<table>
<thead>
<tr>
<th>Reference</th>
<th>Authors</th>
<th>Title</th>
<th>Agents</th>
<th>Vehicle</th>
<th>Route</th>
<th>Species</th>
<th>Pump</th>
<th>Duration</th>
<th>ALZET Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q9457</td>
<td>C. Sheeler, et al.</td>
<td>Post-symptomatic Delivery of Brain-Derived Neurotrophic Factor (BDNF) Ameliorates Spinocerebellar Ataxia Type 1 (SCA1) Pathogenesis.</td>
<td>Brain-derived neurotrophic factor</td>
<td>CSF, artificial</td>
<td>CSF/CNS (right lateral ventricle)</td>
<td>Mice</td>
<td>1004</td>
<td>4 weeks</td>
<td>Dose (0.71 μg/day); Controls received mp w/ vehicle; animal info (Male and female wild-type mice, 12 weeks old); behavioral testing (Rotarod test); brain-derived neurotrophic factor aka BDNF; Brain coordinates (A/P, 1.1 mm; M/L, 0.5 mm; D/V, −2.5 mm from Bregma); neurodegenerative (Spinocerebellar ataxia type 1);</td>
</tr>
<tr>
<td>Q9335</td>
<td>J. K. Y. Lau, et al.</td>
<td>Melanocortin receptor activation alleviates amyloid pathology and glial reactivity in an Alzheimer’s disease transgenic mouse model.</td>
<td>Melanotan II</td>
<td>PBS</td>
<td>CSF/CNS (right lateral ventricle)</td>
<td>Mice</td>
<td>1004</td>
<td>28 days</td>
<td>Dose (2.4 nmol/day); Controls received mp w/ vehicle; animal info (6–7-month-old APP/PS1 mice); neurodegenerative (Alzheimer’s Disease);</td>
</tr>
<tr>
<td>Q9215</td>
<td>M. M. Edwards, et al.</td>
<td>Chronic hindbrain administration of oxytocin elicits weight loss in male diet-induced obese mice.</td>
<td>Oxytocin</td>
<td>Saline</td>
<td>CSF/CNS (fourth ventricle)</td>
<td>Mice</td>
<td>2004</td>
<td>28 days</td>
<td>Dose (16 nmol/day); Controls received mp w/ vehicle; animal info (Adult male C57BL/6J mice, 5.25–6.5 months old; 25.7–51.3 g); Oxytocin aka OT; Brain coordinates (5.9 mm caudal to bregma; 0.4 mm lateral to the midline, and 3.7 mm ventral to the skull surface); dental cement used; dependence;</td>
</tr>
<tr>
<td>Q9498</td>
<td>Y. Tanie, et al.</td>
<td>GRP78-Mediated Signaling Contributes to Axonal Growth Resulting in Motor Function Recovery in Spinal Cord-Injured Mice.</td>
<td>Neuroleukin; GRP78; Immunoglobulin</td>
<td>CSF, artificial</td>
<td>CSF/CNS (lateral ventricle)</td>
<td>Mice</td>
<td>1004</td>
<td>21 days</td>
<td>Dose (100 mg/ml); Controls received mp w/ vehicle; animal info (Eight-week-old female ddY mice); Immunoglobulin aka IgG, GRP78 aka 78-kDa glucose regulated protein; ALZET brain infusion kit 3 used; Brain coordinates (bregma −0.22 mm, lateral to the left +1 mm and −2.5 mm depth); spinal cord injury;</td>
</tr>
<tr>
<td>Q9444</td>
<td>E. H. Sanchez-Mendoza, et al.</td>
<td>Compromised Hippocampal Neuroplasticity in the Interferon-alpha and Toll-like Receptor-3 Activation-Induced Mouse Depression Model.</td>
<td>Interferon, alpha</td>
<td>PBS</td>
<td>CSF/CNS (left ventricle)</td>
<td>Mice</td>
<td>1002</td>
<td>14 days</td>
<td>Dose (250 IU/day); Controls received mp w/ vehicle; animal info (male 8–12-week-old mice); post op. care (buprenorphine); Interferon, alpha aka IFN-α; ALZET brain infusion kit 3 used; Brain coordinates (0.2 mm anterior and 0.9 mm lateral to bregma); dependence;</td>
</tr>
<tr>
<td>Q8907</td>
<td>C. Netzahualcoyotzi, et al.</td>
<td>Neuronal and astroglial monocarboxylate transporters play key but distinct roles in hippocampus-dependent learning and memory formation.</td>
<td>L-lactate, Sodium; Glucose, d-; Perampanel</td>
<td>Saline, Sterile Isotonic; DMSO</td>
<td>CSF/CNS (lateral ventricle)</td>
<td>Mice</td>
<td>1002; 1004</td>
<td>7 days</td>
<td>Dose (30 umol/day L-lactate, 15 umol/day d-Glucose, 0.043 umol/day Perampanel); Controls received mp w/ vehicle; animal info (adult male mice); behavioral testing (Speed, Open-field, Elevated plus-maze, Predator odor test, Forced swimming test, NOR, Y-maze, Morris Water Maze); Perampanel aka PEM; ALZET brain infusion kit 3 used; Brain coordinates (AP -0.6 mm, L -1.5 mm, DV -2.1 mm); dental cement used; cyanoacrylate adhesive; dependence;</td>
</tr>
<tr>
<td>Q8905</td>
<td>H. S. Nam, et al.</td>
<td>Lrig1 expression prospectively identifies stem cells in the ventricular-subventricular zone that are neurogenic throughout adult life.</td>
<td>Ara-C</td>
<td>CSF, artificial</td>
<td>CSF/CNS (lateral ventricle)</td>
<td>Mice</td>
<td>Not Stated</td>
<td>6 days</td>
<td>Dose (30 umol/day L-lactate, 15 umol/day d-Glucose, 0.043 umol/day Perampanel); Controls received mp w/ vehicle; animal info (adult male mice); behavioral testing (Speed, Open-field, Elevated plus-maze, Predator odor test, Forced swimming test, NOR, Y-maze, Morris Water Maze); Perampanel aka PEM; ALZET brain infusion kit 3 used; Brain coordinates (AP -0.6 mm, L -1.5 mm, DV -2.1 mm); dental cement used; cyanoacrylate adhesive; dependence;</td>
</tr>
</tbody>
</table>
Agents: CSF, amyotrophic lateral sclerosis Vehicle: CSF, artificial; Route: CSF/CNS (right lateral ventricle); Species: Mice; Pump: 1002; Duration: 14 days;
ALZET Comments: Controls received mp w/ vehicle; animal info (mice (mean age 230.41 ± 37.7 days)); behavioral testing (open-field test); amyotrophic lateral sclerosis CSF aka ALS-CSF; Brain coordinates (1.50 mm lateral, − 1.00 mm antero-posterior and − 2.00 dorsoventral from Bregma); neurodegenerative (Amyotrophic Lateral Sclerosis);

