List of Drugs in Development for Neurodegenerative Diseases

Update March 2005

Lisa Valentine Myoung-Ok Kwon Paul Herrling

Corporate Research, Novartis International AG, Basel, Switzerland

Neurodegenerative diseases are an increasingly important issue in our society. There are, however, still many obstacles on the way to finding methods for cure. This table is intended to give an overview over neurodegenerative drugs that are currently in research and development in order to give the reader an idea about the complexity of drug discovery in this field. This table is intended as a pointer to drugs and it is recommended to obtain additional information from the internet to check for newest developments.

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
1	Discovery	University of South Florida	(-)-epigallocatechin-3-gallate	Neurodegenerative disease	IL synthesis modulator; Protein kinase C modulator; TACE modulator	Cell cycle inhibitor
2	Discovery	Fujimoto Seiyaku Co Ltd	(R)-(-)-BPAP	Neurodegenerative disease	Neurotransmitter modulator	Neuroprotectant
3	**Phase 3 Clinical	Loma Linda University Medical Center; Myriad Genetics Inc	(R)-flurbiprofen	Alzheimers disease; Prostate tumor; Colon tumor	Cyclooxygenase 2 modulator; Beta amyloid synthesis inhibitor; Gamma-secretase modulator	Anticancer; Neuroprotectant
4	Phase 1 Clinical	GlaxoSmithKline plc	644784	Pain; Schizophrenia	Cyclooxygenase 2 inhibitor	Antipsychotic; Analgesic
5	Phase 1 Clinical	GlaxoSmithKline plc	742457	Alzheimers disease; Schizophrenia	5-HT 6 antagonist	Antipsychotic
6	Phase 1 Clinical	GlaxoSmithKline plc	773812	Schizophrenia	5-HT antagonist; Dopamine modulator	Antipsychotic
7	Phase 2 Clinical	Aventis Pharmaceuticals Inc	100907	Schizoaffective disorder; Anxiety disorder; Psychosis; Schizophrenia; Sleep disorder; Major depressive disorder	5-HT 2a antagonist	Antipsychotic

* Changes made from last issue; ** newly added drug.

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
8	Discontinued	CarlbioTech Ltd	106362-32-7	HIV associated dementia; Neurodegenerative disease	peptide -T	Nootropic agent
9	Discontinued	AstraZeneca plc	128298-28-2; Remacemide	Chorea Huntington; Cerebrovascular ischemia	NMDA receptor antagonist	Neuroprotectant
10	Launched	Cardinal Health Inc	14611-51-9; Selegiline; Zydys	Parkinsons disease; Cerebrovascular ischemia	MAO B inhibitor	DA enhancer
11	**Phase 1 Clinical	University of California	18F-FDDNP	Alzheimers disease	Beta amyloid modulator; PET contrast agent	Radiodiagnostic
12	**Phase 3 Clinical	Neurochem Inc	3APS	Alzheimers disease; Cerebrovascular disease; Cerebrovascular ischemia	Amyloid protein deposition inhibitor	Neuroprotectant
13	**Discovery	Eli Lilly & Co	3,5-DHPG	Neurological disease	Metabotropic glutamate receptor 1 agonist	Neuroprotectant
14	Discovery	National Institutes of Health	4-Cl-kynurenine	Neurodegenerative disease	NMDA receptor antagonist	Neuroprotectant
15	Discovery	4SC AG	4SC, BK channel blockers	Incontinence; Asthma; Central nervous system disease	Ion channel modulator	Neuroprotectant; Anti-inflammatory
16	Discovery	Sigma-Tau Ind Farm Riunite SpA	5-HT2/dopamine D3 antagonists	Psychosis; Schizophrenia	Dopamine D3 antagonist; 5-HT 2 antagonist	Antipsychotic
17	Discovery	Merck Sharp & Dohme Ltd	5-HT 2a antagonists	Schizophrenia	5-HT 2a antagonist	Antipsychotic
18	Discovery	NPS Allelix Corp	5-HT6 antagonists	Psychiatric disorder; Schizophrenia	5-HT 6 antagonist	Antipsychotic
19	Discovery	GlaxoSmithKline plc	5-HT 6 receptor antagonists	Schizophrenia; Cognitive disorder; Major depressive disorder	5-HT 6 antagonist	
20	Clinical	Novartis AG	7B12	Spinal cord injury	NOGO antibody	Inhibition of exonal growth inhibitor
21	Phase 1 Clinical	University of Pennsylvania ; GE Healthcare	99mTc-Trodat-1	Parkinsons disease; Brain disease	SPECT contrast agent; Dopamine modulator	
22	Research Tool	Abbott Laboratories	A-134974	Epilepsy; Neurodegenerative disease	Adenosine kinase inhibitor	Anticonvulsant agent
23	Discovery	Abbott Laboratories	A-366833; A-35380	Alzheimers disease; Neurodegenerative disease; Nicotine use disorder; Anxiety disorder; Pain; Schizophrenia	Nicotinic ACh agonist; Neuronal nAChR ligand	Nootropic agent; Anxiolytic; Antipsychotic; Analgesic
24	Discontinued	Abbott Laboratories	A-72055	Neurodegenerative disease	Muscarinic ACh agonist	Nootropic agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
25	**No Development Reported	Abbott Laboratories	A-74187	Thromboembolism; Cerebrovascular ischemia	Fibrinolysis stimulator; Pro-urokinase; Urokinase plasminogen activator inhibitor	Neuroprotectant
26	**Phase 1 Clinical	Elan Corp plc	AAB-001	Alzheimers disease	Amyloid protein deposition inhibitor	Immunomodulator
27	Phase 1 Clinical	Ferrer Internacional SA	abaperidone	Schizophrenia	Dopamine D3 antagonist; Dopamine D2 antagonist; Antipsychotic; 5-HT 2a antagonist	Antipsychotic
28	**Phase 2 Clinical	Centocor Inc	abciximab	Thromboembolism; Restenosis; Angina; Ischemic heart disease; Cardiovascular disease; Cerebrovascular ischemia	Integrin alpha-V/beta-3 antagonist; Platelet aggregation inhibitor; GP IIb/IIIa antagonist	Vasoprotectant
29	Phase 2 Clinical	Abbott Laboratories	ABT-089	Alzheimers disease; Schizophrenia; Attention deficit hyperactivity disorder	Nicotinic ACh modulator	Antipsychotic; Cognition enhancer
30	Discontinued	American Biogenetic Sciences Inc	ABS-205	Neurodegenerative disease; Cognitive disorder	Cell adhesion molecule modulator; Neuronal growth factor	Neuroprotectant
31	Discovery	ACADIA Pharmaceuticals Inc	AC-184897	Neurodegenerative disease; Carcinoma	Nuclear receptor agonists	Anticancer; Neuroprotectant
32	**Phase 2 Clinical	Dainippon Pharmaceutical Co Ltd	AC-3933	Cognitive disorder; Dementia	BDZ inverse agonist GABA modulator	Nootropic agent
33	Discovery	ACADIA Pharmaceuticals Inc	AC-90222	Alzheimers Disease	Muscarinic M1 agonist	Nootropic agent
34	Discontinued	Cocensys Inc; Novartis	ACEA-1021	Epilepsy; Head trauma; Pain	NMDA, Glycine antagonist	Neuroprotectant; Anticonvulsant
35	Discovery	Synaptica Ltd	AChE peptide fragment (neurodegenerative disease)	Alzheimers disease; Motor neurone disease; Parkinsons disease	Acetylcholinesterase modulator	Antiparkinsonian; Neuroprotectant
36	**Discovery	Elan Corp plc; Wyeth	ACC-001	Alzheimers disease	Vaccine; Amyloid protein deposition inhibitor	Immunomodulator; Neuroprotectant;
37	*Phase 2 Clinical (Phase 1 Clinical)	ACADIA Pharmaceuticals Inc	ACP-103	Psychosis; Schizophrenia	5-HT 2c receptor modulator; 5-HT 2a receptor modulator; 5-HT 2a antagonist	Antipsychotic
38	Phase 1 Clinical	Annovis Inc	ACPC	Cerebrovascular ischemia; Neurological disease; Major depressive disorder	NMDA receptor partial agonist	Neuroprotectant; Antidepressant
39	Discovery	Prescient NeuroPharma Inc	ACPD analogs, IGT	Epilepsy; Anxiety disorder; Cerebrovascular ischemia; Head injury	Metabotropic glutamate receptor 1 agonist; Metabotropic glutamate receptor 2 agonist	Neuroprotectant; Anxiolytic; Anticonvulsant agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
40	Discontinued	National Institutes of Health	ADCI	Neurodegenerative disease	NMDA antagonist; Sodium channel antagonist	Neuroprotectant; Anticonvulsant agent
41	**Discovery	Centre National de la Recherche Scientifique (CNRS)	ACUDA	Neurological disease	Ionotropic glutamate receptor antagonist	Neuroprotectant
42	**Phase 2 Clinical	Schering-Plough Corp	Adenosine A2a antagonists	Parkinsons disease	Adenosine A2a antagonist	Antiparkinsonian
43	*No Development Reported (Discovery)	ActinoDrug Pharmaceuticals GmbH	AD-GL0002	Parkinsons disease; Cancer; Cirrhosis	IL-6 synthesis inhibitor; Transcription factor inhibitor	Anticancer; Antiparkinsonian
44	Discovery	Aegera Therapeutics Inc	AEG-3482 series	Multiple sclerosis; Cerebrovascular ischemia; Cancer	Jnk pathway inhibitor	Neuroprotectant; Antiapoptotic
45	**Discovery	Aeolus Pharmaceuticals Inc	AEOL-10113	Reperfusion injury; Cerebrovascular ischemia; Asthma; Lung malformation; Respiratory distress syndrome; Cancer; Insulin dependent diabetes	Free radical scavenger; Angiogenesis inhibitor	Anticancer; Neuroprotectant; Antioxidant agent
46	*Phase 1 Clinical (Discovery)	Aeolus Pharmaceuticals Inc	AEOL-10150	Mucositis; Motor neurone disease; Cerebrovascular ischemia	Catalytic antioxidant	Neuroprotectant
47	**No Development Reported	Snow Brand Milk Products Co Ltd	AF-150	Alzheimers disease	Muscarinic M1 agonist	Nootropic agent
48	**Phase 3 Clinical	Servier	agomelatine	Sleep disorder; Major depressive disorder	5-HT 2c antagonist; Melatonin agonist; 5-HT 2b antagonist	Antidepressant; Anxiolytic
49	Discovery	Genentech Inc	agonist trkC monoclonal antibody	Neuropathy	Protein tyrosine kinase modulator	Neuroprotectant
50	Discovery	AGY Therapeutics	AGY-110	Alzheimers disease; Schizophrenia; Major depressive disorder	Unclassified enzyme inhibitor	Nootropic agent
51	Discovery	AGY Therapeutics	AGY-207	Cerebrovascular ischemia	Unclassified enzyme inhibitor	Neuroprotectant
52	No Development Reported	Cortex/Alkermes	AK-275; Vasolex	Cerebral infarction; Ischemia	Calpain inhibitor	Neuroprotectant; Vasoprotectant
53	Phase 2 Clinical	VUFB	Alaptid	Alzheimers disease	Melanotropin-inhibiting factor (MIF)-1 analog	Nootropic agent
54	**Phase 1 Clinical	Allon Therapeutics Inc	AL-108	Alzheimers disease; Central nervous system disease	CNS modulator	Neuroprotectant; Nootropic agent
55	No Development Reported	NPS Allelix Corp	ALE-0540	Nervous system injury; Neurodegenerative disease; Pain	NGF antagonist	Neuroprotectant; Analgesic
56	Discovery	Memory Pharmaceuticals Corp	alpha-7 partial agonists	Alzheimers disease; Schizophrenia; Central nervous system disease	Nicotinic ACh modulator	Nootropic agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
57	Discovery	University of Queensland	alpha-conotoxins	Neurological disease	Nicotinic ACh antagonist	Muscle relaxant
58	Discovery	Isis Pharmaceuticals Inc	ALS antisense therapeutics	Motor neurone disease	Superoxide dismutase inhibitor; Antisense oligonucleotide inhibitor	Neuroprotectant
59	Phase 3 Clinical	Harvard University/ Boston Life Sciences Inc	Altropane	Parkinsons disease; Attention deficit hyperactivity disorder	Dopamine transporter ligand; 123I labelled	Diagnostic/Imaging agent
60	Discovery	University of Georgetown / Samaritan	Alzheimers disease therapeutic	Spinal cord injury; Alzheimers disease; Neurodegenerative disease; Parkinsons disease; Dementia	CNS modulator	Neuroprotectant; Antiparkinsonian
61	**Discovery	Wyeth; ArQule Inc	Alzheimer's therapy	Alzheimers disease	No information available	Nootropic agent
62	Discovery	Pharmexa A/S / Lundbeck	Alzheimer's vaccine (AutoVac)	Alzheimers disease	Vaccine; Target not disclosed	Neuroprotectant
63	*Discontinued (Discovery)	AMRAD Corp Ltd	AM-36	Cerebrovascular ischemia; Alzheimers disease, Spinal chord injury	Sodium channel blocker	Neuroprotectant; Antioxidant agent
64	Discovery	Annovis Inc	AMPA antagonists	Neurodegenerative disease; Epilepsy; Schizophrenia; Cerebrovascular ischemia	AMPA receptor antagonist	Neuroprotectant; Antipsychotic; Anticonvulsant agent
65	Discovery	Eli Lilly & Co	AMPA modulators	Cognitive disorder	AMPA receptor modulator	Cognition enhancer
66	Discovery	NV Organon	AMPA modulators	Alzheimers disease; Schizophrenia; Cognitive disorder	AMPA receptor modulator	Antipsychotic
67	Discovery	Eisai Co Ltd	AMPA receptor antagonists (Multiple sclerosis)	Multiple sclerosis	AMPA receptor antagonist	Neuroprotectant
68	Discovery	Yamanouchi Pharmaceutical Co Ltd	AMPA receptor antagonists	Central nervous system disease	AMPA receptor antagonist	Neuroprotectant
69	**Discovery	University of Messina	AMPA receptor antagonists	Epilepsy; Central nervous system disease; Cerebrovascular ischemia	AMPA receptor antagonist	Neuroprotectant; Anticonvulsant agent
70	*Phase 1 Clinical (Discovery)	University of California; Cortex; NV Organon; Servier	AMPAKINES	Dementia; Schizophrenia; Alzheimers disease	AMPA receptor modulator	Neuroprotectant; Antidepressant; Antipsychotic
71	**Discovery	Boehringer Ingelheim Corp	amyloid-beta formation inhibitors	Alzheimers disease	Beta amyloid synthesis inhibitor	Anti-amyloidogenic
72	**Discovery	Mayo Foundation	amyloid beta MRI contrast agents (Alzheimers)	Alzheimers disease	MRI imaging agent	Diagnostic
73	Phase 1 Clinical	Axonyx Inc / Serono	Amyloid-inhibiting peptides	Alzheimers disease; Neurodegenerative disease	Beta amyloid generation inhibitor	Anti-amyloidogenic
74	Discontinued	Elan Pharmaceuticals Inc	AN-1792	Alzheimers disease	Synthetic beta amyloid; Vaccine	beta amyloid vaccine agonist

