ALZET Comments: Vasopressin, arginine; Saline; Mice (pregnant, transgenic); 21 days; Dose (24 ng/hr); Controls received mp w/ vehicle; animal info (CS7BL/6 mice were cultured with human TGFB1 and murine GM-CSF and IL-10); cardiovascular;

ALZET Comments: Vasopressin; SC; Rat; 2002; 3.5 days; Dose (2.4 μg/24 h); animal info (Male Wistar rats weiging 250–300 g); ischemia (cerebral); cardiovascular; Minipumps used administer asopressin to induce prolonged hyponatremia;

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;

ALZET Comments: Antagonist, vasopressin V1A receptor; CSF, artificial; CSF/CNS; Rat; 2001; 3 days; Controls received mp w/ vehicle; animal info (Sprague Dawley, 250-350g); ALZET brain infusion kit 2 used; Dose (416 ng/hr);

ALZET Comments: Vasopressin; IP; Rat; 2006; 4 weeks; Dose (500 ng/kg/day); animal info (Eight-week-old male Sprague-Dawley and lean Zucker rats); Vasopressin aka AVP; diabetes;

ALZET Comments: Vasopressin, 1-desamino-8-D-arginine; Saline; Rat; 2001; 7 days; Controls received mp w/ vehicle; animal info (male, Munich-Wistar rat, 250g); cardiovascular; 1-desamino-8-D-arginine vasopressin aka DDAVP;

ALZET Comments: Vasopressin; IP; Rat; 4 weeks; 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
ALZET Comments: Vasopressin, 1-desamino-8-D-arginine; Saline; Rat; 2001; 7 days; 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
ALZET Comments: Vasopressin, 1-deamino-8-D arginine; Saline; SC; Rat; mice; 1004; 2004; 2ML4; 7 weeks; 8 weeks; 12 weeks;; 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;

ALZET Comments: Vasopressin; SC; mice; 2002; 14 - 30 days; 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.

ALZET Comments: Vasopressin, 1-deamino-8-D-arginine; Saline; SC; Rat; 2002; 4 days; Controls received mp w/ vehicle; animal info (female, Wistar, 200-260g); cardiovascular;

ALZET Comments: Vasopressin, 1-deamino-8-D-arginine; Rat; 8 weeks; Animal info (PCK/Brattleboro, 3-10 weeks old); long-term study; cardiovascular;

ALZET Comments: Vasopressin, arginine; Saline; SC; Mice (pregnant); 1004; Controls received mp w/ vehicle; animal info (C57BL6J); bp measured using tail cuff; preeclampsia model.

ALZET Comments: Tolvaptan; vasopressin, arginine; DMSO; glycerol; SC; Rat; 2ML1; 2001; 4 days; 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.

ALZET Comments: Vasopressin, 1-desamino-8-D-arginine-; SC; Mice; 1002; 14 days; 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
ALZET Comments: Vasopressin, deamino-Pen1,O-Me-Tyr2,Arg8; CSF/CNS; Rat; 2ML4; 28 days; 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;
**ALZET Comments:** Vasopressin, 1-deamino-8-D arginine; Mice; 3 days; Animal info (PKC alpha -/-, wt).

**ALZET Comments:** Vasopressin, 1-deamino-8-D arginine; SC; Rat; 2002; 2ML4; 14 days; Animal info (Sprague Dawley, Lewis Evans, adult, male); pump functionality verified by pump removal/inspection and urine osmolality levels (Fig 2).

**ALZET Comments:** Vasopressin, 1-deamino-8-D arginine; SC; Rat; 5 days; Control animals received mp w/ saline; animal info (Sprague Dawley, 200-250 g).

**ALZET Comments:** FE201874; arginine vasopressin; desmopressin; d[Leu4,Lys8]VP; [Thr4,Gly 7]OT; Saline; DMSO; Cremophore; SC; Rat; 3 days; 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.

