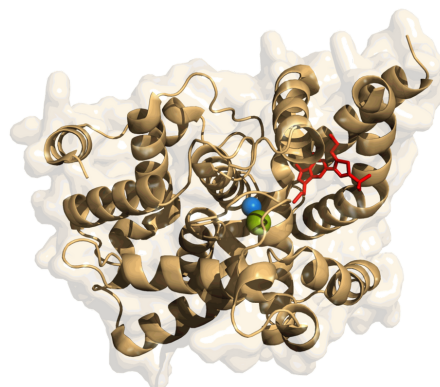




PDE INHIBITORS



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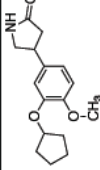
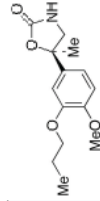
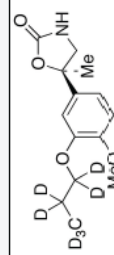
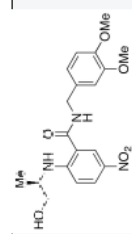
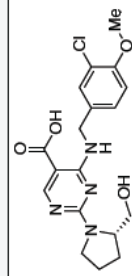
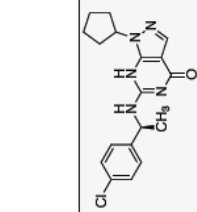
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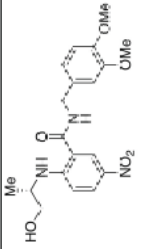
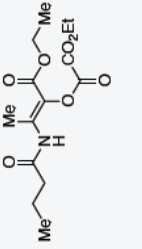
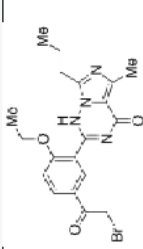
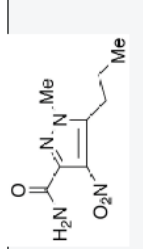
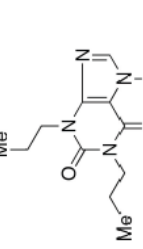
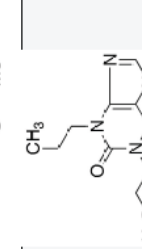
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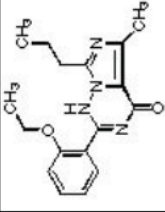
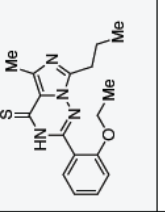
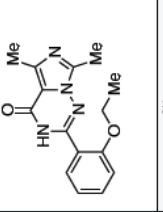
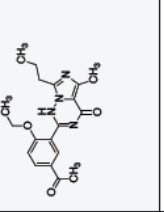
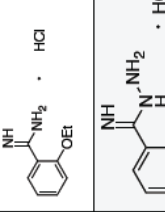
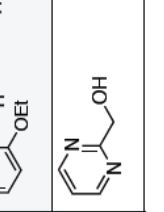
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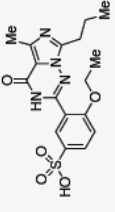
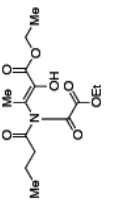
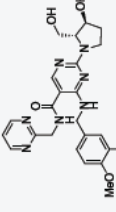
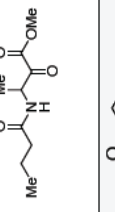
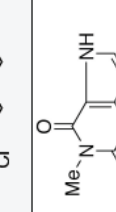
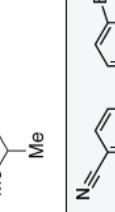
Product	CAS No	CAT No	Target	
(±)-Rolipram	61413-54-5	R640040	PDE 4	
(R)-Mesopram	189940-24-7	M225670	PDE 4	
(R)-Mesopram-d7 Labeled	1795787-13-1	M225672	PDE 4	
(R)-Xanthoantrafil	247568-68-9	X500005	PDE 5	
(S)-4-((3-Chloro-4-methoxybenzyl)amino)-2-((2-(hydroxymethyl)pyrrolidin-1-yl)pyrimidine-5-carboxylic Acid	330785-84-7	C371450		
(S)-C33	2066488-39-7	C999010	PDE9 inhibitor	

