Recent References (2020-Present) on the Intracerebroventricular Administration of Agents to Mice Using ALZET® Osmotic Pumps

Q10525: S. Fujiwara*, et al.* Age-related Changes in Trigeminal Ganglion Macrophages Enhance Orofacial Ectopic Pain After Inferior Alveolar Nerve Injury. In Vivo 2023;37(1):132-142
Agents: Liposomal clodronate; Liposome (control) **Vehicle:** Not Stated; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1004; **Duration:** 5 days;
ALZET Comments: Controls received mp w/ vehicle; animal info (23 week old male SAMP8/SAMR1 mice; Weighed 20-30 g); Brain Coordinates (2,8 mm anterior from posterior fontanelle, 1.2 mm lateral to sagitall suture); polyethylene catheter; dental cement used; aging;

Q10473: K. A. R. Estrela*, et al.* Blocking Metabotropic Glutamate Receptor Subtype 7 via the Venus Flytrap Domain Promotes a Chronic Stress-Resilient Phenotype in Mice. Cells 2022;11(11):
Agents: XAP044 **Vehicle:** DMSO; Ringer's solution; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1004; **Duration:** 26 days;
ALZET Comments: Dose response (100 uM, 10 uM, 1 uM); 5% DMSO used; Controls received mp w/ vehicle; animal info (Male; C57BL/6, 19-22 g); behavioral testing (Chronic Subordinate Colony Housing Paradigm; Light/Dark Box Test; Stress-Induced Hyperthermia Test); functionality of mp verified by aspirating residual volume; ALZET brain infusion kit 3 used; gene therapy; Therapeutic indication (Chronic stress-related pathology);

Q10457: K. E. Claflin*, et al.* Pharmacological FGF21 signals to glutamatergic neurons to enhance leptin action and lower body weight during obesity. Molecular Metabolism 2022;64(101564
Agents: Fibroblast growth factor 21; Leptin; Leptin antagonist **Vehicle:** Not Stated; **Route:** SC; CSF/CNS; **Species:** Mice; **Pump:** 1002; 1004; **Duration:** 2 weeks;
ALZET Comments: Dose: FGF21 (1 mg/kg/day); Leptin (250 ng/h); Leptin antagonist (8 ug/day); Controls received mp w/ vehicle; animal info: mice: DIO WT mice: 16-18-week-old WTt; 12 week-old WT mice; Fibroblast growth factor 21 aka (FGF21); ALZET brain infusion kit 3 used; Brain coordinates (1 mm lateral, 0.34 mm caudal to bregma, and 2.5 mm ventral from the surface of the skull.); dental cement used; Vetbond (3 M); dependence;

Q10416: J. M. Brown*, et al.* Combined micro-osmotic pump infusion and intracerebroventricular injection to study FGF1 signaling pathways in the mouse brain. STAR Protocols 2022;3(2):101329
Agents: UO126 **Vehicle:** DMSO; Saline; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1003D; **Duration:** Not Stated;
ALZET Comments: Dose (30 mg); 50% DMSO and saline used; Controls received mp w/ vehicle; animal info (Male; 8 weeks old); post op. care (Buprenorphine); dental cement used; diabetes;

Q10399: P. Y. Bai*, et al.* Environmental eustress improves postinfarction cardiac repair via enhancing cardiac macrophage survival. Science Advances 2022;8(**Agents:** Brain-derived neurotrophic factor **Vehicle:** PBS; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1002; **Duration: ALZET Comments:** animal info (3-4 weeks old; Male; Wild-type); Brain-derived neurotrophic factor aka BDNF; ALZET brain infusion kit 3 used; dental cement used; cardiovascular; Therapeutic indication (Cardiac remodeling post myocardial infarction);

Q10835: B. Xu*, et al.* An Oncolytic Virus Expressing a Full-Length Antibody Enhances Antitumor Innate Immune Response to Glioblastoma. Nature Communications 2021;12(1):5908
Agents: aCD47-G1 **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1003D; **Duration:** 72 hours;
ALZET Comments: Dose: 24 ug/day; Controls received mp w/ vehicle; animal info: Six- to eight-week-old female athymic nude mice CT2A GBM model; ALZET brain infusion kit 3 used; Brain coordinates (2mm lateral and 1mm anterior to bregma at a depth of 3 mm); immunology;

