

References (2010-Present) on the Administration of Dexamethasone Using ALZET[®] Osmotic Pumps

Q10638: Y. Ozaki, *et al.* Neuron-Derived Neurotrophic Factor Protects Against Dexamethasone-Induced Skeletal Muscle Atrophy. Biochemical and Biophysical Research Communications 2022;593(5-12 Agents: Dexamethasone Vehicle: Not Stated; Route: Not Stated; Species: Mice; Pump: 2002; Duration: 14 days; ALZET Comments: Dose (23 ug/day); Controls received mp w/ vehicle; animal info (Wild-type and NDNF-KO; 8-10 weeks old); immunology; Therapeutic indication (Muscle atrophy);

Q10340: M. K. Song, *et al.* Environmental enrichment modulates silent information regulator 1 (SIRT1) activity to attenuate central presbycusis in a rat model of normal aging. Experimental Gerontology 2021;155(111552 **Agents:** Dexamethasone **Vehicle:** Not Stated; **Route:** Not Stated; **Species:** Rat; **Pump:** Not Stated; **Duration:** 4 weeks; **ALZET Comments:** Dose: (1 mg/kg/day); animal info: male Sprague-Dawley rats-aged eight weeks (weighing 250 g) and 62 weeks (weighing 550–650 g); behavioral testing: Hearing test; Dexamethasone aka (DX); dependence;

Q10158: M. Fila, *et al.* A variant of ASIC2 mediates sodium retention in nephrotic syndrome. JCI Insight 2021;6(15): **Agents:** Aldosterone; Dexamethasone **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** Not Stated; **Duration:** Not Stated; **ALZET Comments:** Dose: Aldosterone (10 μg/kg/d); Dexamethasone (14μg/kg/d); Controls received mp w/ vehicle; animal info: male rats (150–170 g) Sprague-Dawley rats

Q9164: D. M. Bovee, *et al.* Dietary salt modifies the blood pressure response to renin-angiotensin inhibition in experimental chronic kidney disease. American Journal of Physiology Renal Physiology 2021;320(4):F654-F668 **Agents:** Dexamethasone; Losartan **Vehicle:** Ethanol; DMSO; PEG; **Route:** SC; **Species:** Rat; **Pump:** Not Stated; **Duration:** 3 weeks;

ALZET Comments: Dose (12 ug/kg/day Dexamethasone; 30 mg/kg/day Losartan); 10% Ethanol, 15% DMSO, 75% PEG used; Controls received mp w/ vehicle; animal info (Male Sprague-Dawley rats, 6 weeks old, 200 g); Blood pressure measured via radiotelemetry transmitters;dependence;

Q10104: R. M. B. Bell, *et al.* Carbonyl reductase 1 amplifies glucocorticoid action in adipose tissue and impairs glucose tolerance in lean mice. Molecular Metabolism 2021;48(101225

Agents: Dexamethasone; Aldosterone; 20b-DHB Vehicle: DMSO; Propylene glycol; Route: SC; Species: Mice; Pump: Not Stated; Duration: 7 days;

ALZET Comments: Dose: 20b-DHB(20 ug/day); animal info (C57BL/6J Male, Female (8 weeks of age); Dihydrocorticosterone aka (20b-DHB) is a full agonist of the mineralocorticoid receptor.; Mifepristone is a GR antagonist RU486; Spironolactone is a MR antagonist; Carbonyl reductase 1 (Cbr1), is an enzyme inhibitor; diabetes; obesity

Q8959: N. Shimizu, *et al.* Effects of Chronic Glucocorticoid Receptor Stimulation on Circadian Locomotor Activity and Serotonergic Neurotransmission in the Basolateral Amygdala of Rats. Biological Pharmaceutical Bulletin 2020; **Agents:** Dexamethasone **Vehicle:** Saline; **Route:** SC; **Species:** Rat; **Pump:** 2ML2; **Duration:** 14 days; **ALZET Comments:** Dose (0.5 mg/kg/day); Controls received mp w/ vehicle; animal info (Sprague Dawley, Male, 8 weeks old);

Q8565: N. Kawamura, et al. Reduced brain fractalkine-CX3CR1 signaling is involved in the impaired cognition of streptozotocin-treated mice. IBRO Reports 2020;9(233-240