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
75	*Phase 1 Clinical (Discovery)	Fournier Pharma	anatibant	Allergic rhinitis; Asthma; Cerebrovascular ischemia; Head injury	Bradykinin B2 antagonist	Anti-inflammatory; Neuroprotectant
76	**Discovery	Knoll GmbH; Neurobiological Technologies Inc	ancrod	Cerebral infarction; Heart disease; Cerebrovascular ischemia	Fibrinolytic agent	Neuroprotectant
77	**Discovery	Dr Reddy's Laboratories Ltd	Andrographolide	Cancer	Natural Product	Anticancer
78	*Discontinued (Phase 3 Clinical)	Apollo Biopharmaceutics Inc / Wyeth	APBPI-124 / estrogen-like compounds	Alzheimers disease; Neurodegenerative disease; Parkinsons disease; Cerebrovascular ischemia	Estrogen modulator	Neuroprotectant; Antiparkinsonian
79	Phase 2 Clinical	Britannia Pharmaceuticals Ltd	apomorphine (nasal; ED)	Erectile dysfunction; Parkinsons disease	Dopamine agonist	Antiparkinsonian; Apomorphine modulator
80	**No Development Reported	Cardinal Health/ Orion	apomorphine (buccal, Zydis)	Parkinsons disease	Dopamine D2 agonist	Antiparkinsonian
81	**Launched	Chiesi	apomorphine (subcutaneous)	Parkinsons disease	Dopamine D2 agonist	Antiparkinsonian; Apomorphine modulator
82	**Launched	Compagnie de Developpement Aguettant	apomorphine (subcutaneous)	Parkinsons disease	Dopamine agonist; Apomorphine modulator	Antiparkinsonian
83	**Registered	Mylan Laboratories Inc	apomorphine (subcutaneous, Parkinsons disease)	Parkinsons disease	Dopamine D2 agonist; Apomorphine antagonist	Antiparkinsonian
84	Discovery	Merck Sharp & Dohme Ltd	apopain inhibitors	Neurodegenerative disease	Caspase-3 inhibitor	Apoptosis stimulator
85	No Development Reported	ImmunoGen Inc	apoptosin	Inflammation; Neurodegenerative disease; Viral infection; Cancer; Autoimmune disease; Transplant rejection	mitotic kinase-motif protein	Apoptosis modulator;
86	No Development Reported	Oregon Health Sciences University	Aptiganel	Neurodegenerative disease; Parkinsons disease; Cerebrovascular disease; Cerebrovascular ischemia; Brain injury	NMDA receptor antagonist, Ionotropic glutamate receptor antagonist	Neuroprotectant; Antiparkinsonian
87	Discovery	Arena Pharmaceuticals Inc	AR-139525	Neurodegenerative disease; Parkinsons disease	Unspecified GPCR antagonist	Neuroprotectant; Antiparkinsonian
88	Discontinued	Fisons plc	AR-15896; lanicemine	Central nervous system disease; Cerebral infarction; Cerebrovascular ischemia	NMDA receptor antagonist	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
89	Discovery	AstraZeneca plc	AR-A-008055	Neurotoxicity, drug-induced; Neurodegenerative disease	GABA A agonist	Neuroprotectant
90	Launched	Eisai/Pfizer Inc	Aricept (Donepezil) vs. a-Tocopherol	Neurodegenerative disease; Alzheimers disease; Dementia	Acetylcholinesterase inhibitor	Neuroprotectant; Cognition enhancer
91	Research Tool	AstraZeneca plc	AR-R-17779	Alzheimers disease; Neurodegenerative disease; Anxiety disorder	ACh agonist	Nootropic agent; Anxiolytic
92	No Development Reported	AstraZeneca plc	AR-R18565	Ischemia	Calcium channel blocker	Vasodilatory agent
93	No Development Reported	Array BioPharma Inc	ARRY-142886	Inflammation; Neurodegenerative disease; Cancer	Protein kinase inhibitor; Mek protein kinase inhibitor	Neuroprotectant; Anticancer; Anti-inflammatory
94	Discovery	AlphaRx Inc	ARX-2000; -2001; -2002	Inflammation; Neurodegenerative disease; Immune deficiency	Immunomodulators	Immunostimulant; Anti-inflammatory
95	**Launched	Boehringer Ingelheim Corp	Asasantin	Cerebrovascular ischemia	Cyclooxygenase inhibitor; Platelet aggregation inhibitor; TXA2 synthesis inhibitor	Fibrinolytic agent; Non-steroidal anti-inflammatory
96	Phase 3 Clinical	NV Organon	asenapine	Psychosis; Schizophrenia; Bipolar disorder	Dopamine D1 antagonist; Dopamine D2 antagonist; 5-HT 2a antagonist	Antipsychotic
97	Discovery	Serono SA	AS-600292; AS-004509; AS-601245	Inflammation; Neurodegenerative disease; Central nervous system disease; Ischemia; Pulmonary fibrosis	Jun N terminal kinase modulator; Jun N terminal kinase-2 inhibitor; Jun N terminal kinase-3a inhibitor	Vasoprotectant; Anti-inflammatory
98	*Phase 2 Clinical (Discovery)	Avigen Inc	AV-201	Parkinsons disease	Dopamine synthesis stimulant; Adeno-associated virus based gene therapy; Tyrosine hydroxylase stimulator	Antiparkinsonian
99	*Pre-registration (Phase 3 Clinical)	Center for Neurologic Study	AVP-923	Diabetic neuropathy; Neuropathic pain; Mood disorder; Diabetic complication	NMDA receptor antagonist	Antitussive
100	Discovery	Childrens Hospital of Boston	Axogenesis Factor 1, BLS1	Spinal cord injury; Glaucoma; Motor neurone disease; Neurodegenerative disease; Cerebrovascular ischemia	NGF agonist	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
101	*Phase 3 Clinical (No Development Reported)	Regeneron Pharmaceuticals Inc	Axokine	Huntingtons chorea; Motor neurone disease; Neurodegenerative disease; Obesity; Ocular disease; Non-insulin dependent diabetes	CNTF agonist	Metabolic modulator; Appetite suppressant
102	Discovery	Acorda Therapeutics Inc	axonal guidance proteins	Spinal cord injury; Parkinsons disease	Cell adhesion molecule modulator	Neuroprotectant; Antiparkinsonian
103	No Development Reported	Asahi Kasei Corp	AZ-36041	Alzheimers disease; Neurodegenerative disease	Reduction of amyloid beta	Neuroprotectant
104	Discovery	AstraZeneca plc	AZD-0328	Alzheimers disease; Cognitive disorder	5-HT 3 agonist; Nicotinic ACh agonist	Nootropic agent; Anxiolytic
105	Discovery	BioAxone Therapeutique Inc	BA-1016	Neurodegenerative disease	Rho kinase inhibitor	Anticancer; Neuroprotectant
106	**No Development Reported	Bayer AG	BAY-36-7620	Epilepsy	Metabotropic glutamate receptor 1 antagonist	Anticonvulsant agent
107	Phase 1 Clinical	Bayer AG	BAY-38-7271	Pain; Cerebrovascular ischemia; Brain injury	Cannabinoid agonist	Neuroprotectant
108	**No Development Reported	Bayer AG	BAY-44-2041	Cerebrovascular ischemia	Adenosine modulator	Neuroprotectant; Vasoprotectant
109	No Development Reported	Bayer AG	BAY-X-9227	Neurodegenerative disease	Potassium channel activator	Neuroprotectant
110	No Development Reported	Russian Academy Medical Science	BD-1054	Alzheimers disease; Neurodegenerative disease	No information available	Nootropic agent
111	Discovery	Toyama Chemical Co Ltd	benzothiophene derivatives (Alzheimers disease)	Alzheimers disease	benzothiophene derivatives	Neuroprotectant; Nootropic agent
112	Phase 1 Clinical	Purdue Neuroscience Corp	besonprodil	Epilepsy; Pain; Parkinsons disease; Cerebrovascular ischemia	NMDA receptor antagonist	Analgesic; Antiparkinsonian; Anticonvulsant agent
113	*Discovery (Discontinued)	(Sankyo Co Ltd) ; BTG plc	BGC-20-1178	Neurodegenerative disease; Alzheimers disease	Beta amyloid modulator	Nootropic agent
114	**Discovery	Sankyo Co Ltd	BGC-20-1259	Alzheimers disease	Acetylcholinesterase inhibitor; 5-HT uptake inhibitor	Neuroprotectant; Nootropic agent
115	Phase 1 Clinical	BIAL Group	BIA-3-202	Parkinsons disease	COMT inhibitor	Antiparkinsonian
116	**Discovery	Mitsubishi-Tokyo Pharmaceuticals Inc	bifemelane	Alzheimers disease; Parkinsons disease; Attention deficit hyperactivity disorder; Cognitive disorder; Cerebral hypoxia; Cerebral infarction; Cerebrovascular ischemia; Amnesia; Dementia	MAO A inhibitor; ACh agonist	Neuroprotectant; Nootropic agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
117	Phase 3 Clinical	Solvay SA	bifeprunox	Parkinsons disease; Psychosis; Schizophrenia	Dopamine D2 agonist; 5-HT 1a agonist	Antiparkinsonian; Antipsychotic
118	Phase 2 Clinical	Boehringer Ingelheim Corp	BIII-890-CL	Cerebrovascular ischemia; Pain	Sodium channel blocker	Neuroprotectant
119	Discontinued	Boehringer Ingelheim Corp	BIMU-8	Pain	5-HT4 agonist	Analgesic
120	Discovery	Boston Life Sciences Inc	BLS-602; BLS-605	Attention deficit hyperactivity disorder; Parkinsons disease	Dopamine uptake inhibitor	Antiparkinsonian
121	Phase 3 Clinical	Dainippon Pharmaceutical Co Ltd	blonanserin	Psychosis; Schizophrenia	5-HT 2 antagonist; Dopamine D2 antagonist	Antipsychotic
122	Discontinued	Bristol-Myers Squibb Co	BMS-181100	Schizophrenia; Psychosis	Sigma opioid antagonist, 5-HT 1a agonist	Antipsychotic
123	**Discontinued	Bristol-Myers Squibb Co	BMS-181168	Alzheimers disease; Cognitive disorder; Dementia; Amnesia	ACh agonist	Nootropic agent
124	**Launched	Oculinum	BOTOX	Aging; Headache; Incontinence; Pain; Migraine; Paralysis; Gastric motility disorder; Dystonia; Esophageal function disorder; Sweat gland disease; Muscle hypertonia	ACh antagonist	Analgesic; Neuromuscular blocking agent
125	**Phase 2 Clinical	Cambridge University	BP-897	Drug dependence; Cocaine addiction	Dopamine D3 agonist	Neuroprotectant
126	Discontinued	Bristol-Myers Squibb Co	Brasofensine	Parkinsons disease	Dopamine uptake inhibitor	Antiparkinsonian
127	No Development Reported	Pharm-Eco Laboratories Inc	Breflate	Neurodegenerative disease	Brefeldin A prodrug	Nootropic agent
128	**Phase 2 Clinical	UCB Pharma SA	brivaracetam	Epilepsy; Pain; Neurological disease	Synaptic vesicle glycoprotein 2A (SV2A) ligand	Analgesic; Anticonvulsant agent
129	*No Development Reported (Discovery)	National Institutes of Health	BTG-A derivatives	Neurodegenerative disease	Nicotinic ACh modulator; Muscarinic ACh modulator	Nootropic agent
130	**Phase 1 Clinical	BTG plc	BTG-1640	Alzheimers disease; Amnesia; Anxiety disorder; Drug dependence	No information available	Anxiolytic
131	Discovery	Knoll Ltd	BTS-72664	Epilepsy; Migraine; Cerebrovascular ischemia	stimulates chloride currents and weakly inhibits sodium and NMDA channels	Neuroprotectant; Analgesic; Anticonvulsant agent
132	Discovery	Biovitrum AB	BVT-2989	Central nervous system disease	No information available	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
133	Discovery	OXIS International Inc	BXT-51072	Chronic obstructive pulmonary disease; Inflammatory bowel disease; Asthma; Ulcerative colitis; Cardiovascular disease; Central nervous system disease; Cerebrovascular ischemia; Diabetic complication	Glutathione modulator	Neuroprotectant; Vasoprotectant
134	**Phase 1 Clinical	Merck & Co Inc	c-7617	Alzheimers disease	CNS modulator	Neuroprotectant
135	**Phase 2 Clinical	Merck & Co Inc	c-9136	Alzheimers disease	CNS modulator	Neuroprotectant
136	Discovery	BioCryst Pharmaceuticals Inc	C1s inhibitors	Inflammation; Myocardial infarction; Systemic lupus erythematosus; Autoimmune disease; Cerebrovascular ischemia; Respiratory distress syndrome	Serine protease inhibitor; Complement cascade inhibitor	Neuroprotectant; Cardioprotectant; Vasoprotectant; Anti-inflammatory
137	No Development Reported	Roche	C60 fullerenes	Neurodegenerative disease; Cerebrovascular ischemia; Head injury	Free radical scavenger	Neuroprotectant
138	**Discovery	AstraZeneca plc	calcium channel antagonists	Neuropathic pain	Calcium channel blocker, N-type	Analgesic
139	Discovery	Senju Pharmaceutical Co Ltd ; Knoll GmbH	calpain inhibitors	Nervous system injury; Muscular dystrophy; Neurodegenerative disease; Cataract; Cerebrovascular ischemia	Calpain inhibitor	Neuroprotectant
140	**Discovery	Alkermes Inc	Calpain inhibitor	Cerebral infarction; Cerebrovascular ischemia, Head injury	Smooth muscle cell proliferation inhibitor; Calpain inhibitor	Neuroprotectant; Vasoprotectant
141	**Discovery	H Lundbeck A/S	carbamylated erythropoietin	Cerebrovascular ischemia	Induction of synthesis of growth factors BDNF and VEGF without affecting hematopoiesis	Neuroprotectant
142	Discovery	Genentech Inc	cardiotrophin-1	Age related macular degeneration; Glaucoma; Huntingtons chorea; Motor neurone disease; Uveitis; Cardiovascular disease; Diabetic retinopathy	Unspecified growth factor agonist; Cytokine	Growth factor
143	No Development Reported	Sanofi-Aventis	CAS-493; Aloracetam	Alzheimers disease; Amnesia	No information available	Nootropic agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
144	Discovery	Sunesis Pharmaceuticals Inc	Caspase inhibitors	Neurodegenerative disease; Inflammation; Cardiovascular disease	Caspase inhibitor	Nootropic agent; Anti-inflammatory; Cardiovascular agent; Anti-apoptotic
145	**Discovery	IDUN/Novartis	Caspase inhibitor	Cerebrovascular ischemia	Caspase inhibitor	Apoptosis modulator; Neuroprotectant
146	Discovery	Yamanouchi Pharmaceutical Co Ltd; Merck Frosst Canada & Co.	Caspase-3 inhibitors	Alzheimers disease; Liver disease; Myocardial infarction; Parkinsons disease; Cerebrovascular ischemia	Caspase inhibitor	Neuroprotectant; Cardioprotectant; Antiparkinsonian; Antiapoptotic
147	**Discontinued	eXegenics Inc	Caspase-3 inhibitor	Alzheimers disease	Caspase inhibitor	Neuroprotectant
148	** No Development Reported	Encysive Pharmaceuticals Inc	Caspase-3 inhibitor	Myocardial infarction; Cerebrovascular ischemia	Caspase inhibitor	Apoptosis inhibitor; Neuroprotectant; Cardioprotectant
149	**Discovery	University of Toledo	CDD-0102	Alzheimers disease	Muscarinic M1 agonist	Nootropic agent
150	Discovery	Cognitive Pharmaceuticals Ltd	CDD-0304	Alzheimers disease; Schizophrenia	Muscarinic M1 agonist	Nootropic agent
151	Discovery	Novo Nordisk A/S	CEE-03-310	Alcoholism; Schizophrenia; Sleep disorder; Drug dependence	Dopamine D1 antagonist	Antipsychotic; Hypnotic
152	*Discontinued (Discovery)	Novo Nordisk A/S	CEE-03-320	Schizophrenia; Sleep disorder; Tardive dyskinesia; Drug dependence	Dopamine D1 antagonist	Antipsychotic; Hypnotic
153	Launched	Pfizer/Pharmacia; NIA; GD Searle & Co	Celecoxib	Esophagus tumor; Keratosis; Non-small-cell lung cancer; Familial adenomatous polyposis; Alzheimers disease; Renal cell carcinoma; Pain; Osteoarthritis; Pancreas tumor; Prostate tumor; Rheumatoid arthritis; Non-Hodgkin lymphoma; Bladder tumor; Uterine cervix tumor; Breast tumor	Cox-2 antagonist	Anticancer; Nootropic agent; Analgesic; Non-steroidal anti-inflammatory
154	Phase 2 Clinical	Titan Pharmaceuticals Inc / Schering	cell therapy (dopamine producers; Parkinsons)	Parkinsons disease	Dopamine agonist	Anticancer; Neuroprotectant; Antiparkinsonian
155	Phase 3 Clinical	Cephalon	CEP-1347	Alzheimers disease; Parkinsons disease; Peripheral neuropathy	Apoptosis inhibitor; MAP kinase inhibitor; Protein kinase inhibitor; Mixed lineage kinase family inhibitor	Neuroprotectant; Antiparkinsonian

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
156	Discovery	Cephalon Inc	CEP-3122	Alzheimers disease; Neurodegenerative disease; Cerebrovascular ischemia	Protease inhibitor; Calpain inhibitor	Neuroprotectant; Nootropic agent
157	Discovery	Cephalon Inc	CEP-4143	Neurodegenerative disease	Calpain inhibitor	Neuroprotectant
158	Discontinued	LEO Pharma A/S	CEP-4186	Alzheimers disease; Acute myelogenous leukemia; Neurodegenerative disease; Carcinoma	Vitamin D3 agonist	Anticancer; Neuroprotectant
159	Discontinued	Cephalon Inc	CEP-751	Neurodegenerative disease; Prostate tumor	NGF antagonist; Protein tyrosine kinase inhibitor	Anticancer
160	**Phase 1 Clinical	Ceregene Inc	CERE-110	Alzheimers disease	NGF agonist; Adeno-associated virus based gene therapy	Neuroprotectant
161	Discovery	University of Washington	CERE-120	Parkinsons disease; Neurological disease	Growth factor agonist; Adeno-associated virus based gene therapy; Ret tyrosine kinase receptor stimulator	Antiparkinsonian
162	Discovery	Ceregene Inc	CERE-130	Motor neurone disease	Insulin-like growth factor agonist; Adeno-associated virus based gene therapy	Neuroprotectant
163	**Launched	Snow Brand Milk Products Co Ltd	cevimeline	Sjogrens syndrome; Alzheimers disease; Dementia	Muscarinic M1 agonist	Nootropic agent
164	Discontinued	Novartis AG	CGP-35348	Epilepsy; Neurodegenerative disease	GABA B antagonist	Anticonvulsant agent
165	Phase 1 Clinical	Chiesi Farmaceutici SpA	CHF-2060	Neurodegenerative disease; Cognitive disorder; Senile dementia	Acetylcholinesterase inhibitor	Neuroprotectant; Cognition enhancer
166	Phase 1 Clinical	Chiesi Farmaceutici SpA	CHF-3381	Epilepsy; Pain; Parkinsons disease; Cerebrovascular ischemia	MAO A inhibitor; MAO B inhibitor; NMDA receptor antagonist	Neuroprotectant; Analgesic; Antiparkinsonian; Anticonvulsant agent
167	Research Tool	University of Oregon / CoCensys	cinnamide-based NMDA antagonists	Ischemia; Neurological disease; Injury; Head injury	NMDA receptor antagonist	Neuroprotectant
168	Discovery	INSERM	ciproxifan	Epilepsy; Alzheimers disease; Dementia	Histamine H3 antagonist	Anticonvulsant agent; Nootropic agent
169	**Launched	Ferrer Internacional SA	citicoline	Alzheimers disease; Cerebrovascular ischemia	Lipid metabolism modulator; Neurotransmitter release stimulator; Acetylcholine release stimulator	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
170	No Development Reported	Chong Kun Dang Pharmaceutical Corp	CKD-705	Hypertension; Anxiety disorder; Parkinsons disease	Dopamine beta hydroxylase inhibitor; 5-HT release inhibitor	Antihypertensive; Anxiolytic; Antiparkinsonian
171	Discovery	Cogent Neuroscience Inc	CNIC-568	Neurodegenerative disease; Cerebrovascular ischemia	Unspecified vector based gene therapy	Neuroprotectant
172	Discontinued	CeNeS Pharmaceuticals Inc	CNS-1044	Neurodegenerative disease; Cerebrovascular ischemia	NMDA receptor antagonist	Neuroprotectant
173	No Development Reported	CeNeS Pharmaceuticals Inc	CNS-2103	Neurodegenerative disease	Calcium channel blocker	Neuroprotectant
174	No Development Reported	CeNeS Pharmaceuticals Inc	CNS-5065	Neurodegenerative disease	NMDA receptor antagonist	Neuroprotectant
175	**Phase 2 Clinical	CeNeS Pharmaceuticals Inc	CNS-5161	Neuropathic pain; Migraine	NMDA receptor antagonist	Analgesic
176	Discontinued	Ryan Pharmaceuticals Inc	Coenzyme Q10	Cerebrovascular ischemia; AIDS	Apoptosis inhibitor	Neuroprotectant
177	Clinical	ReGen Therapeutics plc	Colostrinin	Alzheimers disease	Amyloid protein deposition inhibitor; Proline rich peptide from colostorinin	Immunomodulator; Antioxidant agent; Neuroprotectant
178	No Development Reported	Pfizer Inc	CP-132484	Neurodegenerative disease	5-HT 2 agonist	Neuroprotectant
179	No Development Reported	Pfizer Inc	CP-283097	Neurodegenerative disease	NMDA receptor antagonist	Neuroprotectant
180	Discovery	Pfizer Inc	CP-465022	Epilepsy; Parkinsons disease; Ischemia	AMPA receptor antagonist	Antiparkinsonian; Anticonvulsant agent
181	No Development Reported	Questcor Pharmaceuticals Inc	CPC-304	Epilepsy; Alzheimers disease; Migraine; Cerebrovascular; ischemia; Neurological disease	Calcium channel blocker	Neuroprotectant; Vasodilatory agent
182	**Discontinued	Neurocrine Biosciences Inc / Janssen Pharmaceutica NV	CRF-1 antagonists	Anxiety disorder; Cerebrovascular ischemia; Major depressive disorder	CRF-1 antagonist	Antidepressant; Anxiolytic
183	**Discovery	Neurocrine Biosciences Inc / Eli Lilly	CRF-BP inhibitors	Alzheimers disease; Obesity	ACTH releasing factor antagonist	Appetite suppressant; Neuroprotectant
184	**Discovery	Creabilis Therapeutics srl	CT-500	Autoimmune disease; Cardiovascular disease; Sepsis; Neurological disease; Infection; Cancer	Amyloid protein deposition inhibitor	Anticancer; Antimicrobial; Antibacterial