Q10064: P. Schiapparelli*, et al.* Strategies to Modulate the Blood-Brain Barrier for Directed Brain Tumor Targeting. Nanotherapy for Brain Tumor Drug Delivery 2021;
Agents: Not Stated **Vehicle:** Saline, sterile; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1007D; **Duration:** 7 days;
ALZET Comments: 0.9% NaCl used; animal info (6-8-week-old mice); ALZET brain infusion kit 3 used; cancer (Brain Tumor);

Q10182: S. Hirose*, et al.* Impact of a Demyelination-Inducing Central Nervous System Virus on Expression of Demyelination Genes in Type 2 Lymphoid Cells. Journal of Virology 2021;95(4):
Agents: Interleukin 2 **Vehicle:** Not Stated; **Route:** CSF/CNS; **Species:** Mice; **Pump:** Not Stated; **Duration:** Not Stated;
ALZET Comments: animal info: C57BL/6 miceInterleukin-2 aka (IL-2); peptides; immunology;

Q10539: M. A. Harris*, et al.* ssDNA Nanotubes For Selective Targeting Of Glioblastoma And Delivery Of Doxorubicin For Enhanced Survival. Science Advances 2021;7(49):
Agents: Doxorubicin **Vehicle:** PBS; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1002; **Duration:** 14 days;
ALZET Comments: Dose: (70 uM or 0.2 mg/kg)Controls received mp w/ vehicle; animal info: Eight-week-old mice; Doxorubicin aka (DOX)ALZET brain infusion kit 3 used; Brain coordinates (right hemisphere from bregma: anterior, 1.0 mm; and lateral, 1.5 mm); cancer (Glioblastoma);

Q10417: J. M. Brown*, et al.* Role of hypothalamic MAPK/ERK signaling and central action of FGF1 in diabetes remission. iScience 2021;24(9):102944
Agents: UO126 **Vehicle:** DMSO; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1003D; **Duration:** 24 hours;
ALZET Comments: Dose: (30 mM); Controls received mp w/ vehicle; animal info: Male mice, 8-week-old C57BL/6J (WT)post op. care: buprenorphine hydrochloride for pain relief and were allowed to recover for one week prior to the study; UO126 is a selective MAPK inhibitor Brain coordinates (LV: 0.7 mm posterior to bregma; 1.3 mm lateral, and 1.3 mm below the skull surface and 3V: -1.8 mm posterior to bregma; mid-line and -4.3 mm below the skull surface); diabetes

Q8701: S. Bhattarai*, et al.* Modulation of Brain Pathology by Enhancer RNAs in Cerebral Ischemia. Mol Neurobiol 2021;58(4):1482-1490
Agents: Anti-eRNA oligos **Vehicle:** CSF/ artificial; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1003D; **Duration:** 3 days;
ALZET Comments: Dose (8.3 pmole/ul); animal info (3 months old, 20-30 g, C57BL/6N); antisense (eRNA_06347: 5′-GATTTGGAATTGCTAG-3′ ; eRNA_093384: 5′-GGAAGCAGGTGAACAG-3′); ALZET brain infusion kit 3 used; ischemia (Cerebral);

Q9893: I. J. Yeo*, et al.* Antifungal drug miconazole ameliorated memory deficits in a mouse model of LPS-induced memory loss through targeting iNOS. Cell Death & Disease 2020;11(8):623
Agents: AB 1-42 **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1002; **Duration:** 2 weeks;
ALZET Comments: Dose (300 pmol); 0.9% Saline used; Controls received mp w/ vehicle; animal info (8-10 weeks old, C57BL/N); ALZET brain infusion kit 1 used; Brain coordinates (−1.0 mm anterior/posterior, +0.5 mm medial/lateral, and −2.5 mm dorsal/ventral); neurodegenerative (Alzheimer's Disease);

Q9905: H. Yang*, et al.* Region-specific astrogliosis: differential vessel formation contributes to different patterns of astrogliosis in the cortex and striatum. Molecular Brain 2020;13(1):103
Agents: Avastin **Vehicle:** Not Stated; **Route:** CSF/CNS; **Species:** Mice; **Pump:** Not Stated; **Duration:** 14 days;
ALZET Comments: Dose (10 mg/kg); animal info (Male, 8-10 weeks old, 25-30 g); Brain coordinates (AP: -0.5, ML: + 1.2, DV: −2.5); neurodegenerative (Brain Injury);