Agents: Dexamethasone Vehicle: Saline; Route: SC; Species: Mice; Pump: 1007D; Duration: 7 days; ALZET Comments: Dose (10, 30, and 100 ug/day); Controls received mp w/ vehicle; animal info (Male C57BL/6 J mice, 10-12 weeks old); behavioral testing (Y-maze test); Dexamethasone aka DEX; dependence;

Q7406: J. E. Brown, *et al.* Biodegradable silk catheters for the delivery of therapeutics across anatomical repair sites. J Biomed Mater Res B Appl Biomater 2019;107(3):501-510

Agents: Dexamethasone Vehicle: PBS; Route: SC; Species: Mice; Pump: 1004; Duration: 28 days; ALZET Comments: Controls received mp w/ vehicle; animal info (4-6 weeks old, female, Balb/C); dependence;



Q7754: D. Hirohama, *et al.* Aldosterone Is Essential for Angiotensin II-Induced Upregulation of Pendrin. J Am Soc Nephrol 2018;29(1):57-68

Agents: Angiotensin II; Aldosterone; Dexamethasone **Route:** SC; **Species:** Mice; **Pump:** 2002; **Duration:** 7 days; **ALZET Comments:** Dose ((AnglI 400 μg/kg/day), (aldosterone 0.1μg/day), (dexamethasone 12 μg/kg/day)); Controls received

mp w/ vehicle; animal info (8-14 weeks, male, C57BL/6J or PDS-/-); replacement therapy (aldosterone, dexamethasone; adrenalectomy); Vehicle used but identity not stated. All minipumps contained dexamethasone for glucocorticoid replacement;

Q7109: S. Chakraborty, *et al.* Dexamethasone-induced Intra-Uterine Growth Restriction impacts NOSTRIN and its downstream effector genes in the rat mesometrial uterus. Sci Rep 2018;8(1):8342

Agents: Dexamethasone Vehicle: Ethanol; Route: SC; Species: Rat; Pump: 2ML1; Duration: 7 days;

ALZET Comments: Dose (200 ug/kg/day); 10% ethanol used; Controls received mp w/ vehicle; animal info (Sprague Dawley, 8-10 weeks old); gene therapy;

Q9467: Methods for Assessing Serpins as Neuroprotective Therapeutics. Methods in Molecular Biology 2018; Agents: Dexamethasone Vehicle: Saline; Route: CSF/CNS (Intrathecal); Species: Rat; Pump: 2ML4, 2ML2, 2ML1; Duration: 2 weeks;

ALZET Comments: Dose (2.5-10 mL/h); animal info (Long Evans, Male, 16 week old rat, 370-420 g); spinal cord injury;

Q6226: A. J. Turner, *et al.* Tubuloglomerular feedback responses in offspring of dexamethasone-treated ewes. American Journal of Physiology Renal Physiology 2017;313(4):F864-F873

Agents: Dexamethasone 21-phosphate disodium salt Vehicle: Not Stated; Route: IV (lateral saphenous vein); Species: Sheep (pregnant); Pump: 2ML1; Duration: 48 hours;

ALZET Comments: Dose (0.48 mg/h);

Q6126: S. Saha, *et al.* MicroRNA regulation of Transthyretin in trophoblast differentiation and Intra-Uterine Growth Restriction. Sci Rep 2017;7(1):16548

Agents: Dexamethasone acetate **Vehicle:** Not Stated; **Route:** SC; **Species:** Rats (pregnant); **Duration:** 7 days; **ALZET Comments:** Dose (200 µg/kg maternal body weight/day); Controls received mp w/ vehicle;

Q6754: S. Raitsin, *et al.* Subchronic glucocorticoids, glutathione depletion and a postpartum model elevate monoamine oxidase a activity in the prefrontal cortex of rats. Brain Research 2017;1666(1-10

Agents: Dexamethasone Vehicle: Saline; Route: SC; Species: Rat; Pump: 2ML4; Duration: 28 days; ALZET Comments: Dose (0.0, 0.05,0.5, and 2.0 mg/kg/day); Controls received mp w/ vehicle; animal info (Male Sprague Dawley rats (325–375 g));

Q5950: C. Quarta, *et al.* Molecular Integration of Incretin and Glucocorticoid Action Reverses Immunometabolic Dysfunction and Obesity. Cell Metabolism 2017;26(4):620-632 e6