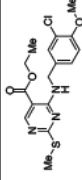
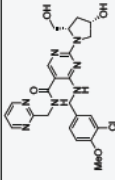
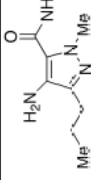
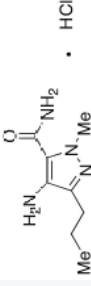
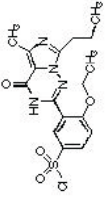
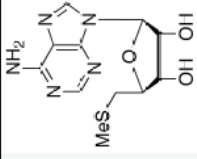
(S)-Xanthoanthrafil	247567-47-1	X500010	Intermediate	
1-[1-(Ethoxycarbonyl)-2-[(1-oxobutyl)amino]-1-propen-1-yl] Ethanedioic Acid 2-Ethyl Ester	68282-25-7	E678375	Intermediate	
1-Decarboxyl-1-(bromoacetyl) Norneovardenafil	358388-58-6	D220200	Intermediate	
1-Methyl-4-nitro-5-propyl-1H-pyrazole-3-carboxamide	247583-72-8	M320330	Intermediate	
1,3-Dipropyl-7-methylxanthine	31542-63-9	D492400	Non-selective	
1,3-Dipropylxanthine	31542-62-8	D492450	Non-selective	

PDE Inhibitors

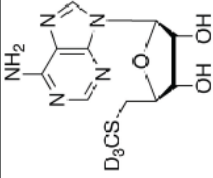
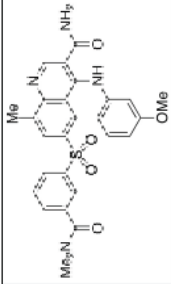
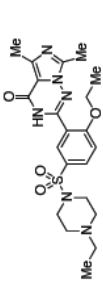
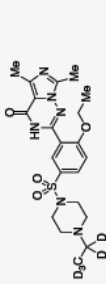
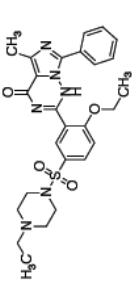
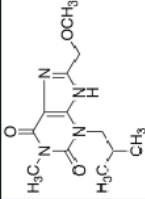
2-(2-Ethoxyphenyl)-5-methyl-7-propyl-3H-imidazo[5,1-f][1,2,4]triazin-4-one	224789-21-3	E892745	Intermediate	
2-(2-Ethoxyphenyl)-5-methyl-7-propyl-imidazo[5,1-f][1,2,4]triazine-4(1H)-thione	912576-44-4	E892760	Intermediate	
2-(2-Ethoxyphenyl)-5,7-dimethylimidazo[5,1-f][1,2,4]triazin-4(1H)-one	224789-20-2	E679585	Intermediate	
2-(5-Acetyl-2-ethoxyphenyl)-5-methyl-7-propyl-imidazo[5,1-f][1,2,4]triazin-4(1H)-one	358390-43-9	A188945	Intermediate	
2-Ethoxybenzamidinium Hydrochloride	18637-00-8	E890560	Impurity	
2-Ethoxybenzenecarboximidic Acid Hydrazide Hydrochloride		E890650	Impurity	
2-Pyrimidinemethanol	42839-09-8	P997280		

PDE Inhibitors

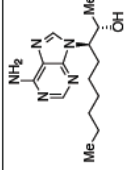
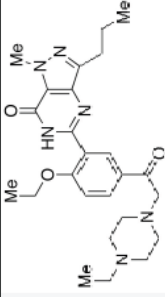
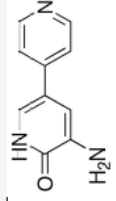
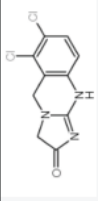
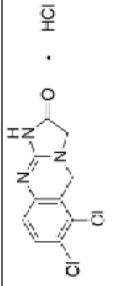
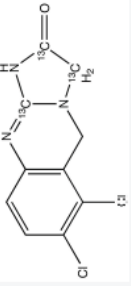
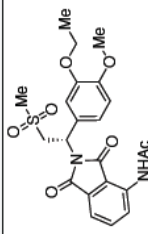
3-((1,4-Dihydro-5-methyl-4-oxo-7-propylimidazo[5,1-f][1,2,4]triazin-2-yl)-4-ethoxybenzenesulfonic Acid	437717-43-6	D453410		
3-(N-(2-Ethoxy-2-oxoacetyl)butyramido)-2-hydroxybut-2-enoic Acid Ethyl Ester		E678385	Intermediate	
3-(S)-Hydroxypyrrrolidinylavanafil	330785-58-5	H952840	Metabolite	
3-Butyramido-2-oxobutanoic Acid Methyl Ester		B810005	Intermediate	
3-Chloro-4-methoxybenzylamine	115514-77-7	C367790		
3-Isobutyl-1-methylxanthine	28822-58-4	I785000	Non-selective	
4-((1-Hydroxy-1,3-dihydrobenzo[c][1,2]oxaborol-5-yl)oxy)benzonitrile	906673-24-3	H947928	PDE 4	