**ALZET Comments:** Vasopressin, 1-deamino-8-D arginine; Saline, isotonic; SC; Rat; 1002; 8 days; Animal info (male, Wistar, 150-200 g).

**ALZET Comments:** Vasopressin, 1-deamino-8-D arginine; SC; Mice; 2002; 7 days; Animal info (wt, UT-A1/A3 KO).

**ALZET Comments:** Vasopressin, 1-deamino-8-D arginine; SC; Rat; 2004; Animal info (Fisher Brown, Norway, F1 hybrid, young adult); pumps replaced monthly.

**ALZET Comments:** Vasopressin, 1-deamino-8-D arginine; secretin; SC; Rat; mice; 1004; 2002; 2ML4; 7, 12 weeks; 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.

**ALZET Comments:** Vasopressin, 1-deamino-8-D arginine; SC; Rat; Peptides; animal info (230-260g, C57Bl/6J).

**ALZET Comments:** Vasopressin, 1-deamino-8-D arginine; Saline; SC; Rat; 2001; 5 days; Controls received mp w/ vehicle; animal info (Sprague Dawley, male, 200-250 g).

**ALZET Comments:** Vasopressin, arginine; oxytocin receptor antagonist; AVP receptor antagonist; CSF, artificial; CSF/CNS; Rat; 2002; 10 days; Controls received mp w/ vehicle; animal info (male, Sprague Dawley, 6-20 wks old); peptides; ALZET brain infusion kit 2 used.


**ALZET Comments:** Vasopressin, 1-deamino-8-D arginine; SC; Rat; 2004; 3 months; Animal info (22 mo old, F344 Brown Norway hybrid, 200 g); long-term study; pumps replaced monthly.


**ALZET Comments:** Vasopressin, 1-desamino-8-D arginine; losartan; SC; Rat; 1003D; 2 days; Controls received mp w/ vehicle; animal info (male, Wistar, 180-220 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 Comparative Physiology 2010;298(2):R486-R493

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


**ALZET Comments:** Vasopressin, 1-desamino-8-D arginine; SC; Rat; 2001; 4 days; Animal info (male, Spague-Dawley, 8 weeks old); dose-response (Fig. 1); endocrinology; behavioral testing (Irwin's test, rotarod treadmill test, passive avoidance test).

**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 infarcton. American Journal of Physiology-Regulatory Integrative and Comparative Physiology 2010;298(3):R672-R680

**ALZET Comments:** Arginine vasopressin; NaCl; CSF/CNS; Rat; 4 weeks; 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.

**ALZET® Bibliography**

**ALZET Comments:** Vasopressin, 1-desamino-8-D arginine; SC; Mice; 1007D; 7 days; Controls received mp w/ vehicle; animal info (AQP1KO, 8 wks old).


**ALZET Comments:** Vasopressin, 1-deamino-8-D-arginine; SC; Rat; Animal info (adult, male, Brattleboro, di/di, 330 g, 10-12 wks old); compound also known as desmopressine; incorrectly listed rate of infusion as 1 ml/hr.

**P9365:** S. Wakamatsu, *et al.* Vasopressin and hyperosmolarity regulate NKCC1 expression in rat OMCD. *Hypertension Research* 2009;32(6):481-487

**ALZET Comments:** Vasopressin, 1-desamino-8-D-arginine; oxytocin; SC; Rat; 2002; 4 days; Controls received mp w/ saline; animal info (male, Sprague Dawley, 80-100 g.).

**P9672:** X. C. Li, *et al.* AT1a receptor knockout in mice impairs urine concentration by reducing basal vasopressin levels and its receptor signaling proteins in the inner medulla. *Kidney International* 2009;76(2):169-177

**ALZET Comments:** Vasopressin, 1-desamino-8-D-arginine; Insulin, FITC; IP; Mice; 2002; 2 weeks; Controls were not treated; animal info (AT1a-KO, wt).