Agents: Glucagon-like peptide-1, Dexamethasone Vehicle: Saline; Route: CSF/CNS; Species: Mice; Pump: 1002; Duration: 14 days;

ALZET Comments: Controls received mp w/ vehicle; Dose (GLP-1: 0.1 mg/24h; Dexa: 0.0219mg/ml); animal info (20 week-old male C57bl6j); post op. care (meloxicam for post-surgical pain (3 mg/kg); ALZET brain infusion kit 3 used; Brain coordinates (anteroposterior: 0.5 mm from bregma, lateral: -/+1;2 mm to bregma and dorsoventral: 2.1 mm below skull); Therapeutic indication (obesity);

Q6441: E. Latres, *et al.* Activin A more prominently regulates muscle mass in primates than does GDF8. Nat Commun 2017;8(15153

Agents: Dexamethasone Vehicle: Saline; Route: Species: Mice; Pump: Not Stated; Duration: 2 weeks;

ALZET Comments: Dose (23.0 mg per day); Controls received mp w/ vehicle; animal info (9-week-old male C57BL/6 mice); Industry authored (Regeneron Pharmaceuticals);



Q6646: Y. C. Rah, *et al.* Extended use of systemic steroid is beneficial in preserving hearing in guinea pigs after cochlear implant. Acta Otolaryngologica 2016;136(12):1213-1219

Agents: Dexamethasone Vehicle: Saline; DMSO; Route: SC; Species: Guinea pig; Pump: 2ML1; Duration: 3 days; 7 days; ALZET Comments: Dose (2.59 mg/kg for 3-day, 2.32 mg/kg for 7-day;); animal info (21 female Hartley guinea pigs aged; 8 weeks; 350–450 mg);

Q4838: H. JIA, et al. PREVENTION OF TRAUMA-INDUCED COCHLEAR FIBROSIS USING INTRACOCHLEAR APPLICATION OF ANTI-INFLAMMATORY AND ANTIPROLIFERATIVE DRUGS. neuroscience 2016;316(261-278

Agents: Dexamethasone; Ara-C Vehicle: Perilymph, artificial; Route: Ear (cochlea); Species: Rat; Pump: 2001; Duration: 7 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (Wistar, adult); animal info (Wistar, adult); stability verified by (incubation in 37C saline for 7 days see pg 268); one cochlea received vehicle only, while other recieved drug;

Q4646: B. A. Williams, et al. Multimodal Perineural Analgesia with Combined

Bupivacaine-Clonidine-Buprenorphine-Dexamethasone: Safe In Vivo and Chemically Compatible in Solution. PAIN MEDICINE 2015;16(186-198

Agents: Bupivacaine; clonidine; dexamethasone Vehicle: Saline; Route: CSF/CNS (sciatic nerve); Species: Rat; Pump: 2ML1; Duration: 7 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (male, albino, CD[SD]); no stress (see pg. 192); post op. care (IM butorphanol tartrate 0.05 mg/kg, ceftiofur sodium 5 mg/kg); stability verified by (pg. 195); used polyurethane catheter 0.5mm ID 0.9 mmOD; pumps removed after 1 week; dose (66.6 ug/mL)

Q7008: M. Y. Lee, *et al.* Continuous topical drug delivery using osmotic pump in animal cochlear implant model: Continuous steroid delivery is effective for hearing preservation. Acta Otolaryngologica 2015;135(8):791-8

Agents: Dexamethasone **Vehicle:** Saline; **Route:** Ear (cochlea); **Species:** Guinea pig; **Pump:** 1007D; **Duration:** 7 days; **ALZET Comments:** Dose (4 mg/ml); Controls received mp w/ vehicle; animal info (female Harley Albino guinea pigs, 255–455 g, 7–9 weeks old); dependence;

Q5006: E. Latres, *et al.* Myostatin blockade with a fully human monoclonal antibody induces muscle hypertrophy and reverses muscle atrophy in young and aged mice. Skelet Muscle 2015;5(1-13

Agents: Dexamethasone Vehicle: Saline; Route: SC; Species: Mice; Pump: Not Stated; Duration: 2 weeks; ALZET Comments: Controls received mp w/ saline; animal info (male, C57BL6, 11 weeks old); Dose (23 ug/day); dose-response (pg. 9)

Q3950: J. M. Kwiecien, *et al.* Subdural infusion of dexamethasone inhibits leukomyelitis after acute spinal cord injury in a rat model. FOLIA NEUROPATHOLOGICA 2015;53(41-51

