



References (2011-Present) on the Use of ALZET® Osmotic Pumps and Wound Clips

Q11355: S. Liu, *et al.* 3, 4-Benzopyrene (Bap) aggravated abdominal aortic aneurysm formation by targeting pyroptosis in smooth muscle cells through ET-1 mediated NLRP3-inflammasome activation. *International Immunopharmacology* 2023;124(Pt A):110851

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 2006; **Duration:** 6 weeks;
ALZET Comments: Dose (0.9 mg/kg/day); controls received mp w/ vehicle; animal info (Male; 8-10 months old; Weighed 30-35 g); blood pressure measured via tail-cuff method; wound clips used; peptides; cardiovascular

Q11342: C. Kondak, *et al.* Mitochondrial Effects of Hydromethylthionine, Rivastigmine and Memantine in Tau-Transgenic Mice. *International Journal of Molecular Sciences* 2023;24(13):

Agents: Rivastigmine; memantine **Vehicle:** Aqua ad injectabilia; **Route:** SC; **Species:** Mice; **Strain:** NMRI; L1 transgenic; L66;
Pump: 1004; **Duration:** 28 days;
ALZET Comments: Dose: rivastigmine 5 mg/kg/d; memantine 1 mg/kg/d; controls received mp w/ vehicle; wound clips used; neurodegenerative (Alzheimer's)

Q11250: S. N. Breit, *et al.* GDF15 enhances body weight and adiposity reduction in obese mice by leveraging the leptin pathway. *Cell Metabolism* 2023;35(8):1341-1355 e3

Agents: Growth differentiation factor 15, recomb mouse; Leptin, recomb.; leptin antagonist **Vehicle:** Not Stated; **Route:** SC;
Species: Mice; **Strain:** C57BL6; **Pump:** 2004; **Duration:** Not Stated;
ALZET Comments: Dose: GDF 0.5ug/g/day; recomb leptin 1.5ug/g/day; leptin antagonist 1.5 mg/kg/day; animal info: Male HFD-induced obesity, obese leptin-deficient ob/ob and CHOW; post op. care: buprenorphine HCl 0.05 mg/kg; obesity;

Q11243: K. A. Alkadhi. A rat model of pre-clinical Alzheimer's disease. *Handbook of Animal Models in Neurological Disorders* 2023;43-55

Agents: Amyloid beta (1-42) **Vehicle:** Acetonitrile; trifluoroacetic acid; **Route:** CSF/CNS (lateral ventricle); **Species:** Rat; **Strain:** Wistar; **Pump:** Not Stated; **Duration:** 2 weeks;
ALZET Comments: Dose (160pmol/day); 35% acetonitrile/0.1% trifluoroacetic acid used; post op. care: wound clips used; triple antibiotic ointment; peptides; catheter; Brain coordinates (AP: -0.3, L: 1.2, V: 4.5); dental cement used; behavioral testing: Radial arm water maze task; Short term memory; Long term memory; neurodegenerative (Alzheimer's); good methods p. 44-45

Q11214: M. L. D. Rayner, *et al.* Exploring the Nerve Regenerative Capacity of Compounds with Differing Affinity for PPARgamma In Vitro and In Vivo. *Cells* 2022;12(1):

Agents: Agonist. peroxisome proliferator-activated receptor gamma **Vehicle:** PBS; **Route:** SC; **Species:** Rat; **Strain:** Wistar;
Pump: 1004; **Duration:** Not Stated;
ALZET Comments: Controls received mp w/ vehicle; animal info (Adult male rats (250–300 g); wound clips used;

Q11162: B. Kloth, *et al.* Piezo2 is not an indispensable mechanosensor in murine cardiomyocytes. *Scientific Reports* 2022;12(1):8193

Agents: Angiotensin II; isoprenaline **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6J WT; WT-Cre+; Piezo2-KO;
Pump: 2004; 1007D; **Duration:** 1 week; 3 weeks;
ALZET Comments: Dose: Angiotensin II (2.5 mg/kg/per day); Isoprenaline (30 mg/kg/per day); Controls received mp w/ vehicle; animal info: 10 to 12 weeks; wound clips used; cardiovascular;

Q11154: J. Keady, *et al.* Age-specific impacts of nicotine and withdrawal on hippocampal neuregulin signaling. *European Journal of Neuroscience* 2022;56(6):4705-4719

Agents: Nicotine tartrate **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** B6/129S F1 (C57/B6 and 129S hybrid); **Pump:** 2002;
Duration: 14 days;
ALZET Comments: Dose (18 mg/kg/d); 0.9% saline used; Controls received mp w/ vehicle; animal info: Male and female mice 8–20 weeks of age; wound clips used; behavioral testing: open field; dependence;



Q10537: J. O. Hendrickx, *et al.* Short-Term Pharmacological Induction of Arterial Stiffness and Hypertension with Angiotensin II Does Not Affect Learning and Memory and Cerebral Amyloid Load in Two Murine Models of Alzheimer's Disease. *International Journal of Molecular Sciences* 2022;23(5):

Agents: Angiotensin II **Vehicle:** PBS; **Route:** SC; **Species:** Mice; **Pump:** 1004; **Duration:** 28 days;

ALZET Comments: Dose (1 µg/kg/min); Controls received mp w/ vehicle; animal info (5 months old hAPP23+/-, APPswe/PSEN1dE9 C57BL6 mice); wound clips used; behavioral testing (Morris water maze); Blood pressure measured via non-invasive CODA tail-cuff blood pressure system; peptides; neurodegenerative (Alzheimer's disease); (hypertension)

Q10538: E. E. Handley, *et al.* Estrogen Enhances Dendrite Spine Function and Recovers Deficits in Neuroplasticity in the prpTDP-43(A315T) Mouse Model of Amyotrophic Lateral Sclerosis. *Molecular Neurobiology* 2022;59(5):2962-2976

Agents: Estradiol **Vehicle:** Saline; DMSO; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 60 days;

ALZET Comments: Dose (10 mg/ml); 50% DMSO used; Controls received mp w/ vehicle; animal info (Female; Wild-type and TDP-43; Ovariectomy); wound clips used; pumps replaced every 4 weeks; replacement therapy (Estrogen); (ALS)