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
185	Phase 2 Clinical	Cortex Pharmaceuticals Inc	CX-516	Fragile X syndrome; Alzheimers disease; Schizophrenia; Sleep disorder; Attention deficit hyperactivity disorder; Cognitive disorder; Male sexual dysfunction; Autism; Cerebrovascular ischemia; Major depressive disorder	AMPA receptor modulator	Neuroprotectant; Antidepressant; Antipsychotic
186	**No Development Reported	Cortex Pharmaceuticals Inc	CX-691	Alzheimers disease; Schizophrenia; Major depressive disorder	AMPA receptor modulator	Neuroprotectant; Antidepressant; Antipsychotic
187	Discovery	Maas Biolab LLC	Cyclosporin A	Alzheimers disease; Huntingtons chorea; Motor neurone disease; Parkinsons disease; Cerebrovascular ischemia; Brain injury	Calcineurin modulator; Cytokine synthesis inhibitor	Neuroprotectant; Antiparkinsonian; Immunomodulator
188	Discontinued	Servier	Dabelotine	Alzheimers disease; Dementia; Amnesia	Adrenoceptor agonist; Vasopressin agonist	Nootropic agent
189	Discovery	DarPharma Inc	DAR-201	Parkinsons disease; Schizophrenia; Attention deficit hyperactivity disorder	Dopamine D1 agonist	Antipsychotic; Antiparkinsonian
190	Research Tool	Suntory Ltd	DCG-IV	Neurodegenerative disease	Glutamate receptor agonist	Neuroprotectant
191	**Discontinued	GD Searle & Co	D-cycloserine	Alzheimers disease; Schizophrenia; Cognitive disorder; Dementia	NMDA receptor agonist	Neuroprotectant
192	Discovery	DiverDrugsSL	DD-20207	Alzheimers disease; Parkinsons disease; Neuralgia	NMDA receptor modulator	Analgesic; Antiparkinsonian
193	Discovery	Memorial Sloan-Kettering Cancer Center	Dehydroascorbic acid	Alzheimers disease; Neurodegenerative disease; Parkinsons disease; Cerebrovascular ischemia; Mucositis	Antioxidant agent	Neuroprotectant; Anti-inflammatory
194	**Discovery	Seoul University	dehydroevodiamine	Dementia	Esterase inhibitor	Neuroprotectant
195	Phase 1 Clinical	NPS Pharmaceuticals Inc	delucemine	Cerebrovascular ischemia; Major depressive disorder	NMDA receptor antagonist	Neuroprotectant; Antidepressant
196	**Phase 3 Clinical	Schering AG / Forest Laboratories Inc	desmoteplase	Lung embolism; Myocardial infarction; Cerebrovascular ischemia; Vascular disease	Fibrinolytic agent; Plasminogen activator stimulator	Neuroprotectant
197	**Phase 2 Clinical	Hebrew University	dexanabinol	Multiple sclerosis; Parkinsons disease; Cognitive disorder; Cerebrovascular ischemia; Brain injury	NMDA receptor antagonist; TNF- α inhibitor; Free radical scavenger	Nootropic agent; Antiparkinsonian; Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
198	Phase 1 Clinical	Pierre Fabre SA / Reckitt & Colman plc	Dexefaroxan	Alzheimers disease	Imidazoline receptor antagonist; Alpha 2 adrenoceptor antagonist	Neuroprotectant
199	**Discontinued	Baxter Healthcare Ltd	diaspirin crosslinked hemoglobin	Hemorrhagic shock; Blood transfusion; Ischemia; Sepsis; Cerebrovascular ischemia	Hemoglobin modulator; Oxygen carrier	
200	Phase 2 Clinical	Purdue Research Foundation	dihydropyridine	Intracranial vasospasm; Parkinsons disease; Schizophrenia; Drug dependence; Respiratory distress syndrome	Dopamine D1 agonist	Antiparkinsonian
201	Discovery	Schering AG	Dihydroquinolines	Neurodegenerative disease	NO synthesis inhibitor	Neuroprotectant
202	No Development Reported	SIR International	Diperidone	Neurodegenerative disease; Cerebral infarction; Cerebrovascular disease	Calcium channel blocker	Antihypertensive
203	**Phase 3 Clinical	Centaur Pharmaceuticals Inc / AstraZeneca plc	disulfiram	Neurodegenerative disease; Brain hemorrhage; Cerebrovascular ischemia	Free radical scavenger	Neuroprotectant; Antioxidant agent
204	Research Tool	Merck & Co Inc	dizocilpine	Epilepsy; Neurodegenerative disease; Cognitive disorder	NMDA receptor antagonist; Ionotropic glutamate receptor antagonist	Anticonvulsant agent
205	Discontinued	Bristol-Myers Squibb Co	DMP-543	Alzheimers disease	Potassium channel blocker; Acetylcholine release stimulator	Neuroprotectant
206	Discovery	Novasite Pharmaceuticals Inc	dopamine D1 receptor agonists	Parkinsons disease; Schizophrenia	Dopamine D1 agonist	Antiparkinsonian
207	Discovery	GlaxoSmithKline plc	dopamine D3 antagonists	Psychosis; Schizophrenia; Cocaine addiction	Dopamine D3 antagonist	Antipsychotic
208	**Discontinued	Sanofi-Aventis	dopamine D3 antagonists	Schizophrenia	Dopamine D3 antagonist	Antipsychotic
209	Discovery	Memory Pharmaceuticals Corp	dopamine D5 receptor modulators	Parkinsons disease	Dopamine D5 receptor modulator	Antiparkinsonian
210	Discovery	Organix Inc	dopamine transporter ligand	Parkinsons disease; Schizophrenia; Cocaine addiction	Dopamine uptake inhibitor	Antipsychotic; Antiparkinsonian
211	Discovery	D-Pharm Ltd	DP-103	Nervous system inflammation; Alzheimers disease	No information available	Anti-inflammatory; Neuroprotectant
212	Discovery	D-Pharm Ltd	DP-109	Alzheimers disease; Neurodegenerative disease; Parkinsons disease	Chelating agent; Apoptosis modulator	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
213	Phase 2 Clinical	D-Pharm Ltd	DP-b99	Cerebrovascular ischemia; Epilepsy; Head injury	Chelating agent; Calcium metabolism modulator; Apoptosis modulator; Metalloprotease-2 inhibitor; Metalloprotease-9 inhibitor;	Neuroprotectant; Anti-inflammatory; Anticonvulsant agent; Antioxidant agent
214	**Phase 2 Clinical	D-Pharm Ltd	DP-VPA	Epilepsy; Bipolar disorder; Migraine	Derivative of valproic acid	Anticonvulsant agent; Neuroprotectant
215	Discovery	Meiji Seika Kaisha Ltd	DR-2313	Cerebrovascular ischemia	PARP inhibitor	Neuroprotectant
216	**Phase 2 Clinical	Unimed Pharmaceuticals Inc	dronabinol	Emesis; Pain; Alzheimers disease; Multiple sclerosis; Anorexia nervosa; Major depressive disorder; Cachexia	Cannabinoid agonist	Appetite stimulant Antidepressant Anti-emetic
217	Phase 1 Clinical	Daiichi Seiyaku Co Ltd	DY-9760e	Cerebrovascular ischemia; Neurological disease	Calmodulin antagonist	Neuroprotectant; Protectant
218	Discovery	Korea Research Institute of Bioscience and Biotechnology	Dykellic acid	Immune disorder; Neurodegenerative disease; Cancer	MMP-5 inhibitor	Anticancer; Anti-apoptotic
219	Phase 2 Clinical	Eisai Co Ltd	E-2007	Epilepsy; Multiple sclerosis; Parkinsons disease	AMPA receptor antagonist	Neuroprotectant; Anticonvulsant agent
220	Phase 1 Clinical	Eisai Co Ltd	E-2051	Cerebrovascular ischemia	Calcium channel blocker	Neuroprotectant
221	Phase 1 Clinical	Eisai Co Ltd	E-2101	Muscle hypertonia	5-HT 2 antagonist; 5-HT 1a antagonist	Centrally-acting muscle relaxant
222	Discovery	Wyeth Research	E-selectin inhibitors	Reperfusion injury; Inflammation; Psoriasis; Rheumatoid arthritis; Atherosclerosis; Cerebrovascular ischemia	E-Selectin antagonist	Neuroprotectant; Vasoprotectant; Anti-inflammatory
223	Discontinued	BTG International Ltd; Novartis	EAA-494; Midafotel	Epilepsy; Neurodegenerative disease; Cerebrovascular ischemia; Head injury	NMDA receptor antagonist	Neuroprotectant
224	**Discovery	Neurocrine Biosciences Inc	EAAT modulators	Neurodegenerative disease; Psychosis; Retinopathy; Schizophrenia; Cerebrovascular ischemia; Injury	Glutamate metabolism modulator	Neuroprotectant; Antipsychotic
225	Discovery	Wyeth Research	EAB-318	Epilepsy; Neurodegenerative disease; Cerebrovascular ischemia	NMDA receptor antagonist	Neuroprotectant; Anticonvulsant agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
226	**No Development Reported	Hoechst AG	ebiratide	Alzheimers disease; Dementia	ACTH agonist	Nootropic agent
227	Discovery	NsGene A/S	ECT-AD	Alzheimers disease; Neurological disease	NGF agonist	Neuroprotectant
228	Discovery	NsGene A/S	ECT-PD	Parkinsons disease	Neuronal growth factor receptor agonist; Ret tyrosine kinase receptor stimulator	Neuroprotectant
229	**Launched	Mitsubishi-Tokyo Pharmaceuticals Inc	edaravone	Motor neurone disease; Brain hemorrhage; Cerebral edema; Cerebrovascular ischemia	Free radical scavenger	Neuroprotectant
230	Discovery	Universidad Complutense de Madrid	EF-7412	Neurodegenerative disease; Anxiety disorder; Major depressive disorder	Dopamine D2 antagonist; 5-HT 1a antagonist; Glutamate release inhibitor	Antidepressant; Anxiolytic
231	**Phase 3 Clinical	Dr Willmar Schwabe GmbH & Co	EGb-761	Alzheimers disease	Free radical scavenger; Amyloid protein deposition inhibitor	Neuroprotectant
232	No Development Reported	EGIS Gyogyszergyar RT	EGIS-7444	Alzheimers disease; Neurodegenerative disease	NMDA receptor antagonist	Neuroprotectant
233	Phase 3 Clinical	ExonHit Therapeutics SA	EHT-201	Motor neurone disease; Central nervous system disease	Vasodilator	Neuroprotectant
234	Phase 1 Clinical	ExonHit Therapeutics SA	EHT-202	Neurodegenerative disease; Alzheimers disease	T-cell inhibitor	Neuroprotectant; Anxiolytic
235	Discontinued	Synthelabo	Eliprodil	Motor neurone disease; Neurodegenerative disease; Cerebrovascular disease; Cerebrovascular ischemia; Head injury	NMDA receptor antagonist	Neuroprotectant
236	Discontinued	Knoll GmbH	emopamil	Neurodegenerative disease; Cerebrovascular ischemia; Migraine	5-HT 2 antagonist; 5-HT antagonist; Calcium channel blocker	Neuroprotectant; Vasodilatory agent
237	Discovery	University of Tennessee Memphis	EP-475	Neurodegenerative disease	Calpain inhibitor	Neuroprotectant
238	Launched	ASAC Pharmaceutical International AIE	EQA-00; Anapsos, Polypodium extract	Multiple sclerosis; Alzheimers disease	Immunomodulator	Immunomodulator, Nootropica agent
239	No Development Reported	Kyowa Hakko Kogyo Co Ltd	ES-242-1	Neurodegenerative disease	NMDA receptor antagonist	Neuroprotectant
240	Discovery	MitoKor	estrogen analogs	Myocardial infarction; Cerebrovascular ischemia	Estrogen modulator; Hormone	Neuroprotectant; Cardiovascular agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
241	**Discontinued	Apollo Biopharmaceutics Inc	estrogen-like compounds	Alzheimers disease; Neurodegenerative disease; Parkinsons disease; Cerebrovascular ischemia	Estrogen modulator	Neuroprotectant; Antiparkinsonian
242	**Discovery	ACADIA Pharmaceuticals Inc	estrogen receptor beta agonists	Inflammation; Pain	Estrogen receptor beta agonist	Pain modulator; Anti-inflammatory
243	**Discovery	GlaxoSmithKline Inc	estrogen receptor beta modulators (triazine)	Alzheimers disease; Osteoporosis; Atherosclerosis; Breast tumor	Estrogen receptor beta modulator	Anticancer; Antiarteriosclerotic; Nootropic agent
244	No Development Reported	GD Searle & Co	ethanoanthracene derivatives	Neurodegenerative disease	Sigma opioid antagonist	Neuroprotectant
245	**Discovery	ProteoTech Inc	Exebryl	Alzheimers disease	Amyloid protein deposition inhibitor	Neuroprotectant
246	No Development Reported	Centre de Recherche Pierre Fabre	F-10981	Alzheimers disease; Neurodegenerative disease; Parkinsons disease	Alpha 2 adrenoceptor antagonist	Antiparkinsonian
247	Discovery	Tokyo Metropolitan Institute	F-2-CCG-I	Epilepsy; Neurodegenerative disease; Head injury	Metabotropic glutamate receptor modulator	Anticonvulsant agent
248	No Development Reported	Pharmacia & Upjohn Inc	FCE-29484A	Neurodegenerative disease; Parkinsons disease; Epilepsy	AMPA derivative	Antiparkinsonian; Anticonvulsant agent
249	No Development Reported	Pharmacia & Upjohn Inc	FCE-29642A	Neurodegenerative disease; Parkinsons disease; Epilepsy; Insomnia; Major depressive disorder	AMPA derivative	Antiparkinsonian; Anticonvulsant agent; Antidepressant; Hypnotic
250	No Development Reported	Amgen Inc	FGF-9; rhuFGF-16	Multiple Sclerosis; Neurodegenerative disease	FGF-9 agonist; FGF-16 agonist	Neuroprotectant
251	**Discovery	Enkam Pharmaceuticals A/S	FGLL	Alzheimers disease	Beta amyloid modulator; FGF receptor modulator	Neuroprotectant
252	No Development Reported	Amgen Inc	fibroblast growth factor, ersofermin	Wound healing; Neurodegenerative disease; Cerebrovascular ischemia	FGF-2 agonist	Neuroprotectant; Angiogenesis stimulator
253	Phase 2 Clinical	Juvantia Pharma Ltd	fipamezole	Parkinsons disease	Alpha 2 adrenoceptor antagonist	Antiparkinsonian
254	Discovery	Kosan Biosciences Inc	FK-520 analogs	Neurological disease	NGF agonist	Immuno-suppressant
255	*Discontinued (Phase 2 Clinical)	Fujisawa Pharmaceutical Co Ltd	FK-960	Alzheimers disease; Cognitive disorder	5-HT agonist	Nootropic agent
256	**Phase 2 Clinical	Fujisawa Pharmaceutical Co Ltd	FK-962	Alzheimers disease	5-HT agonist	Nootropic agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
257	Discovery	Pfizer Inc	FKBP inhibitors	Alzheimers disease; Neurodegenerative disease; Parkinsons disease; Peripheral neuropathy	Molecular chaperones; Inhibition of protein aggregation	Anti-inflammatory; Antiparkinsonian; Immuno-suppressant
258	*No development Reported (Phase 3 Clinical)	Bristol-Myers Squibb Co	flindokalner	Cerebrovascular ischemia	Potassium channel activator	Neuroprotectant
259	Phase 1 Clinical	Harvard University	Fluoratec	Parkinsons disease; Attention deficit hyperactivity disorder; Neurological disease	Dopamine uptake modulator	Antiparkinsonian
260	**Launched	Eli Lilly & Co	fluoxetine	Anxiety disorder; Premenstrual syndrome; Major depressive disorder	5-HT uptake inhibitor	Antidepressant Anxiolytic
261	No Development Reported	Kirin Brewery Co Ltd	Formobactin	Neurodegenerative disease; Cerebrovascular ischemia	Free radical scavenger	Neuroprotectant
262	**Discovery	Faust Pharmaceuticals	FP-7832	Alzheimers disease	Acetylcholinesterase inhibitor; ACh agonist	Neuroprotectant; Antioxidant agent
263	No Development Reported	Fisons plc	FPL-16283	Neurodegenerative disease	NMDA receptor antagonist	Neuroprotectant
264	Discovery	Fujisawa Pharmaceutical Co Ltd	FR-210575	Cerebrovascular ischemia	Free radical scavenger	Neuroprotectant
265	**Launched	GlaxoSmithKline plc	frovatriptan	Migraine	5-HT 1d agonist; 5-HT 1b agonist	Analgesic
266	**Launched	Pfizer Inc	gabapentin	Epilepsy; Pain; Neuropathic pain; Motor neurone disease; Migraine; Osteoarthritis; Muscle wasting disease	GABA modulator	Analgesic; Anti-inflammatory; Anticonvulsant agent
267	Discovery	Synaptica Ltd/ Sanochemia Pharmazeutika AG	Galantamine derivatives	Alzheimers disease	Acetylcholinesterase inhibitor	Nootropic agent; cognition enhancer
268	No Development Reported	GlaxoSmithKline plc	galdansetron	Neurodegenerative disease	5-HT 3 antagonist	Neuroprotectant
269	Discovery	Elan Pharmaceuticals Inc / Eli Lilly	gamma-secretase inhibitors	Alzheimers disease	Beta amyloid synthesis inhibitor; Gamma-secretase inhibitor; Aspartic protease inhibitor	Neuroprotectant
270	Phase 2 Clinical	Chiesi Farmaceutici SpA	ganstigmine	Alzheimers disease; Neurodegenerative disease; Cognitive disorder	Acetylcholinesterase inhibitor	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
271	Discontinued	GlaxoSmithKline plc	gavestinel	Neurodegenerative disease; Cerebrovascular ischemia	Glycine antagonist	Neuroprotectant
272	Discovery	Genentech Inc	GDNF	Neurodegenerative disease; Parkinsons disease	Unspecified growth factor agonist	Antiparkinsonian
273	*Discontinued (Phase 2 Clinical)	Amgen Inc	GDNF; Liatermine	Motor neurone disease; Neurodegenerative disease; Parkinsons disease	Growth factor	Antiparkinsonian
274	**Discovery	Ceregene Inc	GDNF gene therapy (PD)	Parkinsons disease	Neuronal growth factor; Ret tyrosine kinase receptor stimulator	Antiparkinsonian
275	**Discovery	Gencell SA	gene therapy (GDNF)	Parkinsons disease	Adenovirus based gene therapy	Neuroprotectant; Antiparkinsonian
276	**No Development Reported	Genetic Therapy Inc	gene therapy (GDNF)	Parkinsons disease	Adenovirus based gene therapy	Neuroprotectant; Antiparkinsonian
277	Discovery	Oxford BioMedica plc	gene therapy (ALS)	Motor neurone disease	Viral vector based gene therapy; VEGF agonist	Neuroprotectant
278	**Discovery	Centre Hospitalier Universitaire Vaudois	gene therapy (ALS)	Motor neurone disease	Viral vector based gene therapy; bcl-2 gene transfer	Apoptosis inhibitor; Neuroprotectant
279	Discovery	Oxford BioMedica plc	gene therapy (Parkinsons disease)	Parkinsons disease	Dopamine synthesis stimulant; Retrovirus based gene therapy; GTP cyclohydrolase-I stimulator; Tyrosine hydroxylase stimulator	Antiparkinsonian; Dopamine modulator
280	**Phase 2 Clinical	PN Gerolymatos SA	Gero-46	Alzheimers disease	Chelating agent	Neuroprotectant
281	Discovery	CeNeS Pharmaceuticals Inc; Acorda Therapeutics Inc	GGF-2	Diabetic neuropathy; Multiple sclerosis; Muscular dystrophy; Retinopathy; Breast tumor; Myasthenia gravis; Hearing disorder	NGF agonist; Growth factor	Neuroprotectant
282	Phase 2 Clinical	Xcel Pharmaceuticals	GKE-841; retigabine	Epilepsy	GABA A agonist; Potassium channel activator	Anticonvulsant agent; Vasodilatory agent
283	**Launched	Teva Pharmaceutical Industries Ltd	glatiramer	Multiple sclerosis; Neurodegenerative disease; Glaucoma	serves as a decoy for myelin, drawing autoreactive T-cells away from nerve cells	Immunomodulator
284	No Development Reported	Allelix Neuroscience Inc	Glialines, Throphix	Alzheimers disease; Huntingtons chorea; Parkinsons disease; Neurodegenerative disease	Cell therapy; Glial neurotrophic factors	Neuroprotectant; Antiparkinsonian