Agents: Dexamethasone Vehicle: PBS; Route: CSF/CNS (intrathecal); Species: Rat; Pump: 2ML2; Duration: 7 days; ALZET Comments: Controls received mp w/ vehicle; animal info (Long Evans); spinal cord injury; post op. care (ketoprofen 0.3 ml of 10 mg/ml injection, saline administration 1-2 times daily); behavioral testing (Open field testing); "Subdural infusion of dexamethasone, a powerfully anti-inflammatory, stable, synthetic analogue of glucocorticoids, allowed for circumvention of the blood-brain barrier and apparently for achieving a sufficiently high concentration of this drug in the cerebrospinal fluid in proximity of the crush lesion to prevent severe, phagocyte-rich inflammation." pg 48; used rat IT catheter; dose: 2 mg/ml

Q4387: J. S. M. Cuffe, *et al.* Differential mRNA Expression and Glucocorticoid-Mediated Regulation of TRPM6 and TRPM7 in the Heart and Kidney throughout Murine Pregnancy and Development. PLoS One 2015;10(U1394-U1410 **Agents:** Dexamethasone sodium phosphate; corticosterone **Vehicle:** Saline; **Route:** SC; **Species:** Mice (pregnant); **Pump:** 1003D; **Duration:** 60 hours;

ALZET Comments: Controls received mp w/ saline; animal info (female, E12.5, C57Bl6J, 8-10 weeks old); teratology; cardiovascular;



Q3668: K. Terada, *et al.* Fluvoxamine moderates reduced voluntary activity following chronic dexamethasone infusion in mice via recovery of BDNF signal cascades. NEUROCHEMISTRY INTERNATIONAL 2014;69(9-13

Agents: Dexamethasone Vehicle: Saline; Route: SC; Species: Mice; Pump: Not Stated; Duration: 14 days;

ALZET Comments: Controls received mp w/ vehicle; behavioral testing (spontaneous locomotor activity; forced swim test); "our chronic infusion model captures aspects of chronic stress loads and reduces experimental error" pg 11; depression animal model; 0.5 mg/kg/day

Q3659: E. Somm, *et al.* Protective effects of maternal nutritional supplementation with lactoferrin on growth and brain metabolism. PEDIATRIC RESEARCH 2014;75(1):51-61

Agents: Dexamethasone **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat (pregnant); **Pump:** Not Stated; **Duration:** 7 days; **ALZET Comments:** Controls received mp w/ vehicle; animal info (female, Sprague Dawley OFA, gestational day 14); teratology; pumps used to induce intrauterine growth restriction; dose: 100 ug/kg/day

Q4033: D. R. Overby, *et al.* Ultrastructural Changes Associated With Dexamethasone-Induced Ocular Hypertension in Mice. INVESTIGATIVE OPHTHALMOLOGY & VISUAL SCIENCE 2014;55(4922-4933

Agents: Dexamethasone **Vehicle:** Cyclodextrin; PBS; **Route:** SC; **Species:** Mice; **Pump:** 1004; **Duration:** 3 weeks; 4 weeks; **ALZET Comments:** Controls received mp w/ vehicle; animal info (male, C57BL6J, 10-14 weeks); functionality of mp verified by serum plasma levels; post op. care (carpofen or buprenorphine given 12 hours after surgery); solutions were sterile-filtered using 0.22-um inline syringe filter; used Tissue Bond glue to close incision;

Q3985: G. Malkoc, *et al.* Histopathological and audiological effects of mechanical trauma associated with the placement of an intracochlear electrode, and the benefit of corticosteroid infusion: prospective animal study. Journal of Laryngology and Otology 2014;128(702-708

Agents: Dexamethasone **Vehicle:** Saline; **Route:** Ear (round window); **Species:** Rat; **Pump:** Not Stated; **Duration:** 14 days; **ALZET Comments:** Controls received mp w/ vehicle; animal info (female, Albino, 250-33g, adult); used ALZET IT catheter to cannulate round window; "Dexamethasone infusion given after implantation of the intracochlear model electrode was more effective for preventing hearing loss than the administration of just one dose of dexamethasone" pg 702;