4-(3-Chloro-4-methoxybenzylamino)-5-ethoxycarbonyl-2-methylthiopyrimidine	330785-81-4	C367865	Intermediate	
4-(S)-Hydroxypyrrrolidinylavanafil	330785-54-1	H952845	Metabolite	
4-Amino-1-methyl-3-propyl-1H-pyrazole-5-carboxamide	139756-02-8	A617415	Impurity	
4-Amino-1-methyl-3-propyl-1H-pyrazole-5-carboxamide Hydrochloride	247584-10-7	A617420	Impurity	
4-Ethoxy-3-(5-methyl-4-oxo-7-propyl-3,4-dihydro-imidazo[5,1-f][1,2,4]-triazin-2-yl)benzene-sulfonyl Chloride	224789-26-8	E892500	Intermediate	
5'-Deoxy-5'-(methylthio)adenosine	2457-80-9	D242600	Substrate	

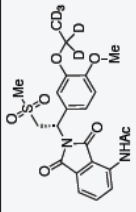
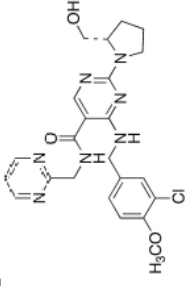
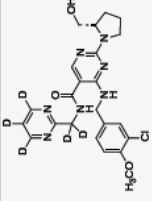
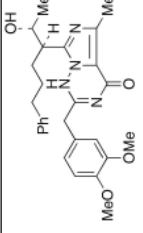
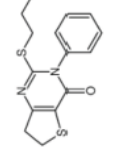
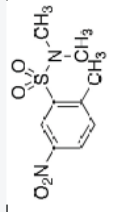
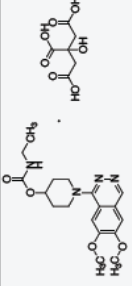
PDE Inhibitors

5'-Deoxy-5'-(methylthio)adenosine-d3		D242602	Substrate	
6-[[3-[(Dimethylamino)carbonyl]phenyl]sulfonyl]-4-[(3-methoxyphenyl)amino]-8-methyl-3-quinolinecarboxamide	801312-28-7	D461145	PDE Inhibitor	
7-Despropyl 7-Methyl Vardenafil		D297350	Impurity	
7-Despropyl 7-Methyl Vardenafil-d5 Labeled		D297352	Impurity	
7-Despropyl 7-Phenyl Vardenafil	1255919-01-7	D416843	Impurity	
8-Methoxymethyl-1-methyl-3-(2-methylpropyl)	78033-08-6	M264500	PDE1	

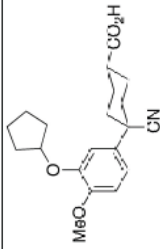
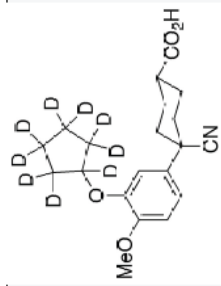
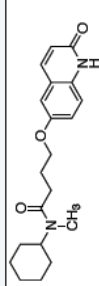
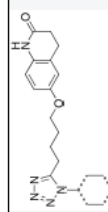
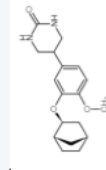
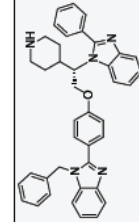
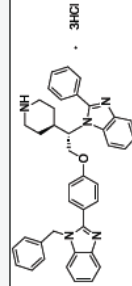
PDE Inhibitors

