



Recent References (2010-Present) on the Administration of Vasopressin
Using ALZET® Osmotic Pumps

Q10656: S. Ramdin, *et al.* Physiological Characterization of an Arginine Vasopressin Rat Model of Preeclampsia. *Systems Biology in Reproductive Medicine* 2022;68(1):55-69

Agents: Arginine vasopressin **Vehicle:** Saline; **Route:** SC; **Species:** Rat; **Pump:** 2004; **Duration:** 18 days;

ALZET Comments: Dose (150 ng/h); Controls received mp w/ vehicle; animal info (Female pregnant Sprague Dawley; 10-12 weeks old; 160-180 g); Blood pressure measured via MRBP tail-cuff BP monitor; cardiovascular;

Q10601: G. Marroncini, *et al.* Hyponatremia-Related Liver Steatofibrosis and Impaired Spermatogenesis: Evidence From a Mouse Model of The Syndrome of Inappropriate Antidiuresis. *Journal of Endocrinological Investigation* 2022;

Agents: Vasopressin, 1-deamino [8-D-arginine] **Vehicle:** Saline, isotonic; **Route:** SC; **Species:** Mice; **Pump:** 1002; **Duration:** 14 days;

ALZET Comments: Dose (0.3 ng/h); (0.5 ng/h); 0.9% NaCl, used; animal info (8-week-old Foxn1nu/ nu male mice); Vasopressin analog 1-deamino [8-D-arginine]; hyponatremia

Q9350: J. H. Lim, *et al.* Different Expressions of AQP1 and AQP4 in Hyponatremic Rat Brain. *International Journal of Morphology* 2021;

Agents: Vasopressin, 8-deamino-arginin **Vehicle:** DMSO; Saline; **Route:** SC; **Species:** Rat; **Pump:** 2001; **Duration:** 2 days;

ALZET Comments: Sociedad Chilena de Anatomia

Q9131: T. Kawakami, *et al.* Vasopressin escape and memory impairment in a model of chronic syndrome of inappropriate secretion of antidiuretic hormone in mice. *Endocrine Journal* 2021;68(1):31-43

Agents: Vasopressin, 1-desamino-8-D arginine **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 1004; **Duration:** 1 week;

ALZET Comments: Dose (0.03 ng/h, 0.3 ng/h, 0.5 ng/h); dose-response (p. 8); Controls received mp w/ vehicle; animal info (Male 8-week-old C57BL/6J mice); 1-desamino-8-D arginine-vasopressin aka dDAVP; dependence;

Q10195: A. Hus-Citharel, *et al.* Characterization of a functional V1B vasopressin receptor in the male rat kidney: evidence for cross talk between V1B and V2 receptor signaling pathways. *Renal Physiology* 2021;321(3):F305-F321

Agents: Vasopressin; dDAVP **Vehicle:** PBS; **Route:** SC; **Species:** Rat; **Pump:** 2001; **Duration:** 3 days;

ALZET Comments: Dose: Vasopressin (40 mg/kg-day); DDAVP (2 mg/kg-day) Controls received mp w/ vehicle; animal info: Male Sprague-Dawley rats, (200–250g) Vasopressin V1B receptor aka (V1BR); 1-desamino-8-D-arginine vasopressin aka (dDAVP)peptides;

Q6790: M. K. Santillan, *et al.* 105: Regulatory dendritic cell treatment prevents the development of vasopressin-induced preeclampsia in mice. *American Journal of Obstetrics & Gynecology* 2019;220(1):S84-S85

Agents: Vasopressin, arginine **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice (pregnant, transgenic); **Duration:** 21 days;

ALZET Comments: Dose (24 ng/hr); Controls received mp w/ vehicle; animal info (C57BL/6 mice were cultured with human TGFb1 and murine GM- CSF and IL-10); cardiovascular;

Q7982: E. Degerman, *et al.* Endolymphatic hydrops induced by different mechanisms responds differentially to spironolactone: a rationale for understanding the diversity of treatment responses in hydropic inner ear disease. *Acta Otolaryngol* 2019;139(8):685-691

Agents: vasopressin, arginine-8-; rolipram; cilostamide; spironolactone **Vehicle:** Not stated; **Route:** SC; **Species:** Mice; **Pump:** 2002; **Duration:** 4 weeks;

