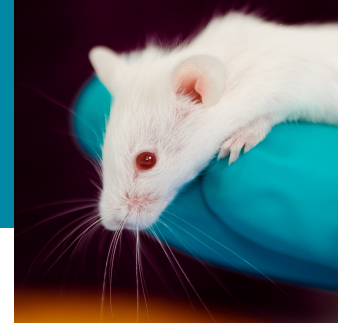


# ALZET RESEARCH SUMMARY — Neurodegenerative Diseases



ALZET® Osmotic Pumps are a reliable, convenient and cost effective method for continuous dosing of unrestrained laboratory animals. These small, implantable pumps are an effective tool for studying various neurodegenerative diseases and conditions. The table below summarizes examples of recent research including the disease studied, compound delivered, animal species, pump model, study duration and a brief description of the pump's application. For additional references, please contact ALZET Technical Support.

Disease	Agent	Species	Duration	Pump	ALZET Application	Citation
ALS	D3-1 mouse antibody	Rat	4 weeks	2ML4	Delivering antibodies to investigate new therapies against misfolded SOD1 proteins.	S. Minamiyama <i>et al.</i> Mol Ther Methods Clin Dev. 2023;28:312-329
Alzheimer's	Isradipine	Mice	30 days	2004	Continuous isradipine treatment to see if amyloid beta plaque-associated dystrophic neurites and inflammatory microglia decrease.	J. . Wickline <i>et al.</i> Neuropharmacology. 2023;227:109454
Alzheimer's	Hippocampal cholinergic neuro-stimulating peptide	Mice	2 weeks	1002	Clarify whether HCNP has a rescue function in cholinergic efferent network, which is important for learning and memory. HCNP is a potential therapeutic candidate.	Y. Madokoro <i>et al.</i> Int J Mol Sci. 2023;24(10):8916
Ataxia	Brain-derived neurotrophic factor	Mice	4 weeks	1004	Delivery of BDNF can offer potential for treatment of motor and cognitive defects in SCA1.	J.-G. Rosa <i>et al.</i> Neurobiol Dis. 2023;178:106023
Huntington's	Cerebral dopamine neurotrophic factor	Mice	4 weeks	1004	Infusion of CDNF to study effects on behavior and motor coordination.	P. Stepanova <i>et al.</i> Sci Rep. 2023;13(1):2953
Multiple sclerosis	PF-04957325	Mice	14 days	Not Stated	Exploring PF-04957325 (PDE8 inhibitor family) as new therapeutic for multiple sclerosis.	C.P. Basole <i>et al.</i> Cells. 2022;11(4):660
Parkinson's	MPTP	Monkey	24 hours	Not Stated	Continuous infusion of MPTP to render monkeys parkinsonian.	M. Morissette <i>et al.</i> Cells. 2022;11(4):691
Parkinson's	Angiotensin (1-7)	Rat	4 weeks	2004	Investigating whether continuous angiotensin-(1-7) delivery is neuroprotective.	Q. Gao <i>et al.</i> Neural Regen Res. 2022;17(5)1138-1145

**Technical Support**  
toll-free: 800.692.2990  
email: [alzet@durect.com](mailto:alzet@durect.com)

**Customer Service**  
toll-free: 877.922.5938  
email: [alzetcs@durect.com](mailto:alzetcs@durect.com)

**Website**  
[www.alzet.com](http://www.alzet.com)