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
285	Discovery	Glaxo Wellcome SpA	glycine antagonists	Epilepsy; Pain; Schizophrenia; Cerebrovascular ischemia; Head injury	Glycine antagonist; NMDA receptor antagonist	Neuroprotectant; Antipsychotic; Analgesic; Anticonvulsant agent
286	Discovery	Eli Lilly & Co	glycine transporter inhibitors	Schizophrenia	Glycine transport inhibitor	Antipsychotic
287	**Discovery	CrystalGenomics Inc	glycogen synthase kinase-3beta inhibitors	Alzheimers disease; Diabetes mellitus	Glycogen synthase kinase-3 alpha inhibitor; Glycogen synthase kinase-3 beta inhibitor	Hypoglycemic agent; Neuroprotectant
288	Discovery	Allelix Neuroscience Inc /NPS/Janssen	GlyT-1 inhibitors	Schizophrenia; Dementia	Glycine modulator	Antipsychotic
289	**Discovery	Sanofi-Synthelabo	GlyT-1 inhibitors	Schizophrenia	Glycine modulator	Antipsychotic
290	*Launched (Phase 2 Clinical)	Fidia Farmaceutici	GM-1 ganglioside	Parkinsons disease; Birth complication; Cerebral hypoxia; Cerebrovascular ischemia; Injury	Ionotropic glutamate receptor antagonist	Neuroprotectant; Antiparkinsonian
291	Discovery	Parke-Davis & Co	GMC-1111	Parkinsons disease; Schizophrenia	Dopamine D2 agonist	Antiparkinsonian; Antipsychotic
292	No Development Reported	SICOR Inc	GP-14683	Epilepsy; Angina; Neurodegenerative disease	ARA-100 analogue	Vasodilatory agent; Anticonvulsant agent
293	Discontinued	Guilford Pharmaceuticals Inc	GPI-1337	Neurodegenerative disease; Parkinsons disease	Neuroimmunophilin ligand	Neuroprotectant; Antiparkinsonian; Anti-inflammatory
294	Phase 2 clinical	Guilford Pharmaceuticals Inc, Symphony Neuro Development Co	GPI-1485	Parkinsons disease; Erectile dysfunction	Neuroimmunophilin	Antiparkinsonian; Anti-inflammatory
295	Research Tool	GlaxoSmithKline plc	GR-73632	Neurodegenerative disease	NK1 agonist	Neuroprotectant
296	Discontinued	GlaxoSmithKline plc	GR-89696	Neurodegenerative disease	Kappa opioid agonist	Neuroprotectant
297	**Discovery	GlaxoSmithKline plc	GSK-3 inhibitors	Neurodegenerative disease; Non-insulin dependent diabetes	Hypoglycemic agent; Glycogen synthase kinase-3 beta inhibitor	Neuroprotectant
298	Discovery	AstraZeneca plc	GSK-3 inhibitors	Alzheimers disease	Glycogen synthase kinase family inhibitor	Neuroprotectant
299	Discontinued	Gliatech Inc	GT-2342	Neurodegenerative disease	Histamine H3-ligand	Neuroprotectant
300	*No development Reported (Discovery)	GBtherapeutics Ltd	GT-715	Epilepsy; Pain; Neurodegenerative disease; Cognitive disorder; Cerebrovascular ischemia; Insomnia	NO modulator; GABA modulator	Neuroprotectant; Nootropic agent; Hypnotic; Analgesic
301	**Phase 1 Clinical	GB Therapeutics Ltd	GT-1061	Alzheimers disease; Seizure, epilepsy & convulsion	NO modulator	Nootropic agent; Anticonvulsant agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
302	**Phase 1 Clinical	Chiesi Farmaceutici SpA	GT-3381	Epilepsy; Pain Alzheimers disease; Parkinsons disease; Cerebrovascular ischemia	MAO A inhibitor; MAO B inhibitor; NMDA receptor antagonist	Neuroprotectant; Analgesic; Antiparkinsonian; Anticonvulsant agent
303	**Pre-registration	GW Pharmaceuticals Ltd	GW-1000	Spinal cord injury; Multiple sclerosis; Neuropathy; Pain	Cannabinoid modulator	Analgesic
304	Discontinued	EGIS Gyogyszergyar RT	GYKI-52466	Alzheimers disease; Parkinsons disease; Epilepsy	AMPA receptor antagonist	Anticonvulsant agent, Antiparkinsonian
305	**Discovery	Bioprojet/Berlin Free University/ INSERM/UCL / GlaxoSmithKline Inc	H3 antagonists	Psychiatric disorder; Neurological disease; Schizophrenia	Histamine H3 antagonist	Antipsychotic; Hypnotic; Anticonvulsant agent
306	No Development Reported	American Cyanamid Co	HBNF	Hematological disease; Neurodegenerative disease	Heparin binding neurotrophic factor; FGF-8 agonist	
307	Discovery	Hunter-Fleming Ltd	HF-0220	Alzheimers disease; Parkinsons disease; Cognitive disorder; Cerebrovascular ischemia; Head injury	7-hydroxysteroid pathway modulator	Neuroprotectant; Antiparkinsonian
308	Discovery	Curis Inc	Hh agonists	Diabetic neuropathy; Infertility; Alopecia; Parkinsons disease; Bone disease; Neurological disease	Hedgehog protein agonist	Neuroprotectant; Antiparkinsonian
309	**Discovery	Kyorin Pharmaceutical Co Ltd	himbacine analogs	Alzheimers disease	Muscarinic M2 antagonist	Nootropic agent
310	Phase 2 Clinical	Sanofi-Aventis	HP-184	Spinal chord injury; Alzheimers disease; Cognitive disorder	Potassium channel blocker; Sodium channel blocker; Acetylcholine release stimulator	Neuroprotectant
311	Discovery	Tapestry Pharmaceuticals Inc	Huntingtons disease therapy	Huntingtons chorea	Gene therapy	Neuroprotectant
312	**Discovery		Huntingtons disease therapy	Huntingtons chorea	Cyclooxygenase 2 inhibitor; Sodium channel blocker; Cyclooxygenase 1 inhibitor	Antioxidant agent
313	**Launched	Shanghai Institute of Materia Medica	huperzine A	Alzheimers disease	Acetylcholinesterase inhibitor	Nootropic agent
314	Discovery	Aegera Therapeutics Inc	IAP	Parkinsons disease; Multiple sclerosis; Cerebrovascular ischemia; Cancer	Apoptosis inhibitor; Caspase inhibitor; Gene therapy	Neuroprotectant; Anticancer
315	Phase 1 Clinical	ICAgene Inc	ICA-69673	Epilepsy; Anxiety disorder; Parkinsons disease; Arthritis; Pain	Ion channel modulator	Anxiolytic; Analgesic; Antiparkinsonian; Anticonvulsant agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
316	Discovery	Idun Pharmaceuticals Inc	IDN-6556	Hepatitis; Inflammation; Primary biliary cirrhosis; Liver disease; Neurodegenerative disease; Ischemia; Cardiac failure	Caspase inhibitor; Apoptosis inhibitor	Apoptosis modulator; Anti-inflammatory; Cardioprotectant
317	Research Tool	Synthelabo	ifenprodil	Schizophrenia; Cerebral infarction; Cerebrovascular ischemia	Noncompetitive NMDA antagonist	Neuroprotectant; Antipsychotic
318	Discovery	Neurocrine Biosciences Inc	IGF modulators	Endocrine disease; Neurodegenerative disease; Central nervous system disease; Cerebrovascular ischemia; Diabetes mellitus	Insulin-like growth factor 1 agonist	Neuroprotectant; Antipsychotic
319	Discontinued	Pfizer Inc	Igmesine	Diarrhea; Alzheimers disease; Irritable bowel syndrome; Major depressive disorder	Sigma opioid agonist; Sigma opioid modulator	Neuroprotectant; Antidepressant
320	Discovery	Prescient NeuroPharma Inc	IGT-440103	Cerebrovascular ischemia; Head injury	Metabotropic glutamate receptor agonist	Neuroprotectant
321	*Phase 3 Clinical (Discovery)	Hoechst Marion Roussel Inc	iloperidone	Psychosis; Schizophrenia	Dopamine D2 antagonist; 5-HT 2a antagonist	Antipsychotic
322	No Development Reported	Ortho Pharmaceutical Corp	Imidazole derivatives	Pain; Neurodegenerative disease	Alpha 3 adrenoceptor agonist	Analgesic
323	**Discovery	Janssen Farmaceutica SA (Spain)	Imidazole derivatives	Brain Injury	AMPA receptor ligand inhibitor	Neuroprotectant
324	Discovery	Servier	Imidazolyl nitrones	Nervous system injury; Neurodegenerative disease	Free radical scavenger	Neuroprotectant; Antioxidant agent
325	Discovery	Cytos Biotechnology AG / Novartis	Immunodrug vaccines (Alzheimers disease)	Alzheimers disease	Vaccine against BA4 fragments	Neuroprotectant
326	Phase 2 Clinical	Inotek Pharmaceuticals Corp	INO-1001	Nervous system injury; Reperfusion injury; Colitis; Glioma; Sepsis; Melanoma; Multiple sclerosis; Myocardial infarction; Arthritis; Uveitis; Cerebrovascular ischemia; Cancer; Diabetes mellitus; Diabetic complication	PARP inhibitor	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
327	Discovery	Boston Life Sciences Inc	inosine	Neurodegenerative disease; Glaucoma; Cerebrovascular ischemia	NGF agonist; Adenosine precursor	Neuroprotectant
328	No Development Reported	Yeda Research & Development Co Ltd	Interleukin-2-like growth factor	Neurodegenerative disease	IL-2 agonist	Growth factor agonist
329	Pre-registration	Research Triangle Institute	Iometopane	Parkinsons disease	Dopamine uptake inhibitor; SPECT contrast agent	Neuroprotectant; Antiparkinsonian
330	Phase 2 Clinical	Nippon Chemiphar Co Ltd	Ipenoxazone	Alzheimers disease; Neurodegenerative disease; Middle ear disease	NMDA receptor antagonist; Ionotropic glutamate receptor antagonist; Calcium channel blocker	Smooth muscle relaxant
331	Discovery	Chronogen Inc	isp-1; clk-1	Neurodegenerative disease; Cardiovascular disease; Cancer; Metabolic disorder	Protein tyrosine kinase STY	Neuroprotectant; Anticancer; Metabolic modulator
332	*Phase 3 Clinical (Phase 2 Clinical)	Kyowa Hakko Kogyo Co Ltd	istradefylline	Parkinsons disease; Major depressive disorder	Adenosine A2a antagonist	Antidepressant; Antiparkinsonian
333	Discovery	Bristol-Myers Squibb Pharma Co	IT-657	Schizophrenia	Dopamine D2 antagonist; 5-HT 2a antagonist	Antipsychotic
334	No Development Reported	Hoechst AG	itameline	Dementia; Alzheimers disease; Cognitive disorder	Muscarinic ACh agonist	Nootropic agent
335	Discovery	Serono SA ; Vertex Pharmaceuticals; BioFocus plc; Signal Research Division	JNK inhibitors	Inflammation; Neurodegenerative disease; Central nervous system disease; Ischemia; Pulmonary fibrosis; Cancer; Diabetes mellitus; Epilepsy; Pancreatitis; Arthritis; Asthma; Transplant rejection	Jun N terminal kinase modulator; Jun N terminal kinase-2 inhibitor; Jun N terminal kinase-3a inhibitor	Vasoprotectant; Anti-inflammatory; Anticancer; Angiogenesis inhibitor; Anticonvulsant agent
336	**Discontinued	Japan Tobacco Inc	JTP-4819	Alzheimers disease; Cocaine addiction	Prolylendopeptidase inhibitor	Neuroprotectant
337	No Development Reported	Kyowa Hakko Kogyo Co Ltd	KF-17329	Neurodegenerative disease; Cerebrovascular ischemia	No information available	Neuroprotectant
338	Discontinued	Krenitsky Pharmaceuticals Inc	KP-102	Age related macular degeneration; Dementia	NGF agonist	Neurotrophic agent
339	Discovery	Kyorin Pharmaceutical Co Ltd	KRP-199	Cerebrovascular ischemia	AMPA receptor antagonist	Neuroprotectant
340	Discovery	Keryx Biopharmaceuticals Inc	KRX-411	Neurodegenerative disease	Protein kinase modulator	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
341	*Phase 3 Clinical (Phase 2 Clinical)	Kyowa Hakko	KW-6002; Istradefylline	Parkinsons disease; Major depressive disorder	Adenosine A2a antagonist	Antidepressant; Antiparkinsonian
342	No Development Reported	Merck & Co Inc	L-687306	Alzheimers disease	Muscarinic M1 agonist	Nootropic agent
343	Research Tool	Merck & Co Inc	L-687414	Neurodegenerative disease; Epilepsy	NMDA receptor antagonist	Anticonvulsant agent
344	Research Tool	Merck & Co Inc	L-689560	Neurodegenerative disease	NMDA receptor antagonist	Anticonvulsant agent
345	No Development Reported	Merck & Co Inc	L-701252	Alzheimers disease; Cerebrovascular ischemia; Epilepsy	NMDA receptor antagonist	Neuroprotectant; Anticonvulsant agent
346	**Discontinued	Merck & Co Inc	L-701324	Epilepsy; Psychosis; Cerebrovascular ischemia	NMDA/Glycine antagonist; Glutamate receptor antagonist; Glycine antagonist; NMDA receptor antagonist	Neuroprotectant; Antipsychotic; Anticonvulsant agent
347	**Discovery	Yamanouchi Pharmaceutical Co Ltd	lactacystin	Alzheimers disease	Proteasome inhibitor	Neuroprotectant
348	Phase 1 Clinical	Hebrew University of Jerusalem	ladostigil	Alzheimers disease	Acetylcholinesterase inhibitor; MAO B inhibitor	Neuroprotectant; Nootropic agent
349	Phase 1 Clinical	GlaxoSmithKline plc	Lamictal XR	Epilepsy; Neuropathic pain	Sodium channel blocker; Glutamate release inhibitor	Neuroprotectant; Antidepressant; Antipsychotic; Anticonvulsant agent
350	Launched	GlaxoSmithKline plc	lamotrigine	Epilepsy; Huntingtons chorea; Migraine; Schizophrenia; Autism; Mood disorder; Cerebrovascular ischemia; Bipolar disorder; Neuropathy; Seizure, epilepsy & convulsion; Major depressive disorder	Glutamate release inhibitor; Sodium channel blocker	Neuroprotectant; Anticonvulsant agent; Antidepressant; Antipsychotic
351	Discovery	Louisiana University	LAU-0501	Alzheimers disease; Parkinsons disease	Cyclooxygenase 2 inhibitor; Non-steroidal anti-inflammatory	Anti-inflammatroy; Antiparkinsonian
352	Discovery	Louisiana State University	LAU-8080	Cerebrovascular ischemia	Platelet aggregation inhibitor; PAF antagonist	Neuroprotectant
353	Phase 3 Clinical	Scotia Holdings plc	LAX-101	Huntingtons chorea; Schizophrenia; Bipolar disorder; Major depressive disorder	Phospholipase inhibitor	Antidepressant; Antipsychotic
354	Discontinued	Roche	lazabemide	Alzheimers disease; Neurodegenerative disease; Parkinsons disease; Dementia	MAO B inhibitor	Antiparkinsonian

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
355	Discovery	Oxford BioMedica plc	LentiVector	HIV infection; Motor neurone disease; Asthma; Parkinsons disease; Cystic fibrosis; Diabetes mellitus	EGF-, VEGF-agonist; Apoptosis antagonist	Gene Transfer System
356	*Discontinued (Phase 2 Clinical)	Spectrum Pharmaceuticals	Leteprinin	Nervous system injury; Spinal cord injury; Alzheimers disease; Motor neurone disease; Parkinsons disease; Cerebrovascular ischemia	FGF agonist; NGF agonist	Nootropic agent; Antiparkinsonian; Neuroprotectant
357	Discovery	Renovis Inc	leukocyte trafficking inhibitors (neurodegenerative disease)	Neurodegenerative disease	leukocyte trafficking inhibitors	Neuroprotectant; Anti-inflammatory
358	**Phase 2 Clinical	Voyager Pharmaceutical Corp / DURECT Corp	leuprolide	Alzheimers disease	GNRH agonist	Nootropic agent
359	**Discovery	Advanced Plant Pharmaceuticals Inc	LHM-123	Alzheimers disease	No information available	Neuroprotectant
360	**No Development Reported	Roche Bioscience	lifarizine	Cerebral infarction; Cerebrovascular disease; Cerebrovascular ischemia	Sodium channel blocker; Calcium channel blocker	Neuroprotectant; Protectant
361	Discovery	Fidia-Georgetown Institute for Neurosciences	LIGA-20	Neurodegenerative disease; Cerebrovascular ischemia	Excitatory amino acid antagonist	Neuroprotectant
362	Discovery	OXIS International Inc	lipid soluble antioxidants	Alzheimers disease; Parkinsons disease; Central nervous system disease	Antioxidant	Antiparkinsonian
363	**Discontinued	Janssen Pharmaceutica NV	lubeluzole	Carcinoma; Cerebrovascular ischemia; Neuropathy; Head injury	MAO inhibitor; NO synthesis inhibitor; Ionotropic glutamate receptor antagonist	Neuroprotectant
364	Discovery	University of Chicago ; Anagen Therapeutics	LXR agonists	Alzheimers disease; Atherosclerosis; Lipid metabolism disorder	Lipid metabolism modulator, Liver X receptor agonist; Cholesterol modulator; Cardiac agent	Neuroprotectant
365	No Development Reported	Eli Lilly & Co	LY-178002	Inflammation; Neurodegenerative disease	Antioxidant agent	Anti-inflammatory; Imuno-suppressant
366	No Development Reported	Eli Lilly & Co	LY-233536	Neurodegenerative disease	Competitive NMDA antagonist	Antiparkinsonian; Anticonvulsant agent
367	No Development Reported	Eli Lilly & Co	LY-235959	Epilepsy; Opiate dependence; Parkinsons disease	Competitive NMDA antagonist	Antiparkinsonian; Anticonvulsant agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
368	Discontinued	Eli Lilly & Co	LY-274614	Epilepsy; Alzheimers disease; Neurodegenerative disease; Opiate use disorder; Parkinsons diseases; Dementia	NMDA receptor antagonist	Antiparkinsonian; Anticonvulsant agent
369	Phase 2 Clinical	Eli Lilly & Co	LY-293558	Epilepsy; Pain; Cerebral infarction; Cerebrovascular ischemia; Migraine	AMPA receptor antagonist	Neuroprotectant; Analgesic; Anticonvulsant agent
370	Research Tool	Eli Lilly & Co	LY-302427	Neurodegenerative disease	Metabotropic glutamate receptor modulator	Neuroprotectant
371	No Development Reported	Eli Lilly & Co	LY-354006	Alzheimers disease; Neurodegenerative disease	Muscarinic ACh modulator	Nootropic agent
372	Phase 2 Clinical	Eli Lilly & Co	LY-354740	Neurodegenerative disease; Epilepsy; Nicotine dependence; Anxiety disorder; Drug dependence; Central nervous system disease	Metabotropic glutamate receptor 2 agonist; Metabotropic glutamate receptor 3 agonist	Anxiolytic; Anticonvulsant agent
373	**Phase 2 Clinical	Eli Lilly & Co	LY-450139	Alzheimers disease	Beta amyloid synthesis inhibitor; Gamma-secretase inhibitor; Aspartic protease inhibitor	Neuroprotectant
374	Phase 1 Clinical	Eli Lilly & Co	LY-451395	Alzheimers disease; Neurodegenerative disease	AMPA receptor agonist	Neuroprotectant
375	Discovery	Eli Lilly & Co	LY-483518	Alzheimers disease; Anxiety disorder; Psychosis; Schizophrenia; Cognitive disorder	5-HT 6 antagonist	Nootropic agent; Anxiolytic; Antipsychotic
376	Discovery	MetaPhore Pharmaceuticals Inc	M-40401	Reperfusion injury; HIV infection; Parkinsons disease; Shock; Encephalitis	Viral replication inhibitor; Apoptosis inhibitor; Superoxide dismutase stimulator; HIV replication inhibitor	Neuroprotectant
377	**Phase 3 Clinical	Medicure Inc	MC-1	Reperfusion injury; Myocardial infarction; Cerebrovascular ischemia	No information available	Cardioprotectant; Neuroprotectant
378	Discovery	Mitsubishi-Tokyo Pharmaceuticals Inc	MCC-257	Diabetic neuropathy; Neurodegenerative disease	NGF agonist	Neuroprotectant
379	Discontinued	Mitsubishi-Tokyo Pharmaceuticals Inc	MCI-225	Alzheimers disease; Neurodegenerative disease; Depression	5-HT 3 antagonist; Norepinephrine uptake inhibitor	Antidepressant; Metabolic activator
380	**Discovery	Arachnova Ltd	MCI-225	Functional bowel disorder; Incontinence; Irritable bowel syndrome; Pain	5-HT 3 antagonist; Norepinephrine uptake inhibitor; 5-HT uptake inhibitor	Gastrointestinal system agent; Analgesic