Q10434: A. DeGuzman, *et al.* Bittersweet: relevant amounts of the common sweet food additive, glycerol, accelerate the growth of PC3 human prostate cancer xenografts. *BMC Research Notes* 2022;15(1):101

Agents: Glycerol **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 32 days;

ALZET Comments: Dose (0.25 µL/h); Controls received mp w/ vehicle; animal info (Male; 6 weeks old); post op. care (Bupivacaine 7 mg/kg); wound clips used; cancer (Prostate);

Q10515: C. Decourt, *et al.* Central Irisin Signaling Is Required for Normal Timing of Puberty in Female Mice. *Endocrinology* 2022;164(2):

Agents: Cilengitide **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 1007D; **Duration:** 7 days;

ALZET Comments: Dose (1.4 µg/mL); Controls received mp w/ vehicle; animal info (Male; Female; Mice; Weighed at least 10 g); receptor antagonist (Alpha(v)beta(3) and alpha(v)beta(5) integrins); wound clips used

Q10509: B. Cruz, *et al.* Alcohol self-administration and nicotine withdrawal alter biomarkers of stress and inflammation and prefrontal cortex changes in Gbeta subunits. *The American Journal of Drug and Alcohol Abuse* 2022;1-12

Agents: Nicotine, hydrogen ditartrate **Vehicle:** Saline; **Route:** SC; **Species:** Rat; **Pump:** 2ML2; **Duration:** 14 days;

ALZET Comments: Dose (3.2 mg/kg/day); 0.9% saline used; animal info (Male; Rats; Weighed 250-300 g); dependence;

Q10503: M. D. Campbell, *et al.* Elamipretide effects on the skeletal muscle phosphoproteome in aged female mice. *Geroscience* 2022;44(6):2913-2924

Agents: Elamipretide **Vehicle:** Saline, sterile, isotonic; **Route:** SC; **Species:** C57BL/6 mice; **Pump:** 1004; **Duration:** 8 weeks;

ALZET Comments: Dose (3 mg/kg/day); animal info (Female; Mice; 6-7 and 28-29 months old); post op. care: IP injection of meloxicam; pumps replaced every 4 weeks; peptides; wound clips used; aging; good methods (see page 2)

Q10577: C. Kondak, *et al.* Hydromethylthionine Enhancement of Central Cholinergic Signalling is Blocked by Rivastigmine and Memantine. *Journal of Neurochemistry* 2021;160(2):172-184

Agents: Rivastigmine; Memantine **Vehicle:** Aqua ad injectabilia; **Route:** SC; **Species:** Mice; **Pump:** 1004; **Duration:** 28 days;

ALZET Comments: Dose (Rivastigmine 0.5 mg/kg/d; Memantine 1 mg/kg/d); dose-response (see p. 174); animal info (60 of each species so 120 mice total; Female; 6-8 months old; NMRI); enzyme inhibitor (Rivastigmine); (Alzheimer's)

Q6884: M. R. Johnstone, *et al.* The selective TrkA agonist, gambogic amide, promotes osteoblastic differentiation and improves fracture healing in mice. *Journal of Musculoskeletal and Neuronal Interactions* 2019;1-10

Agents: Gambogic amide **Vehicle:** DMSO; **Route:** SC; **Species:** Mice; **Pump:** 1002; **Duration:** 14 days;

ALZET Comments: Dose (1 mg/kg/day); Controls received mp w/ vehicle; animal info (Eighty C57BL/6 male mice); gambogic amide is the selective TrkA agonist; "Due to solubility issues with osmotic pump delivery, our study was limited to use of a dosing regimen of 1 mg/kg/day." P. 8; reflex wound clips used; Therapeutic indication (fibular fracture);



Q10079: K. A. Alkadhi, *et al.* Exercise decreases BACE and APP levels in the hippocampus of a rat model of Alzheimer's disease. *Molecular and Cellular Neuroscience* 2018;86(25-29)

Agents: Peptide, amyloid beta 1-42 **Vehicle:** Water, distilled; Acetonitrile; TFA; **Route:** SC; CSF/CNS (right lateral cerebral ventricle); **Species:** Rat; **Pump:** Not Stated; **Duration:** 4 weeks;

ALZET Comments: Dose (250 pmol/day); 64.9% distilled water, 35% acetonitrile, 0.1% trifluoroacetate (TFA) used; 2 control groups, 1 mp w/ agent, 1 mp w/ vehicle; animal info (adult male Wistar rats, 7 weeks, 200-225g); post op. care (wound clips used and triple antibiotic ointment); Amyloid beta 1 - 42 aka A β 1-42; peptides; Brain coordinates (AP, -0.3, L, 1.2, V, 4); Cannula placement verified via rat brain atlas; dental cement used; neurodegenerative (Alzheimer's); "Since our AD model was created by infusion of A β 1-42, we wanted to ascertain the possible effects of exogenous introduction of A β peptide on the endogenous system that produces AD-related peptides and whether regular exercise would be able to prevent these changes. The current and recent experiments showed that exercise might be beneficial for managing the ravages of AD probably through increasing endogenous BDNF." Therapeutic indication (exercise to increase production of BDNF);

Q5271: T. A. Slotkin, *et al.* Prenatal drug exposures sensitize noradrenergic circuits to subsequent disruption by chlorpyrifos. *Toxicology* 2015;338(8-16)

Agents: Nicotine Bitartrate **Vehicle:** Water, bacteriostatic; **Route:** SC; **Species:** Rat (pregnant dams); **Pump:** 2ML2; **Duration:** 17 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (SD 211-217g); dependence; Dose (3 mg/kg/day);

Q5246: K. E. Parrish, *et al.* Efflux transporters at the blood-brain barrier limit delivery and efficacy of cyclin-dependent kinase 4/6 inhibitor palbociclib (PD-0332991) in an orthotopic brain tumor model. *J Pharmacol Exp Ther* 2015;355(2):264-71