Q8640: L. Li, et al. ABCA1/ApoE/HDL Signaling Pathway Facilitates Myelination and Oligodendrogenesis after Stroke. International Journal of Molecular Sciences 2020;21(12);
Agents: Apolipoprotein E; High density lipoprotein; Vehicle: CSF, artificial; Route: CSF/CNS (right lateral ventricle); Species: Mice; Pump: 1002; Duration: 14 days;
ALZET Comments: Dose (25µg); Controls received mp w/ vehicle; animal info (ABCA1-B/-B mice); behavioral testing (adhesive removal test); Apolipoprotein E aka ApoE2; High density lipoprotein aka HDL3; ischemia (cerebral);

Agents: Pyruvate Kinase Isoform M2; CB-5083 Vehicle: CSF, artificial; Route: CSF/CNS (lateral ventricle); Species: Mice; Pump: 1004; Duration: 28 days;
ALZET Comments: Dose (1 ng/ml Pyruvate Kinase Isoform M2; 100 nM CB-5083); Controls received mp w/ vehicle; animal info (eight-week-old female ddY mice); behavioral testing (Basso Mouse Scale, Toyama Mouse Score, vertical cage test); Pyruvate Kinase Isoform M2 aka PKM2; CB-5083 aka valosin-containing protein inhibitor; ALZET brain infusion kit 3 used; Brain coordinates (bregma− 0.22 mm, lateral to the lef+1 mm and − 2.5 mm depth); spinal cord injury;

Agents: Ganciclovir Vehicle: Saline; Route: CSF/CNS (right lateral ventricle); Species: Mice; Pump: Not stated; Duration: 2 weeks;
ALZET Comments: Dose (11 µg/ul/hr); Controls received mp w/ vehicle; animal info (APP23/GFAP-TK double transgenic mice, 9 months old); behavioral testing (Object location task; Y maze); Ganciclovir aka GCV; neurodegenerative (Alzheimer’s disease);

