References on the Administration of Melanocyte Stimulating Hormone
Using ALZET® Osmotic Pumps

Agents: Melanocyte Stimulating Hormone, alpha; Melanocyte Stimulating Hormone, desacetyl-alpha Vehicle: Saline; Route: Not Stated; Species: Mice; Pump: 1002; Duration: 14 Days;
ALZET Comments: Dose (5 mg /25 g body weight/day for both peptides); Controls received mp w/ vehicle; animal info (Pomc mutation mice, ~21-22 weeks old); Melanocyte Stimulating Hormone aka MSH; peptides; Obesity;

Agents: Melanocyte-stimulating hormone, alpha Vehicle: Saline; Route: SC; Species: Rat; Pump: 2006; Duration: 6 weeks;
ALZET Comments: Dose (0.72 ug /h); Controls received mp w/ vehicle; animal info (Zucker Diabetic Fatty rats); diabetes;

Agents: Melanocyte-stimulating hormone, a- Vehicle: Saline, pyrogen free; Route: CSF/CNS (lateral ventricle); Species: Rat; Pump: Not Stated; Duration: 7 days;
ALZET Comments: Dose (1 μg/μl/h); Controls received mp w/ vehicle; animal info (Male Wistar rats aged 2, 3, 12 or 24 months); ALZET brain infusion kit used; delayed delivery (12 hours);

Agents: Melanocyte-stimulating hormone, alpha Vehicle: Not Stated; Route: CSF/CNS; Species: Rat; Pump: Not Stated;
Duration: Not Stated;
ALZET Comments: ALZET brain infusion kit used; pumps mentioned in introduction and discussion;

Q0718: E. Petervari, et al. Central alpha-MSH infusion in rats: Disparate anorexic vs. metabolic changes with aging. REGULATORY PEPTIDES 2011;166(1-3):105-111
Agents: Melanocyte stimulating hormone, alpha Vehicle: Saline, pyrogen free; Route: CSF/CNS; Species: Rat; Pump: 2001; Duration: 7 days;
ALZET Comments: Controls received mp w/ vehicle; animal info (male, Wistar, 2 mo, 3-4 mo, 12 mo, 24 mo old, ); ALZET brain infusion kit used; cannula placement verified macroscopically; 12 hour delayed delivery due to “dead-space of the connecting tube”

Agents: Melanocyte stimulating hormone, alpha Vehicle: Saline, pyrogen free; Route: CSF/CNS; Species: Rat; Pump: 2001; Duration: 7 days;
ALZET Comments: Controls received mp w/ vehicle; peptides; ALZET brain infusion kit used; animal info (male, Wistar, 6-9 wks old, 3-4, 6, 12, 18, 24 mo old)

Agents: Melanocyte-stimulating hormone, NDP-g Vehicle: Saline, normal; Route: SC; Species: Rat; Pump: 1002; Duration: 14 days;
ALZET Comments: Controls received mp w/ vehicle; no stress (see pg. 863); antihypertensive; cardiovascular; peptides; animal info (male, Sprague-Dawley, 180-210 grams); nephrology

Agents: Melanocyte-stimulating hormone analogue, a- Vehicle: Not Stated; Route: IP; Species: Mice; Pump: 1007D; Duration: 1 week;
ALZET Comments: Controls received mp w/ vehicle; peptides; NDP-a-MSH plasma samples taken

**P5506:** C. Hill, et al. The effects of acute and chronic alpha melanocyte stimulating hormone (alpha MSH) on cardiovascular dynamics in conscious rats. Peptides 2002;23(9):1625-1630  
**Agents:** Melanocyte stimulating hormone, alpha  
**Vehicle:** CSF, artificial;  
**Route:** CSF/CNS;  
**Species:** Rat;  
**Pump:** Not Stated;  
**Duration:** 8 days;  
**ALZET Comments:** Animals allowed to recover for 4-5 days after cannula implantation before pumps implanted

**P6245:** S. Froidevaux, et al. Homologous regulation of melanocortin-1 receptor (MC1R) expression in melanoma tumor cells in vivo. JOURNAL OF RECEPTOR AND SIGNAL TRANSDUCTION RESEARCH 2002;22(1-4):111-121  
**Agents:** Melanocyte-stimulating hormone, a-  
**Vehicle:** Citric Acid; sodium chloride;  
**Route:** SC;  
**Species:** Mice (SCID);  
**Pump:** 1002;  
**Duration:** 3-14 days;  
**ALZET Comments:** Comparison of IV injections vs. mp; stability verified by HPLC analysis after 2 week peptide incubation @ 37ºC; cancer (melanoma); peptides

**P1582:** S. T., et al. A central action of a-melanocyte-stimulating hormone on serum levels of LH and prolactin in rats. J. Endocrinol 1990;124(127-132)  
**Agents:** Melanocyte-stimulating hormone, a-  
**Vehicle:** Not Stated;  
**Route:** CSF/CNS (median eminence);  
**Species:** Rat;  
**Pump:** 2002;  
**Duration:** no duration posted;  
**ALZET Comments:** peptides

**Agents:** ACTH analog; ORG-2766; Melanocyte-stimulating hormone, a-  
**Vehicle:** Saline;  
**Route:** CSF/CNS (sciatic nerve); SC;  
**Species:** Rat;  
**Pump:** 2002;  
**Duration:** 2 weeks;  
**ALZET Comments:** Comparison of oral admin. and admin. by s.c. microspheres; comparison of s.c. injections vs. mp infusion; tissue perfusion (sciatic nerve)

**Agents:** Melanocyte-stimulating hormone, a-  
**Vehicle:** Saline;  
**Route:** SC;  
**Species:** Rat;  
**Pump:** Not Stated;  
**Duration:** 5 days;  
**ALZET Comments:** controls received mp w/vehicle; mp model not stated

**Agents:** ACTH (1-24); Dexamethasone disodium phosphate; Melanocyte-stimulating hormone, a-; Thyroxine, l-  
**Vehicle:** Not Stated;  
**Route:** SC;  
**Species:** Rat;  
**Pump:** Not Stated;  
**Duration:** 6 days;  
**ALZET Comments:** comparison of agents effects; replacement therapy (hypophysectomy); peptides

**Agents:** Melanocyte-stimulating hormone, a-  
**Vehicle:** Not Stated;  
**Route:** SC;  
**Species:** Rat;  
**Pump:** 2001;  
**Duration:** 8 days or 32 hours;  
**ALZET Comments:** comparison of injec vs. mp infusion; no stress p. 14; peptides

**Agents:** Melanocyte-stimulating hormone, b-; Melanocyte-stimulating hormone, a-  
**Vehicle:** Saline;  
**Route:** IP;  
**Species:** fish;  
**Pump:** 2002;  
**Duration:** 4 weeks;  
**ALZET Comments:** comparison of agents effects; plasma assayed by RIA at 28 days to verify mp delivery; delivery rate 0.17 ul/hr at 21C; peptides
Agents: Melanocyte-stimulating hormone, α
Vehicle: Water; Route: IP; Species: fish; Pump: 1701; Duration: 10 days;
ALZET Comments: peptides

Agents: Melanocyte-stimulating hormone, α
Vehicle: Acetic acid; Saline; Route: IP; Species: Rat; Pump: Not Stated; Duration: 3 weeks;
ALZET Comments: comparison of injections vs. infusion; replacement therapy (hypophysectomy); pump replaced every 5 days for 3 weeks; peptides