ALZET Comments: Dose ((VP 0.5 mg/kg/day), (rolipram 0.4mg/kg/day), (cilostamide 0.5 mg/kg/day), (spironolactone 1.2 mg/kg/day)); Controls received mp w/ VP; animal info (8 weeks, female, CBA/J, 22-24g); enzyme inhibitor (cilostamide is a PDE3 inhibitor and rolipram is a PDE4 inhibitor); MRI; Therapeutic indication (Spironolactone prevents the development of vasopressin and rolipram-induced endolymphatic hydrops although not cilostamide-induced endolymphatic hydrops);



Q7868: S. M. Scroggins, *et al.* Elevated vasopressin in pregnant mice induces T-helper subset alterations consistent with human preeclampsia. *Clinical Science* 2018;132(3):419-436

Agents: arginine vasopressin **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 1004; **Duration:** 21 days;
ALZET Comments: Dose (24 ng/h); Controls received mp w/ vehicle; animal info (12–16 weeks, female, C57BL/6J); teratology;

Q7864: J. A. Sandgren, *et al.* Arginine vasopressin infusion is sufficient to model clinical features of preeclampsia in mice. *JCI Insight* 2018;3(19):

Agents: arginine vasopressin; conivaptan; relcovaptan; tolvaptan **Vehicle:** Saline; DMSO; **Route:** SC; **Species:** Mice; **Pump:** 1002; 1004; 1007D; **Duration:** 1, 2 weeks;

ALZET Comments: Dose ((AVP 24 ng/h), (conivaptan 22 ng/h), (relcovaptan 22 ng/h), (tolvaptan 22 ng/h)); saline or saline with 10% DMSO used; Controls received mp w/ vehicle; Multiple pumps per animal (2 if AVP plus antagonist); conivaptan is a nonselective AVPR1A and AVPR2 antagonist. relcovaptan is an AVPR1A antagonist. tolvaptan is an AVPR2 antagonist.; AVP and tolvaptan were reconstituted in saline while relcovaptan was reconstituted in saline with 10% DMSO;

Q8071: J. W. Lee, *et al.* Single-tubule RNA-Seq uncovers signaling mechanisms that defend against hyponatremia in SIADH. *Kidney Int* 2018;93(1):128-146

Agents: Vasopressin **Vehicle:** Not stated; **Route:** SC; **Species:** Rat; **Pump:** Not stated; **Duration:** 5 days;

ALZET Comments: Dose (5 ng/hr); animal info (Male, Sprague-Dawley, 120-160 g); Vasopressin aka dDAVP; dependence;

Q7098: M. Aleksandrowicz, *et al.* Effect of vasopressin-induced chronic hyponatremia on the regulation of the middle cerebral artery of the rat. *Pflugers Arch* 2018;470(7):1047-1054

Agents: Vasopressin **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 2002; **Duration:** 3.5 days;

ALZET Comments: Dose (2.4 µg/24 h); animal info (Male Wistar rats weighing 250–300 g); ischemia (cerebral); cardiovascular; Minipumps used administer vasopressin to induce prolonged hyponatremia;

Q5900: T. Tsuji, *et al.* Vasopressin casts light on the suprachiasmatic nucleus. *J Physiol* 2017;595(11):3497-3514

Agents: Antagonist, vasopressin V1A receptor **Vehicle:** CSF, artificial; **Route:** CSF/CNS; **Species:** Rat; **Pump:** 2001; **Duration:** 3 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (Sprague Dawley, 250-350g); ALZET brain infusion kit 2 used; Dose (416 ng/hr);

Q6508: C. Taveau, *et al.* Acute and chronic hyperglycemic effects of vasopressin in normal rats: involvement of V1A receptors. *American Journal of Physiology Endocrinology and Metabolism* 2017;312(3):E127-E135

Agents: Vasopressin **Vehicle:** Not Stated; **Route:** IP; **Species:** Rat; **Pump:** 2006; **Duration:** 4 weeks;

ALZET Comments: Dose (500 ng/kg/day); animal info (Eight-week-old male Sprague-Dawley and lean Zucker rats);

Q5302: L. Zhou, *et al.* Systemic PPARgamma deletion causes severe disturbance in fluid homeostasis in mice. *Physiol Genomics* 2015;47(11):541-7

