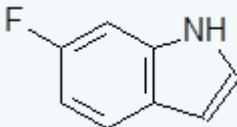
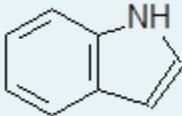
Indoles

API – Intermediates CAS	Formula	API
5-Aminoindole CAS 5192-03-0		LY-334370
5-Amino-2-pentylisoindole-1,3-dione CAS unknown		
5-[(2R)-2-Aminopropyl]-1-[3-(benzyloxy)propyl]-2,3-dihydro-1H-indole-7-carbonitrile CAS 239463-85-5		Silodosin



API – Intermediates CAS	Formula	API
1-(3-Benzoyloxy-propyl)-7-cyano-5-(2-nitropropyl)indoline CAS 350797-56-7		Silodosin
4-Bromoindole CAS 52488-36-5		GSK-2269557
6-Bromoindole CAS 52415-29-9		273094 UK-350926 AE-66034



API – Intermediates CAS	Formula	API
6-Chloroindole CAS 17422-33-2		632883
6-Fluoroindole CAS 399-51-9		Lu-AE-58054 Birinapant
Indole CAS 120-72-9		Bucindolol hydrochloride Perindopril Ondansetron hydrochloride Sumatriptan succinate Masilukast Zolmitriptan Silodosin Rizatriptan benzoate Vilazodone hydrochloride Varespladib



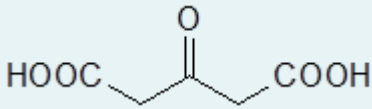
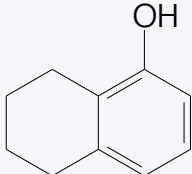
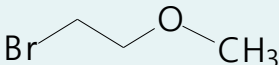


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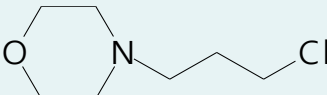
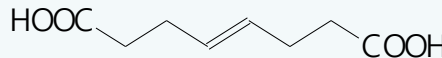
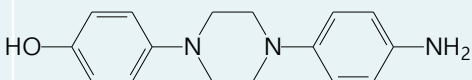
VUOS

Intermediates

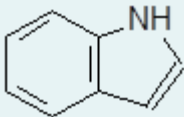
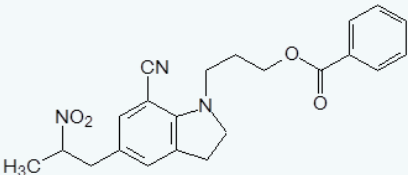
Intermediates

API – Intermediates CAS	Formula	API
1,3-Acetone dicarboxylic acid CAS 542-05-2		Atropine Sulfate
5,6,7,8-Tetrahydro-1-naphthol CAS 529-35-1		Benazepril Hydrochloride
2-Bromoethyl methyl ether CAS 6482-24-2		Gefitinib

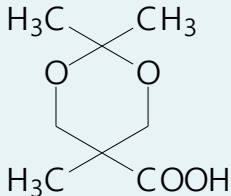
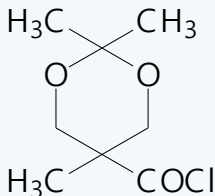
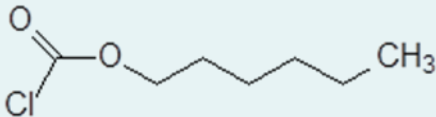


API – Intermediates CAS	Formula	API
4-(3-Chloropropyl)morpholine CAS 7357-67-7		Gefitinib
(E)-4-Octenedioic acid CAS 124791-62-4		Mivacurium Chloride
1-(4-Aminophenyl)-4-(4-hydroxyphenyl)piperazine CAS 74853-08-0		Ketoconazole

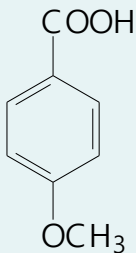
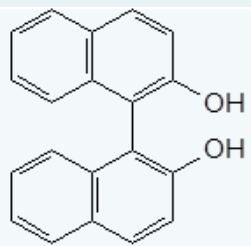
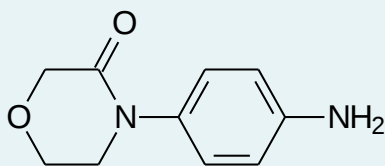