9-erythro-(2-Hydroxyl-3-nonyl)adenine	51350-19-7	H825590	Intermediate	
Acetildenafil	831217-01-7	A161600	PDE 5	
Amrinone	60719-84-8	A635000	PDE 3	
Anagrelide	68475-42-3	A637303	PDE 3	
Anagrelide Hydrochloride	58579-51-4	A637300	PDE 3	
Anagrelide-13C3 Labeled	1219531-58-4	A637302	PDE 3	
Apremilast	608141-41-9	A729700	PDE 4	

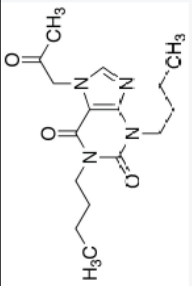
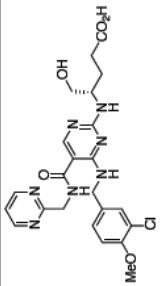
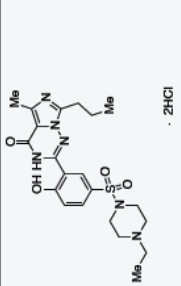
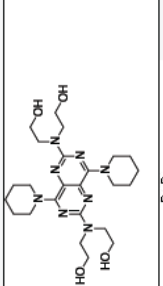
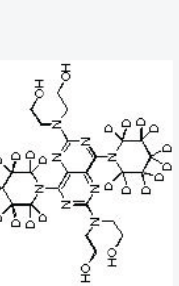
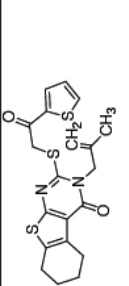
PDE Inhibitors

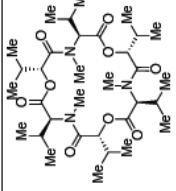
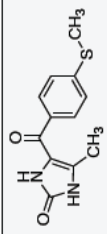
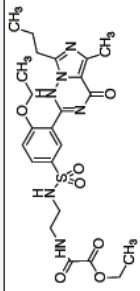
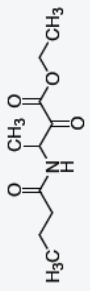
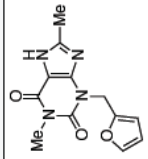
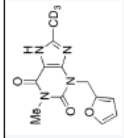
Apremilast-d5 Labeled	1258597-47-5	A729702	PDE 4	
Avanafil	330784-47-9	A794670	PDE 5	
Avanafil-d5 Labeled		A794673	PDE 5	
Bay 60-7550	439083-90-6	B119000	PDE 2	
BC 11-38	686770-80-9	B129345	PDE 11	
BRL-50481	433695-36-4	B677750	PDE 7	
Carbazeran Citrate	153473-94-0	C175793	Non-specific	

PDE Inhibitors

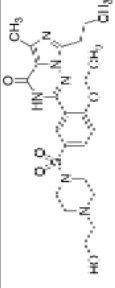
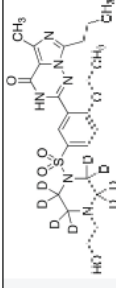
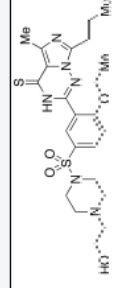
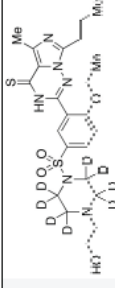
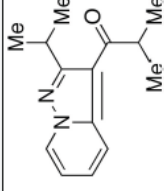
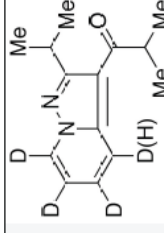
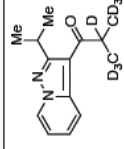
Cilomilast	153259-65-5	C441430	PDE 4	
Cilomilast-d9 Labeled	1794779-92-2	C441432	PDE 4	
Cilostamide (OPC 3689)	68550-75-4	C441505	PDE 3	
Cilostazol	73963-72-1	C441500	PDE 3A	
CP 80633	135637-46-6	C781468	PDE 4	
Deltarasin	1440898-61-2	D231315	PDE-KRAS inhibitor	
Deltarasin	1440898-82-7	D231318	PDEδ-KRAS interaction inhibitor	