Agents: Palbociclib **Vehicle:** DMSO, saline; **Route:** IP; **Species:** Mice; **Pump:** 1003D; **Duration:** 2 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (wild-type, Mdr1a/b2/2, Bcrp12/2, and Mdr1a/b2/2Bcrp12/2 mice); functionality of mp verified by brain and plasma level; cancer (brain tumor); good methods (pg 265); Wound clips used; Resultant brain-to-plasma ratios (pg 268); Dose (10 mg/ml);

Q5240: Y. Oda, *et al.* G protein-coupled receptor kinase 6/beta-arrestin 2 system in a rat model of dopamine supersensitivity psychosis. *J Psychopharmacol* 2015;29(12):1308-13

Agents: Haloperidol **Vehicle:** Acetic acid, glacial; water; **Route:** SC; **Species:** Rat; **Pump:** 2ML2; **Duration:** 14 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (Eleven-week-old male Wistar rats, 240-260 g); functionality of mp verified by ELIZA testing; 2% acetic acid used; good methods (pg 1309); stress/adverse reaction: "One animal did not recover from pump-implanting surgery and was excluded from analysis" (see pg. 1310); behavioral testing (MAP-induced locomotion test); Vehicle pH adjusted to 3.6-3.8 with NaOH; 9mm wound clips used; Dose (0.75 mg/kg/d);

Q7355: H. Lu, *et al.* Subcutaneous Angiotensin II Infusion using Osmotic Pumps Induces Aortic Aneurysms in Mice. *J Vis Exp* 2015;103):

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice (knockout); **Pump:** Not Stated; **Duration:** 4 weeks;

ALZET Comments: Dose (1000 ng/kg/min); animal info (male LDL receptor -/- mice); cardiovascular; good methods;

Q4323: R. C. Bates, *et al.* Increasing pro-survival factors within whole brain tissue of Sprague Dawley rats via intracerebral administration of modified valproic acid. *JOURNAL OF PHARMACOLOGICAL SCIENCES* 2015;128(193-201)

Agents: Valproic acid-PEG **Vehicle:** Not Stated; **Route:** CSF/CNS (caudate putamen); CSF/CNS (sagittal fissure); **Species:** Rat; **Pump:** 2004; **Duration:** 25 days;

ALZET Comments: Animal info (male, Sprague Dawley, 275-300g); ALZET brain infusion kit 1 used; behavioral testing (elevated plus maze, open field test); wound clips used;

Q5450: M. Onda, *et al.* Tofacitinib suppresses antibody responses to protein therapeutics in murine hosts. *J Immunol* 2014;193(1):48-55

Agents: Tofacitinib **Vehicle:** PEG 300; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (Female BALB/c mice (6-8 wk old)); functionality of mp verified by plasma levels; immunology; Wound clips used; suppressing antibody responses; Dose (100 mg/mL); enzyme inhibitor (JAK3)



Q5562: P. G. Popovich, *et al.* Independent evaluation of the anatomical and behavioral effects of Taxol in rat models of spinal cord injury. *Experimental Neurology* 2014;261(97-108

Agents: Paclitaxel **Vehicle:** Cremophor; ethanol; **Route:** CSF/CNS (intrathecal); **Species:** Rat; **Pump:** 2004; **Duration:** 28 days; **ALZET Comments:** Controls received mp w/ vehicle; animal info (Female Sprague-dawley rats, 10 weeks old, 215 g); functionality of mp verified by (pg. 100); good methods (pg. 99); spinal cord injury; post op. care (wound clips used; cages maintained at 37 degrees during recovery; daily injections of Gentocin (5 mg/kg) and saline for 7 days); Taxol aka Paclitaxel; Taxol is an anti-neoplastic microtubule stabilizing agent; reduces fibroglotic scarring caused by dorsal spinal hemisection; injury recovery; ALZET rat intrathecal catheter used for custom designed catheter; Therapeutic indication (spinal cord injury); Dose (256 ng/day);

Q5462: S. P. Patel, *et al.* N-acetylcysteine amide preserves mitochondrial bioenergetics and improves functional recovery following spinal trauma. *Experimental Neurology* 2014;257(95-105

Agents: Acetylcysteine amide, N- **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 2ML1; **Duration:** 24 hours; 7 days; **ALZET Comments:** animal info (female Sprague-Dawley rats; 225-250 g); functionality of mp verified by analysis of spinal cord tissue; good methods (pg. 96); spinal cord injury, dorsal laminectomy performed at 12th thoracic vertebra; post op. care (hydrogen peroxide and betadine used to clean wound area; injected with pre-warmed Ringer's solution and Cefazolin); behavioral testing (BBB LRS [Basso, Beattie, Bresnahan Locomotor Rating Scale], Gait analysis); Rats anesthetized with ketamine (80 mg/kg) and xylazine (10 mg/kg); wound clips used; Therapeutic indication (spinal cord injury); Dose (150, 300 mg/kg);

Q3213: A. T. Dao, *et al.* Regular exercise prevents non-cognitive disturbances in a rat model of Alzheimer's disease. *INTERNATIONAL JOURNAL OF NEUROPSYCHOPHARMACOLOGY* 2014;17(4):593-602

Agents: Amyloid, protein beta (1-42) **Vehicle:** Water, distilled; acetonitrile; trifluoroacetate; **Route:** CSF/CNS; **Species:** Rat; **Pump:** Not Stated; **Duration:** 2 weeks; **ALZET Comments:** Control animals received sham operation; animal info (adult, male, Wistar, 176-200 g); wound clips used; post op care (triple antibiotic); neurodegenerative (Alzheimer's disease)

Q2671: D. Yu, *et al.* Alleviation of chronic pain following rat spinal cord compression injury with multimodal actions of huperzine A. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA* 2013;110(8):E746-E755

Agents: Huperzine A **Vehicle:** Cyclodextrin, beta; saline; **Route:** CSF/CNS (intrathecal); **Species:** Rat; **Pump:** Not Stated; **Duration:** 2 weeks; **ALZET Comments:** Animal info (Sprague Dawley, female, adult, 200-235 g); 10% cyclodextrin used; 0.5 ul/hr rate of infusion; PE20 catheter used; wound clips used; catheter filled with 12 ul saline for delayed delivery of 24 hours; pumps replaced