Q9929: D. Xu*, et al.* Modulating TRADD to restore cellular homeostasis and inhibit apoptosis. Nature 2020;587(7832):133-138
Agents: Apostatin-1 **Vehicle:** CSF, artificial; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1002; **Duration:** Not Stated;
ALZET Comments: Dose (0.25 ul/hr); animal info (2 months old); Apostatin-1 aka Apt-1 ; ALZET brain infusion kit XX used; Brain coordinates (ML −1.0 mm; AP −0.5 mm; DV 2.0 mm); cyanoacrylate adhesive; cardiovascular;

Q9936: S. Y. Wu*, et al.* BDNF reverses aging-related microglial activation. Journal of Neuroinflammation 2020;17(1):210
Agents: Brain-derived neurotrophic factor **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1004; **Duration:** 28 days;
ALZET Comments: Dose (0.1 ul/min); 0.9% Saline used; Controls received mp w/ vehicle; animal info (18 months old); Brain-derived neurotrophic factor aka BDNF ; neurodegenerative (Microglial Activation);

Q9959: J. Wu, *et al.* Activation of the Hedgehog Pathway Promotes Recovery of Neurological Function After Traumatic Brain Injury by Protecting the Neurovascular Unit. Translational Stroke Research 2020;11(4):720-733
Agents: Cytosine-b-D-arabinofuranoside **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1007D; **Duration:** 6 days;
ALZET Comments: Controls received mp w/ vehicle; animal info (C57BL/6J); Cytosine-b-D-arabinofuranoside aka Ara-C ; Brain coordinates (anterior (A), 0; lateral (L), 0.8; and depth (D), 2.5 (relative to bregma and the surface of the brain)); neurodegenerative (Neurogenesis);

Q9951: Y. Wang, *et al.* Calpain-2 as a therapeutic target in repeated concussion–induced neuropathy and behavioral impairment. Neuroscience 2020;
Agents: Selective Calpain 2 Inhibitor **Vehicle:** Not stated; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 2002; **Duration:** 10 days;
ALZET Comments: Dose (0.3 mg/kg/day); Controls received mp w/ vehicle; animal info (C57Bl/6); Selective Calpain 2 Inhibitor aka C21 ; enzyme inhibitor (Selective Calpain 2 Inhibitor); neurodegenerative (Traumatic Brain Injury);

Q9956: W. H. Walker, 2nd, *et al.* Social enrichment attenuates chemotherapy induced pro-inflammatory cytokine production and affective behavior via oxytocin signaling. Brain, Behavior, and Immunity 2020;89(451-464
Agents: Oxytocin, Selective Oxytocin Antagonist **Vehicle:** CSF artificial; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1004;
Duration: 14 days;
ALZET Comments: Dose (OT- 40 or 100 ng, OTA- 500 ng); Controls received mp w/ vehicle; animal info (Female, Balb/C, 8 weeks or older); Oxytocin aka OT or Selective Oxytocin Antagonist aka OTA ; ALZET brain infusion kit 3 used; Brain coordinates (+0.02 posterior, -0.95 lateral, -2.75 mm for bregma); bilateral cannula used; cancer (Chemotherapy);

Q9090: V. Tsvankin, *et al.* ABC Transporter Inhibition Plus Dexamethasone Enhances the Efficacy of Convection Enhanced Delivery in H3.3K27M Mutant Diffuse Intrinsic Pontine Glioma. Neurosurgery 2020;86(5):742-751
Agents: Dasatinib **Vehicle:** Not Stated; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 2002; **Duration:** 14 days;
ALZET Comments: Dose (2 uM); Dasatinib aka Tyrosine Kinase Inhibitor; enzyme inhibitor (Tyrosine Kinase Inhibitor); cancer (Glioma);

Q10705: M. C. Trolese, *et al.* CXCL13/CXCR5 Signaling is Pivotal to Preserve Motor Neurons in Amyotrophic Lateral Sclerosis. EBioMedicine 2020;62(103097
Agents: MAb 5261; Immunoglobulin G **Vehicle:** Not Stated; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1004; **Duration:** Not Stated;
ALZET Comments: "Dose: (7.2 mg/ml CSCL13 antibody); animal info: Female transgenic SOD1G93A mice on C57BL/6 J or 129SvHsd genetic background, hereafter indicated as C57-mSOD1 and 129Sv-mSOD1; Immunoglobulin G aka (IgG); MAb 5261 (anti-CSCL13 antibody; neurodegenerative; (amyotrophic lateral sclerosis); "

