References on the Administration of Corticotropin Releasing Factor Using ALZET® Osmotic Pumps


ALZET Comments: Corticotropin releasing hormone; Saline; CSF/CNS; Mice; 28 days; Controls received mp w/ vehicle; animal info (female, C57BL/6, 8-10 weeks old); behavioral testing (Step down test, tail suspension test, open field); peptides; cyanoacrylate adhesive; Corticotropin-rel. factor aka Corticotropin releasing hormone; Plastics 1 cannula, DURECT PE 60 tubing.


ALZET Comments: Corticotropin-releasing factor; Stressin1; sauvagine, anti-; urocortin III; Saline; SC; Rat; 2002; 12 days; Controls received mp w/ vehicle; peptides; multiple pumps per animal (2); animal info (mast cell -deficient, +/+, 10 wks old, 200-250 g.); “The use of the minipump avoids daily interactions with the animals, possibly causing less variability in the results.” pg G458; stressin1 is a selective CFR-R1 agonist; urocortin III is a CFR-R2 agonist; antisauvagine is a CRF-R2 antagonist.


ALZET Comments: Urocortin II, Corticotropin releasing factor, ovine; CSF, artificial; CSF/CNS; Rat; 1007D; 6 days; Dose: ovine CRF (100ng/hr), urocortin II (2ng/μL); Controls received mp w/ vehicle; animal info (male Sprague-Dawley rats (250 g)); post op. care (surgical methylacrylate glue (VetBond) used to close incision, 25 ug of buprenorphine once after surgery for pain control); functionality of mp verified by determining residual volume in the pump at the termination of the experiment; stability verified by HPLC HPLC analysis of samples taken at filing and after 6 days; peptides; Brain coordinates (AP −7.5, lateral −0.2, and depth −6.4);


ALZET Comments: Endorphin, B; corticotropin releasing hormone; CSF, artificial; CSF/CNS (paraventricular nucleus of hypothalamus); Rat; 2002; 16 hours; Controls received mp w/ vehicle; peptides; animal info (male, Fischer, 160-175g.).


ALZET Comments: Corticotropin-releasing factor, a helical (9-41); Saline, physiological; NaOH; Ascorbic acid; CSF/CNS; Fish (rainbow trout); 1003D; 8 days; Controls received mp w/ vehicle; no stress (see pg. R984); peptides; animal info (male, female, hypoxia); CRF receptor antagonist; x-ray radiography; mp encased in a layer of dialysis tubing; cannula placement confirm; mp at 14C.


ALZET Comments: Corticotropin-releasing factor; astressin; Saline; BSA; Ascorbic acid; CSF/CNS; Rat; 2002; 7 days; Controls received mp w/ vehicle; ALZET brain infusion kit 1 used; 2 week recovery period by filling tubing and cannula with sterile saline; pump connected to catheter after recovery period; astressin is a novel CRF antagonist; BSA and ascorbic acid was 0.1%; ischemia (cerebral).

ALZET Comments: Corticotropin-releasing hormone, human/rat; BSA; acetic acid; Ascorbic acid; SC; Mice; 1002; 9 days; Controls received mp w/ vehicle; peptides.

ALZET Comments: Urocortin; Corticotropin-releasing factor; CSF/CNS (lateral ventricle); Rat; 2001; 13 days; Dose (0.01-1.0 nmol/day); Controls received mp w/ vehicle; animal info (Male Long-Evans rats: 300–347 g); pumps replaced every 7 days; Urocortin, Corticotropin are CRF-related peptide; peptides; Silicone catheter used to connect pump to cannula; Brain coordinates (AP=-0.8 mm, ML=+1.2mm, and DV=-4.5mm); Cannula placement verified via cresyl violet dye injection post mortem;

ALZET Comments: Corticotropin-rel. factor; Corticotropin-rel. factor, 9-41; Saline, normal; SC; Rat (pregnant); 2ML1; no duration posted; controls received mp w/vehicle; peptides; cardiovascular.

P4165: A. Gerth, et al. Corticotropin releasing hormone antagonist does not prevent adrenalectomy-induced apoptosis in the dentate gyrus of the rat hippocampus. Stress 1998;2(159-169
ALZET Comments: Corticotropin-rel. hormone antagonist; Rat; no duration posted; no comment posted.

ALZET Comments: Corticotropin-rel. hormone; Acetic Acid; Ascorbate; Albumin, bovine serum; SC; Mice (knockout); 2-6 days; Controls received mp w/ vehicle; replacement therapy (adrenalectomy); dose-response (p.2926); peptides.

ALZET Comments: Corticotropin-rel. hormone; Saline, pyrogen-free; Ascorbic acid; SC; CSF/CNS; Rat; 2001; 7 days; controls received mp w/ vehicle; no stress (see pg. 4452); ALZET brain infusion kit used.

ALZET Comments: Dexamethasone; Corticotropin-rel. factor, ovine; SC; Rat; 1003D; 2001; 3,7 days; replacement therapy; peptides.