Q3501: R. Hatano, *et al.* Glucocorticoid mediates the transcription of OAT-PG, a kidney-specific prostaglandin transporter. PFLUGERS ARCHIV-EUROPEAN JOURNAL OF PHYSIOLOGY 2014;466(925-935

Agents: Dexamethasone Vehicle: Not Stated; Route: SC; Species: Rat; Pump: 2002; Duration: 7 days; ALZET Comments: Controls received mp w/ saline; animal info (Sprague Dawley Rats, 180-250g); replacement therapy (adrenalectomy);

Q3439: P. Chimin, *et al.* Chronic glucocorticoid treatment enhances lipogenic activity in visceral adipocytes of male Wistar rats. ACTA PHYSIOLOGICA 2014;211(409-420

Agents: Dexamethasone **Vehicle:** Saline; **Route:** SC; **Species:** Rat; **Pump:** 1004; **Duration:** 4 weeks; **ALZET Comments:** Controls received mp w/ vehicle; animal info (male, Wistar, 10 weeks old); diabetes;

Q3136: E. M. Thompson, *et al.* Inhibition of SUR1 Decreases the Vascular Permeability of Cerebral Metastases. NEOPLASIA 2013;15(5):535-543

Agents: Glyburide; dexamethasone **Vehicle:** DMSO; saline; **Route:** SC; **Species:** Rat (nude); **Pump:** 2002; **Duration:** Not Stated; **ALZET Comments:** Controls received mp w/ vehicle; animal info (rnu/rnu); cancer (brain tumor/metastases); Glyburide aka glibenclamide;

Q2758: V. Proserpio, *et al.* The methyltransferase SMYD3 mediates the recruitment of transcriptional cofactors at the myostatin and c-Met genes and regulates skeletal muscle atrophy. GENES & DEVELOPMENT 2013;27(11):1299-1312 Agents: Dexamethasone Vehicle: Not Stated; Route: SC; Species: Mice; Pump: 2002; Duration: 14 days; ALZET Comments: Control animals received mp w/ saline; animal info (C57BL/6, male, 8-10 wks old)



Q2821: C. B. M. Platania, *et al.* Regulation of intraocular pressure in mice: Structural analysis of dopaminergic and serotonergic systems in response to cabergoline. Biochemical Pharmacology 2013;86(9):1347-1356

Agents: Dexamethasone **Vehicle:** Cyclodextrin; PBS; **Route:** SC; **Species:** Mice; **Pump:** 1004; **Duration:** 4 weeks; **ALZET Comments:** Control animals received mp w/ vehicle; animal info (C57BL/6 D3R -/-, male, 8-12 wks old)

Q2545: B. A. O'Connell, *et al.* Synthetic Glucocorticoid Dexamethasone Inhibits Branching Morphogenesis in the Spiny Mouse Placenta. Biology of Reproduction 2013;88(1):U241-U248

Agents: Dexamethasone Vehicle: Not Stated; Route: SC; Species: Mice (pregnant); Pump: 1003D; Duration: 60 hours; ALZET Comments: Control animals received mp w/ saline; animal info (A. Cahirinus)

Q3587: B. A. O'Connell, *et al.* Treatment of pregnant spiny mice at mid gestation with a synthetic glucocorticoid has sex-dependent effects on placental glycogen stores. PLACENTA 2013;34(10):932-940

Agents: Dexamethasone **Vehicle:** Saline; **Route:** SC; **Species:** Mice (pregnant); **Pump:** 1003D; **Duration:** 72 hours; **ALZET Comments:** Controls received mp w/ vehicle; animal info (female, spiny mouse, day 20 gestation); teratology; pumps removed after 72 hours;

Q5646: N. J. Heo, *et al.* Effect of estradiol on the expression of renal sodium transporters in rats. Climacteric 2013;16(2):265-73 **Agents:** Dexamethasone **Vehicle:** DMSO, Saline; **Route:** SC; **Species:** Rat; **Pump:** 2ML4; **Duration:** 4 weeks; **ALZET Comments:** Controls received mp w/ vehicle ; animal info (female, Sprague-Dawley, 9 weeks old, 180-220g) ; antihypertensive; Adrenalectomy; Therapeutic indication (Kidney, Hypertension, Renal Sodium Transporters); Dose (1.2 ug x 100g/body weight x day);