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
381	**Discovery	Medicure Inc	MC-45228	Reperfusion injury; Cerebrovascular ischemia; Ischemia	Factor IIa antagonist; Factor Xa antagonist	Neuroprotectant; Coagulation inhibitor
382	**Discovery	Medicure Inc	MC-45308	Lung embolism; Peripheral arterial occlusive disease; Myocardial infarction; Cerebrovascular ischemia	Protease modulator; Factor IIa antagonist; Factor Xa antagonist; Platelet aggregation inhibitor	Coagulation inhibitor; Neuroprotector
383	**Discovery	Medicure Inc	MC-5422	Reperfusion injury; Cerebrovascular ischemia; Ischemia	Reduction of infarct size	Cardioprotectant; Neuroprotectant
384	No Development Reported	Hoechst Marion Roussel Inc	MDL-100748	Neurodegenerative disease; Epilepsy	NMDA/Glycine antagonist; Glycine antagonist	Anticonvulsant agent
385	Discontinued	Hoechst Marion Roussel Inc	MDL-101002	Neurodegenerative disease; Cerebrovascular ischemia; Septic shock	Free radical scavenger	Neuroprotectant; Antioxidant agent
386	No Development Reported	Hoechst Marion Roussel Inc	MDL-102288	Neurodegenerative disease; Epilepsy	Glycine antagonist	Neuroprotectant; Anticancer
387	No Development Reported	Hoechst Marion Roussel Inc	MDL-105519	Neurodegenerative disease	Glycine antagonist; NMDA receptor antagonist	Neuroprotectant
388	No Development Reported	Hoechst Marion Roussel Inc	MDL-27266	Neurodegenerative disease; Epilepsy	Ionotropic glutamate receptor antagonist; NMDA receptor antagonist	Anticonvulsant agent
389	Discontinued	Hoechst Marion Roussel Inc	MDL-28170	Alzheimers disease; Neurodegenerative disease	Cysteine protease inhibitor; Hydrolase inhibitor; Amyloid protein deposition inhibitor; Calpain inhibitor	Antiparasitic, Neuroprotectant
390	No Development Reported	Hoechst Marion Roussel Inc	MDL-29951	Neurodegenerative disease; Epilepsy	NMDA/Glycine antagonist	Anticonvulsant agent
391	Discontinued	Cephalon Inc; Chiron	mecasermin	Diabetic neuropathy; Motor neurone disease; Renal failure; Neurodegenerative disease; Osteoarthritis; Peripheral neuropathy	Insulin-like growth factor 1 agonist	Neuroprotectant
392	**Launched	Eisai Co Ltd	mecobalamin	Diabetic neuropathy; Neuralgia; Infertility; Glaucoma; Alzheimers disease; Incontinence; Leukemia; Peripheral neuropathy; Sleep disorder; Genitourinary disease	Vitamin B12 agonist	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
393	Phase 1 Clinical	Bayer AG / Memory Pharmaceuticals Corp	MEM-1003	Alzheimers disease; Neurodegenerative disease; Cognitive disorder; Central nervous system disease; Dementia	Calcium channel modulator (L-type)	Neuroprotectant
394	Launched	Merz/Forrest	Memantine	HIV associated dementia; Dementia; Neuropathic pain; Glaucoma; Alzheimers disease; Ocular disease; Ocular hypertension;	NMDA receptor antagonist	Neuroprotectant; Analgesic
395	Discontinued	Pharmed Dr Liedtke GmbH	Mepindolol	Hypertension; Angina; Neurodegenerative disease; Cardiovascular disease; Coronary artery disease	Beta adrenoceptor antagonist	Antihypertensive
396	Discovery	Prescient NeuroPharma Inc	mesencephalic astrocyte-derived neurotrophic factor	Parkinsons disease	NGF receptor agonist	Neuroprotectant; Antiparkinsonian
397	Discovery	Eli Lilly & Co	metabotropic glutamate receptor agonists	Neurodegenerative disease; Anxiety disorder; Pain	Metabotropic glutamate receptor 2 agonist; Metabotropic glutamate receptor 3 agonist	Anxiolytic; Analgesic
398	Discovery	Taisho Pharmaceutical Co Ltd / Merck	metabotropic glutamate receptor ligands	Psychosis; Schizophrenia; Major depressive disorder	Metabotropic glutamate receptor agonist; Metabotropic glutamate receptor antagonist	Antipsychotic
399	Discovery	Pharmacyclics Inc	Metallotexaphyrins	Motor neurone disease	Chelating agent	Neuroprotectant
400	Discovery	Sibia Neuroscience; Novartis AG	methylphenylethynylpyridine (MPEP)	Epilepsy; Pain; Neurodegenerative disease; Anxiety disorder; Cerebrovascular ischemia; Head injury	Metabotropic glutamate receptor 1 agonist; Metabotropic glutamate receptor 5 antagonist; NMDA receptor antagonist; AMPA receptor antagonist	Neuroprotectant; Analgesic; Anticonvulsant agent; Anxiolytic
401	**Discovery	Merck Research Laboratories	mGlu5 antagonists	Fragile X syndrome; Anxiety disorder; Neurological disease; Major depressive disorder; Pain	Metabotropic glutamate receptor 5 antagonist	Antidepressant; Anxiolytic; Analgesic
402	Discovery	Prescient NeuroPharma Inc; Royal Danish School of Pharmacy	mGluR agonists	Neurodegenerative disease; Anxiety disorder; Ischemia	Metabotropic glutamate receptor agonist	Neuroprotectant; Anxiolytic
403	Discovery	F Hoffmann-La Roche Ltd	mGluR1 modulator	Alzheimers disease; Central nervous system disease; Dementia	Metabotropic glutamate receptor 1 modulator	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
404	**Discovery	Johnson & Johnson	mGluR1 modulators	Panic disorder; Anxiety disorder; Cerebrovascular ischemia; Pain	Metabotropic glutamate receptor 1 modulator	Anxiolytic; Analgesic; Imaging agent
405	Discovery	Mera Pharmaceuticals Inc	microalgal compound, Astaxanthin	Age related macular degeneration; Hypercholesterolemia; Neurodegenerative disease; Cancer	Antioxidant	Anticancer; Antihypercholesterolemic agent; Neuroprotectant
406	Discontinued	GD Searle & Co	milacemide	Epilepsy; Alzheimers disease; Depression; Neurodegenerative disease; Dementia	MAO B inhibitor; NMDA receptor agonist; Oxidoreductase inhibitor	Antidepressant; Anticonvulsant agent
407	**Discovery	Molecular Insight Pharmaceuticals Inc	MIP-170D	Parkinsons disease; Attention deficit hyperactivity disorder; Central nervous system disease	Imaging agent	Radiodiagnostic
408	Launched	Pharmacia/Boehringer	Mirapex (pramipexole);	Parkinsons disease; Schizophrenia; Major depressive disorder	Dopamine D2 agonist; Free radical scavenger; Dopamine D3 agonist	Neuroprotectant; Antidepressant; Antipsychotic; Antiparkinsonian
409	Phase 1 Clinical	MitoKor	MITO-4509	Alzheimers disease; Retinitis pigmentosa; Parkinsons disease; Cognitive disorder; Ataxia	Estrogen agonist	Antiparkinsonian; Neuroprotectant
410	Discovery	MitoKor	MITO-4565	Glaucoma; Retinitis pigmentosa	Apoptosis inhibitor	Neuroprotectant
411	Phase 2 Clinical	Mitsubishi-Tokyo Pharmaceuticals Inc	MKC-231	Alzheimers disease; Cerebrovascular ischemia; Amnesia	Choline uptake enhancer	Neuroprotectant; Nootropic agent
412	Discovery	Cephalon Inc	MLK inhibitors	Neurodegenerative disease	Protein kinase inhibitor	Neuroprotectant
413	Discontinued	LeukoSite Inc; PAION GmbH	MLN-519	Inflammation; Myocardial infarction; Cerebrovascular ischemia; Nervous system inflammation	Proteasome inhibitor	Neuroprotectant; Anti-inflammatory
414	Phase 2 Clinical	Mochida Pharmaceutical Co Ltd	MND-21, icosapentanoic acid	Alzheimers disease	Platelet aggression antagonist	Neuroprotectant; Antithrombotic
415	No Development Reported	Mitsui Pharmaceuticals Inc	MS-153	Cerebrovascular ischemia	Glutamate receptor modulator	Neuroprotectant
416	**Phase 1 Clinical	Santen Pharmaceutical Co Ltd	Msc-1	Spinal cord injury; Alzheimers disease; Cognitive disorder; Drug dependence; Cerebrovascular ischemia; Brain injury; Dementia; Major depressive disorder	Sigma opioid agonist	Neuroprotectant; Antidepressant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
417	No Development Reported	Taisho Pharmaceutical Co Ltd	MT-5	Neurodegenerative disease	Neuronal growth factor receptor agonist	Neuroprotectant
418	**Discovery	ACADIA Pharmaceuticals Inc	muscarinic M1 agonists	Alzheimers disease	Muscarinic M1 agonist	Nootropic agent
419	**Discovery	Eli Lilly & Co	muscarinic M1 agonists	Alzheimers disease	Muscarinic M1 agonist	Nootropic agent
420	**Discovery	Cytovia Inc	MX-1013	Sepsis; Hepatitis; Bacterial infection; Cerebrovascular ischemia; Degeneration	Caspase inhibitor	Antibacterial; Neuroprotectant
421	**Phase 1 Clinical	MitoKor	MX-4509	Alzheimers disease; Retinitis pigmentosa; Parkinsons disease; Cognitive disorder; Ataxia	Estrogen agonist	Neuroprotectant; Antiparkinsonian
422	No Development Reported	Nisshin Flour Milling Co Ltd	N-3393	Neurodegenerative disease; Cerebrovascular ischemia	NO-agonist	Vasodilatory agent
423	**Discovery	Guilford Pharmaceuticals Inc	NAALADase inhibitors	Diabetic neuropathy; Spinal cord injury; Neuropathic pain; Neurodegenerative disease; Head injury; Peripheral neuropathy; Prostate tumor; Drug dependence;	Carboxypeptidase inhibitor; Unclassified enzyme inhibitor	Anticancer; Neuroprotectant; Anticonvulsant agent
424	Discovery	Sumitomo Pharmaceuticals Co Ltd	Na ⁺ /H ⁺ exchange inhibitors	Reperfusion injury; Cerebrovascular ischemia; Angina	H ⁺ K ⁺ ATPase inhibitor; Na ⁺ H ⁺ ion exchange inhibitor	Neuroprotectant; Cardioprotectant; Vasoprotectant; Vasodilatory agent
425	**Launched	IVAX Corp; Biotie Therapies Corp; Ohmeda	nalmefene	Alcoholism; Impulse control disorder; Cystitis; Compulsive gambling; Opiate dependence; Pruritus; Shock; Cerebrovascular ischemia	Opioid antagonist	Reverses narcotic analgesia; Neuroprotectant
426	Discovery	Toray Industries Inc	Naltrindole derivatives	Neurodegenerative disease	Delta opioid antagonist	Neuroprotectant
427	Discovery	National Institutes of Health	NAPVSIPQ	Neurodegenerative disease	Antioxidant agent	Neuroprotectant
428	Clinical	Neurocrine Biosciences Inc	NBI-30702	Cerebrovascular ischemia	ACTH releasing factor antagonist	Neuroprotectant
429	*Phase 3 Clinical (Phase 2 Clinical)	Neurochem Inc	NC-531	Alzheimers disease; Cerebrovascular disease; Cerebrovascular ischemia	Amyloid protein deposition inhibitor	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
430	**Discovery	NicOx SA	NCX-2216	Alzheimers disease	Cyclooxygenase inhibitor; Non-steroidal anti-inflammatory; NO donor	Antioxidant agent
431	Phase 2 Clinical	Taisho Pharmaceutical Co Ltd	NE-100	Psychosis; Schizophrenia	Sigma opioid antagonist	Antipsychotic
432	**Pre-registration	Daiichi Seiyaku Co Ltd	nefiracetam	Cerebrovascular disease; Dementia	Nootropic agent; ACh agonist; ACAT stimulator; Calcium channel activator	Neuroprotectant
433	**Discovery	Osaka Bioscience Institute	NEPP-10	Alzheimers disease	cyclopentenone prostaglandin analogs; neurite outgrowth-promoting prostaglandins (NEPPs)	Nootropic agent; Antioxidant agent
434	*Phase 3 Clinical (Phase 2 Clinical)	Merz & Co GmbH	Neramexane	Alcoholism; Alzheimers disease; Pain; Parkinsons disease; Drug dependence; Central nervous system disease; Cerebrovascular ischemia; Major depressive disorder	NMDA receptor antagonist	Neuroprotectant; Analgesic; Antiparkinsonian
435	Discovery	NsGene A/S	Neublastin	Neuropathic pain; Neurodegenerative disease; Neuropathy	Ret tyrosine kinase receptor stimulator; Neuronal growth factor	Neuroprotectant
436	Discovery	NeuroSpheres Ltd	neural stem cells	Motor neurone disease; Neurodegenerative disease; Central nervous system disease; Genetic disorder; Cerebrovascular ischemia	Tissue regeneration from stem cells	Neuroprotectant; Nootropic agent; Antipsychotic; Antiparkinsonian
437	**Discovery	ReNeuron (UK) Ltd	neural stem cell therapy	Alzheimers disease; Huntingtons chorea; Paralysis; Parkinsons disease; Cerebrovascular ischemia; Dementia	Cell line; Cell therapy	Neuroprotectant; Antiparkinsonian
438	Discovery	Harvard University/ Acorda	neuregulin-2	Heart disease; Neurological disease	ErbB2 tyrosine kinase receptor modulator; ErbB3 tyrosine kinase receptor modulator; ErbB4 tyrosine kinase receptor modulator; Unspecified growth factor agonist	Neuroprotectant; Cardioprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
439	Discontinued	Apollo Biopharmaceutics Inc	Neurocalc	Alzheimers disease; Neurodegenerative disease	Calcium metabolism modulator	Neuroprotectant
440	Discovery	Johns Hopkins University ; Guilford Pharmaceuticals	neuroimmunophilin ligands	Diabetic neuropathy; Alzheimers disease; Multiple sclerosis; Neurodegenerative disease; Parkinsons disease; Cerebrovascular disease; Cerebrovascular ischemia; Neuropathy	Immunophilin modulator	Chemoprotectant; Neuroprotectant Antiparkinsonian
441	**Discovery	Sanofi-Aventis	neurolysin inhibitors	Neurological disease	Metalloprotease 3 inhibitor; Neuropeptide metabolism modulator	Neuroprotectant
442	**Discovery	Abbott Laboratories	neuronal nAChR ligands	Alzheimers disease; Neurodegenerative disease; Pain; Nicotine dependence; Anxiety disorder; Schizophrenia; Major depressive disorder	Nicotinic ACh agonist; Nootropic agent	Anxiolytic; Antipsychotic; Analgesic
443	Discovery	Acorda Therapeutics Inc	neuronal stem cell therapy	Spinal cord injury; Parkinsons disease	Genetically engineered autologous cell therapy; regeneration from stem cells	Antiparkinsonian
444	Discovery	Vertex Pharmaceuticals Inc / Schering AG	neurophilins (neurological disease)	Alzheimers disease; Multiple sclerosis; Parkinsons disease; Arthritis; Psoriasis; Autoimmune disease; Neurological disease; Diabetes mellitus	General pump inhibitors; P-glycoprotein inhibitor	Antiparkinsonian; Immuno-suppressant
445	Discovery	Renovis Inc	neuroprotectants (nitroene-based)	Cerebrovascular ischemia; Neurological disease; Injury	Antioxidants	Neuroprotectant
446	No Development Reported	Neurocal International Inc	Neurostrol	Alzheimers disease; Neurodegenerative disease	Antioxidants	Neuroprotectant; Antioxidant agent
447	**Discovery	Krenitsky Pharmaceuticals Inc	neurotrophic factor mimetics	Alzheimers disease; Huntingtons chorea; Neurodegenerative disease; Cognitive disorder; Cerebrovascular ischemia	Neuronal growth factor receptor agonist	Neuroprotectant
448	Discovery	BioVex Ltd	NeuroVEX	Spinal cord injury; Neurodegenerative disease; Parkinsons disease; Pain	Dopamine synthesis stimulant; Herpes virus based gene therapy; Dopamine modulator	Antiparkinsonian