Agents: Ganciclovir Vehicle: CSF, artificial; Route: CSF/CNS (right lateral ventricle); Species: Mice; Pump: 2001; 2004; Duration: 6 weeks;
ALZET Comments: Dose (2.5 mg); animal info (APPPS1 mice; CX3CR1-GFP mice; CD11b-HSVTK+/- mice); Ganciclovir aka Cymeven; neurodegenerative (Alzheimer’s disease);

Agents: Erythropoietin, recombinant human Vehicle: Saline; Route: CSF/CNS (lateral cerebral ventricle); Species: Mice; Pump: 2006; Duration: 14 days;
ALZET Comments: Dose (3000 U/kg); Controls received mp w/ vehicle; animal info (Tg21 mice); recombinant human Erythropoietin aka recombinant human EPO; ALZET brain infusion kit 3 used; Brain coordinates (midline, 1.00 mm; antero-posterior, 0.34 mm; dorsoventral, 2.30 mm); dental cement used; replacement therapy (Erythropoietin);

**Agents:** APY-d3  
**Vehicle:** CSF, artificial  
**Route:** CSF/CNS (ipsilesional lateral ventricle)  
**Species:** Mice  
**Pump:** 1002  
**Duration:** 2 weeks;

**ALZET Comments:** Dose (5 mm); animal info (In-bred C57BL/6J male mice, 10–12 weeks of age); behavioral testing (accelerating rotarad; horizontal ladder task); APY-d3 aka peptide solution, β APVCYVR β ASWS; peptides; ALZET brain infusion kit 3 used; Brain coordinates (0.1 mm caudal and 1.0 mm lateral of bregma); cyanoacrylate adhesive; gene therapy;


**Agents:** SHU9119  
**Vehicle:** Saline  
**Route:** CSF/CNS (lateral ventricle)  
**Species:** Mice  
**Pump:** Not stated  
**Duration:** 4 weeks;

**ALZET Comments:** Dose (5 nmol/day); Controls received mp w/ vehicle; animal info (male mice, 6-8 weeks old); SHU9119 aka melanocortin receptor antagonist; Brain coordinates (−0.7 mm posterior to bregma; 1.3 mm lateral, and 1.3 mm below the skull surface); diabetes;


**Agents:** TLQP-62  
**Vehicle:** CSF, artificial  
**Route:** CSF/CNS (lateral ventricle)  
**Species:** Mice  
**Pump:** Not Stated  
**Duration:** 28 days;

**ALZET Comments:** Dose (15 ug/day); Controls received mp w/ vehicle; animal info (young male C57BL/6J mice); Brain coordinates (AP = − 0.1, ML = ± 1.0 and DV: − 3.0 from bregma (mm)); neurodegenerative (Alzheimer’s disease);

Q7501: J. Y. J. Z. Wang, Zhang Hongxia, A. Smith Charity, Jin Kunlin. AMPK Signaling Regulates the Age-Related Decline of Hippocampal Neurogenesis. Aging and Disease 2019;0-

**Agents:** AICAR  
**Vehicle:** Saline  
**Route:** CSF/CNS (right lateral ventricle)  
**Species:** Mice  
**Pump:** 1003D  
**Duration:** 4 days;

**ALZET Comments:** Dose (4Mm); Controls received mp w/ vehicle; animal info (young male C57BL/6J mice); Brain coordinates (1 mm lateral to the midline, 0.34 mm posterior to the bregma, and 3.5 mm deep into the pial surface); neurodegenerative (hippocampal neurogenesis);


**Agents:** LY294002  
**Vehicle:** CSF, artificial  
**Route:** CSF/CNS (left lateral ventricle)  
**Species:** Mice  
**Pump:** 1003D; 2002  
**Duration:** Not Stated;

**ALZET Comments:** Dose (5 ug/ml); Controls received mp w/ vehicle; animal info (Eight-week-old male C57BL6/J mice); enzyme inhibitor (LY294002 inhibits Akt);


**Agents:** Cathepsin B inhibitor  
**Vehicle:** Saline, DMSO  
**Route:** CSF/CNS (lateral ventricle)  
**Species:** Mice  
**Pump:** 1002  
**Duration:** 7 days;