Agents: Vasopressin, 1-desamino-8-D-arginine **Vehicle:** Not Stated; **Route:** SC; **Species:** mice; **Pump:** 1002; **Duration:** 5 days;

ALZET Comments: animal info (PPARy f/f mice and EsrCre/flox mice; 2-4 mo males); functionality of mp verified by urine osmolalities; Dose (0.25 ng/h);

Q4608: C. Taveau, *et al.* Vasopressin and hydration play a major role in the development of glucose intolerance and hepatic steatosis in obese rats. *Diabetologia* 2015;58(1081-1090)

Agents: Vasopressin **Vehicle:** Not Stated; **Route:** IP; **Species:** Rat; **Pump:** Not Stated; **Duration:** 4 weeks;

ALZET Comments: Animal info (male, Fa/fa Zucker, 7 weeks old); no stress (see pg. 1083-1084); diabetes;

Q4518: S. C. Luetken, *et al.* AVP-Induced Increase in AQP2 and p-AQP2 Is Blunted in Heart Failure during Cardiac Remodeling and Is Associated with Decreased AT1R Abundance in Rat Kidney. *PLoS One* 2015;10(U754-U786)

Agents: Vasopressin, 1-desamino-8-D-arginine **Vehicle:** Saline; **Species:** Rat; **Pump:** 2001; **Duration:** 7 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (male, Munich-Wistar rat, 250g); cardiovascular;

1-desamino-8-D-arginine vasopressin aka DDAVP;



Q4453: K. Hopp, *et al.* Effects of hydration in rats and mice with polycystic kidney disease. *American Journal of Physiology Renal Physiology* 2015;308(F261-F266)

Agents: Vasopressin, 1-deamino-8-D arginine **Vehicle:** Saline; **Route:** SC; **Species:** Rat; mice; **Pump:** 1004; 2004; 2ML4; **Duration:** 7 weeks; 8 weeks; 12 weeks;;

ALZET Comments: Controls received mp w/ vehicle; animal info (rat PCK, 3 weeks old; mice Pkd1 RC/RC or Pkd2 WS25/- 4 weeks old); pumps replaced every 3 weeks; cardiovascular;

Q5213: E. Degerman, *et al.* Vasopressin induces endolymphatic hydrops in mouse inner ear, as evaluated with repeated 9.4 T MRI. *Hear Res* 2015;330(Pt A):119-24

Agents: Vasopressin **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 2002; **Duration:** 14 - 30 days;

ALZET Comments: Controls received mp w/ vehicle; animal info: Five female C57BL6 mice and 4 and 6 female CBA/J mice of body weight 22 - 24 g (8 weeks of age); functionality of mp verified by MRI; dose-response (pg 3); MRI; "EH was induced, to our knowledge for the first time, by chronic administration of vasopressin via mini-osmotic pumps in two mouse strains using 9.4 T MRI in combination with Gd contrast agent intraperitoneally as read-out" (pg 5); Dose: 50 mg/100 g/day

Q4380: O. Cil, *et al.* Salt-sparing diuretic action of a water-soluble urea analog inhibitor of urea transporters UT-A and UT-B in rats. *KIDNEY INTERNATIONAL* 2015;88(311-320)

Agents: Vasopressin, 1-deamino-8-D-arginine **Vehicle:** Saline; **Route:** SC; **Species:** Rat; **Pump:** 2002; **Duration:** 4 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (female, Wistar, 200-260g); cardiovascular;

Q3665: J. J. Talbot, *et al.* The Cleaved Cytoplasmic Tail of Polycystin-1 Regulates Src-Dependent STAT3 Activation. *Journal of the American Society of Nephrology* 2014;25(1737-1748)

Agents: Vasopressin, 1-deamino-8-D-arginine **Vehicle:** Not Stated; **Route:** Not Stated; **Species:** Rat; **Pump:** Not Stated; **Duration:** 8 weeks;

ALZET Comments: Animal info (PCK/Brattleboro, 3-10 weeks old); long-term study; cardiovascular;

Q4082: M. K. Santillan, *et al.* Vasopressin in Preeclampsia A Novel Very Early Human Pregnancy Biomarker and Clinically Relevant Mouse Model. *Hypertension* 2014;64(852-+)

Agents: Vasopressin, arginine **Vehicle:** Saline; **Route:** SC; **Species:** Mice (pregnant); **Pump:** 1004; **Duration:** Not Stated;