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
449	**Launched	Bayer AG	nimodipine	Alzheimers disease; Brain hemorrhage; Cerebral infarction; Cerebrovascular ischemia; Migraine	Vasodilatory agent; Calcium channel blocker	Neuroprotectant Analgesic
450	Discovery	Institut Henri Beaufour; Northwestern University; Fissons plc	nitric oxide synthase inhibitors	Neurodegenerative disease; Cerebrovascular ischemia	NO synthesis inhibitor; Free radical scavenger	Neuroprotectant;
451	Discontinued	AstraZeneca plc	NLA-715; Clomethiazole; Zendra	Alcoholism; Epilepsy; Pre-eclampsia; Anesthesia; Cerebrovascular ischemia	GABA A agonist	Neuroprotectant; Anticonvulsant agent; Anxiolytic
452	Discovery	Hoffmann-La Roche AG	NMDA antagonists	Neurodegenerative disease; Central nervous system disease; Cerebrovascular ischemia	NMDA receptor antagonist	Neuroprotectant
453	Discovery	Hokkaido University	NMDA antagonists	Neurodegenerative disease	NMDA receptor antagonist	Neuroprotectant
454	*No Development Reported (Discovery)	Sumitomo Pharmaceuticals Co Ltd ; Pfizer; University of Oxford	NMDA antagonists	Neurodegenerative disease; Epilepsy; Cerebrovascular ischemia	NMDA/Glycine antagonist; NMDA receptor antagonist	Neuroprotectant; Anticonvulsant agent
455	**Discovery	Neurotech Pharmaceuticals Inc	NMDA antagonists	Neurodegenerative disease; Cerebral hypoxia; Brain injury	Noncompetitive NMDA antagonist	Neuroprotectant; Antioxidant agent
456	**No Development Reported	Novartis AG	NMDA antagonists	Alzheimers disease; Parkinsons disease; Cerebrovascular disease; Epilepsy	NMDA receptor antagonist	Neuroprotectant; Antiparkinsonian; Anticonvulsant agent
457	**Discovery	University of Tennessee Memphis	NMDA antagonists	Pneumocystis carinii infection; Central nervous system disease	NMDA receptor antagonist	Antiparasitic
458	**No Development Reported	Vernalis Research Ltd	NMDA antagonists	Pain	NMDA receptor antagonist; Ionotropic glutamate receptor antagonist; Glutamate receptor modulator	Neuroprotectant; Analgesic
459	Phase 1 Clinical	Pfizer Inc	NMDA/glycine antagonists	Cerebrovascular ischemia	NMDA/Glycine antagonist	Neuroprotectant
460	**Discontinued	Astra Zeneca	NMDA/glycine antagonists	Cerebrovascular ischemia; Neurological disease	NMDA/Glycine antagonist; Glutamate receptor antagonist; Glycine antagonist	Neuroprotectant
461	Discovery	Merck Sharp & Dohme Research Laboratories	NMDA receptor antagonists (NR2B subtype-selective)	Neuropathic pain; Parkinsons disease; Cerebrovascular ischemia; Epilepsy	NMDA receptor antagonist	Neuroprotectant; Analgesic; Antiparkinsonian; Anticonvulsant agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
462	No Development Reported	Novo Nordisk A/S	NNC-07-0775	Alzheimers disease; Cerebrovascular ischemia; Epilepsy; Head injury	Metabotropic glutamate receptor 1 antagonist; Ionotropic glutamate receptor antagonist	Neuroprotectant; Anticonvulsant agent
463	Discontinued	Novo Nordisk A/S	NNC-07-9202	Epilepsy; Neurodegenerative disease; Psychosis; Cerebrovascular ischemia	Neuroprotectant; NMDA receptor antagonist; Ampa receptor antagonist	Neuroprotectant; Antipsychotic; Anticonvulsant agent
464	No Development Reported	Regeneron Pharmaceuticals Inc	Noggin	Neurodegenerative disease; Bone disease; Burns; Injury	Growth factor agonist	Neuroprotectant
465	Discovery	Biogen Inc	Nogo receptor modulators	Spinal cord injury; Multiple sclerosis; Cerebrovascular ischemia; Brain injury	Neuronal growth factor receptor modulator; antibody technology	Neuroprotectant
466	Discovery	Organix Inc	nonamines	Parkinsons disease; Central nervous system disease; Cocaine addiction	Monoamine uptake inhibitor	Antiparkinsonian
467	No Development Reported	Hedral Therapeutics Inc	Norleu	Neurodegenerative disease; Cerebrovascular ischemia	Angiokine	Vasodilatory agent
468	Phase 1 Clinical	Medinox Inc	NOX-700	Neurodegenerative disease; Insulin dependent diabetes; Non-insulin dependent diabetes	NO modulator	Antioxidant agent
469	**Discovery	Neuropharma SA	NP-0361	Alzheimers disease	Acetylcholinesterase inhibitor; Amyloid protein deposition inhibitor	Neuroprotectant
470	Discovery	NPS Pharmaceuticals Inc	NPS-1407	Epilepsy; Pain; Neurodegenerative disease; Cerebrovascular ischemia; Depression	NMDA receptor antagonist	Antidepressant; Anticonvulsant agent; Analgesic; Neuroprotectant
471	Discontinued	NPS Pharmaceuticals Inc	NPS-846	Epilepsy; Pain; Neurodegenerative disease; Cerebrovascular ischemia	Ionotropic glutamate receptor antagonist	Neuroprotectant; Anticonvulsant agent
472	**Phase 2 Clinical	NPS Pharmaceuticals Inc	NPS-1776	Epilepsy; Migraine; Psychiatric disorder; Neurological disease	Calcimimetic compound	CNS modulator; Antidepressant; Anxiolytic; Antipsychotic; Analgesic; Anticonvulsant agent
473	Discovery	Centaur Pharmaceuticals Inc	NRT-115	Inflammation; Inflammatory bowel disease; Arthritis; Multiple sclerosis;	Cytokine release modulator	Anti-inflammatory; Antioxidant agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
474	*Phase 2 Clinical (Discontinued)	NeuroSearch AS	NS-1209	Epilepsy; Pain; Myocardial infarction; Cerebrovascular ischemia; Brain injury	Metabotropic glutamate receptor 5 antagonist; AMPA receptor antagonist	Neuroprotectant; Analgesic
475	Research Tool	NeuroSearch AS	NS-1608	Cerebrovascular ischemia	Potassium channel activator	Neuroprotectant
476	Phase 2 Clinical	NeuroSearch	NS-2330	Alzheimers disease; Parkinsons disease	Neurotransmitter modulator; Dopamine agonist; Dopamine uptake inhibitor; Monoamine uptake inhibitor; Adrenoceptor agonist; ACh agonist	Neuroprotectant; Antiparkinsonian
477	Discontinued	NeuroSearch AS	NS-257	Neurodegenerative disease; Cerebrovascular ischemia	AMPA receptor antagonist	Neuroprotectant
478	Discontinued	NeuroSearch AS	NS-377	Alzheimers disease; Neurodegenerative disease; Cognitive disorder	AMPA receptor antagonist	Neuroprotectant
479	Discontinued	NeuroSearch AS	NS-638	Neurodegenerative disease; Cerebrovascular ischemia	Calcium channel blocker	Neuroprotectant; Vasodilatory agent
480	Discontinued	NeuroSearch AS	NS-649	Alzheimers disease; Neurodegenerative disease; Cognitive disorder	Calcium channel blocker	Neuroprotectant
481	**Discontinued	Takeda Pharmaceutical Company Ltd	NT-3	Constipation; Neuropathy	Neurotrophin-3 agonist	Neuroprotectant
482	*Discontinued (Discovery)	Genentech Inc/ Ceregene	NT-4/5	Age related macular degeneration; Glaucoma; Huntingtons chorea; Motor neurone disease; Parkinsons disease; Uveitis; Diabetic retinopathy; Neurological disease; Hearing disorder	Neurotrophin-4/5 agonist; Gene therapy	Neuroprotectant; Antiparkinsonian
483	Discovery	Newron Pharmaceuticals SpA	NW-1048	Epilepsy; Parkinsons disease	MAO B inhibitor	Antiparkinsonian
484	Discovery	Nymox Pharmaceutical Corp	NXD-5150	Neurodegenerative disease	Unidentified	Neuroprotectant
485	Discovery	Nymox Pharmaceutical Corp	NXD-9062	Alzheimers disease	Spheron conversion inhibitor	Neuroprotectant
486	Phase 3 Clinical	Centaur Pharmaceuticals Inc, Astra Zeneca plc	NXV-059	Neurodegenerative disease; Brain hemorrhage; Cerebrovascular ischemia	Free radical scavenger; NO synthesis inhibitor	Neuroprotectant; Antioxidant agent
487	Phase 2 Clinical	Janssen Pharmaceutica NV	ocaperidone	Schizophrenia	Dopamine D2 antagonist; 5-HT 2a antagonist	Antipsychotic

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
488	Discontinued	Novo Nordisk A/S	odapipam	Neurodegenerative disease; Psychosis; Schizophrenia	Dopamine D1 antagonist	Antipsychotic
489	**Phase 2 Clinical	Fournier Pharma	odiparcil	Heart arrhythmia; Deep vein thrombosis; Cerebrovascular ischemia	Factor IIa antagonist	Antiarrhythmic agent; Coagulation inhibitor
490	Launched	Eli Lilly & Co	Olanzapine	Alzheimers disease; Psychosis; Schizophrenia; Bipolar disorder	5-HT 2 antagonist; Dopamine D1 antagonist; Dopamine D2 antagonist; Dopamine D4 antagonist	Antidepressant; Antipsychotic
491	**Launched	Eli Lilly & Co	Olanzapine and fluoxetine	Bipolar disorder	5-HT uptake inhibitor	Antidepressant; Anxiolytic
492	**Launched	Glaxo Wellcome plc	ondansetron	Drug-induced emesis; Gastrointestinal disease; Nausea; Anxiety disorder; Gastric motility disorder; Dementia; Major depressive disorder	5-HT 3 antagonist	Anxiolytic; Anti-emetic; Acetylcholine release stimulator
493	Phase 2 Clinical	Ono Pharmaceutical Co Ltd	ONO-2506	Alzheimers disease; Motor neurone disease; Parkinsons disease; Cerebral infarction; Cerebrovascular ischemia; Neurological disease	Protection of dopaminergic neurons; inhibition of S100B synthesis	Neuroprotectant; Antiparkinsonian
494	No Development Reported	Otsuka Pharmaceuticals Co Ltd	OPC-14117	Dementia; Cerebrovascular ischemia; Dementia; Huntingtons chorea	Free radical scavenger	Neuroprotectant; Antiparkinsonian
495	Phase 2 Clinical	Cortex Pharmaceuticals Inc	Org-24448	Schizophrenia; Major depressive disorder	AMPA receptor modulator	Antidepressant; Antipsychotic
496	Phase 2 Clinical	Sanofi-Synthelabo	osanetant	Pain; Schizophrenia; Major depressive disorder	NK3 antagonist; NK agonist	Anxiolytic; Antipsychotic; Antidepressant
497	Discovery	Serono SA	osteopontin	Multiple sclerosis	NOS inhibitor; Cytokine	Neuroprotectant
498	Discovery	National Institutes of Health	p53 inhibitors (neurodegenerative disease)	Neurodegenerative disease; Toxicity	Protection of dopaminergic neurons; Suppression of Bax production	Neuroprotectant; Apoptosis inhibitor
499	Phase 2 Clinical	Phytopharm plc	P-58	Dementia; Alzheimers disease; Parkinsons disease	Muscarinic M1 modulator	Neuroprotectant; Nootropic agent
500	No Development Reported	Hoechst AG	P-9939	Neurodegenerative disease	Glycine partial agonist	
501	*No Development Reported (Phase 1 Clinical)	Tulane University; Indevus Pharmaceuticals Inc	PACAP	Neurodegenerative disease; Cerebrovascular ischemia	Pituitary adenylate cyclase activating polypeptide (PACAP); Adenylate cyclase stimulator	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
502	Phase 3 Clinical	Johnson & Johnson	paliperidone	Schizophrenia	5-HT antagonist	Antipsychotic
503	Phase 3 Clinical	Lifegroup SpA	palmidrol	Inflammation; Autoimmune disease	5-HT release inhibitor; Cannabinoid agonist	Neuroprotectant; Anti-inflammatory
504	Discovery	Panacea Pharmaceuticals Inc	PAN-811	Alzheimers disease; Ischemia; Cancer	Ribonucleotide reductase inhibitor	Neuroprotectant; Antioxidant agent
505	**Discovery	Aurigene Discovery Technologies Ltd	pan-caspase inhibitors	Myocardial infarction; Neurodegenerative disease; Cerebrovascular ischemia	Apoptosis inhibitor; Caspase inhibitor	Cardioprotectant; Neuroprotectant
506	No Development Reported	Regeneron Pharmaceuticals Inc	Pan-Neurotrophin-1	Alzheimers disease; Neurodegenerative disease; Psychosis	Unspecified growth factor agonist	Neuroprotectant; Antipsychotic
507	*Discontinued	CellFactors plc	Parkinsons disease cell therapy	Parkinsons disease	Cell therapy; Dopamine synthesis stimulant	Antiparkinsonian
508	Discovery	Boston Life Sciences Inc	Parkinsons disease therapeutics	Parkinsons disease; Attention deficit hyperactivity disorder	Dopamine uptake inhibitor	Antiparkinsonian
509	Discovery	Panacea Pharmaceuticals Inc	Parkinsons therapeutic peptides (PAN-408, PAN-527)	Parkinsons disease	Prevention of aggregation of the α -synuclein protein	Antiparkinsonian
510	Discovery	Johns Hopkins University ; Guilford Pharmaceuticals	PARP inhibitors	Diabetic neuropathy; Spinal cord injury; Alzheimers disease; Myocardial infarction; Neurodegenerative disease; Parkinsons disease; Cerebrovascular ischemia; Cancer; Head injury; Septic shock	PARP inhibitor; Radiosensitizer	Neuroprotectant; Antiparkinsonian
511	**Discovery	Inotek Pharmaceuticals Corp	PARP inhibitors	Congestive heart failure; Parkinsons disease; Ulcerative colitis; Diabetes mellitus; Diabetic complication	PARP inhibitor	Neuroprotectant
512	**Discovery	Bayer AG	PARP inhibitors	Neurotoxicity, drug-induced Ischemia	PARP inhibitor	Neuroprotectant
513	**Discovery	Kyorin Pharmaceutical Co Ltd	PARP inhibitors	PARP inhibitor Cerebroprotectant	PARP inhibitor	Neuroprotectant
514	**Discovery	Octamer Inc	PARP inhibitors	HIV infection; Inflammation; Cerebrovascular ischemia; Cancer; Septic shock	PARP inhibitor	Anticancer Neuroprotectant Anti-inflammatory
515	Discovery	Fujisawa Pharmaceutical Co Ltd	PARP-1 inhibitors	Brain ischemia, Parkinsons disease	PARP inhibitor	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
516	Discovery	Sumitomo Pharmaceuticals Co Ltd	PARP-1 inhibitors (stroke)	Cerebrovascular ischemia	PARP inhibitor	Neuroprotectant
517	Discovery	University of Florence / GlaxoSmithKline	PARP-1 inhibitors	Cerebrovascular ischemia	PARP inhibitor	Neuroprotectant
518	**Discovery	Sanofi-Aventis	PARP-1 inhibitors	Cerebrovascular ischemia	PARP inhibitor	Neuroprotectant
519	Phase 2 Clinical	Prana Biotechnology	PBT-1; Clioquinol	Alzheimers disease	Chelating agent; Beta amyloid modulator	Neuroprotectant
520	**Discovery	Prana Biotechnology Ltd	PBT-2	Alzheimers disease	Metal attenuating compound	Chelating agent; Nootropic agent
521	No Development Reported	Parke-Davis & Co	PD-132026	Neurodegenerative disease	Dopamine agonist	Neuroprotectant; Antipsychotic
522	Discovery	Parke-Davis & Co	PD-148903	Parkinsons disease	Dopamine D1 agonist; Dopamine D2 agonist	Antiparkinsonian
523	No Development Reported	Pfizer Inc	PD-150606	Neurodegenerative disease; Neuropathy	Calpain inhibitor	Neuroprotectant
524	Discovery	Pfizer Inc	PD-159265	Neurodegenerative disease	AMPA receptor antagonist	Neuroprotectant
525	No Development Reported	Parke-Davis & Co	PD-90780	Nervous system tumor; Neurodegenerative disease	NGF antagonist	Neuroprotectant; Anticancer
526	No Development Reported	MannKind Corp	PDC-008.004	Alzheimers disease; Neurodegenerative disease	Muscarinic M2 agonist	Nootropic agent
527	Discovery	Memory Pharmaceuticals Corp	PDE-4 inhibitors	Alzheimers disease; Parkinsons disease; Schizophrenia; Major depressive disorder; Cognitive disorder	PDE 4 inhibitor	Nootropic agent; Antidepressant; Antipsychotic; Antiparkinsonian
528	**Discontinued	Bayer AG	PDE 9 inhibitors	Neurological disease	PDE inhibitor	Neuroprotectant
529	**Discovery	ICOS Corp	PDE modulators	Metabolic disorder; Neurological disease	PDE modulator	Neuroprotectant
530	Discovery	INSERM	PE21	Neurodegenerative disease; Parkinsons disease	Dopamine uptake inhibitor	Antiparkinsonian
531	Phase 2 Clinical	Wyeth Research	perzinfotel	Pain; Cerebrovascular ischemia; Neuropathy	NMDA receptor antagonist	Neuroprotectant; Analgesic
532	Discovery	Alexion Pharmaceuticals Inc	pexelizumab	Myocardial infarction; Cerebrovascular ischemia; Angina	Complement cascade inhibitor	Cardioprotectant; Vasoprotectant
533	Phase 3 Clinical	Axonyx Inc/NIH	Phenserine	Alzheimers disease	Acetylcholinesterase inhibitor; Beta amyloid synthesis inhibitor	Anti-amyloidogenic; Nootropic agent
534	**Discovery	Message Pharmaceuticals Inc	Phenserine	Alzheimers disease	Beta amyloid modulator	Anti-amyloidogenic
535	Discovery	University of Nottingham	Philanthotoxins	Neurodegenerative disease; Cognitive disorder	Nicotinic ACh antagonist; AMPA receptor antagonist	Nootropic agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
536	No Development Reported	Pierre Fabre SA	Piperidine derivatives	Alzheimers disease; Neurodegenerative disease; Parkinsons disease	Alpha 1 adrenoceptor antagonist; Alpha 2 adrenoceptor antagonist	Antiparkinsonian
537	**Launched	UCB Pharma Ltd	piracetam	Cognitive disorder; Seizure, epilepsy & convulsion	Acetylcholine release stimulator	Nootropic agent; Anticonvulsant agent
538	Discovery	Universita di Siena	PK-11195 analogs	Neurodegenerative disease; Anxiety disorder	PET contrast agent; Benzodiazepine agonist	Anxiolytic
539	Discovery	Proneuron Biotechnologies Inc	PN-277	Spinal cord injury; Neurodegenerative disease; Glaucoma; Cerebrovascular ischemia	No information available	Neuroprotectant; Immunomodulator
540	Discovery	Wellstat Therapeutics Corp	PN-401	Leukopenia, drug induced; Stomach tumor; Gastrointestinal tumor; Neurodegenerative disease; Pancreas tumor; Colorectal tumor	Uracil metabolism modulator	Anticancer; Neuroprotectant
541	Discontinued	Pharmacia & Upjohn Inc	PNU-87663	Neurodegenerative disease	Coagulation inhibitor; Antithrombin III	Antioxidant agent
542	Research Tool	Pharmacia & Upjohn Inc	PNU-99194A (and analogues)	Schizophrenia	Dopamine D3 antagonist	Antipsychotic
543	No Development Reported	Pharmacia & Upjohn Inc	PNU-101033E	Neurodegenerative disease; Asthma; Ischemia	Reduction of lipid peroxidation	Neuroprotectant; Antioxidant agent
544	No Development Reported	Pharmacia & Upjohn Inc	PNU-157678	Neurodegenerative disease	Unclassified enzyme inhibitor	Neuroprotectant
545	Phase 2 Clinical	Pharmacia Corp	PNU-170413	Psychosis; Schizophrenia	Dopamine D3 antagonist	Antipsychotic
546	Phase 1 Clinical	Pharmacia Corp	PNU-177864	Schizophrenia	Dopamine D3 antagonist	Antipsychotic
547	Clinical	Polifarma SpA	POL-255	Diabetic neuropathy; Neurodegenerative disease; Schizophrenia	Dopamine agonist	Antipsychotic
548	Discovery	University of Kuopio; Finncover Oy	POP inhibitor (Alzheimers)	Alzheimers disease	Prolylendopeptidase inhibitor	Neuroprotectant
549	Discontinued	Gedeon Richter Ltd	posatirelin	Neurodegenerative disease	TRH agonist	Neuroprotectant
550	Discovery	Bristol-Myers Squibb Co	potassium channel modulators	Neuropathic pain; Migraine; Epilepsy; Cerebrovascular ischemia	Potassium channel modulator	Neuroprotectant
551	**Discovery	Wyeth Research	potassium channel modulators	Epilepsy	Potassium channel modulator	Anticonvulsant agent
552	No Development Reported	Praecis Pharmaceuticals Inc	PPI-368	Alzheimers disease; Neurodegenerative disease	Amyloid protein deposition inhibitor	Neuroprotectant
553	**Phase 2 Clinical	Praecis Pharmaceuticals Inc	PPI-1019	Alzheimers disease	Amyloid protein deposition inhibitor	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
554	**Launched	Bristol-Myers Squibb Co; Sankyo Co Ltd	pravastatin	Hyper-cholesterolemia; Hyperlipidemia; Atherosclerosis; Cardiac failure; Cerebrovascular ischemia	HMG CoA reductase inhibitor	Antihyper-cholesterolemic agent; Neuroprotectant
555	Discovery	Prescient NeuroPharma Inc	PRE-103	Neurodegenerative disease; Anxiety disorder; Ischemia	Metabotropic glutamate receptor agonist	Neuroprotectant; Anxiolytic
556	**No Development Reported	Wyeth	Prempro	Alzheimers disease; Osteoporosis; Hormone deficiency; Estrogen deficiency; Cardiovascular disease	Estrogen agonist; Progesterone agonist	Vasoprotectant; Neuroprotectant
557	**Discovery	Samaritan Pharmaceuticals Inc	procaine hydrochloride	Alzheimers disease; HIV infection; Retinitis pigmentosa; Cancer	Corticosteroid antagonist; HIV uptake inhibitor	Anticancer; Immuno-modulator; Antiviral; Neuroprotectant
558	**Discontinued	Sanofi-Aventis	propentofylline	Alzheimers disease; Arteriosclerosis; Cardiovascular disease; Dementia; Cerebral infarction	PDE inhibitor	Antiarteriosclerotic; Neuroprotectant
559	Discontinued	Takeda Chemical Industries Ltd	Protirelin	Alzheimers disease; Neurodegenerative disease; Dementia	TRH agonist	Nootropic agent
560	Discovery	Pharmos Corp	PRS-211220	Neuropathic pain; Inflammation; Inflammatory bowel disease; Multiple sclerosis; Nervous system inflammation; Neurodegenerative disease; Parkinsons disease; Rheumatoid arthritis; Autoimmune disease; Cerebrovascular ischemia; Brain injury	Cyclooxygenase 2 inhibitor; Neuroprotectant; Chemokine antagonist; NMDA receptor antagonist; Cannabinoid agonist; Cytokine modulator	Neuroprotectant; Analgesic; Antiparkinsonian; Non-steroidal anti-inflammatory; Immunomodulator
561	**Phase 1 Clinical	Predix Pharmaceuticals Inc	PRX-03140	Alzheimers disease; Cognitive disorder	5-HT 4 agonist	Neuroprotectant; Antiparkinsonian
562	*No Development Reported (Discovery)	ProteoTech Inc	PTI-777	Amyloidosis; Alzheimers disease; Parkinsons disease; Non-insulin dependent diabetes	Amyloid protein deposition inhibitor	Neuroprotectant; Antiparkinsonian
563	Phase 1 Clinical	Phytopharm plc	PYM-50018	Motor neurone disease; Neuromuscular disease; Cardiac failure	Adrenergic modulator	Neuroprotectant; Cardioprotectant
564	Phase 2 Clinical	Phytopharm plc	PYM-50028	Alzheimers disease; Neurodegenerative disease; Parkinsons disease	Dopamine modulator	Neuroprotectant; Nootropic agent; Antiparkinsonian