Q2786: J. R. Turner, *et al.* Divergent Functional Effects of Sazetidine-A and Varenicline During Nicotine Withdrawal. *Neuropsychopharmacology* 2013;38(10):2035-2047

Agents: Nicotine tartrate **Vehicle:** Saline, sterile; **Route:** SC; **Species:** Mice; **Pump:** 2002; **Duration:** 14 days; **ALZET Comments:** Control animals received mp w/ vehicle; animal info (129SvEv;C57Bl/6J F1 hybrid, male, 7-12 wks old, 25-35 g); Reflex wound clips used

Q2629: P. Sokoloff, *et al.* Direct and indirect interactions of the dopamine D(3) receptor with glutamate pathways: implications for the treatment of schizophrenia. *NAUNYN-SCHMIEDEBERGS ARCHIVES OF PHARMACOLOGY* 2013;386(2):107-124

Agents: MK-801 **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 1007D; **Duration:** 7 days; **ALZET Comments:** Control animals received mp w/ saline; wound clips used; post op. care (Vetedine, Negrol spray)

Q2672: A. H. Rezvani, *et al.* Effects of chronic sazetidine-A, a selective alpha4beta2 neuronal nicotinic acetylcholine receptors desensitizing agent on pharmacologically-induced impaired attention in rats. *Psychopharmacology* 2013;226(1):35-43

Agents: Sazetidine-A **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 2ML4; **Duration:** 4 weeks; **ALZET Comments:** Control animals received mp w/ saline; animal info (Sprague Dawley, female, 70 days old, 287 g); wound clips used



Q2806: J. P. Moore, *et al.* A flow cytometric method for the analysis of macrophages in the vascular wall. *Journal of Immunological Methods* 2013;396(1-2):33-43

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2002; **Duration:** 14 days;

ALZET Comments: Control animals received mp w/ vehicle; animal info (C57BL/6); peptides; wound clips used; bp measured using tail-cuff;

R0363: K. D. Carr, *et al.* Animal Models of Eating Disorders. *NeuroMethods*, 2013;74(261-317

Agents: Leptin, recomb. mouse **Vehicle:** Not Stated **Route:** CSF/CNS (lateral ventricle) **Species:** Rat **Pump:** 2002

Duration: 14d

ALZET Comments: Dose (0.5 ug/0.5 uL/hr); Controls received mp w/ vehicle; Brain coordinates (1.0 mm posterior, 1.5 mm lateral, and 4.5 mm ventral); good methods (pg. 267); Wound clips used;

Q2606: R. K. Babbs, *et al.* 2-Hydroxyestradiol enhances binge onset in female rats and reduces prefrontal cortical dopamine in male rats. *Hormones and Behavior* 2013;63(1):88-96

Agents: Estradiol, hydroxy 2- **Vehicle:** PEG 400; **Route:** SC; **Species:** Rat; **Pump:** 2ML4; **Duration:** 4 weeks;

ALZET Comments: Control animals received mp w/ vehicle; animal info (SD, female); replacement therapy (ovariectomy);

Q2576: S. Agarwal, *et al.* Function of the Blood-Brain Barrier and Restriction of Drug Delivery to Invasive Glioma Cells: Findings in an Orthotopic Rat Xenograft Model of Glioma. *Drug Metabolism and Disposition* 2013;41(1):33-39

Agents: Erlotinib **Vehicle:** DMSO; **Route:** IP; **Species:** Mice; **Pump:** 1003D; **Duration:** 48 hours;

ALZET Comments: Animal info (Mdr1ab -/-, Bcrp1 -/-, 8-10 wks old); wound clips used; half-life ("approximately 1 hour") pg 34; cancer (glioma); "Erlotinib half-life in mice has been reported to be approximately 1 hour (Marchetti et al., 2008), so an infusion lasting 48 hours was considered to be sufficient to attain steady state in both the brain and plasma." pg 34; chemotherapeutic; enzyme inhibitor (tyrosine kinase);

Q2457: A. M. Williams, *et al.* The effect of intermittent alcohol vapor or pulsatile heroin on somatic and negative affective indices during spontaneous withdrawal in Wistar rats. *Psychopharmacology* 2012;223(1):75-88

Agents: Heroin **Vehicle:** Saline; **Route:** SC; **Species:** Rat; **Pump:** 2ML4; **Duration:** 30 days;

ALZET Comments: Control animals received mp w/ vehicle; animal info (Wistar, male, 70 days old); pulsatile delivery; "By filling the pumps with saline and attaching polyethylene (PE60) tubing to the pump, based on the tubing inner diameter and pump flow rate characteristics, the volume needed for different infusion periods (e.g., 14- or 10-h periods) could be determined"; "the tubing was filled with alternating heroin solution and mineral oil"; pulsatile delivery; good methods, pg 78; image of pump with connected Lynch coil; post op. care (Baytril); behavioral testing (elevated plus mazet forced swim test)

Q2733: S. P. Vickers, *et al.* Effects of the DPP-4 Inhibitor, Linagliptin, in Diet-Induced Obese Rats: A Comparison in Naive and Exenatide-Treated Animals. *Clinical Laboratory* 2012;58(7-8):787-799

Agents: Exenatide **Vehicle:** Saline, sterile; **Route:** SC; **Species:** Rat; **Pump:** 2ML4; **Duration:** 28 days;

ALZET Comments: Control animals received mp w/ vehicle; animal info (Wistar, female, 250-300 g); post op. care (betadine); wound clips used; pumps replaced on day 11

Q2717: S. Tadokoro, *et al.* Chronic Treatment With Aripiprazole Prevents Development of Dopamine Supersensitivity and Potentially Supersensitivity Psychosis. *SCHIZOPHRENIA BULLETIN* 2012;38(5):1012-1020

Agents: Haloperidol; aripiprazole **Vehicle:** Acetic acid, glacial; water; **Route:** SC; **Species:** Rat; **Pump:** 2ML2; **Duration:** 28 days;