API – Intermediates CAS	Formula	API
Indole CAS 120-72-9		Silodosin Ondansetron hydrochloride Rizatriptan benzoate Zolmitriptan
1-(3-Benzoyloxypropyl)-7-cyano-5-(2-nitropropyl)-indoline CAS 350797-56-7		Silodosin
Allyl methyl ether CAS 627-40-7		Sirolimus

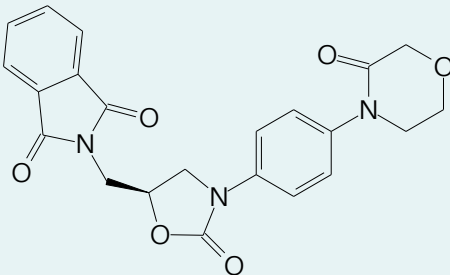
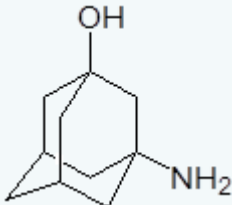
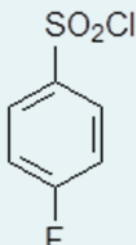


API – Intermediates CAS	Formula	API
2,2,5-Trimethyl-1,3-dioxane-5-carboxylic acid CAS 16837-14-2		Temsirolimus
2,2,5-Trimethyl-1,3-dioxane-5-carbonyl chloride CAS 331810-11-8		Temsirolimus
n-Hexyl chloroformate CAS 6092-54-2		Dabigatran etexilate

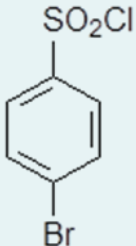


API – Intermediates CAS	Formula	API
p-Methoxybenzoic acid CAS 100-09-4		Dronedarone
(+/-)-1,1'-Bi -2-naphthol CAS 602-09-5		Esomeprazole Magnesium Esomeprazole Sodium
4-(4-Aminophenyl)-morpholin-3-one CAS 438056-69-0		Rivaroxaban



API – Intermediates CAS	Formula	API
2-[[[(5S)-2-oxo-3-[4-(3-oxo-4-morpholinyl)phenyl]-5-oxazolidinyl]methyl]-1H-isoin CAS 446292-08-6		Rivaroxaban
3-Aminoadamantan-1-ol CAS 702-82-9		Vildagliptin
4-Fluorobenzene sulfonyl chloride CAS 349-88-2		Linezolid



API – Intermediates CAS	Formula	API
4-Bromobenzene sulfonyl chloride CAS 98-58-8	 <chem>ClS(=O)(=O)c1ccc(Br)cc1</chem>	Linezolid



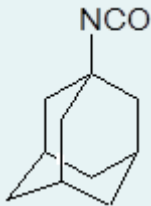
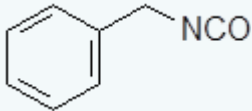
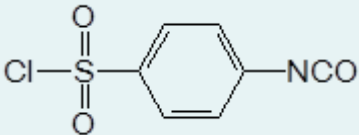


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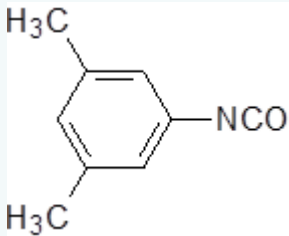
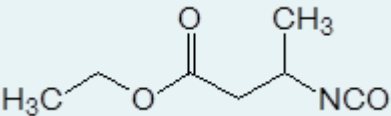
VUOS

Isocyanates - Intermediates

Isocyanates

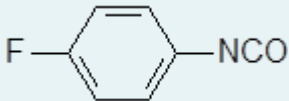
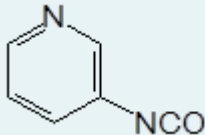
API – Intermediates CAS	Formula	API
1-Adamantyl isocyanate CAS 4411-25-0		365824 WX-FX4 AUDA-BE 436614 465420
Benzylisocyanate CAS 3173-56-6		
4-(Chlorosulfonyl)-phenyl isocyanate CAS 6752-38-1		



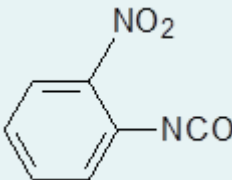
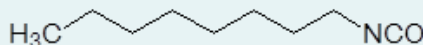
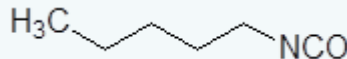
API – Intermediates CAS	Formula	API
4-Cyanophenyl isocyanate CAS 40465-45-0		Glasdegib
3,5-Dimethylphenyl isocyanate CAS 54132-75-1		
Ethyl 3- Isocyanatobutanoate CAS 89775-65-5		