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
565	Discovery	Ferrer Internacional SA	pyrimidin-5-one	Schizophrenia	Stimulation of protein kinase C; inhibition of DAG kinase	Antipsychotic
566	Discovery	Quark Biotech Inc	QG-2283	Neurodegenerative disease	Hypoxia protection	Neuroprotectant
567	Phase 2 Clinical	Quigley Pharma Inc	QR-333	Diabetic neuropathy	Carbohydrate metabolism modulator	Neuroprotectant
568	**Phase 3 Clinical	Aquila Biopharmaceuticals Inc	QS-21	Alzheimers disease; Hepatitis B; HIV; Herpes simplex; Influenza virus; Melanoma; Carcinoma; Plasmodium infection; Respiratory syncytial virus; Vaccination; Lyme disease	Immune adjuvant	Immunostimulant; Adjuvant
569	**Launched	AstraZeneca plc	quetiapine	Alzheimers disease; Psychosis; Schizophrenia; Bipolar disorder	5-HT 2 antagonist; Dopamine D2 antagonist	Antidepressant; Antipsychotic
570	Phase 1 Clinical	Roche Holding AG	R-1485	Alzheimers disease	Unspecified GPCR modulator	Neuroprotectant
571	*Phase 1 Clinical (Discovery)	Roche Holding AG	R-1577	Alzheimers disease	Unclassified enzyme inhibitor	Neuroprotectant
572	**Discovery	University of Pennsylvania	radiodiagnostic agents	Alzheimers disease	PET contrast agent	Radiodiagnostic; Neuroprotectant
573	**Phase 2 Clinical	Newron Pharmaceuticals SpA	ralfinamide	Neuropathic Pain	Sodium channel blocker	Analgesic
574	*Registered (Pre-registration)	Teva Pharmaceutical Industries Ltd	Rasagiline	Alzheimers disease; Neurodegenerative disease; Parkinsons disease	Apoptosis inhibitor; MAO B inhibitor	Antiparkinsonian
575	**Phase 1 Clinical	ThromboGenics Ltd	recombinant human microplasmin	Peripheral arterial occlusive disease; Ocular disease; Cerebrovascular ischemia	Fibrinolytic agent; Plasmin	Neuroprotectant
576	**Discovery	Galileo Pharmaceuticals Inc	redox metabolic modulators	Cerebrovascular ischemia	Antioxidant agent	Neuroprotectant
577	*Phase 2 Clinical (Discontinued)	Centaur Pharmaceuticals Inc	REN-1654	HIV associated dementia; Neuropathic pain; Alzheimers disease; Inflammatory bowel disease; Multiple sclerosis; Parkinsons disease	TNF alpha antagonist	Neuroprotectant; Antiparkinsonian; Anti-inflammatory
578	Discovery	ReNeuron (UK) Ltd	ReN-1820	Alzheimers disease; Inflammation; Pain; Neurodegenerative disease; Dementia	NGF antagonist	Nootropic agent; Anti-inflammatory; Analgesic

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
579	*Discontinued (Phase 2 Clinical)	Bayer AG	repinotan	Cerebrovascular ischemia; Brain injury; Major depressive disorder	5-HT 1a agonist	Neuroprotectant; Antidepressant
580	**No Development Reported	National Institutes of Health	resiniferatoxin	Emesis; Headache; Allergic rhinitis; Incontinence; Urinary tract disease; Cystitis; Neuropathy	Neuromuscular blocking agent; Vanilloid receptor agonist	Allergen; Analgesic
581	Phase 2 Clinical	ASTA Medica AG	retigabine	Epilepsy	GABA A agonist; Potassium channel activator	Vasodilatory agent; Anticonvulsant agent
582	*Phase 2 Clinical (Phase 3 Clinical)	RepliGen Corp	RG-1068	Anxiety disorder; Pancreatitis; Schizophrenia; Autism; Obsessive-compulsive disorder	Secretin agonist	
583	*Discontinued (Discovery)	Rinat Neuroscience Corp	RI-820	Motor neurone disease; Spinal muscular atrophy	Protein based therapeutic; Muscle system agent	Neuroprotectant
584	Launched	Aventis	Rilutek (Riluzole) + Dopamine Agonist	Huntingtons chorea; Motor neurone disease; Myocardial infarction; Parkinsons disease; Brain injury; Cerebrovascular ischemia	Protein kinase C inhibitor; Sodium channel blocker; Glutamate release inhibitor	Neuroprotectant; Antiparkinsonian
585	Launched	Alkermes Inc; Janssen Research Foundation Worldwide	risperidone (controlled release; Medisorb)	Schizophrenia; Bipolar disorder	5-HT 2 antagonist; Dopamine D2 antagonist	Antipsychotic
586	**Launched	Novartis AG	rivastigmine	Alzheimers disease; Cognitive disorder; Dementia	Acetylcholinesterase inhibitor	Nootropic agent; Neuroprotectant
587	* Pre-registration (Phase 3 Clinical)	Aderis Pharmaceuticals Inc	rotigotine	Parkinsons disease; Restless legs syndrome	Dopamine D2 agonist	Antiparkinsonian
588	No Development Reported	R J Reynolds Tobacco Co	RJR-1401	Alzheimers disease; Neurodegenerative disease	Nicotinic ACh agonist	Nootropic agent
589	**No Development Reported	Targacept Inc	RJR-2403	Alzheimers disease; Pain; Dementia	Nicotinic ACh agonist	Nootropic agent; Analgesic
590	Discovery	R J Reynolds Tobacco Co	RJR-2429	Alzheimers disease; Parkinsons disease; Dementia	Nicotinic ACh agonist	Nootropic agent; Antiparkinsonian
591	**Discovery	Sirna Therapeutics Inc	RNAi therapy	Huntingtons chorea	Gene inhibitor	Neuroprotectant
592	No Development Reported	Roche	Ro-09-2210	Neurodegenerative disease; Autoimmune disease	MAP kinase inhibitor	Immunomodulator
593	**No Development Reported	Roche Holding AG	Ro-41-1049	Alzheimers disease; Parkinsons disease; Dementia	MAO A inhibitor	Antiparkinsonian

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
594	Discontinued	Schering AG	Rolipram	HIV infection; Multiple sclerosis; Neurodegenerative disease; Asthma; Tardive dyskinesia; Depression	PDE 4 inhibitor; TNF antagonist; HIV replication inhibitor	Nootropic agent; Antidepressant; Bronchodilator
595	*Launched (Phase 3 Clinical)	GlaxoSmithKline	ropinirole	Parkinsons disease	Dopamine D2 agonist; Dopamine D3 agonist	Antiparkinsonian
596	**Phase 2 Clinical	GlaxoSmithKline	rosiglitazone	Alzheimers disease; Ulcerative colitis; Non-insulin dependent diabetes; Psoriasis	PPAR gamma agonist	Insulin sensitizer; Neuroprotectant
597	No Development Reported	Rhone-Poulenc Rorer Inc	RPR-104632	Neurodegenerative disease	NMDA receptor antagonist	Neuroprotectant
598	Discovery	Roche Bioscience	RS-100642	Neurodegenerative disease; Cerebrovascular ischemia	Sodium channel blocker	Neuroprotectant
599	**Phase 2 Clinical	Shionogi & Co Ltd	S-0139	Cerebrovascular ischemia	Endothelin ET-A antagonist	Antihypertensive
600	Discontinued	Shionogi & Co Ltd	S-312-d	Hypertension; Neurodegenerative disease; Heart arrhythmia; Cerebrovascular ischemia	Calcium channel blocker; Class IV antiarrhythmic agent	Antihypertensive
601	Phase 1 Clinical	Shionogi & Co Ltd	S-1746	Cerebrovascular ischemia; Head injury	NMDA receptor modulator; AMPA receptor antagonist	Neuroprotectant
602	Discovery	Servier	S-14297	Psychosis; Schizophrenia	Dopamine D3 antagonist; 5-HT 2a antagonist	Antipsychotic
603	No Development Reported	Servier	S-14820	Neurodegenerative disease; Central nervous system disease	TRH agonist	Neuroprotectant
604	Discovery	Servier	S-176251; S-34730-1; S-34730	Neurodegenerative disease; Cerebrovascular ischemia; Seizure, epilepsy & convulsion	AMPA receptor antagonist	Neuroprotectant; Anticonvulsant agent
605	*Phase 2 Clinical (Phase 1 Clinical)	Servier	S-18986	Neurodegenerative disease; Cognitive disorder; Cerebrovascular ischemia	Glutamate receptor antagonist; AMPA receptor modulator; Brain derived neurotrophic factor modulator	Neuroprotectant
606	Discovery	Servier	S-33113-1	Neurodegenerative disease; Cerebrovascular ischemia	Inhibition of lipid peroxidation	Neuroprotectant; Antioxidant agent
607	Discovery	Servier	S-33138	Psychosis; Schizophrenia	Dopamine D3 antagonist	Antipsychotic
608	**Phase 2 Clinical	Shionogi & Co Ltd	S-8510	Alzheimers disease; Dementia	BDZ inverse agonist	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
609	**Discovery	Angiogenix Ltd; Stanford University; Endovasc Inc	(S)-nicotine	Alzheimers disease; Myocardial infarction; Wound healing; Atrophy; Pain; Cardiac failure	Nicotinic ACh agonist; Angiogenesis stimulator	Neuroprotectant
610	**Discontinued	GlaxoSmithKline plc	sabcomeline	Alzheimers disease; Dementia	Muscarinic M1 agonist	Nootropic agent
611	Discontinued	Janssen Pharmaceutica	sabeluzole	Alzheimers disease; Cognitive disorder; Cerebrovascular ischemia; Head injury; Dementia	Hypoxia protection	Neuroprotectant; Nootropic agent
612	*Phase 3 Clinical (Phase 2 Clinical)	Newron Pharmaceuticals SpA; Pharmacia & Upjohn AB	Safinamide	Restless legs syndrome; Epilepsy; Pain; Parkinsons disease	Calcium channel modulator; Dopamine uptake inhibitor; MAO B inhibitor; Sodium channel blocker	Neuroprotectant; Antiparkinsonian; Anticonvulsant agent; Analgesic
613	Phase 2 Clinical	Merck KGaA	sarizotan	Parkinsons disease; Psychosis; Schizophrenia; Tardive dyskinesia	Dopamine antagonist; Dopamine D2 antagonist; 5-HT 1a agonist	Antipsychotic; Antiparkinsonian
614	Research Tool	GlaxoSmithKline plc	SB-203580	Alzheimers disease; Inflammation; Rheumatoid arthritis; Asthma; Ischemia; Cerebrovascular ischemia; Vascular disease	Cytokine release inhibitor; p38 MAP kinase inhibitor	Neuroprotectant; Vasoprotectant; Anti-inflammatory
615	**Phase 1 Clinical	GlaxoSmithKline plc	SB-234551	Hypertension; Cerebrovascular ischemia; Renal failure	Endothelin antagonist; Endothelin ET-A antagonist	Antihypertensive
616	Discontinued	GlaxoSmithKline plc	SB-271046	Alzheimers disease; Schizophrenia; Cognitive disorder	5-HT 6 antagonist	Antipsychotic
617	Discovery	GlaxoSmithKline plc	SB-277011	Schizophrenia	Dopamine D3 antagonist	Antipsychotic
618	Phase 1 Clinical	Wyeth	SCA-136	Schizophrenia	5-HT 2c agonist	Psychomodulator
619	Research Tool	Schering-Plough Corp	Sch-58261	Neurodegenerative disease; Parkinsons disease; Neurological disease	Adenosine A2a antagonist	Neuroprotectant
620	**Discovery	Scios Inc	SCIO-323	Myelodysplastic syndrome; Multiple myeloma; Rheumatoid arthritis; Cerebrovascular ischemia; Diabetes mellitus	p38 MAP kinase inhibitor; Anti-inflammatory; TNF alpha synthesis inhibitor	Neuroprotectant
621	**Phase 2 Clinical	Scios Inc	SCIO-469	Multiple myeloma Pain Rheumatoid arthritis Crohns disease	Phosphotransferase inhibitor; p38 MAP kinase inhibitor; Protein kinase inhibitor; TNF alpha synthesis inhibitor	Anticancer; Analgesic; Anti-inflammatory