ALZET Comments: Controls received mp w/ vehicle; animal info (C57BL6J); bp measured using tail cuff; preeclampsia model

Q3206: C. A. Miranda, *et al.* Tolvaptan as a tool in renal physiology. *American Journal of Physiology Renal Physiology* 2014;306(3):F359-F366

Agents: Tolvaptan; vasopressin, arginine **Vehicle:** DMSO; glycerol; **Route:** SC; **Species:** Rat; **Pump:** 2ML1; 2001; **Duration:** 4 days;

ALZET Comments: Control animals received mp w/ vehicle; animal info (pathogen-free, Sprague Dawley, Brattleboro, 190-215 g, male); 50% DMSO used; 50% glycerol used; "The third alternative, osmotic minipumps, proved the most practical approach (versus food or water for tolvaptan infusion) pg F360; dose response (Fig 1); good methods (appendix 1); "alternative to dDAVP infusion in Brattleboro rats" pg F363

Q4726: W. Kittikulsuth, *et al.* Lack of an effect of collecting duct-specific deletion of adenylyl cyclase 3 on renal Na(+) and water excretion or arterial pressure. *American Journal of Physiology Renal Physiology* 2014;306(6):F597-F607

Agents: Vasopressin, 1-desamino-8-D-arginine-; **Route:** SC; **Species:** Mice; **Pump:** 1002; **Duration:** 14 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (DC AC3 KO); cardiovascular; bp measured using radiotelemetry;

Q4239: A. Cudnoch-Jedrzejewska, *et al.* The effect of blockade of the central V1 vasopressin receptors on anhedonia in chronically stressed infarcted and non-infarcted rats. *PHYSIOLOGY & BEHAVIOR* 2014;135(208-214)

Agents: Vasopressin, deamino-Pen1,O-Me-Tyr2,Arg8 **Route:** CSF/CNS; **Species:** Rat; **Pump:** 2ML4; **Duration:** 28 days;

ALZET Comments: Controls received mp w/ saline; animal info (male, Sprague Dawley, 8-10 weeks old); ALZET brain infusion kit used; no stress (see pg. 211); post op. care (buprenorphine 3ug/100g IP BID 2-3 days, Penicillin 10000IU/100g IM); behavioral testing (chronic mild stress); cardiovascular; Cannula placement verified via Evans blue dye postmortem; Vasopressin, deamino-Pen1,O-Me-Tyr2,Arg8 aka V1RANT is a V1 receptor antagonist; myocardial infarction;



Q2509: Y. Wang, *et al.* Role of protein kinase C- α in hypertonicity-stimulated urea permeability in mouse inner medullary collecting ducts. *American Journal of Physiology Renal Physiology* 2013;304(2):F233-F238

Agents: Vasopressin, 1-deamino-8-D arginine **Vehicle:** Not Stated; **Route:** Not Stated; **Species:** Mice; **Pump:** Not Stated; **Duration:** 3 days;

ALZET Comments: Animal info (PKC α -/-, wt)

Q3200: T. G. Paunescu, *et al.* Vasopressin induces apical expression of caveolin in rat kidney collecting duct principal cells. *American Journal of Physiology Renal Physiology* 2013;305(12):F1783-F1795

Agents: Vasopressin, 1-deamino-8-D arginine **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 2002; 2ML4; **Duration:** 14 days;

ALZET Comments: Animal info (Sprague Dawley, Lewis Evans, adult, male); pump functionality verified by pump removal/inspection and urine osmolality levels (Fig 2)

Q2510: E. J. Park, *et al.* The role of 70-kDa heat shock protein in dDAVP-induced AQP2 trafficking in kidney collecting duct cells. *American Journal of Physiology Renal Physiology* 2013;304(7):F958-F971

Agents: Vasopressin, 1-deamino-8-D arginine **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** Not Stated; **Duration:** 5 days;

ALZET Comments: Control animals received mp w/ saline; animal info (Sprague Dawley, 200-250 g)

Q3118: R. Marir, *et al.* Pharmacological characterization of FE 201874, the first selective high affinity rat V(1A) vasopressin receptor agonist. *British Journal of Pharmacology* 2013;170(2):278-292