Isocyanates

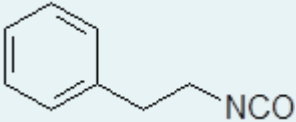
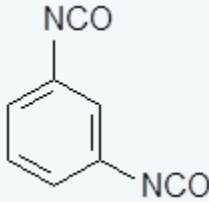
API – Intermediates CAS	Formula	API
4-Fluorophenyl isocyanate CAS 1195-45-5		GW-9820
n-Hexyl isocyanate CAS 2525-62-4		Carmofur
3-Isocyanatopyridine CAS 15268-31-2		221789 PF-3845 S-32006 SB-221284



API – Intermediates CAS	Formula	API
2-Nitrophenyl isocyanate CAS 3320-86-3		Itasetron BIMU-1 BIMU-8 NKT-343
4-Nitrophenyl isocyanate CAS 100-28-7		YM17E PD-176252 TAK-456 KN 1022
Octyl isocyanate CAS 3158-26-7		307676
n-Pentyl isocyanate CAS 3954-13-0		BM-567 BM-613



Isocyanates

API – Intermediates CAS	Formula	API
Phenylethyl isocyanate CAS 1943-82-4		
1,3-Phenylene diisocyanate CAS 123-61-5		



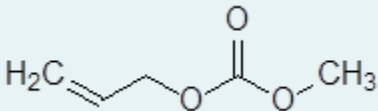
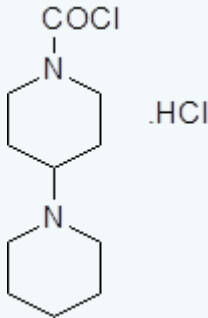


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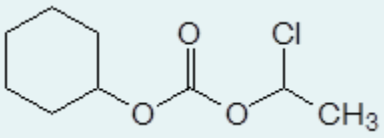
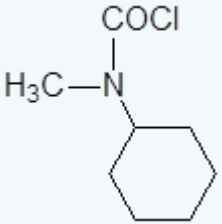
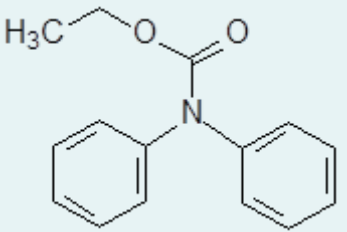
VUOS

Phosgenation products - Intermediates

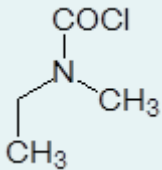
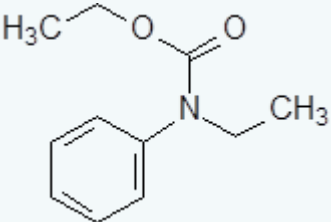
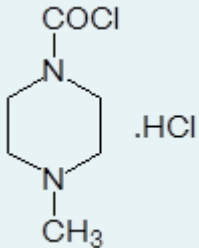
Phosgenation products

API – Intermediates CAS	Formula	API
Allyl methyl carbonate CAS 35466-83-2		Indometacine Pravadoline LY-418426 ABD-0056
1-Chlorocarbonyl-4-piperidinopiperidine hydrochloride CAS 143254-82-4		Irinotecan hydrochloride Simmitecan hydrochloride



API – Intermediates CAS	Formula	API
1-Chloroethyl cyclohexyl carbonate CAS 99464-83-2		
N-Cyclohexyl-N-ethylcarbamoyl chloride CAS 62899-75-6		
N,N-Diphenylurethane CAS 603-52-1		



API – Intermediates CAS	Formula	API
N-Ethyl-N-methylcarbamoyl chloride CAS 42252-34-6		Rivastigmine tartrate Ladostigil tartrate
N-Ethyl-N-phenylurethane CAS 1013-75-8		
4-Methylpiperazine-1-carbonyl chloride hydrochloride CAS 55112-42-0		Eszopiclone





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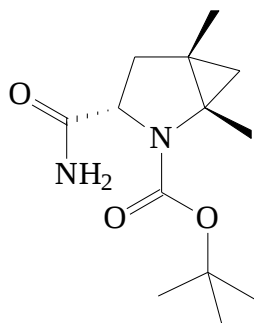
Intermediates for Generics