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
622	**Discontinued	Novartis AG	SDZ-NVI-085	Alzheimers disease; Amnesia; Dementia; Sleep disorder; Cognitive disorder; Major depressive disorder	Alpha 1 adrenoceptor agonist	Nootropic agent; Antidepressant; Hypnotic
623	Discovery	Taisho Pharmaceutical Co Ltd	SEA-0400	Cerebrovascular ischemia	Na+ Ca2+ ion exchange inhibitor	Neuroprotectant
624	Phase 2 Clinical	Russian Academy of Sciences	SEMAX	Alzheimers disease; Neurodegenerative disease; Head injury; Cerebrovascular ischemia	ACTH agonist	Neuroprotectant; Vasoprotectant
625	Discovery	Guilford Pharmaceuticals Inc	serine racemase inhibitors	Neurodegenerative disease	Unclassified enzyme inhibitor; Glutamate release inhibitor	Neuroprotectant
626	**Launched	Pfizer Inc	sertraline	Anxiety disorder; Obsessive-compulsive disorder; Premenstrual syndrome; Major depressive disorder	5-HT uptake inhibitor	Antidepressant; Anxiolytic
627	*Discontinued (Discovery)	SIBIA Neurosciences Inc	SIB-1553A	Alzheimers disease; Parkinsons disease; Neurological disease	Nicotinic ACh modulator	Antiparkinsonian; Neuroprotectant
628	No Development Reported	SIBIA Neurosciences Inc	SIB-1765F	Alzheimers disease; Parkinsons disease; Neurological disease	Nicotinic ACh agonist	Nootropic agent; Antiparkinsonian
629	Discovery	Schering-Plough Corp	Siclofen	Neurodegenerative disease	GABA B agonist	Neuroprotectant
630	**Discontinued	Russian Academy of Sciences	SGS-111	Cognitive disorder; Cerebrovascular ischemia; Brain injury	NMDA receptor agonist	Neuroprotectant; Nootropic agent; Anxiolytic
631	Discovery	Eli Lilly & Co	SGS-518	Schizophrenia; Cognitive disorder	5-HT 6 antagonist	Nootropic agent
632	**Phase 2 Clinical	Novartis AG	SGS-742	Alzheimers disease; Attention deficit hyperactivity disorder; Cognitive disorder	GABA B antagonist	Nootropic agent; Anticonvulsant agent
633	**Discontinued	Glaxo Wellcome plc	sipatrigine	Cerebrovascular ischemia	Sodium channel blocker	Neuroprotectant
634	Discovery	Senju Pharmaceutical Co Ltd	SJA-6017	Nervous system injury; Muscular dystrophy; Neurodegenerative disease; Cataract; Cerebrovascular ischemia	Calpain inhibitor; Cysteine protease inhibitor	Neuroprotectant
635	Research Tool	GlaxoSmithKline plc	SKF-38393	Parkinsons disease; Non-insulin dependent diabetes	Dopamine D1 agonist; Insulin receptor modulator	Antiparkinsonian; Hypoglycemic agent; Antihypercholesterolemic agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
636	No Development Reported	GlaxoSmithKline plc	SKF-74652	Alzheimers disease; Neurodegenerative disease	Beta amyloid generation inhibitor; Amyloid protein deposition inhibitor	Anti-amyloidogenic
637	Discovery	GlaxoSmithKline plc	SKF-82958	Parkinsons disease	Dopamine D1 agonist	Antiparkinsonian
638	No Development Reported	Synthelabo	SL-34.0026	Neurodegenerative disease; Parkinsons disease	MAO B inhibitor	Antiparkinsonian
639	Phase 2 Clinical	Sanofi-Aventis	SL-65.0155	Alzheimers disease; Pollakiuria	5-HT 4 antagonist; 5-HT 4 agonist	Neuroprotectant; Nootropic agent
640	*Phase 3 Clinical (Discontinued)	Solvay SA	SLV-308	Anxiety disorder; Parkinsons disease; Major depressive disorder	Dopamine D2 agonist; Adrenoceptor agonist; 5-HT 1a agonist	Neuroprotectant; Antidepressant; Anxiolytic; Antiparkinsonian
641	Phase 1 Clinical	Solvay SA	SLV-314	Psychosis; Schizophrenia	5-HT 1a receptor modulator; Dopamine D2 antagonist; 5-HT uptake inhibitor	Antipsychotic
642	*No Development Reported (Phase 1 Clinical)	Solvay SA	SLV-319	Obesity; Psychosis; Schizophrenia; Metabolic disorder	Dopamine D2 antagonist; Cannabinoid CB1 antagonist; 5-HT 1a agonist	Antipsychotic
643	Phase 2 Clinical	Sumitomo Pharmaceuticals Co Ltd	SM-13496	Schizophrenia	5-HT 2 antagonist; Dopamine D2 antagonist	Antipsychotic
644	No Development Reported	Elan Pharmaceuticals Inc	SNX-482	Alzheimers disease; Neurodegenerative disease	Calcium channel blocker	Nootropic agent
645	Discovery	Celgene Corp	SPC-9766	Neurodegenerative disease; Parkinsons disease; Ischemia; Cerebrovascular ischemia	Jun N terminal kinase inhibitor	Neuroprotectant; Antiparkinsonian
646	Discovery	Sanochemia Pharmazeutika AG	SPH-1371	Alzheimers disease; Dementia	Cholinesterase inhibitor	Neuroprotectant
647	Discovery	Biofrontera Pharmaceuticals GmbH	sphingomyelinase inhibitors	Neurodegenerative disease	Sphingomyelinase inhibitor	Neuroprotectant; Nootropic agent
648	Discovery	Sagami Chemical Research Center	sphingomyelinase inhibitors, Taisho/ Sagami	Neurodegenerative disease; Cerebrovascular ischemia	Sphingomyelinase inhibitor	Neuroprotectant; Nootropic agent
649	*No Development Reported (Discovery)	Alviva Biopharmaceuticals Inc / Schwarz	SPM-914	Alzheimers disease; Huntingtons chorea; Motor neurone disease; Neurodegenerative disease; Parkinsons disease	Apoptosis inhibitor	Antiparkinsonian
650	**Phase 3 Clinical	Harris FRC Corp	SPM-927 (Iacosamide)	Neuralgia; Epilepsy; Neuropathic pain	Indirect modulation of GABA and glutamate neurotransmission	Analgesic; Anticonvulsant agent
651	*No Development Reported (Discovery)	Albert-Ludwigs-Universitaet Freiburg	SPM-935	Neurodegenerative disease	No information available	Neuroprotectant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
652	Phase 2 Clinical	Sanofi-Aventis	SR-57667	Alzheimers disease; Parkinsons disease	Growth factor stimulator; anti-apoptotic	Neuroprotectant; Nootropic agent; Antiparkinsonian
653	Phase 2 Clinical	Wyeth	SRA-333	Alzheimers disease	5-HT 1a antagonist	Nootropic agent
654	Discovery	Purdue Neuroscience Corp /Pfizer	SSNRAs	Ocular disease; Parkinsons disease; Psychosis; Central nervous system disease; Cerebrovascular ischemia; Head injury	NMDA/Glycine antagonist; NMDA receptor antagonist	Neuroprotectant; Antipsychotic; Antiparkinsonian
655	Phase 1 Clinical	Sanofi-Aventis	SSR-125047	Schizophrenia	Sigma opioid modulator	Antipsychotic
656	Phase 1 Clinical	Sanofi-Aventis	SSR-146977	Anxiety disorder; Schizophrenia; Major depressive disorder	NK3 antagonist	Antidepressant; Anxiolytic; Antipsychotic
657	Phase 1 Clinical	Sanofi-Aventis	SSR-180575	Congestive heart failure; Arthritis; Neurodegenerative disease	Benzodiazepine agonist	Neuroprotectant; Nootropic agent; Cardiac agent
658	**Discovery	Sanofi-Aventis	SSR-180711	Alzheimers disease; Neurodegenerative disease; Schizophrenia	Nicotinic ACh agonist	Nootropic agent
659	Phase 1 Clinical	Sanofi-Aventis	SSR-181507	Schizophrenia	Dopamine D2 antagonist; 5-HT 1a agonist	Antipsychotic
660	Discovery	Sanofi-Aventis	SSR-482073	Neurodegenerative disease	Benzodiazepine agonist	Neuroprotectant; Nootropic agent
661	Discovery	Sanofi-Aventis	SSR-504734	Schizophrenia	Glycine transport inhibitor	Antipsychotic
662	**Discovery	Geron Corp	stem cell derived therapy	Spinal cord injury; Liver disease; Osteoporosis; Parkinsons disease; Transplant rejection; Heart disease; Cerebrovascular ischemia; Insulin dependent diabetes	Repairing damaged and diseased tissues with healthy new cells	Neuroprotectant; Antiparkinsonian
663	Discovery	BresaGen Ltd	stem cell therapy	Spinal cord injury; Parkinsons disease; Thalassemia; Cerebrovascular ischemia	Repairing damaged and diseased tissues with healthy new cells	Neuroprotectant; Antiparkinsonian
664	**Discovery	Tanabe Seiyaku Co Ltd	stem cell therapy	Parkinsons disease	Repairing damaged and diseased tissues with healthy new cells	Neuroprotectant; Antiparkinsonian
665	**Discovery	University of Miami	stilbazulenyl nitrone	Cerebrovascular ischemia; Brain injury	Azulenyl nitrone-based antioxidant	Neuroprotectant; Antioxidant agent
666	*Discontinued (Phase 3 Clinical)	Pharmacia & Upjohn Inc	Sumanitrole	Parkinsons disease; Restless legs syndrome	Dopamine D2 agonist	Neuroprotectant; Antiparkinsonian; Anxiolytic
667	*Phase 2 Clinical (No Development Reported)	Suntory Ltd	SUN-C5174	Neurodegenerative disease; Vascular disease	5-HT 2 antagonist	Vasodilatory agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
668	Phase 1 Clinical	Daiichi Suntory Biomedical Research Co Ltd	SUN-N8075	Cerebral infarction	Na ⁺ Ca ²⁺ ion exchange inhibitor; Sodium channel blocker; Calcium channel blocker	Neuroprotectant; Vasodilatory agent; Antioxidant agent
669	No Development Reported	Allelix Neuroscience Inc	survivins	Neurodegenerative disease	Modification of signal transduction of neurotrophic pathways	Neuroprotectant
670	*Phase 1 Clinical (Discovery)	PoliChem SA / SIRENADE	sustained release dihydroergocryptine	Alzheimers disease; Migraine; Parkinsons disease	Dopamine agonist	Neuroprotectant
671	**Discovery	Annovis Inc	SYM-2081	Pain; Neurological disease	Kainate receptor agonist	Analgesic
672	Discovery	Annovis Inc	SYM-2207	Alzheimers disease; Neurodegenerative disease; Cerebrovascular ischemia	AMPA receptor antagonist	Neuroprotectant
673	**Phase 2 Clinical	Taro Pharmaceutical Industries Ltd	T-2000	Epilepsy; Tremor Cerebrovascular ischemia	Non-sedating barbiturate	Anticonvulsant agent
674	**Discovery	Taro Pharmaceutical Industries Ltd	T-2001	Cerebrovascular ischemia	Neuroprotective barbiturate	Neuroprotectant
675	Phase 2 Clinical	Toyama Chemical Co Ltd	T-588	Glaucoma; Alzheimers disease; Motor neurone disease; Cognitive disorder; Cerebral hypoxia; Dementia	Protein kinase stimulator; Acetylcholine release stimulator	Neuroprotectant
676	**Phase 2 Clinical	Fujisawa Pharmaceutical Co Ltd	tacrolimus	Transplant rejection; Cerebrovascular ischemia	IL synthesis inhibitor; IL-2 antagonist	Neuroprotectant; Immuno-suppressant
677	Discontinued	American Biogenetic Sciences Inc	tacrine analogs, ABS-301, ABS-302, ABS-304	Alzheimers disease; Neurodegenerative disease	Acetylcholinesterase inhibitor	Neuroprotectant
678	**Discontinued	Takeda Pharmaceutical Company Ltd	TAK-044	Hypertension; Myocardial infarction; Brain hemorrhage; Ischemia; Renal failure	Endothelin antagonist	Antihypertensive; Neuroprotectant
679	*Phase 2 Clinical (No Development Reported)	Eli Lilly & Co/IVAX Corp	talampanel	Motor neurone disease; Epilepsy; Multiple sclerosis; Parkinsons disease; Cerebrovascular ischemia; Seizure, epilepsy & convulsion; Brain tumor; Brain injury	AMPA receptor agonist	Neuroprotectant; Antiparkinsonian; Anticonvulsant agent
680	Phase 2 Clinical	GlaxoSmithKline plc	talnetant	Chronic obstructive pulmonary disease; Irritable bowel syndrome; Pain; Schizophrenia; Asthma; Micturition disorder; Cough	NK3 antagonist	Antitussive; Antipsychotic; Analgesic

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
681	Launched	Tanabe Seiyaku Co Ltd	Taltirelin	Alzheimers disease; Neurodegenerative disease; Dementia	TRH agonist; Dopamine modulator	Neuroprotectant
682	Discontinued	Takeda Chemical Industries Ltd	TAN-950A	Neurodegenerative disease; Fungal infection	Fungicide; Ionotropic glutamate receptor agonist; NMDA receptor agonist	Neuroprotectant
683	Phase 2 Clinical	Targacept Inc	TC-1734	Cognitive disorder	Nicotinic ACh modulator	Neuroprotectant; Nootropic agent
684	*No Development Reported (Discovery)	Targacept Inc	TC-2559	Neurodegenerative disease	Nicotinic ACh agonist	Nootropic agent
685	**Discovery	Targacept Inc	TC-4959	Alzheimers disease	Nicotinic ACh agonist	Neuroprotectant
686	*Discontinued (Phase 2 Clinical)	Novartis AG	TCH-346	Motor neurone disease; Neurodegenerative disease; Parkinsons disease	Metabotropic glutamate receptor 2 agonist	Apoptosis inhibitor; Neuroprotectant; Nootropic agent; Antiparkinsonian
687	**Discontinued	Abbott Laboratories	tebanicline	Neuropathic pain; Pain; Neuropathy	Nicotinic ACh agonist	Analgesic
688	Discontinued	Takeda Chemical Industries Ltd	TGP-580	Neurodegenerative disease; Peptic ulcer; Wound healing	FGF-2 agonist	Neuroprotectant
690	Discovery	Thuris Corp	Thurinex	Alzheimers disease	Amyloid protein deposition inhibitor	Neuroprotectant
691	Discovery	Lonza Group	TK-14	Neurodegenerative disease		Neuroprotectant
692	Discovery	Digital Gene Technologies Inc.; Neurome, Inc.	TOGA technology	Alzheimers disease; Inflammatory bowel disease; Neoplasm; Parkinsons disease; Atherosclerosis; Gastrointestinal inflammation	Transcriptome analysis	Antiarteriosclerotic; Antiparkinsonian
693	Discontinued	AVANT Immunotherapeutics Inc	TP-20	Reperfusion injury; Immune disorder; Multiple sclerosis; Neurodegenerative disease; Burns; Ischemic heart disease; Cerebrovascular ischemia; Infection; Respiratory distress syndrome	Complement Factor inhibitor; Selectin antagonist	Cardioprotectant; Immuno-suppressant
694	**Phase 1 Clinical	Telios Pharmaceuticals Inc	TP-9201	Angina; Restenosis; Thromboembolism; Cerebrovascular ischemia	Platelet aggregation inhibitor; GP IIb/IIIa antagonist	Vasoprotectant; Neuroprotectant
695	**Discontinued	Scios Inc	trafermin	Bone injury; Peripheral vascular disease; Wound healing; Periodontal disease; Cerebrovascular ischemia; Skin ulcer; Coronary artery disease; Diabetic cataract; Diabetic complication	FGF-2 agonist	Neuroprotectant; Angiogenesis stimulator

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
696	Phase 2 Clinical	Pfizer Inc	traxoprodil	Neuropathic pain; Pain; Migraine; Neurodegenerative disease; Parkinsons disease; Head injury; Cerebrovascular ischemia; Tinnitus	NMDA receptor antagonist	Neuroprotectant; Analgesic; Antiparkinsonian
697	Discovery	Pharmos Corp	tricyclic dextrocannabinoids	Neuropathic pain; Inflammation; Inflammatory bowel disease; Multiple sclerosis; Neurodegenerative disease; Brain injury; Parkinsons disease; Rheumatoid arthritis; Autoimmune disease; Cerebrovascular ischemia; Nervous system inflammation	Cyclooxygenase 2 inhibitor; Chemokine antagonist; NMDA receptor antagonist; Cannabinoid agonist; Cytokine modulator	Neuroprotectant; Analgesic; Immunomodulator; Non-steroidal anti-inflammatory; Antiparkinsonian
698	Phase 1 Clinical	Taisho Pharmaceutical Co Ltd	TS-011	Cerebral infarction	Arachidonic acid metabolism inhibitor	Neuroprotectant; Anti-inflammatory
699	No Development Reported	Pharmacia & Upjohn Inc	U-74500A	Neurodegenerative disease	Aminosteroid	Neuroprotectant
700	Discontinued	Pharmacia & Upjohn Co	U-78517F	Alzheimers disease; Inflammation; Myocardial infarction; Neurodegenerative disease; Asthma; Burns; Cardiovascular disease; Ischemia; Cerebrovascular ischemia	Lipid peroxidation inhibitor	Vasoprotectant; Anti-inflammatory; Antioxidant agent
701	Discovery	Universidad Complutense de Madrid	UCM-3100	Psychiatric disorder; Neurological disease	5-HT 7 receptor modulator	
702	Research Tool	Astra AB	UH-232	Schizophrenia	Dopamine D3 antagonist	Antipsychotic
703	**Discovery	Dendreon San Diego LLC	UK-279276	Inflammation; Inflammatory bowel disease; Shock; Ischemic heart disease; Cerebrovascular ischemia; Respiratory distress syndrome	Integrin antagonist	Immuno-modulator; Vasoprotectant
704	Discovery	Pfizer Inc	UK-351666; UK-356464; UK-356297	Alzheimers disease; Neurodegenerative disease; Parkinsons disease; Peripheral neuropathy	FKBP inhibitors	Antiparkinsonian; Immuno-suppressant

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
705	**Phase 2 Clinical	University of California San Diego	uridine therapy	Renal disease; Genetic disorder; Bipolar disorder; Neurological disease; Major depressive disorder	Uracil metabolism modulator	Neuroprotectant
706	**Discovery	Vernalis plc	V-10153	Myocardial infarction; Thromboembolism; Cardiovascular disease; Cerebrovascular ischemia	Plasminogen activator stimulator	Fibrinolytic agent
707	Phase 1 Clinical	Vernalis Group plc	V-2006	Parkinsons disease	Adenosine A2a antagonist	Antiparkinsonian
708	Discovery	Novavax Inc	vaccine (stroke)	Cerebrovascular ischemia	Vaccine; CD62E agonist	Neuroprotectant
709	**Launched	GD Searle & Co	valdecixib	Gout; Inflammation; Pain; Migraine	Cyclooxygenase 2 inhibitor	Analgesic; Non-steroidal anti-inflammatory
710	*Phase 1 Clinical (Research Tool)	Royal Gist-Brocades NV	vanoxerine	Cocaine addiction; Major depressive disorder	Dopamine uptake inhibitor	Antipsychotic
711	*Discovery (Research Tool)	US National Institute on Drug Abuse	vanoxerine	Cocaine addiction	Dopamine uptake inhibitor	Antipsychotic
712	**Phase 2 Clinical	Human Genome Sciences Inc	VEGF-2 gene therapy	Vascular disease; Coronary artery disease; Ischemia	Non-viral vector based gene therapy; Plasmid based gene therapy; VEGF agonist; Angiogenesis stimulator	Neuroprotectant; Cardioprotectant
713	**Discontinued	Sanofi-Aventis	velnacrine	Alzheimers disease; Cognitive disorder; Dementia; Amnesia	Acetylcholinesterase inhibitor	Nootropic agent
714	*Phase 1 Clinical (Discovery)	Vasogen Inc	VP-025	Alzheimers disease; Motor neurone disease; Parkinsons disease; Nervous system inflammation	Cytokine modulator	Neuroprotectant; Nootropic agent; Anti-inflammatory
715	Discovery	Serono; Vertex Pharmaceuticals Inc; Taisho Pharmaceutical Co Ltd	VX-799	Sepsis; Inflammation; Neurodegenerative disease; Cardiovascular disease; Cerebral infarction; Cerebrovascular ischemia	Caspase inhibitor; Apoptosis inhibitor	Neuroprotectant; Vasoprotectant; Anti-inflammatory
716	Discovery	Neurocrine Biosciences Inc; Wyeth	WAY-855	Neurodegenerative disease; Psychosis; Retinopathy; Schizophrenia; Cerebrovascular ischemia; Injury	EAAT modulator; glutamate receptor modulator	Neuroprotectant; Antipsychotic
717	*No Development Reported (Discovery)	Sterling Winthrop Products Inc	WIN-63480-2	Alzheimers disease; Huntingtons chorea; Cerebrovascular ischemia; Epilepsy	NMDA receptor antagonist	Neuroprotectant; Anticonvulsant agent

	Highest Dev. Status	Company	Drug	Indication	Mode of Action	Drug Effect
718	No Development Reported	Sterling Winthrop Products Inc	WIN-67500	Neurodegenerative disease	Calpain inhibitor	Neuroprotectant
719	No Development Reported	Sterling Winthrop Products Inc	WIN-68100	Neurodegenerative disease	Calpain inhibitor	Neuroprotectant
720	No Development Reported	Sterling Winthrop Products Inc	WIN-69211	Neurodegenerative disease	Calpain inhibitor	Neuroprotectant
721	Phase 3 Clinical	Sanofi-Aventis	Xaliprodene	Alzheimers disease; Motor neurone disease; Neuropathy; Multiple sclerosis; Neurodegenerative disease	5-HT 1a agonist; NGF agonist	Neuroprotectant; Nootropic agent
722	**Discovery	Bristol-Myers Squibb Pharma Co	XE-991	Alzheimers disease	Potassium channel modulator; Acetylcholine release stimulator	Neuroprotectant
723	**Phase 2 Clinical	XenoPort Inc	XP-13512	Neuralgia;Epilepsy; Neuropathic pain; Restless legs syndrome; Neurological disease	GABA modulator	Analgesic; Anticonvulsant agent
724	Phase 1 Clinical	Mitsubishi Pharma Corp	Y-931	Schizophrenia	Benzodiazepine agonist	Antipsychotic
725	Discovery	SK Corp	YKP-1358	Schizophrenia	No information available	Antipsychotic
726	Discontinued	Yamanouchi Pharmaceutical Co Ltd	YM-90K	Cerebrovascular ischemia	AMPA receptor antagonist	Neuroprotectant
727	*Registered (Pre-registration)	Elan Pharmaceuticals Inc	ziconotide	Neurodegenerative disease; Pain; Cardiac failure; Cardiovascular disease; Head injury; Cerebrovascular ischemia	Calcium channel blocker	Neuroprotectant; Analgesic; Vasodilatory agent
728	No Development Reported	Yamanouchi Pharmaceutical Co Ltd	Zonampanel	Cerebrovascular ischemia	AMPA receptor antagonist	Neuroprotectant
729	**Discovery	Zenyaku Kogyo Co Ltd	ZSET-845	Alzheimers disease	Induction of choline acetyltransferase (ChAT) activity in the hippocampus	Nootropic agent; Neuroprotectant
730	**Phase 1 Clinical	Debiopharm SA	ZT-1 (injectable, sustained release)	Alzheimers disease	Acetylcholinesterase inhibitor	Nootropic agent; Neuroprotectant
731	Phase 2 Clinical	Shanghai Institute of Materia Medica	ZT-1	Alzheimers disease	Acetylcholinesterase inhibitor	Nootropic agent; Neuroprotectant

Glossary

No Development Reported: No evidence of continuing development has been reported for the past 18 months.

Discontinued: Confirmation from the company source that in-house development has been terminated.

Research Tool: Compounds that are not used as a drug, but needed to investigate the function of a specific compound, which might result in a drug.

Discovery: Late research state, preparation for human testing: adaptation of research chemical synthesis (mg) to larger scale (kg), selection of salt form, selection of galenical form, design of clinical proof of concept studies, definition of endpoints, selection of biomarkers for clinical testing, additional safety testing, IND (investigational new drug) filing, clinical ethical review boards.

Phase 1: Clinical testing: tolerance in humans, repeated dosing, some escalation; proof of therapeutic concept or mechanism using scientific evaluation methods in a limited number of volunteers or patients.

Phase 2: Dose-finding studies, statistics, double blind studies.

Phase 3: Proof of efficacy, comparison to standard therapy, statistics, double blind studies with up to thousands of patients. Final phase of testing before registration and license to market.

Sources

'Investigational Drugs database, Copyright Current Drugs 2005, <http://www.iddb3.com>'

'The Final Neuroprotection Report, Bolt International Healthcare & Pharmaceutical Research, February 2003'

These sources were amended whenever the authors found more accurate information on the websites of companies.

Disclaimer

The author does not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of the information in the article. It is not the intention of the author to provide medical advice or to promote or endorse any medical practice, test or program, but rather to provide readers with information to better understand neurodegenerative diseases. The author is not responsible for errors in or omissions of information contained in the article or any actions resulting from the use of such information. Readers are encouraged to confirm the information in the article with other reliable sources.