Q2134: C. Veyrat-Durebex, *et al.* Central Glucocorticoid Administration Promotes Weight Gain and Increased 11 beta-Hydroxysteroid Dehydrogenase Type 1 Expression in White Adipose Tissue. PLoS One 2012;7(3):U954-U965 Agents: Dexamethasone Vehicle: NaCl; Route: CSF/CNS; Species: Rat; Pump: 2001; 1003D; Duration: 2, 3 days; ALZET Comments: Controls received mp w/ vehicle; animal info (Sprague Dawley, male, 200-225 g, Wistar, male, 200-225 g); PE tubing used

Q2648: E. Somm, *et al.* Early Metabolic Defects in Dexamethasone-Exposed and Undernourished Intrauterine Growth Restricted Rats. PLoS One 2012;7(11):U933-U943

Agents: Dexamethasone Vehicle: Not Stated; Route: Not Stated; Species: Rat; Pump: Not Stated; Duration: Not Stated; ALZET Comments: Animal info (Sprague Dawley, OFA, male, female, 275-350 g);

Q1842: S. I. Hu, *et al.* MNK2 Inhibits eIF4G Activation Through a Pathway Involving Serine-Arginine-Rich Protein Kinase in Skeletal Muscle. Science Signaling 2012;5(211):U22-U30

Agents: Dexamethasone sodium phosphate Vehicle: Not Stated; Route: Not Stated; Species: Mice; Pump: Not Stated; Duration: 21 days;

ALZET Comments: Animal info (MNK1, MNK2, MNK1/2 KO)

Q2047: I. De Meyer, *et al.* Toll-like receptor 7 stimulation by imiquimod induces macrophage autophagy and inflammation in atherosclerotic plaques. Basic Research in Cardiology 2012;107(3):U36-U48

Agents: Dexamethasone; imiquimod **Vehicle:** Not Stated; **Route:** IA (carotid); **Species:** Rabbit; **Pump:** 2ML1; **Duration:** 3, 7 days;

ALZET Comments: Animal info (male, New Zeland, white, 2.5-4.0 kg); one group contained mixture of dexamethasone and imiquimod

Q2413: D. I. Carrasco, *et al.* Motor terminal degeneration unaffected by activity changes in SOD1(G93A) mice; a possible role for glycolysis. NEUROBIOLOGY OF DISEASE 2012;48(1):132-140

Agents: Tetrodotoxin; dexamethasone Vehicle: Not Stated; Route: CSF/CNS (sciatic nerve); Species: Mice; Pump: 2002; Duration: Not Stated;

ALZET Comments: Animal info (SOD1 G93A); good methods, pg 133



Q2064: E. Bas, *et al.* Efficacy of three drugs for protecting against gentamicin-induced hair cell and hearing losses. British Journal of Pharmacology 2012;166(6):1888-1904

Agents: Gentamicin; dexamethasone; melatonin Vehicle: Not Stated; Route: Ear (round window); Species: Rat; Pump: 2001; Duration: 7 days;

ALZET Comments: Controls received mp w/ saline; animal info (Wistar, male, 220-250 g); stability verified after 7 days (data not shown)

Q1376: N. van der Lubbe, *et al.* Angiotensin II induces phosphorylation of the thiazide-sensitive sodium chloride cotransporter independent of aldosterone. Kidney International 2011;79(1):66-76

Agents: Dexamethasone; aldosterone; angiotensin II Vehicle: Not Stated; Route: Not Stated; Species: Rat; Pump: 2ML2; Duration: 8 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (male, Sprague Dawley, 15 wks old, 300 g); replacement therapy (adrenalectomy); blood pressure measured via tail-cuff (Kent Scientific)

Q0896: K. Rafiq, *et al.* Effects of mineralocorticoid receptor blockade on glucocorticoid-induced renal injury in adrenalectomized rats. Journal of Hypertension 2011;29(2):290-298

Agents: Hydrocortisone; Dexamethasone Vehicle: Not Stated; Route: SC; Species: Rat; Pump: 2004; Duration: 8 weeks; ALZET Comments: Controls received mp w/ vehicle; animal info (male, Wistar-Kyoto, 160-183 g, uninephrectomy, bilateral adrenalectomy); long-term study; pumps replaced after 4 weeks; blood pressure (SBP) was measured by tail plethysmography (BP-98A; Softron Co., Tokyo, Japan)