ALZET Comments: Control animals received mp w/ vehicle; animal info (Sprague Dawley, male, 240-260 g); wound clips used; pumps replaced after 14 days; good methods "When a subsequent pump was implanted in exchange for a former one, the most recent pump was inserted on the other side of the scapulae across from the former pump." pg 1013

Q2048: A. K. Stoker, *et al.* Role of alpha7- and beta 4-Containing Nicotinic Acetylcholine Receptors in the Affective and Somatic Aspects of Nicotine Withdrawal: Studies in Knockout Mice. *Behavioral and Neural Biology* 2012;42(3):423-436

Agents: Nicotine hydrogen tartrate **Vehicle:** Saline, sterile; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (wt, alpha 7 -/-); wound clips used



Q2433: M. J. Sopol, *et al.* Treatment with Activated Protein C (aPC) Is Protective during the Development of Myocardial Fibrosis: An Angiotensin II Infusion Model in Mice. *PLoS One* 2012;7(9):U1197-U1206

Agents: Angiotensin II; activated protein C **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** 3 days; **ALZET Comments:** Control animals received mp w/ vehicle; animal info (TIE2-EPCR, C57BL/6, male, 8-9 wks old); peptides

Q2309: A. J. Skwara, *et al.* Influence of environmental enrichment on hypothalamic-pituitary-adrenal (HPA) responses to single-dose nicotine, continuous nicotine by osmotic mini-pumps, and nicotine withdrawal by mecamylamine in male and female rats. *Behavioural Brain Research* 2012;234(1):1-10

Agents: Nicotine **Vehicle:** Saline; **Route:** IP; **Species:** Rat; **Pump:** 2002; **Duration:** 14 days; **ALZET Comments:** Animal info (SD, male, female, 200-225 g); 4.5 mg/kg/day, the approximate exposure of a smoker who uses one-half to one pack per day; "We did not measure plasma NIC concentrations, because the stability of NIC in the osmotic mini-pumps and the steady-state NIC concentrations in plasma following pump implantation are reliable and reproducible" p2

Q1811: M. L. Rovin, *et al.* Influence of chronic administration of antidepressant drugs on mRNA for galanin, galanin receptors, and tyrosine hydroxylase in catecholaminergic and serotonergic cell-body regions in rat brain. *Neuropeptides* 2012;46(2):81-91

Agents: Phenelzine; desipramine; paroxetine **Vehicle:** DMSO; PEG; water, distilled; **Route:** SC; IP; **Species:** Rat; **Pump:** 2ML2; **Duration:** 14 days; **ALZET Comments:** Controls received mp w/ vehicle; animal info (Sprague Dawley, adult, 5-7 mo old); Osmotic minipumps were chosen for AD delivery because they slowly release drug over 14 days, thus eliminating the stress animals would experience by daily injections of the AD" pg 83; IP catheter used; wound clips used; enzyme inhibitor (monoamine oxidase); 50% DMSO used; 25% PEG used

Q1786: L. B. Romo, *et al.* Delayed administration of VEGF rescues spinal motor neurons from death with a short effective time frame in excitotoxic experimental models in vivo. *ASN Neuro* 2012;4(2):121-129

Agents: AMPA **Vehicle:** Phosphate buffer; vascular endothelial growth factor 164; neurodegenerative (amyotrophic lateral sclerosis); **Route:** CSF/CNS (intrathecal); **Species:** Rat; **Pump:** 2004; **Duration:** Not Stated; **ALZET Comments:** Animal info (Wistar, male, 270-290 g); bilateral cannula used; wound clips used

Q1787: G. S. Portugal, *et al.* Strain-dependent Effects of Acute, Chronic, and Withdrawal from Chronic Nicotine on Fear Conditioning. *Behavior Genetics* 2012;42(1):133-150

Agents: Nicotine hydrogen tartrate salt **Vehicle:** Saline, physiological; **Route:** SC; **Species:** Mice; **Pump:** 1002; **Duration:** 12, 14 days; **ALZET Comments:** Controls received mp w/ vehicle; animal info (male, 129/SvEv); wound clips used

Q1893: P. G. Popovich, *et al.* Independent evaluation of the effects of glibenclamide on reducing progressive hemorrhagic necrosis after cervical spinal cord injury. *Experimental Neurology* 2012;233(2):615-622

Agents: Glibenclamide **Vehicle:** DMSO; saline, sterile; **Route:** SC; **Species:** Rat; **Pump:** 2002; **Duration:** Not Stated; **ALZET Comments:** Controls received mp w/ vehicle; animal info (female, Long-Evans, 10 wks old, 247 g); wound clips used;

Q2364: A. R. Pandiri, *et al.* Reversion to Subgroup J Avian Leukosis Virus Viremia in Seroconverted Adult Meat-Type Chickens Exposed to Chronic Stress by Adrenocorticotropin Treatment. *Basic & Clinical Pharmacology & Toxicology* 2012;56(3):578-582

Agents: Adrenocorticotropin, porcine **Vehicle:** Saline; **Route:** SC; **Species:** Chicken; **Pump:** 2ML2; **Duration:** 14 days; **ALZET Comments:** Animal info (V-A+, V-A-, DOH, 32 wks old); post op. care (pine tar on surgical site to avoid cannibalism)

Q2184: R. K. Mittapalli, *et al.* Impact of P-Glycoprotein (ABCB1) and Breast Cancer Resistance Protein (ABCG2) on the Brain Distribution of a Novel BRAF Inhibitor: Vemurafenib (PLX4032). *The Journal of Pharmacology and Experimental Therapeutics* 2012;342(1):33-40

Agents: Vemurafenib **Vehicle:** DMSO; propylene glycol; saline; **Route:** IP; **Species:** Mice; **Duration:** 48 hours; **ALZET Comments:** Animal info (wt, Mdr1a/b -/-, Bcrp1 -/-); infusion rate of 1 ul/hr; wound clips used; brain tissue distribution; cancer (breast); vemurafenib also known as PLX4032; 40% DMSO used; chemotherapeutic



Q2642: F. L. Martin, *et al.* CD-NP: A Novel Engineered Dual Guanylyl Cyclase Activator with Anti-Fibrotic Actions in the Heart. *PLoS One* 2012;7(12):U857-U863