**ALZET Comments:** Vasopressin, 1-desamino-8-D arginine; Mice; 1002; 10 days; Controls received mp w/ vehicle; animal info (S/C26a4 -/-).

**P9603:** C. Kim, *et al.* Deletion of N-type Ca2+ Channel Ca2.2 Results in Hyperaggressive Behaviors in Mice. *Journal of Biological Chemistry* 2009;284(5):2738-2745

**ALZET Comments:** Vasopressin, 1-desamino-8-D arginine; SC; PBS; CSF/CNS; Mice; Controls received mp w/vehicle; animal info (Cav 2.2 -/-, male, 10-15 wks old); post op. care (buprenorphrine).


**ALZET Comments:** Vasopressin; SC; Rat; 3 days; Animal info (60 days old, Brattleboro, 200-250g).

**Q0386:** T. Indrambarya, *et al.* Low-dose vasopressin infusion results in increased mortality and cardiac dysfunction following ischemia-reperfusion injury in mice. *Critical Care* 2009;13(3):U361-U368

**ALZET Comments:** Vasopressin, arginine; dobutamine; IP; Mice; 1003D; Controls received mp w/normal saline; animal info (10-14 wks old, male, C57B6); post op. care (buprenorphrine).


**ALZET Comments:** Vasopressin; desmopressin; SC; Rat; 1007D; 3 or 6 days; Controls received mp w/ vehicle; comparison of 2x daily IP injections vs. mp; animal info (male, Sprague Dawley, 2 months old).


**ALZET Comments:** Vasopressin, 1-deamino-8-D-arginine; Saline, sterile; SC; Mice (knockout); 1007D; 5 days; Animal info (P2Y2-R KO, wt, 2 and 5 months old); post op. care (ketorolac); nephrology.
ALZET Comments: Vasopressin, d(CH2)5Tyr(Me) Arginine; Saline; CSF/CNS; CSF/CNS (medial amygdala); Rat (pregnant); 2002; 4-6 days; Controls received mp w/ vehicle; dose-response (fig 3); animal info (female, Sprague Dawley, GD18); V1a receptor antagonist; behavioral testing (maternal behavior, social recognition test, maternal memory test); cannula placement confirmed.

Q0618: L. N. Ivanova, et al. Structure and Concentration Capacity of the Kidneys in Brattleboro Rats under Conditions of Long-Term Vasopressin Treatment. BULLETIN OF EXPERIMENTAL BIOLOGY AND MEDICINE 2008;146(5):642-646
ALZET Comments: Vasopressin, arginine; SC; Rat; 2ML4; 28 days; Controls received empty plastic capsules; animal info (2 months old, male, VP -/-); functionality of mp verified by osmolarity of excreted urine.

ALZET Comments: Vasopressin, 1-deamino-8-D-arginine; Saline, isotonic; SC; Rat; 1002; 10 days; Controls received mp w/ vehicle; animal info (male, Brattleboro, DI); endocrinology.

ALZET Comments: Vasopressin; IP; Mice; Controls received mp w/ saline; animal info (5-6 wks old, CD-1 female).

ALZET Comments: Vasopressin, arginine; oxytocin; oligonucleotide, antisense; oligonucleotide, missense; Ringer’s solution; CSF/CNS; CSF/CNS (medial preoptic area); Rat (pregnant); 1007D; 5-7 days; Controls received mp w/ vehicle; comparison of ICV injections vs. mp; antisense (AVP-R); peptides; multiple pumps per animal (2); post op. care (Enrofloxacin, Baytril); animal info (female, Wistar, HAB, LAB, 14 wks old); behavioral testing (maternal care, pup retrieval test, elevated plus maze); cannula placement and infusion sites verified with blue ink.

ALZET Comments: Vasopressin, 1-deamino-8-D-arginine; CSF/CNS; Rat; 1007D; 3, 6 days; Controls received mp w/ PBS; animal info (male, Wistar, Long Evans); dAVP; 26 gauge 10 mm cannula used.