Q9983: Y. Sun, *et al.* Modulation of the Astrocyte-Neuron Lactate Shuttle System contributes to Neuroprotective action of Fibroblast Growth Factor 21. Theranostics 2020;10(18):8430-8445
Agents: Fibroblast Growth Factor 21 **Vehicle:** Not Stated; **Route:** CSF/CNS; **Species:** Mice; **Pump:** Not Stated; **Duration:** 14 days;
ALZET Comments: Dose (0.4 ug/day); Controls received mp w/ vehicle; animal info (6 month old); Fibroblast Growth Factor 21 aka FGF21 ; Brain coordinates (0.1 mm anteroposterior to bregma; 0.9 mm lateral from midline; 2.5 mm below the dura); bilateral cannula used; neurodegenerative (Alzheimer's Disease);

Q8955: J. Sorrell, *et al.* The central melanocortin system mediates the benefits of time-restricted feeding on energy balance. Physiology & Behavior 2020;227(113132
Agents: Leptin **Vehicle:** Saline; **Route:** CSF/CSN; **Species:** Mice; **Pump:** 1007D; **Duration:** 7 days;
ALZET Comments: Dose (1 ug/day); 0.9% Saline used; Controls received mp w/ vehicle; animal info (Male, C57BL/6J); Brain coordinates (0.7 mm posterior, 1.2 mm lateral, and 2.5 mm ventrally from the surface of the brain); bilateral cannula used; dependence;

Q9132: G. A. Rodriguez, *et al.* Attenuation of entorhinal cortex hyperactivity reduces Aβ and tau pathology. PLOS Biology 2020;18(8):
Agents: D-4- [(2E)-3-phosphono-2-propenyl]-2-piperazinecarboxylic acid **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1007D; **Duration:** 2 days;
ALZET Comments: Dose (10 uM); Controls received mp w/ vehicle; animal info (NR1 flox); D-4-[(2E)-3-phosphono-2-propenyl]-2-piperazinecarboxylic acid aka NMDAR antagonist; Brain coordinates (-0.22 mm posterior, 1 mm lateral from bregma to target the lateral cerebral ventricle); bilateral cannula used; dental cement used; neurodegenerative (Synaptic scaling and sliding threshold); "these data support the utility of long-term CNO delivery in indwelling osmotic minipumps to activate DREADDs in vivo (see also [83]). Importantly, percentage theta power was further reduced in EC-Tau/hAPP mice following chronic hM4Di DREADDs activation."

Q8840: G. A. Rodriguez, *et al.* Chemogenetic attenuation of neuronal activity in the entorhinal cortex reduces Abeta and tau pathology in the hippocampus. PLOS Biology 2020;18(8):e3000851
Agents: Clozapine-N-Oxide **Vehicle:** DMSO; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 2006; **Duration:** 6 weeks;
ALZET Comments: Dose (1 mg/kg/day); 0.05% DMSO used; Clozapine-N-Oxide aka CNO ; neurodegenerative (Alzheimer's Disease);

Q8813: Y. Qin, *et al.* Estradiol Replacement at the Critical Period Protects Hippocampal Neural Stem Cells to Improve Cognition in APP/PS1 Mice. Frontiers in Aging Neuroscience 2020;12(240
Agents: p75 NTR metalloprotease inhibitor **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice; **Pump:** Not Stated; **Duration:** 7 days;
ALZET Comments: Dose (0.25 ul/hr); Controls received mp w/ vehicle; animal info (APP/PS1, 4-10 months old); p75 NTR metalloprotease inhibitor aka TAPI-2 ; enzyme inhibitor (p75 NTR metalloprotease inhibitor); Brain coordinates (0.3 mm posterior, 1.0 mm lateral, and 2.3 mm ventral to Bregma); bilateral cannula used; neurodegenerative (Alzheimer's Disease);

Q8370: M. Popek, *et al.* Physiology and Morphological Correlates of Excitatory Transmission are Preserved in Glutamine Transporter SN1-Depleted Mouse Frontal Cortex. Neuroscience 2020;446(124-136
Agents: Anti-SN1 vivo-morpholinos oligonucleotides **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1002; **Duration:** Not stated;
ALZET Comments: Dose (1.2 mg/kg/day); Controls received mp w/ vehicle; animal info (Male, C57Bl6, 30 g); peptides; Brain coordinates (AP + 2.0, ML 0.8, DV 1.5)); neurodegenerative (Glutamatergic transmission);