**ALZET Comments:** Dose (1 mg/mL); 1.5% DMSO used; Controls received mp w/ vehicle; animal info (Eight- to ten-week-old male adult 22-25 g BTBR T+tf/J (BTBR) mice); Therapeutic indication (Autism);


**Agents:** Insulin; Melanotan  
**Vehicle:** PBS; SC  
**Route:** CSF/CNS (Paraventricular Nucleus of Hypothalamus)  
**Species:** Mice  
**Pump:** 2002; 1002  
**Duration:** 14 days;

**ALZET Comments:** Dose (10 U/kg/day); Controls received mp w/ vehicle; Brain coordinates (bregma: anteroposterior, 0.70; mediolateral, 0.22; doroventral, 4.80 mm); bilateral cannula used; diabetes; BIK: Plastics1, 3280PD/V/SPC;

Agents: MCC950 Vehicle: Saline; Route: CSF/CNS (right lateral ventricle); Species: Mice; Pump: 2006; Duration: 6 weeks;
ALZET Comments: Dose (0.15 ul/h); Controls received mp w/ vehicle; enzyme inhibitor (inflammasome inhibitor); ALZET brain infusion kit 3 used; Brain coordinates (A/P, − 0.5; L, − 1.1; relative to bregma); cyanoacrylate adhesive; neurodegenerative (Alzheimer’s Disease);


Agents: Topotecan Vehicle: Saline; Route: CSF/CNS (ventricle); Species: Mice; Pump: 2004; Duration: 28 days;
ALZET Comments: Dose (5.28 μg/day); Controls received mp w/ vehicle; animal info (J:NU mice (homozygous for the Foxn1nu mutation); comparison of bolus dosing vs mp; cancer (Leptomeningeal medulloblastoma);


Agents: Albumin, bovine serum; BSA, Alexa Fluor 647 conjugated Vehicle: CSF, artificial; Route: CSF/CNS (right lateral ventricle); Species: Mice, Rat; Pump: 2001, 2ML1; Duration: 7 days;
ALZET Comments: Dose (0.4mM bovine serum albumin for mice, 0.2 mM bovine serum albumin for rat, 2.68 g/L BSA ); animal info (adult male mice, 10 week-old male Wistar rats were used); behavioral testing (Morris water maze); ALZET brain infusion kit 3 used; Brain coordinates (0.5 mm posterior, 1 mm lateral to bregma for mice, -1 mm posterior and 1.5 mm lateral to bregma for rat); neurodegenerative (astrocrytic TGF-beta signaling, aberrant ECG activity, cognitive impairment);


Agents: Melanotan-II Vehicle: Water, sterile; Saline; Route: CSF/CNS (left lateral ventricle); Species: Mice; Pump: 1007D; 1002; Duration: 7 days; 14 days;
ALZET Comments: Dose (2.5 μg/day); Controls received mp w/ vehicle; animal info (Four- to six-month-old male MIA and male control C57BL/6J mice weighing 25-30g); behavioral testing (self-grooming test; three chamber test; Exploratory behavior; marble burying); ALZET brain infusion kit 3 used; Brain coordinates (posterior 0.20 mm, left 0.8 mm, ventral 2.5 mm); cyanoacrylate adhesive; neurodegenerative (Autism spectrum disorder);


Agents: DV1 Vehicle: Saline; Route: CSF/CNS (left ventricle); Species: Mice; Pump: 1007D; Duration: 7 days;
ALZET Comments: Dose (50 mg/kg/day); Controls received mp w/ vehicle; animal info (female athymic nude mice, 8 weeks old,); DV1 is a synthetic inhibitor of Chemokine receptor 4 (CXCR4); ALZET brain infusion kit 3 used; cyanoacrylate adhesive; cancer (breast); the skin incision was closed with Vetbond; Brain coordinates (skull at 0.3 mm posterior, 1.0 mm lateral to the bregma, 3.0mm deep);


Agents: NEDD4-2 Vehicle: Saline; Route: CSF/CNS (lateral ventricle); Species: Mice; Pump: 1007D; Duration: 1 day;
ALZET Comments: Controls received mp w/ vehicle; animal info (C57BL/6J mice); NEDD4-2 aka neural precursor cell expressed developmentally down-regulated protein 4; ALZET brain infusion kit 3 used; Brain coordinates (2 mm posterior; 1.25 mm lateral; 2 mm depth from bregma); dependence;