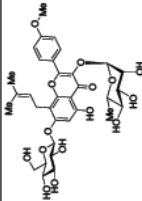
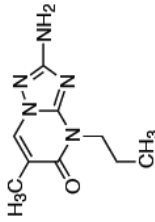
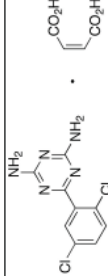
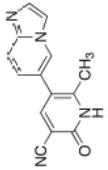
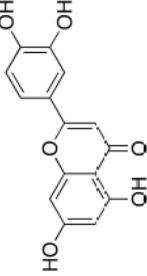
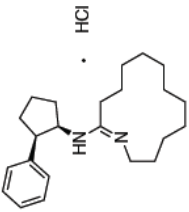
PDE Inhibitors

Denbufylline	57076-71-8	D231400	PDE 4	
Des(2-hydroxymethylpyrrolidino) 2-[(2-Hydroxymethyl)-3-carboxy]propylamino]avanafil		D290440	Metabolite	
Desethyl Vardenafil Dihydrochloride		D288190	Impurity	
Dipyridamole	58-32-2	D492625	PDE 5	
Dipyridamole-d20 (Major) Labeled	1189983-52-5	D492627	PDE 5	
Eggmanone	505068-32-6	E440060	PDE 4	

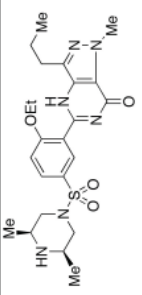
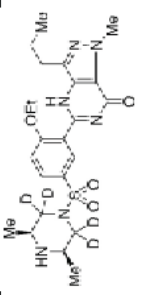
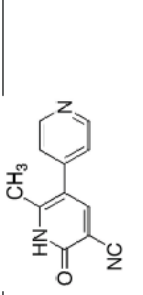
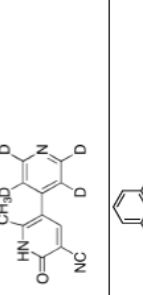
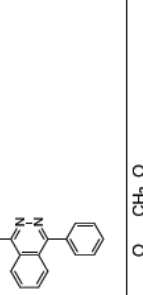
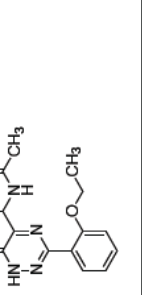
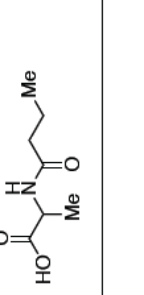
Enniatin B	917-13-5	E556005	Non Specific	
Enoximone	77671-31-9	E557610	PDE3	
Ethyl 2-((2-(4-Ethoxy-3-(5-methyl-4-oxo-7-propyl-1,4-dihydroimidazo[5,1-f][1,2,4]triazin-2-yl)phenylsulfonamido)ethyl)amino)-2-oxoacetate		E918068	Intermediate	
Ethyl 3-(Butanoylamino)-2-oxobutanoate	68282-26-8	E900565	Reactant	
Furafylline	80288-49-9	F864070	Non-selective	
Furafylline-d3 Labeled	149981-47-5	F864072	Non-selective	

PDE Inhibitors

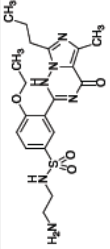
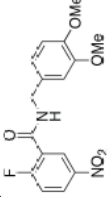
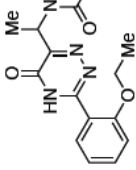
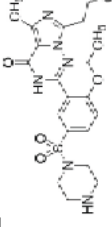
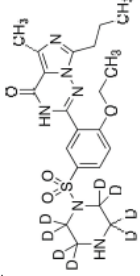
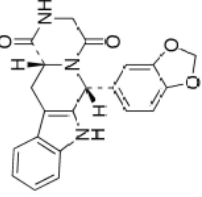
Hydroxy Vardenafil	224785-98-2	H995300	PDE 5	
Hydroxy Vardenafil-d8 Labeled	1329612-34-1	H995302	PDE 5	
Hydroxythiovardenafl	912576-30-8	H963400	PDE 5	
Hydroxythiovardenafl-d8 Labeled		H963402	PDE 5	
Ibudilast	50847-11-5	I125000	Non-selective	
Ibudilast-d3 (Major) Labeled	102064-45-9	I125002	Non-selective	
Ibudilast-d7 Labeled		I125003	Non-selective	