Q1460: B. A. O'Connell, *et al.* The Placental Response to Excess Maternal Glucocorticoid Exposure Differs Between the Male and Female Conceptus in Spiny Mice. Biology of Reproduction 2011;85(5):1040-1047

Agents: Dexamethasone Vehicle: Not Stated; Route: SC; Species: Mice (pregnant); Pump: 1003D; Duration: 3 days; ALZET Comments: Controls received mp w/ saline; animal info (spiny, female)

Q1691: S. D. Kraner, *et al.* Upregulation of the Ca(V) 1.1-ryanodine receptor complex in a rat model of critical illness myopathy. American Journal of Physiology Regulatory, Integrative, and Comparable Physiology 2011;300(6):R1384-R1391 **Agents:** Dexamethasone **Vehicle:** DMSO; ethanol; water; **Route:** SC; **Species:** Rat; **Pump:** 2ML1; **Duration:** 7 days; **ALZET Comments:** Controls received mp w/ vehicle; animal info (Wistar, female, adult, 250-350 g); 50% DMSO used; 15% ethanol used; post op. care (buprenorphine)

Q1828: J. S. M. Cuffe, *et al.* Sex specific changes in placental growth and MAPK following short term maternal dexamethasone exposure in the mouse. PLACENTA 2011;32(12):981-989

Agents: Dexamethasone Vehicle: Not Stated; Route: Not Stated; Species: Mice (pregnant); Pump: 1003D; Duration: Not Stated;

ALZET Comments: Controls received mp w/ saline; animal info (E12.5, C57BL/6)

Q0321: X. L. Yao, *et al.* Apolipoprotein E Negatively Regulates House Dust Mite-induced Asthma via a Low-Density Lipoprotein Receptor-mediated Pathway. American Journal of Respiratory and Critical Care Medicine 2010;182(10):1228-1238 **Agents:** Dexamethasone; apolipoprotein E (130-149), mimetic **Vehicle:** Not Stated; **Route:** Not Stated; **Species:** Mice; **Pump:** 2004; **Duration:** 3 weeks;

ALZET Comments: Controls received mp w/ apolipoprotein E scrambled, or saline); animal info (female A/J, C57BL/6, apo E-/-, LDLR-/-, 6-8 wk old); peptides;

P9986: Y. Wu, *et al.* REDD1 Is a Major Target of Testosterone Action in Preventing Dexamethasone-Induced Muscle Loss. Endocrinology 2010;151(3):1050-1059

Agents: Dexamethasone; testosterone Vehicle: Propylene glycol; Route: Not Stated; Species: Rat; Pump: Not Stated; Duration: 7 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (male, Wistar, 250 g.)



Q1603: N. A. Whitlock, *et al.* Increased Intraocular Pressure in Mice Treated with Dexamethasone. INVESTIGATIVE OPHTHALMOLOGY & VISUAL SCIENCE 2010;51(12):6496-6503

Agents: Dexamethasone Vehicle: PBS; Route: SC; Species: Mice; Pump: 1004; Duration: 4 weeks;

ALZET Comments: Controls received mp w/ vehicle; animal info (B6.129, 10-13 wks old), post op. care (buprenorphine)

Q1390: W. K. Ward, *et al.* Controlled release of dexamethasone from subcutaneously-implanted biosensors in pigs: Localized anti-inflammatory benefit without systemic effects. JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A 2010;94A(1):280-287

Agents: Dexamethasone Vehicle: Cyclodextrin, 2-hydroxypropyl-b-; Route: SC; Species: Pig (mini); Pump: 2004; 2ML4; Duration: 28 days;

ALZET Comments: Controls received mp w/ normal saline; animal info (Yucatan, adult, 60-70 kg); functionality of mp verified by opening and inspecting the pump; dose-response; multiple pumps per animal (2); Fig 1, image of biosensor array with ALZET pump

Q0344: W. J. Henderson, *et al.* Inhibition of Wnt/beta-catenin/CREB binding protein (CBP) signaling reverses pulmonary fibrosis. Proceedings of the National Academy of Sciences of the United States of America 2010;107(32):14309-14314 **Agents:** Dexamethasone; ICG-001 **Vehicle:** Saline; **Route:** SC; **Species:** Mice (transgenic); **Pump:** 2001; **Duration:** 10, 21 days; **ALZET Comments:** Controls received mp w/ vehicle; animal info (C57BL/6, BAT-gal transgenic)