Saxagliptin intermediates

BOC- methanoprolinamide

(1S,3S,5S)-tert-butyl 3-carbamoyl-2-azabicyclo[3.1.0]hexane-2-carboxylate

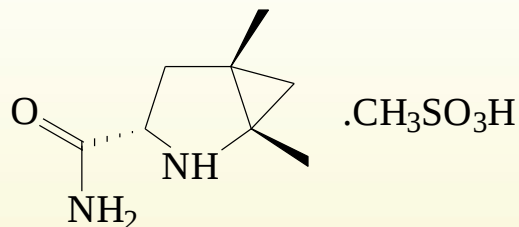
CAS 361440-67-7



Methanoprolinamide mesylate

(1S,3S,5S)-,2-Azabicyclo[3.1.0]hexane-3-carboxamide monomethanesulfonate

CAS 709031-45-8

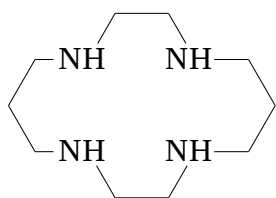


Plerixafor intermediates

Cyclam

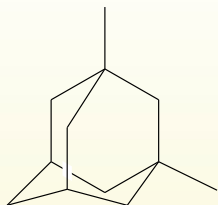
1,4,8,11-Tetraazacyclotetradecane

CAS 295-37-4

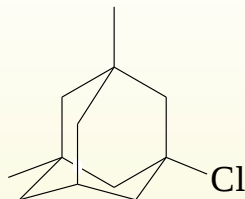


Memantine

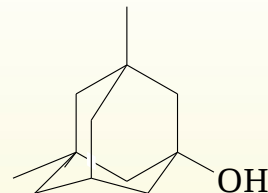
Dimethyladamantane
CAS 702-79-4



1-Chloro-3,5-dimethyladamantane
CAS 707-36-8



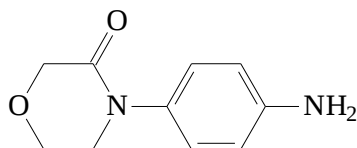
3,5-Dimethyl-1-adamantanol
CAS 707-37-9



Rivaroxaban

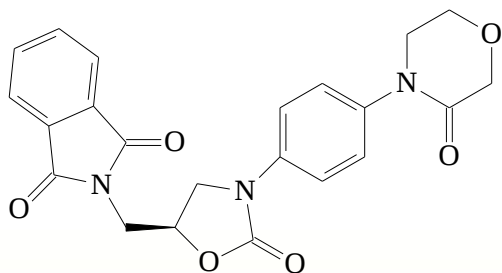
4-(4-Aminophenyl)morpholin-3-one

CAS 446292-08-6



2-[[[(5S)-2-oxo-3-[4-(3-oxo-4-morpholinyl)phenyl]-5-oxazolidinyl]methyl]-1H-isoindole-1,3(2H)-dione

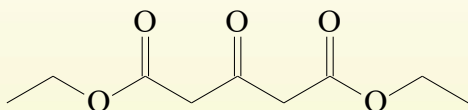
CAS 446292-08-6



Distrontium Ranelate (Ranelic acid distrontium salt)

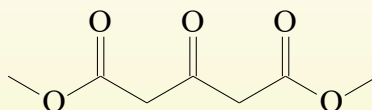
Diethyl acetone-1,3-dicarboxylate

CAS 105-50-0



Dimethyl acetone-1,3-dicarboxylate

CAS 1830-54-2

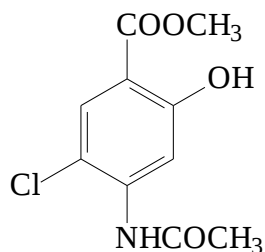


Intermediates in development

Prucaloprid

Methyl 4-(acetylamino)-5-chloro-2-hydroxybenzoate

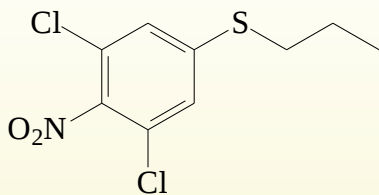
CAS 24190-77-0



Ticagrelor

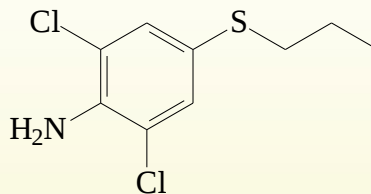
4,6-Dichloro-5-nitro-2-propylthiopyrimidine

CAS 145783-14-8



4,6-Dichloro-2-(propylthio)pyrimidin-5-amine

CAS 145783-15-9





Výzkumný ústav organických syntéz a.s.
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www.vuos.cz