Icariin	489-32-7	I163680	PDE 5	
ICI 63197	27277-00-5	I163888	PDE 4	
Irsogladine Maleate	84504-69-8	I777000	PDE 4	
Loprinone Hydrochloride	119615-63-3	L469530	PDE3	
Luteolin	491-70-3	L475000	PDE 4	
MDL 12330A Hydrochloride	40297-09-4	M199510	Non-selective	

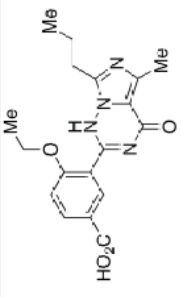
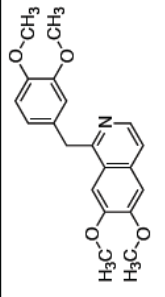
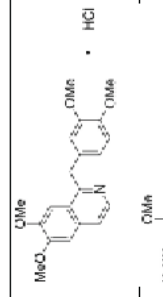
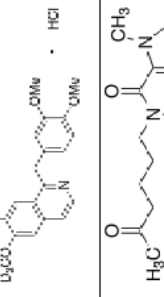
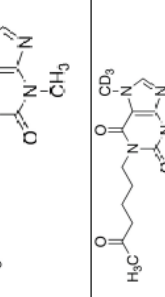
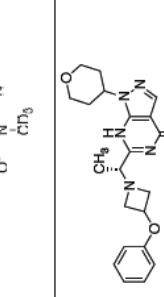
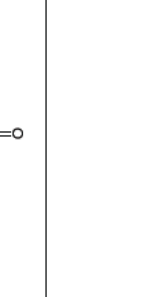
PDE Inhibitors

Methisosildenafil	496835-35-9	M225935	PDE 5	
Methisosildenafil-d4 Labeled	1246819-66-8	M225937	PDE 5	
Milrinone	78415-72-2	M344680	PDE3	
Milrinone-d4 Labeled		M344682	PDE 3	
MY-5445	78351-75-4	M831350	PDE5	
N-(1-(3-(2-Ethoxyphenyl)-6-oxo-1,6-dihydro-1,2,4-triazin-5-yl)ethyl)acetamide		E679575	Impurity	
N-(1-Oxobutyl)-DL-alanine	59875-04-6	O848000		

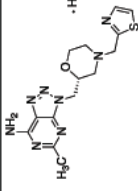
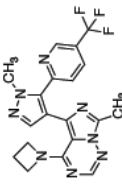
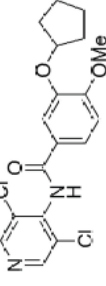
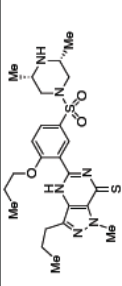
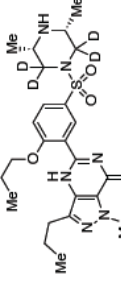
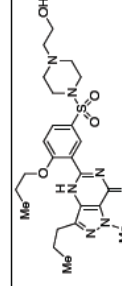
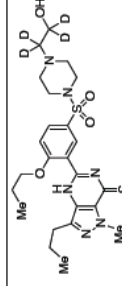
PDE Inhibitors