Agents: Cenderitide **Vehicle:** Glucose solution; **Route:** SC; **Species:** Rat; **Pump:** 2ML1; **Duration:** 2 weeks;

ALZET Comments: Control animals received mp w/ vehicle; animal info (Wistar, male, wks old, 150-200 g); wound clips used; cenderitide also known as CD-NP

Q1838: K. Z. Kolokotroni, *et al.* Effects of chronic nicotine, nicotine withdrawal and subsequent nicotine challenges on behavioural inhibition in rats. *Psychopharmacology* 2012;219(2):453-468

Agents: Nicotine hydrogen tartrate salt **Vehicle:** Saline; sodium hydroxide **Route:** S **Species:** Rat; **Pump:** 2ML1; **Duration:** 7 d

ALZET Comments: animal info (Lister Hooded, adult, male); "Chronic administration of nicotine via osmotic minipumps (rather than by injection) mimics more effectively the nicotine intake of smokers... by ensuring the maintenance of constant plasma levels throughout the study." pg 455; wound clips used

Q2313: H. S. Kim, *et al.* Carbohydrate restriction and lactate transporter inhibition in a mouse xenograft model of human prostate cancer. *Blood* 2012;110(7):1062-1069

Agents: Cyano-4-hydroxycinnamate, alpha **Vehicle:** DMSO; PEG; **Route:** SC; **Species:** Mice (nude); **Pump:** Not Stated;

Duration: 42 days;

ALZET Comments: Control animals received mp w/ vehicle; animal info (athymic, male, 6-8 wks old); cancer (prostate); 9 mm wound clips used; post op. care (triple antibiotic ointment); long-term study;

Q1884: E. Jang, *et al.* Syndecan-4 proteoliposomes enhance fibroblast growth factor-2 (FGF-2)-induced proliferation, migration, and neovascularization of ischemic muscle. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA* 2012;109(5):1679-1684

Agents: Fibroblast growth factor-2; syndecan-4, proteoliposome **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 1004;

Duration: 7-16 days;

ALZET Comments: Controls received mp w/ PBS; animal info (Sprague Dawley); wound clips used; ischemia

Q2350: N. E. Heger, *et al.* Human Fetal Testis Xenografts Are Resistant to Phthalate-Induced Endocrine Disruption. *Environmental Health Perspectives* 2012;120(8):1137-1143

Agents: Cytidine, bromodeoxy **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice (nude); Rat (nude); **Pump:** 2001;

Duration: Not Stated;

ALZET Comments: Wound clips used

Q2734: C. W. Grant, *et al.* Development of Standardized Insulin Treatment Protocols for Spontaneous Rodent Models of Type 1 Diabetes. *Comparative Medicine* 2012;62(5):381-390

Agents: Insulin (Humulin R) **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice (NOD); **Pump:** 1002; **Duration:** 14 days;

ALZET Comments: Animal info (diabetic, NOD); Humulin R used; wound clips used; diabetes; dose response (Table 1);

"Compared with injected insulin, osmotic insulin pumps provided superior glycemic control, although diabetic NOD mice did experience events of hypoglycemia. diabetes;

Q2126: E. B. Engler-Chiurazzi, *et al.* Continuous estrone treatment impairs spatial memory and does not impact number of basal forebrain cholinergic neurons in the surgically menopausal middle-aged rat. *Hormones and Behavior* 2012;62(1):1-9

Agents: Estrone sulfate **Vehicle:** PEG; **Route:** SC; **Species:** Rat; **Pump:** 2004; **Duration:** 25 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (Fischer 344, female, 15-16 mo old); wound clips used; replacement therapy (ovariectomy);

Q2838: E. Craigie, *et al.* Failure to Downregulate the Epithelial Sodium Channel Causes Salt Sensitivity in Hsd11b2 Heterozygote Mice. *Hypertension* 2012;60(3):684-U224

Agents: Benzamil **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** Not Stated;

ALZET Comments: Control animals received mp w/ vehicle; animal info (Hsd11b2 wt, +/-, 100-200 days old); wound clips used



Q2111: V. R. Chowdhary, *et al.* Chronic Exposure to Staphylococcal Superantigen Elicits a Systemic Inflammatory Disease Mimicking Lupus. *Journal of Immunology* 2012;189(4):2054-2062

Agents: Staphylococcal enterotoxin B **Vehicle:** PBS; **Route:** SC; **Species:** Mice (transgenic); **Pump:** Not Stated; **Duration:** 4 w
ALZET Comments: Controls received mp w/ vehicle; animal info (HLA-DQ8 tg, male, female, 8-12 wks old); wound clips used; 28-day pump used; immunology

Q2310: R. M. Camp, *et al.* Fear conditioning can contribute to behavioral changes observed in a repeated stress model. *Behavioural Brain Research* 2012;233(2):536-544

Agents: Propranolol; nadolol **Vehicle:** Saline, endotoxin-free; **Route:** SC; **Species:** Rat; **Pump:** 2ML2; **Duration:** Not Stated;
ALZET Comments: Control animals received mp w/ vehicle; animal info (Fischer 344, Sprague Dawley, 225-275 g); wound clips used; behavioral testing (exploration, social interaction)

Q2287: D. K. Atchison, *et al.* Parathyroid hormone-related protein stimulates plasma renin activity via its anorexic effects on sodium chloride intake. *American Journal of Physiology Endocrinology and Metabolism* 2012;303(4):E457-E463

Agents: Parathyroid hormone related protein (1-34), rat **Vehicle:** Cysteine HCl; saline; **Route:** SC; **Species:** Rat; **Pump:** 2001; **Duration:** 5 days;
ALZET Comments: Controls received mp w/ vehicle; animal info (Sprague Dawley, male, 200-250 g); wound clips used

Q1814: N. Amitai, *et al.* Repeated phencyclidine administration alters glutamate release and decreases GABA markers in the prefrontal cortex of rats. *Neuropharmacology* 2012;62(3):1422-1431