Q8369: G. Pirovano, *et al.* Targeted Brain Tumor Radiotherapy Using an Auger Emitter. Clin Cancer Res 2020;26(12):2871-2881
Agents: Iodine-123 Meitner-Auger PARP1 inhibitor **Vehicle:** PEG; PBS; **Route:** CSF/CNS; **Species:** MICE; **Pump:** 1003D; **Duration:** 3 days;
ALZET Comments: 30% PEG/PBS used; (Iodine-123 Meitner-Auger PARP1 inhibitor aka 123 I-MAPi; enzyme inhibitor ((Iodine-123 Meitner-Auger PARP1 inhibitor); ALZET brain infusion kit 3 used; cancer (Glioblastoma);

Q8361: E. E. Parks, *et al.* Interleukin 6 reduces allopregnanolone synthesis in the brain and contributes to age-related cognitive decline in mice. J Lipid Res 2020;61(10):1308-1319
Agents: Interleukin-6 **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1002; **Duration:** 14 days;
ALZET Comments: Dose (100 ng/day); Controls received mp w/ vehicle; animal info (Male, C57BL/6N); neurodegenerative (Alzheimer's Disease);

Q8494: L. Park, *et al.* tPA Deficiency Underlies Neurovascular Coupling Dysfunction by Amyloid-beta. Journal of Neuroscience 2020;40(42):8160-8173
Agents: PAI-039 **Vehicle:** Not stated; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1004; **Duration:** 4 weeks;
ALZET Comments: Dose (42 ng/kg/min); Controls received mp w/ vehicle; animal info (10-11 months old); behavioral testing (Maze Test, Novel Object Recognition Test); enzyme inhibitor (PAI-1 inhibitor); Brain coordinates (-0.22 mm lateral, 0.8 mm, dorsal 2 mm); neurodegenerative (Alzheimer's Disease);

Q10048: M. A. Nunes*, et al.* Kinin B2 Receptor Activation Prevents the Evolution of Alzheimer's Disease Pathological Characteristics in a Transgenic Mouse Model. Pharmaceuticals (Basel) 2020;13(10):
Agents: Amyloid Beta 1-42 **Vehicle:** CSF, Artificial; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1004; **Duration:** 8 weeks;
ALZET Comments: Dose (10 nmol/kg/h); Controls received mp w/ vehicle; animal info (Twelve-month-old transgenic mice); pumps replaced every 4 weeks; Amyloid Beta 1-42 aka AB peptide; peptides; neurodegenerative (Alzheimer's Disease);

Q8648: F. Mannara*, et al.* Allosteric modulation of NMDA receptors prevents the antibody effects of patients with anti-NMDAR encephalitis. Journal of Neurology 2020;143(9):2709-2720
Agents: NMDAR-CSF **Vehicle:** Not Stated; **Route:** CSF/CNS; **Species:** Mice; **Pump:** Not stated; **Duration:** 14 days;
ALZET Comments: Animal info (male C57BL/6J mice, 8-10 weeks old, 25-30 g); behavioral testing (Novel object location; locomotor activity); Brain coordinates (0.2 mm posterior and ± 1.00 mm lateral from bregma, depth 2.2 mm); dependence;

Q10183: S. Hirose*, et al.* Type 2 Innate Lymphoid Cells Induce CNS Demyelination in an HSV-IL-2 Mouse Model of Multiple Sclerosis. iScience 2020;23(10):101549
Agents: Interleukin-2 **Vehicle:** Not Stated; **Route:** CSF/CNS; **Species:** Mice; **Pump:** Not Stated; **Duration:** Not Stated;
ALZET Comments: animal info: wild-type (WT) HSV-1Interleukin -2 aka (IL-2)peptides; immunology;

Q8529: D. W. Hampton*, et al.* HspB5 Activates a Neuroprotective Glial Cell Response in Experimental Tauopathy. Frontiers in Neuroscience 2020;14(574
Agents: HspB5, human recomb.; Myoglobin **Vehicle:** PBS; **Route:** CSF/CSN; **Species:** Mice; **Pump:** 1004; **Duration:** 4 weeks;
ALZET Comments: Dose (12.5 mg/mL); Controls received mp w/ vehicle; animal info (P301S transgenic mice (female, 8 weeks age)); ALZET brain infusion kit 3 used; Brain coordinates (0.5 mm deep, resting onto the surface of the cortex 0.75 mm laterally from the midline and 1.2 mm forward from bregma); neurodegenerative (Alzheimer's disease);