ALZET Comments: Corticotropin-rel. factor, ovine; Saline; BSA; Ascorbic acid; CSF/CNS; Rat; 2002; 10 days; controls received mp w/ vehicle; peptides; ALZET brain infusion kit used; catheter filled w/ saline to delay agent delivery; delayed delivery;

ALZET Comments: Nicotine tartrate salt; Corticotropin-rel. factor, 6-33;; Saline; SC; CSF/CNS;; Rat; 2001; 2002;; 14 days; controls received mp w/ vehicle; functionality of mp verified by plasma levels; peptides; ALZET brain infusion kit used; recomb. human corticotropin releasing factor used; dummy cannula maintained cannula patency during one week recovery period; after 14 day SC nicotine infusion, r/h CRF (6-33) was infused ICV.

ALZET Comments: Corticotropin-rel. factor; Saline, sterile; Ascorbic acid; CSF/CNS; Rat; 2001; 1 week; controls received mp w/ vehicle; replacement therapy (adrenalectomy); peptides.
P2287: S. Rivest, et al. CRF alters the infundibular LHRH secretory system from the medial preoptic area of female rats: possible involvement of opioid receptors. Neuroendocrinology 1993;57(2):236-246
ALZET Comments: Corticotropin-rel. factor; Ascorbic acid; Albumin, bovine serum; Saline; CSF/CNS (hypothalamic medial preoptic area); Rat; 2001; 7 days; two pumps connected to double internal cannula; animals were ovariectomized.

ALZET Comments: Corticotropin-rel. factor; Vasopressin; Vasopressin antagonist; SC; Rat; 2001; 48 hours; controls received inactive mp or silastic tubing; peptides; the vasopressin antagonist was (mercapto cyclopenta-methylene propionic acid)-[methyl-tyrosine]arginine VP; agents given singly or together.

ALZET Comments: Corticotropin-rel. factor; Vasopressin; SC; Rat; 2001; 48-50 hours; controls received silastic tubing; peptides; animals given CRF or CRF + vasopressin.

P1829: F. C. Iturriza, et al. Transplantation of the pituitary pars distalis induces the corticotrophs to store melanocyte-stimulating hormone, an effect reversed by the administration of corticotropin-releasing factor. Neuroendocrinology 1991;53(75-78
ALZET Comments: Corticotropin-rel. factor; Albumin, bovine serum; Saline; SC; Rat; 2001; 24 hours; no comment posted.

ALZET Comments: Corticotropin-rel. factor, ovine; Ascorbic acid; Albumin, bovine serum; Saline; CSF/CNS; Rat; 2001; 1 week; peptides.

ALZET Comments: Corticotropin-rel. factor, human; Corticotropin-rel. factor, rat; Ascorbic acid; Albumin, bovine serum; Saline; CSF/CNS; Rat; 2002; 14 days; infusion delayed about 4 days by 10.6 cm saline-filled catheter; delayed delivery;

ALZET Comments: Corticotropin-rel. factor; Sodium chloride; CSF/CNS; Rat; 2001; 6 days; ICV cannula capped to prevent scratching; peptides.

ALZET Comments: Corticotropin-rel. factor; Acetic acid; Ascorbate; Albumin, bovine serum; SC; Rat; 5 days; Pump model not stated; controls received sham-op; mp primed overnight in saline; pump inserted sc adjacent to wax or cort pellet; varying doses of agent infused; replacement therapy (hypothalmic lesions); peptides.

ALZET Comments: Corticotropin-rel. factor; Saline; CSF/CNS; Rat; 2001; 7 days; mp connected to cannula; dose-response (text); functionality of mp verified by serum levels; peptides.

ALZET Comments: Corticotropin-rel. factor, ovine; Saline; CSF/CNS; Rat; 7 days; mp model not stated; controls received mp with vehicle; peptides.
ALZET Comments: Dye, Trypan blue; Corticotropin-rel. factor; Vasopressin; Saline; SC; Rat; 48 hours; Pump model not stated; concomitant and simultaneous infusion of agents; functionality of mp verified; replacement therapy (vasopressin deficiency); peptides.

ALZET Comments: Corticotropin-rel. factor, rat; Ascorbic acid; Albumin, bovine serum; Saline; SC; Rat; 2002; 52 days; controls received mp w/vehicle; pumps replaced at 10-14 day intervals; long-term study; peptides.

ALZET Comments: Corticotropin-rel. factor; IP; Rat; 2001; 2 days; comparison of adrenal excision vs. mp infusion; sham pump used in controls to determine stress of abdominal surgery p. 440; dose-response data, 2 doses of CRF.

ALZET Comments: Corticotropin-rel. factor, rat; Acetic acid; Ascorbate; Albumin, bovine serum; SC; Rat; 2001; 5 days; replacement therapy (adrenalectomy); mp primed in saline 4-12 h prior to implant.

ALZET Comments: Corticotropin-rel. factor, 7-14; Corticotropin-rel. factor; Corticotropin-rel. factor, ovine; Ascorbic acid; Albumin, bovine serum; PBS; IV (jugular); Rat; 1 week; comparison of acute iv injec vs. multiple icv injec vs. iv mp infusion; comparison of agents effects.

ALZET Comments: Corticotropin-rel. factor; Water; SC; Rat; 2001; 8 days; controls received mp w/ water; peptides.

ALZET Comments: Corticotropin-rel. factor; Ascorbic acid; Saline; IV (jugular); Rat; 2001; 3-15 days; peptides.