Agents: Clozapine **Vehicle:** HCl; saline; **Route:** SC; **Species:** Rat; **Pump:** 2ML1; **Duration:** 14 days;
ALZET Comments: Controls received mp w/ vehicle; animal info (Wistar, male, 300 g); pumps replaced after 7 days; "The limited solubility of clozapine at the concentration that was required to deliver 4 mg/kg/day in the maximal volume that could be contained in the minipumps prevented the use of a single 14 day osmotic minipump; thus, two successive 7 day minipumps were used" pg 1423; wound clips used; post op. care (antibacterial ointment) pg 1423

Q2649: D. Agarwal, *et al.* Detraining Differentially Preserved Beneficial Effects of Exercise on Hypertension: Effects on Blood Pressure, Cardiac Function, Brain Inflammatory Cytokines and Oxidative Stress. *PLoS One* 2012;7(12):U2141-U2153

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Rat; **Pump:** 2006; **Duration:** 42 days;
ALZET Comments: Control animals received mp w/ vehicle; animal info (Sprague Dawley, male, adult, 250-350 g); peptides; wound clips used; good methods (pg 252569); post op. care (buprenorphine); long-term study;

Q1641: J. R. Turner, *et al.* Parallel Anxiolytic-Like Effects and Upregulation of Neuronal Nicotinic Acetylcholine Receptors Following Chronic Nicotine and Varenicline. *NICOTINE & TOBACCO RESEARCH* 2011;13(1):48-53

Agents: Nicotine tartrate; varenicline **Vehicle:** Saline, sterile; **Route:** SC; **Species:** Mice; **Pump:** 2002; **Duration:** 14 days;
ALZET Comments: Controls received mp w/ vehicle; animal info (male, 129SvJ; C57Bl/6J, F1 hybrid, 6-12 wks old, 25-35 g);

Q0932: L. G. Thaete, *et al.* ENDOTHELIN AND BLOOD PRESSURE REGULATION IN THE FEMALE RAT: STUDIES IN NORMAL PREGNANCY AND WITH NITRIC OXIDE SYNTHASE INHIBITION-INDUCED HYPERTENSION. *HYPERTENSION IN PREGNANCY* 2011;19(2):233-247

Agents: A-127722; A-182086; A-192621; FR-139317; L-NAME **Vehicle:** Ethyl alcohol; propylene glycol; NaOH; water; **Route:** SC; IV (jugular); **Species:** Rat (pregnant); Rat; **Pump:** Not Stated; **Duration:** 7 days;
ALZET Comments: Controls received mp w/ vehicle; animal info (female, Sprague-Dawley); multiple pumps per animal (2); wound clips used; 20% ethyl alcohol used; "It is likely that administration with the pumps resulted in more consistent drug levels..." pg 242

Q1700: L. E. Stefanyk, *et al.* Recovered insulin response by 2 weeks of leptin administration in high-fat fed rats is associated with restored AS160 activation and decreased reactive lipid accumulation. *American Journal of Physiology Regulatory, Integrative, and Comparable Physiology* 2011;301(1):R159-R171

Agents: Leptin, recomb. rat **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 2ML2; **Duration:** 2 weeks;
ALZET Comments: Controls received mp w/ saline; animal info (Sprague Dawley, female, 140 g); wound clips used



Q0724: N. J. Stagg, *et al.* Regular Exercise Reverses Sensory Hypersensitivity in a Rat Neuropathic Pain Model Role of Endogenous Opioids. *Anesthesiology* 2011;114(4):940-948

Agents: Naltrexone **Vehicle:** Saline; **Route:** SC; **Species:** Rat; **Pump:** 2006; **Duration:** 5 weeks;

ALZET Comments: Controls received mp w/ vehicle; animal info (male, Sprague Dawley, 250-380 g); wound clips used; neuropathic pain

Q1951: R. E. Sorge, *et al.* Spinal Cord Toll-Like Receptor 4 Mediates Inflammatory and Neuropathic Hypersensitivity in Male But Not Female Mice. *Journal of Neuroscience* 2011;31(43):15450-15454

Agents: Testosterone propionate **Vehicle:** Polyethylene glycol; **Route:** SC; **Species:** Mice; **Pump:** 2002; **Duration:** 14 days;

ALZET Comments: animal info (naive, adult, 6-12 wks old, male, female, CD-1); wound clips used

Q0895: M. J. Sopel, *et al.* Myocardial fibrosis in response to Angiotensin II is preceded by the recruitment of mesenchymal progenitor cells. *Laboratory Investigation* 2011;91(4):565-578

Agents: Angiotensin II; Losartan **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice (transgenic); **Pump:** Not Stated;

Duration: 1, 3, 7 days;

ALZET Comments: Controls received mp w/ saline; animal info (male, C57BL/6, Tie2-GFP); peptides; 7 mm wound clips used

Q1346: M. Skrzypski, *et al.* Orexin A stimulates glucose uptake, lipid accumulation and adiponectin secretion from 3T3-L1 adipocytes and isolated primary rat adipocytes. *Diabetologia* 2011;54(7):1841-1852

Agents: Orexin A **Vehicle:** Saline; **Route:** IP; **Species:** Rat; **Pump:** 2ML4; **Duration:** 4 weeks;

ALZET Comments: Animal info (adult, male, Wistar, 10 wks old, 200 g); wound clips used

Q0907: N. Saghafi, *et al.* Cannabinoids attenuate cancer pain and proliferation in a mouse model. *Neuroscience Letters* 2011;488(3):247-251

Agents: WIN-55212-2; ACEA; AM1241 **Vehicle:** DMSO; Water; **Route:** SC; **Species:** Mice (nude); **Pump:** 2002; **Duration:** 2 w

ALZET Comments: Animal info (Foxn1 nu, athymic, 4-5 wks old, 20-25 g); cancer (oral); behavioral testing (mechanical allodynia); 50% DMSO used; wound clips used; pain

Q0700: N. Sachan, *et al.* Sustained Hemodynamic Stress Disrupts Normal Circadian Rhythms in Calcineurin-Dependent Signaling and Protein Phosphorylation in the Heart. *Circulation Research* 2011;108(4):437-U100

Agents: Cyclosporine **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** Not Stated;