Q8760: Z. Hai-Na*, et al.* Atorvastatin ameliorates depressive behaviors and neuroinflammatory in streptozotocin-induced diabetic mice. Psychopharmacology (Berl) 2020;237(3):695-705
Agents: Atorvastatin **Vehicle:** CSF, artificial; **Route:** CSF/CNS; **Species:** Mice; **Pump:** Not Stated; **Duration:** 3 weeks;
ALZET Comments: Dose (1 ug or 5 ug); animal info (Male, C57BL/6, 25-30 g, 2 months old); behavioral testing (Open Field Test, Tail Suspension Test, Sucrose Preference Test, Novelty Suppressed Feeding Test); Brain coordinates ((– 0.7 mm posterior to the bregma; ± 1.2 mm lateral to the sagittal; 2.0 mm below dura); bilateral cannula used; immunology;

Q8484: P. Garland*, et al.* Haemoglobin causes neuronal damage in vivo which is preventable by haptoglobin. Brain Commun 2020;2(1):fcz053
Agents: Haemoglobin; Haptoglobin **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 2002; **Duration:** 2 weeks;
ALZET Comments: Dose (20mg/ml Haemoglobin; 14mg/ml Haptoglobin); 0.9% Saline used; Controls received mp w/ vehicle; animal info (Locally bred male C57BL/6 mice, 10–12 weeks of age); post op. care (Buprenorphine); Haemoglobin aka Hb; Haptoglobin aka Hp; ALZET brain infusion kit 3 used; Brain coordinates (from bregma: anteroposterior, -0.4 mm; lateral, 1 mm; depth, 2.5 mm.); cyanoacrylate adhesive; toxicology;

Q8899: J. Gao*, et al.* TDP-43 inhibitory peptide alleviates neurodegeneration and memory loss in an APP transgenic mouse model for Alzheimer's disease. BBA - Molecular Basis of Disease 2020;1866(1):165580
Agents: CPM / PM1 **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1004; **Duration:** Not Stated;
ALZET Comments: Dose (0.5 mg/kg/day); animal info (Female); behavioral testing (Open Field Test, Rotarod and Footprint Test, Grip Strength Test, Barnes Maze Test); cPM or PM1 aka Inhibitory Peptide ; peptides; neurodegenerative (Alzheimer's Disease);

Q8469: A. Frisch*, et al.* Apelin Controls Angiogenesis-Dependent Glioblastoma Growth. International Journal of Molecular Sciences 2020;21(11):
Agents: Apelin-13 **Vehicle:** CSF, Artificial; **Route:** CSF/CSN; **Species:** Mice; **Pump:** 1002; **Duration:** 14 days;
ALZET Comments: Dose (30 µg); Controls received mp w/ vehicle; animal info (APLNKO mice); Apelin-13 aka APLN; ALZET brain infusion kit 3 used; Brain coordinates (1 mm anterior and 1.5 mm right of bregma); cancer (Glioblastoma);

Q9763: J. C. DuBois*, et al.* Anti-Axl antibody treatment reduces the severity of experimental autoimmune encephalomyelitis. Journal of Neuroinflammation 2020;17(1):324
Agents: Growth arrest-specific gene 6 **Vehicle:** Not Stated; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1104; **Duration:** 28 days; **ALZET Comments:** Dose (40 ug/day); animal info (C57BL6/J, 8-12 weeks old); Growth arrest-specific gene 6 aka Gas6; immunology;

Q8448: S. Dominguez-Garcia*, et al.* A novel PKC activating molecule promotes neuroblast differentiation and delivery of newborn neurons in brain injuries. Cell Death and Disease 2020;11(4):262
Agents: EOF2 **Vehicle:** DMSO; PBS; **Route:** CSF/CNS; **Species:** Mice; **Pump:** Not stated; **Duration:** 14 days; **ALZET Comments:** Dose (5µM); 0.4% DMSO used; Controls received mp w/ vehicle; animal info (CD1 male mice, 2 months old); EOF2 aka plant derived diterpene; ALZET brain infusion kit II used;

Q9775: J. P. Barrett*, et al.* Interferon-beta Plays a Detrimental Role in Experimental Traumatic Brain Injury by Enhancing Neuroinflammation That Drives Chronic Neurodegeneration. J Neurosci 2020;40(11):2357-2370
Agents: a-IFNAR neutralizing antibody **Vehicle:** Not Stated; **Route:** CSF/CNS; **Species:** Mice; **Pump:** 1007D; **Duration:** 3 days; **ALZET Comments:** Dose (0.5 mg/ml); animal info (10-12 weeks old, Male, C57BL/6J); ALZET brain infusion kit 3 used; Brain coordinates (0.7mmposterior to the bregma, 1.5 mm lateral to the bregma, 2 mm deep); neurodegenerative (Traumatic Brain Injury);