Agents: FE201874; arginine vasopressin; desmopressin; d[Leu4,Lys8]VP; [Thr4,Gly7]OT **Vehicle:** Saline; DMSO; Cremophore; **Route:** SC; **Species:** Rat; **Pump:** Not Stated; **Duration:** 3 days;

ALZET Comments: Controls received mp w/ vehicle; animal info (male, Sprague Dawley, adult, 200-250g); 5% DMSO, 7.5% Cremophore used; dose-response (288); cardiovascular; Desmopressin aka dDAVP; FE 201874 is a selective agonist of the rat V1A receptor

Q3201: M. L. A. Kortenoeven, *et al.* Demeclocycline attenuates hyponatremia by reducing aquaporin-2 expression in the renal inner medulla. *American Journal of Physiology Renal Physiology* 2013;305(12):F1705-F1718

Agents: Vasopressin, 1-deamino-8-D arginine **Vehicle:** Saline, isotonic; **Route:** SC; **Species:** Rat; **Pump:** 1002; **Duration:** 8 days;

ALZET Comments: animal info (male, Wistar, 150-200 g)

Q2518: T. O. Ilori, *et al.* Urine concentration in the diabetic mouse requires both urea and water transporters. *American Journal of Physiology Renal Physiology* 2013;304(1):F103-F111

Agents: Vasopressin, 1-deamino-8-D arginine **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 2002; **Duration:** 7 days;

ALZET Comments: Animal info (wt, UT-A1/A3 KO)

Q2498: J. Barsony, *et al.* Chronic hyponatremia exacerbates multiple manifestations of senescence in male rats. *Age* 2013;35(2):271-288

Agents: Vasopressin, 1-deamino-8-D arginine **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 2004;

ALZET Comments: Animal info (Fisher Brown, Norway, F1 hybrid, young adult); pumps replaced monthly

Q2286: X. F. Wang, *et al.* Insignificant effect of secretin in rodent models of polycystic kidney and liver disease. *American Journal of Physiology Renal Physiology* 2012;303(7):F1089-F1098

Agents: Vasopressin, 1-deamino-8-D arginine; secretin **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; mice; **Pump:** 1004; 2002; 2ML4; **Duration:** 7, 12 weeks;

ALZET Comments: Controls received mp w/ vehicle; animal info (3 wks old, PKD2 -/WS25); pumps replaced every 2 weeks, every 4 weeks, or after 2 and 5 weeks; functionality of mp verified via plasma secretin levels; long-term study