Agents: D3 Vehicle: CSF, Artificial; Route: CSF/CNS (right lateral ventricle); Species: Mice; Duration: 2 weeks;
ALZET Comments: ”Dose (40 ug/100 ul); Controls received mp w/ vehicle; animal info (C57BL/6 wild-type male mice, 4-6 months old); behavioral testing (Morris Water Maze); D3 aka TrkA partial agonist; Brain coordinates (0.46 mm posteriorly and 1 mm laterally from Bregma); dependence; ”

**Agents:** Arabinofuranoside, cytosine-beta-D-; deoxyuridine, 5-bromo-2′-**Vehicle:** CSF, Artificial; **Route:** CSF/CNS (lateral ventricle); **Species:** Mice; **Pump:** 1004; **Duration:** 4 weeks;

**ALZET Comments:** Dose (AraC 15 mg/ml, 2.69 μl/day), (BrdU 4 mg/ml)); Controls received mp w/ vehicle and BrdU; animal info (3-4 or 23–24 months, C57BL/6J); functionality of mp verified by residual volume and BrdU staining; cytosine beta-D-arabinofuranoside (AraC) is an antimitic agent previously shown to suppress hypothalamic proliferation and neurogenesis; Brain coordinates (2 mm dorsal to the lateral ventricle (LV: anterior-posterior, −0.3 mm; dorsal-ventral, 2.5 mm; and lateral, 1.0 mm from the bregma)); Cannula placement verified via photomicrograph of histological section; “We used micro-osmotic pump and ICV administration for chronic delivery of aCSF or AraC, which provided good control of drug concentration and continuous delivery without disturbing animals. This method also reduced the likelihood that treatment effects on sleep–wake function could be due to stress of daily or multiple IP injections or mechanical or inflammatory responses of the sites examined in this study due to local manipulation.” pg.552; “We also noted that, unlike the control group, the AraC+BrdU-treated mice did not maintain their nests well.” p.545;


**Agents:** adiponectin, recombinant globular; rimonabant; chloroethylamine, arachidonyl-2′-**Vehicle:** CSF, Artificial; **Route:** CSF/CNS (third ventricle); **Species:** Mice; **Pump:** Not Stated; **Duration:** 28 days;

**ALZET Comments:** ”Dose ((Recombinant gAPN (20 ng/h), (rimonabant 2 pg/h), (ACEA 4 pg/h)); Controls received mp w/ vehicle; animal info (4-6 weeks, male, APN-KO or C57BL/6J, 20-25g); APN is a 30 kDa circulating hormone and major adipokine, rimonabant (SR141716A) is a CB1 receptor antagonist, ACEA is a CB1 receptor agonist; ALZET brain infusion kit 2 used; Brain coordinates (midline, −1 mm AP, 3 mm ventral, 0 point bregma); Cannula placement verified via histology analysis; cyanoacrylate adhesive; pump model not stated but flow rate listed at 0.22 μl/h; Therapeutic indication (novel APN-HDAC5-CB1 signaling mechanism that promotes peripheral bone formation); “


**Agents:** Oxytocin; atosiban **Vehicle:** Not Stated; **Route:** CSF/CNS (lateral ventricle); **Species:** Mice; Rats; **Pump:** Not Stated; **Duration:** 15 days; 14 days;

**ALZET Comments:** Dose (Oxytocin 1, 10 ng/h), (atosiban 600μg/kg/day)); animal info (adult, male); behavioral testing (elevated plus maze, light-dark box, chronic subordinate colony stress); Atosiban is an inhibitor of the hormones oxytocin and vasopressin; literature review: author lists studies where oxytocin was administered to mice and atosiban was administered to rats;


**Agents:** Vascular endothelial growth factor, mouse recomb.; Vascular endothelial growth factor, synthetic peptide (Nano-VEGF) **Vehicle:** CSF, artificial; **Route:** CSF/CNS (right lateral ventricle); **Species:** Mice; **Pump:** 1002; **Duration:** 2 weeks;

**ALZET Comments:** animal info (8-10, and 24 week-old mice); behavioral testing (rotating rod assy); Brain coordinates (A/P -0.5mm, M/L -1.1mm, D/V -2.5mm);


**Agents:** XPro1595 **Vehicle:** Saline; **Route:** CSF/CNS (lateral ventricle); **Species:** Mice; **Pump:** 1004; **Duration:** 4 weeks;