ALZET Comments: Controls received mp w/ vehicle; animal info (male, C57BL/6, 6-8 wks old); wound clips used

Q1959: L. Raz, *et al.* Acetylation of the Pro-Apoptotic Factor, p53 in the Hippocampus following Cerebral Ischemia and Modulation by Estrogen. *PLoS One* 2011;6(10):U823-U832

Agents: Estradiol, 17-beta **Vehicle:** Not Stated; **Route:** Not Stated; **Species:** Rat; **Pump:** Not Stated; **Duration:** Not Stated;

ALZET Comments: Animal info (Sprague Dawley, female, adult, 3 mo old); replacement therapy (ovariectomy); wound clips

Q0735: K. M. Raehal, *et al.* The role of beta-arrestin2 in the severity of antinociceptive tolerance and physical dependence induced by different opioid pain therapeutics. *Neuropharmacology* 2011;60(1):58-65

Agents: Morphine; Methadone; Fentanyl; Oxycodone **Vehicle:** Water, sterile, distilled; **Route:** SC; **Species:** Mice;

Pump: Not Stated; **Duration:** 7 days;

ALZET Comments: Animal info (male, WT, barr2-KO); dependence; wound clips used

Q1758: M. J. Palmer, *et al.* Signaling thresholds govern heterogeneity in IL-7-receptor-mediated responses of naive CD8(+) T cells. *Immunology and Cell Biology* 2011;89(5):581-594

Agents: Interleukin-7 **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 1007D; **Duration:** 7 days;

ALZET Comments: Controls received mp w/ PBS; animal info (C57BL/6, 6-16 wks old); wound clips used; post op. care (betadine)



Q2230: S. G. N. Mazurek, *et al.* Functional biomarkers of musculoskeletal syndrome (MSS) for early in vivo screening of selective MMP-13 inhibitors. *Journal of Pharmacological and Toxicological Methods* 2011;64(1):89-96

Agents: Marimastat **Vehicle:** DMSO; water; **Route:** SC; **Species:** Rat; **Pump:** 2ML2; **Duration:** 15-17 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (Sprague Dawley, male, 180-370); wound clips used; enzyme inhibitor (matrix metalloproteinase, MMP-13)

Q1222: M. S. Madhur, *et al.* Role of Interleukin 17 in Inflammation, Atherosclerosis, and Vascular Function in Apolipoprotein E-Deficient Mice. *Arteriosclerosis, Thrombosis, and Vascular Biology* 2011;31(7):1565-U188

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Not Stated; **Pump:** 2004; **Duration:** 4 weeks;

ALZET Comments: Animal info (IL17A -/-, ApoE -/-, 8-11 wks old); peptides; wound clips used

Q1533: J. W. Kenney, *et al.* The effects of acute, chronic, and withdrawal from chronic nicotine on novel and spatial object recognition in male C57BL/6J mice. *Psychopharmacology* 2011;217(3):353-365

Agents: Nicotine **Vehicle:** Saline, physiological; **Route:** SC; **Species:** Mice; **Pump:** 1002; **Duration:** 12 days;

ALZET Comments: Controls received mp w/ vehicle; wound clips used

Q1132: E. Ilijic, *et al.* The L-type channel antagonist isradipine is neuroprotective in a mouse model of Parkinson's disease. *Neurobiology of Disease* 2011;43(2):364-371

Agents: Isradipine **Vehicle:** DMSO; PEG 300; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (male, C57BL/6, 6-7 wks old, 20 g); wound clips used

Q0852: H. Goto, *et al.* Exendin-4, a glucagon-like peptide-1 receptor agonist, reduces intimal thickening after vascular injury. *Biochemical and Biophysical Research Communications* 2011;405(1):79-84

Agents: Exendin-4 **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 1004; **Duration:** 4 weeks;

ALZET Comments: Controls received mp w/ saline; animal info (male, C57BL/6, 8 wks old); wound clips used

Q1081: J. B. Garlie, *et al.* Tumor necrosis factor receptor 2 signaling limits beta-adrenergic receptor-mediated cardiac hypertrophy in vivo. *Basic Research in Cardiology* 2011;106(6):1193-1205

Agents: Isoproterenol **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 1007D; **Duration:** 7 days;

ALZET Comments: Controls received mp w/ saline; animal info (TNFR2-/-, TNFR1-/-, male, 25-30 g, C57BL/6); wound clips

Q1074: L. Fuechtbauer, *et al.* Angiotensin II Type 1 receptor (AT1) signaling in astrocytes regulates synaptic degeneration-induced leukocyte entry to the central nervous system. *Brain, Behavior, and Immunity* 2011;25(5):897-904

Agents: Candesartan **Vehicle:** Saline, physiological; sodium carbonate; **Route:** IP; **Species:** Mice (transgenic); **Pump:** 1002; **Duration:** 14 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (adult, female, GFAP-lj-beta-alpha-dn, GFAP-EGFP-tg); wound clips used

Q0652: M. H. Farah, *et al.* Reduced BACE1 Activity Enhances Clearance of Myelin Debris and Regeneration of Axons in the Injured Peripheral Nervous System. *Journal of Neuroscience* 2011;31(15):5744-5754

Agents: BACE1 inhibitor IV; WAY 258131 **Vehicle:** DMSO; **Route:** SC; **Species:** Mice; **Pump:** 2001; **Duration:** 7, 15 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (BACE1 KO, WT, 8-12 wks old); enzyme inhibitor (beta-site amyloid precursor protein (APP) cleaving enzyme 1 (BACE1)); 9 mm wound clips used

Q0695: C. A. Blaiss, *et al.* Temporally Specified Genetic Ablation of Neurogenesis Impairs Cognitive Recovery after Traumatic Brain Injury. *Journal of Neuroscience* 2011;31(13):4906-4916

Agents: Ganciclovir **Vehicle:** Water, deionized; **Route:** SC; **Species:** Mice; **Pump:** 2002; **Duration:** 2 weeks; 30 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (6 wks old, male, wild-type, nestin-HSV-tk); wound clips used; behavioral testing (Morris water maze, fear conditioning)