- Q2901:** P. D. Cabral, *et al.* Membrane-associated aquaporin-1 facilitates osmotically driven water flux across the basolateral membrane of the thick ascending limb. *American Journal of Physiology Renal Physiology* 2012;303(5):F621-F629
Agents: Vasopressin, 1-deamino-8-D arginine; **Vehicle:** Not Stated; **Route:** Not Stated; **Species:** Rat; Mice; **Pump:** Not Stated; **ALZET Comments:** Peptides; Animal info (230-260g, C57Bl/6J)
- Q2197:** Y. J. Lee, *et al.* E3 ubiquitin-protein ligases in rat kidney collecting duct: response to vasopressin stimulation and withdrawal. *American Journal of Physiology Renal Physiology* 2011;301(4):F883-F896
Agents: Vasopressin, 1-deamino-8-D-arginine **Vehicle:** 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)
- Q1164:** J. S. Kim, *et al.* Chronic Hyperosmotic Stress Converts GABAergic Inhibition into Excitation in Vasopressin and Oxytocin Neurons in the Rat. *Journal of Neuroscience* 2011;31(37):13312-13322
Agents: Vasopressin, arginine; oxytocin receptor antagonist; AVP receptor antagonist **Vehicle:** CSF, artificial; **Route:** CSF/CNS; **Species:** Rat; **Pump:** 2002; **Duration:** 10 days; **ALZET Comments:** Controls received mp w/ vehicle; animal info (male, Sprague Dawley, 6-20 wks old); peptides; ALZET brain infusion kit 2 used
- Q0874:** J. Barsony, *et al.* Osteoclast Response to Low Extracellular Sodium and the Mechanism of Hyponatremia-induced Bone Loss. *Journal of Biological Chemistry* 2011;286(12):10864-10875
Agents: Vasopressin, 1-deamino-8-D arginine **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 2004; **Duration:** 3 months; **ALZET Comments:** Animal info (22 mo old, F344 Brown Norway hybrid, 200 g); long-term study; pumps replaced monthly
- Q0309:** W. D. Wang, *et al.* Interaction between vasopressin and angiotensin II in vivo and in vitro: effect on aquaporins and urine concentration. *American Journal of Physiology Renal Physiology* 2010;299(3):F577-F584
Agents: Vasopressin, 1-desamino-8-D arginine; losartan **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 1003D; **Duration:** 2 days; **ALZET Comments:** Controls received mp w/ vehicle; animal info (male, Wistar, 180-220 g)
- Q1443:** H. Suzuki, *et al.* Minocycline Prevents Osmotic Demyelination Syndrome by Inhibiting the Activation of Microglia. *Journal of the American Society of Nephrology* 2010;21(12):2090-2098
Agents: Vasopressin, 1-desamino-8-D arginine **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 2002; **ALZET Comments:** Animal info (Sprague-Dawley, 250-300 g)
- Q1258:** N. B. Pedersen, *et al.* Vasopressin induces phosphorylation of the thiazide-sensitive sodium chloride cotransporter in the distal convoluted tubule. *Kidney International* 2010;78(2):160-169
Agents: Candesartan; Vasopressin, 1-deamino-8-D arginine **Vehicle:** Saline, physiological; **Route:** SC; **Species:** Rat; **Pump:** 2001; **Duration:** 4 days; **ALZET Comments:** Animal info (Munich Wistar, male)
- Q0176:** T. Miyazaki, *et al.* Chronic hyponatremia impairs memory in rats: effects of vasopressin antagonist tolvaptan. *Journal of Endocrinology* 2010;206(1):105-111
Agents: Vasopressin, 1-desamino-8-D arginine **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 2002; **Duration:** 14 days; **ALZET Comments:** Controls received mp w/ saline; no stress (pg. 108); animal info (male, Spague-Dawley, 8 weeks old); dose-response (Fig. 1); endocrinology; behavioral testing (Irwin's test, rotarod treadmill test, passive avoidance test)
- Q0145:** A. F. Marshall, *et al.* Magnetic resonance imaging of guinea pig cochlea after vasopressin-induced or surgically induced endolymphatic hydrops. *Otolaryngology-Head and Neck Surgery* 2010;142(2):260-265
Agents: Vasopressin **Vehicle:** Not Stated; **Route:** SC; **Species:** Guinea pig; **Pump:** 2002; **Duration:** 7, 14 days; **ALZET Comments:** Animal info (male, albino, Hartley, 300-500 g)



Q1121: M. Hiroi, *et al.* Activation of vasopressin neurons leads to phenotype progression in a mouse model for familial neurohypophysial diabetes insipidus. *American Journal of Physiology Regulatory, Integrative, and Comparable Physiology* 2010;298(2):R486-R493

Agents: Desmopressin arginine vasopressin **Vehicle:** Acetic acid; **Route:** SC; **Species:** Mice; **Pump:** 1002; **Duration:** 30 days; **ALZET Comments:** Controls received mp w/ vehicle; animal info (female, FNDI, 1 mo old); pumps replaced on day 10 and 20

Q1496: F. Gankam-Kengne, *et al.* Minocycline Protects against Neurologic Complications of Rapid Correction of Hyponatremia. *Journal of the American Society of Nephrology* 2010;21(12):2099-2108

Agents: Vasopressin, 1-desamino-8-D arginine **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 2001; **Duration:** 4 days; **ALZET Comments:** Animal info (male, Wistar, 250-300 g)

Q1022: A. Cudnoch-Jedrzejewska, *et al.* Brain vasopressin V(1) receptors contribute to enhanced cardiovascular responses to acute stress in chronically stressed rats and rats with myocardial infarction. *American Journal of Physiology Regulatory, Integrative, and Comparable Physiology* 2010;298(3):R672-R680

Agents: Arginine vasopressin **Vehicle:** NaCl; **Route:** CSF/CNS; **Species:** Rat; **Pump:** Not Stated; **Duration:** 4 weeks; **ALZET Comments:** Controls received mp w/ vehicle; animal info (male, Sprague Dawley, 8-10 wks old); ALZET brain infusion kit used; cannula placement verified by injecting Evan's blue dye into the cannula and inspecting sagittal sections of the brain; 2ML sized pump used