**ALZET Comments:** Dose (0.08 mg/kg/day); Controls received mp w/ vehicle; animal info (6.5 weeks, Transgenic R6/2); XPro1595 is a dominant-negative inhibitor of soluble TNF-alpha; ALZET brain infusion kit 3 used; neurodegenerative (Huntington’s); Therapeutic indication (disease progression in HD due to inflammation); ”
Q8012: A. E. Govier-Cole, et al. Inhibiting Bone Morphogenetic Protein 4 Type I Receptor Signaling Promotes Remyelination by Potentiating Oligodendrocyte Differentiation. eNeuro 2019;6(2);
**Agents:** LDN-193189  
**Vehicle:** CSF, artificial;  
**Route:** CSF/CNS (ventricle);  
**Species:** Mice;  
**Pump:** 1007D;  
**Duration:** 7 days;  
**ALZET Comments:** Dose (400 ng/day); Controls received mp w/ vehicle; animal info (7-8 weeks old, C57BL/6); Pharmacological inhibitor aka LDN-193189; enzyme inhibitor (Bone morphogenetic protein 4 inhibitor); ALZET brain infusion kit used; Brain coordinates (0.5 mm anterior to bregma, 0.7 mm laterally from the longitudinal midline); bilateral cannula used; cyanoacrylate adhesive;

**Agents:** TNF-a  
**Vehicle:** CSF, artificial;  
**Route:** CSF/CNS (third cerebral ventricle);  
**Species:** Mice;  
**Pump:** 1004D;  
**Duration:** 28 days;  
**ALZET Comments:** Dose (5 ug/kg/day); Controls received mp w/ vehicle; animal info (5 week old, Male); behavioral testing (); Brain coordinates (A= 0.3 mm, L= 1 mm, D= 2.8 mm); bilateral cannula used; dependence;

**Agents:** miR-128 NC, ago-  
**Vehicle:** Not Stated;  
**Route:** CSF/CNS (Lateral ventricle);  
**Species:** Mice;  
**Pump:** Not Stated;  
**Duration:** 8 μmol/L; animal info (neonatal mice, 7 days old 4.50 +/- 0.50g); behavioral testing (Morris water maze test); behavioral testing (Morris water maze test); Therapeutic indication (hypoxic-ischemic brain damage); ischemia (hypoxic-ischemic brain damage);

**Agents:** Clozapine  
**Vehicle:** Saline;  
**Route:** CSF/CNS (lateral ventricles);  
**Species:** Mice;  
**Pump:** 2006;  
**Duration:** 3 weeks;  
**ALZET Comments:** Dose (0,12.5,25, or 50 ug/day); Controls received mp w/ vehicle; animal info (C57BL/6J); ALZET brain infusion kit used; Brain coordinates (AP −0.5 mm, ML ± 1.4mmand DV 3mm from the skull surface); neurodegenerative ();

**Agents:** RG108 Vehicle: DMSO;  
**Route:** CSF/CNS (ventricle);  
**Species:** Mice (pregnant);  
**Pump:** Not Stated;  
**Duration:** 5 days;  
**ALZET Comments:** Dose (20 nmol/day); 10% DMSO used; Controls received mp w/ vehicle; animal info (Timed pregnant mice, PND 60-85); behavioral testing (social interation; stereotype rearing activity); RG108 (N-Phthalyl-L-Tryptophan) is a noncompetitive antagonist of DNMT1 activity; ALZET brain infusion kit used;

**Agents:** Antibody, PDGFRalpha neutralizing  
**Vehicle:** PBS;  
**Route:** CSF/CNS (lateral ventricle);  
**Species:** Mice;  
**Pump:** Not stated;  
**Duration:** 28 days;  
**ALZET Comments:** Dose (20 μg/day); Controls received mp w/ vehicle; animal info (8-12 weeks, male, CAGG-iKO); ALZET brain infusion kit 3.3mm depth used; Brain coordinates (0.5 mm antero-posterior and 1.1 mm lateral relative to bregma); cyanoacrylate adhesive (Loctite);