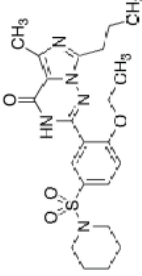
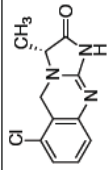
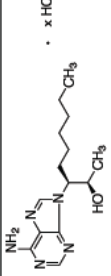
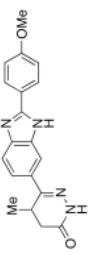
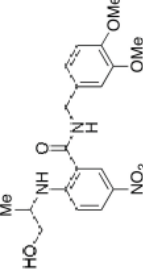
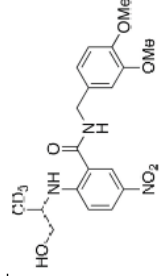
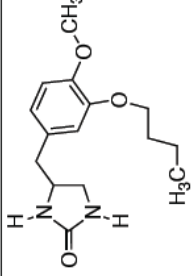
N-(2-Aminoethyl)-3-(1,4-dihydro-5-methyl-4-oxo-7-propylimidazo[5,1-f][1,2,4]triazin-2-yl)-4-ethoxybenzenesulfonamide	448184-52-9	A622708	Intermediate	
N-(3,4-Dimethoxybenzyl)-2-fluoro-5-nitrobenzamide	247568-67-8	D470760	Intermediate	
N-[1-[3-(2-Ethoxyphenyl)-2,5-dihydro-5-oxo-1,2,4-triazin-6-yl]ethyl]acetamide	1417529-59-9	E679580	Intermediate	
N-Desethyl Vardenafil	448184-46-1	D289950	Metabolite	
N-Desethyl Vardenafil-d8 Labeled	1184985-26-9	D289952		
N-Desmethyl Tadalafil	171596-36-4	D293800	PDE 5	

PDE Inhibitors

Norneo Vardenafil	358390-39-3	N824500	PDE 5	
Papaverine	58-74-2	P190503	Non-selective	
Papaverine Hydrochloride	61-25-6	P190500	Non-selective	
Papaverine-d3 Hydrochloride	113718-66-4	P190502	Non-selective	
Pentoxifylline-d6 Labeled	6493-05-6	P276502	Non-selective	
Pentoxifylline-d6 Labeled	1185878-98-1	P276502	Non-selective	
PF 04449613	1236858-52-8	P294110	PDE9	

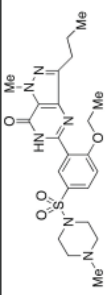
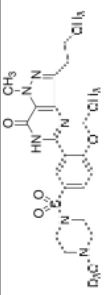
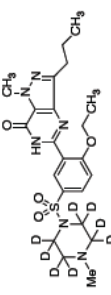
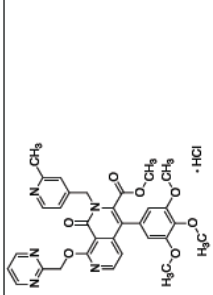
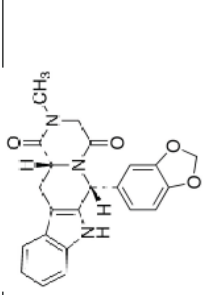
PDE Inhibitors

PF 04671536 Hydrochloride	1305116-67-9	P294038	PDE 8B/8A	
PF 05180999	1394033-54-5	P294133	PDE 2A	
Piclamilast	144035-83-6	P436600	PDE 4	
Propoxyphenyl Thioaildenafil	856190-49-3	P831640	PDE 5	
Propoxyphenyl Thioaildenafil-d4 Labeled		P831642		
Propoxyphenyl-thiohydroxyhomosildenafil	479073-90-0	P831630		
Propoxyphenyl-thiohydroxyhomosildenafil-d4 Labeled		P831632		

Pseudo Vardenafil	224788-34-5	P839615	
Quazinone (Ro 13-6438)	70018-51-8	Q509453	PDE 3 
rac erythro-9-(2-Hydroxy-3-nonyl)adenine Hydrochloride Salt	58337-38-5	H825550	 · x HCl
rac Pimobendan	74150-27-9	P447500	PDE 1 & 2 
rac Xanthoanthrafil	1020251-53-9	X500000	PDE 5 
rac Xanthoanthrafil-d3 Labeled	1216710-83-6	X500002	PDE 5 
Ro 20-1724	29925-17-5	R700903	PDE 4 

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PDE Inhibitors

Sildenafil	139755-83-2	S435001	PDE 5	
Sildenafil-d3 Labeled	1126745-90-1	S435002	PDE 5	
Sildenafil-d8 Labeled	951385-68-5	S435003	PDE 5	
T 0156 Hydrochloride	324572-93-2	T430008	PDE 5	
Tadalafil	171596-29-5	T004500	PDE 5	
Tadalafil-13C2,d3 Labeled		T004502	PDE 5	