**Agents:** XAV939; Fluoxetine  
**Vehicle:** DMSO, PBS and Tween 20 buffered;  
**Route:** CSF/CNS (lateral ventricle);  
**Species:** Mice;  
**Pump:** 1004;  
**Duration:** 7 days;  
**ALZET Comments:** Dose (XAV939 1mM at 0.5 μL/h), (fluoxetine 18 mg/kg/day)); 3% DMSO and 0.2% Tween 20 in PBS (pH 7.4) used; Controls received mp w/ vehicle; animal info (10-12 weeks, male, C57); behavioral testing (open field, sucrose preference, novelty-suppressed feeding, forced swim test); XAV939 is a small molecule Axin stabilizer; enzyme inhibitor (tankyrase); Therapeutic indication (increased the amplification of adult neural progenitor cells and neuron production in the hippocampus and ameliorated depression-like behaviors induced by chronic restraint stress);

**Agents:** GW501516  **Vehicle:** DMSO; PBS;  **Route:** CSF/CNS (left lateral ventricle);  **Species:** Mice;  **Pump:** 1007D;  **Duration:** 7 days;

**ALZET Comments:** Dose (60, 120, 240 μg/day); 30% DMSO used; animal info (Male C57/BL6 mice (10–12 weeks old, 22–24 g)); behavioral testing (open field and pole tests); GW501516 is a peroxisome proliferator-activated receptor β/δ (PPARβ/δ) agonists; ALZET brain infusion kit 2 used; Brain coordinates (0.0mm posterior to the bregma, 1.2mm lateral to the midsagittal suture, and 2.5mm ventral to the skull); neurodegenerative (Parkinson’s disease);


**Agents:** Everolimus  **Vehicle:** DMSO; CSF, artificial;  **Route:** CSF/CNS (right lateral ventricle);  **Species:** Mice;  **Pump:** 1002;  **Duration:** 2 weeks;

**ALZET Comments:** Dose (0.167 μg/μl/day); 10% DMSO used; Controls received mp w/ vehicle; animal info (6-month-old 3×Tg-AD male mice and their wild type male littersmates (Non-Tg)); Brain coordinates (0.5mm anterior-posterior, 1.1mm medio-lateral, and 2.5mm dorso-ventral to the skull); neurodegenerative (Alzheimer’s disease);

Q7399: J. A. Blair, et al. CNS luteinizing hormone receptor activation rescues ovariectomy-related loss of spatial memory and neuronal plasticity. Neurobiol Aging 2019;78(111-120

**Agents:** Chorionic gonadotropin hormone, human  **Vehicle:** CSF, artificial;  **Route:** CSF/CNS (right lateral ventricle);  **Species:** Mice;  **Pump:** 1004;  **Duration:** Not Stated;

**ALZET Comments:** Controls received mp w/ vehicle; animal info (Female, C57Bl/6J); behavioral testing (Morris water maze); hCG aka LHR agonist; enzyme inhibitor (Luteinizing hormone inhibitor); ALZET brain infusion kit 3 used; Brain coordinates (AP=-0.5, ML= -1.1, DV= -2.5); bilateral cannula used; Cannula placement verified via injecting fast green, observing cannula track by cryosectioning ; neurodegenerative (Spatial memory);


**Agents:** Letrozole; ICI-182,780  **Vehicle:** DMSO;  **Route:** CSF/CNS (right lateral ventricle);  **Species:** Mice;  **Pump:** Not stated;  **Duration:** 7 Days;

**ALZET Comments:** Dose (0.1 ug/ul or 0.3 ug/ul); 10% DMSO used; animal info (Adult female heterozygous ERE-Luc model mice (70 d of age)); estrogen receptor antagonist aka ICI-182,780; ALZET brain infusion kit XX used; Brain coordinates (relative to bregma: anteroposterior, 0.5 mm; mediolateral, 1.1 mm; dorsoventral, 2.5 mm); dependence;


**Agents:** bupivacaine  **Vehicle:** PBS;  **Route:** CSF/CNS (lateral ventricle);  **Species:** Mice;  **Pump:** 1002;  **Duration:** 1, 2 weeks;

**ALZET Comments:** Dose ((bupivacaine 0.75%), (A293 100 mM at 0.5 μl/hr)); 120 mM NaCl, 2 mM KCl, 0.25 mM NaH2PO4, 30 mM HEPES, 2 mM MgSO4, 2 mM CaCl2, 10 mM glucose in ddH2O (pH 6) used; Controls received mp w/ vehicle; animal info (8 weeks, male, C57BL/6J and Task1(−/−)); bupivacaine is a K+ channel blocker. A293 is a specific TASK1 channel inhibitor; neurodegenerative (multiple sclerosis);