



References on the Administration of Neurotensin
Using ALZET® Osmotic Pumps

Q0038: J. H. Cooke, *et al.* Peripheral and Central Administration of Xenin and Neurotensin Suppress Food Intake in Rodents. *Obesity* 2009;17(6):1135-1143

Agents: Xenin; Neurotensin **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 1007D; **Duration:** 6 days;
ALZET Comments: Controls received mp w/ saline; peptides; no stress (pg 1142); animal info (male, C57BL/6); comparison of IP injections vs. SC mp; dose-response (table 1); functionality of mp verified by residual volume

P9874: C. Norman, *et al.* Effects of chronic infusion of neurotensin and a neurotensin NT₁ selective analogue PD149163 on amphetamine-induced hyperlocomotion. *JOURNAL OF PSYCHOPHARMACOLOGY* 2008;22(3):300-307

Agents: Neurotensin; PD149163 **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Rat; **Pump:** Not Stated; **Duration:** 7, 21 days;
ALZET Comments: Controls received mp w/ vehicle; ALZET brain infusion kit 2 used; animal info (lister hooded, 250-300 g.); cannula placement verified by histological assessment; PD149163 is an NT₁ selective analogue

P8672: E. Popp, *et al.* Time course of the hypothermic response to continuously administered neurotensin. *Neuropeptides* 2007;41(5):349-354

Agents: Neurotensin **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Rat; **Pump:** 1003D; **Duration:** Not Stated;
ALZET Comments: Controls received mp w/ vehicle; dose-response (pg 351, fig. 1); comparison of SC injections vs. mp; ALZET brain infusion kit 2 used; tolerance; peptides; animal info (Wistar-Han, male, 300-350g); "Diffusion of neurotensin into the pump was avoided by a drop of sesame oil" p. 350; "Complete surgery took about 20 min" p. 350; neurotensin is a tridecapeptide

P7131: P. Brun, *et al.* Neuropeptide neurotensin stimulates intestinal wound healing following chronic intestinal inflammation. *American Journal of Physiology Gastrointestinal and Liver Physiology* 2005;288(4):G621-G629

Agents: Neurotensin **Vehicle:** PBS; BSA; **Route:** SC; **Species:** Mice; **Pump:** 2002; **Duration:** 5 days;
ALZET Comments: Controls received mp w/ vehicle; peptides; wound healing

P5015: A. Kramer, *et al.* Regulation of daily locomotor activity and sleep by hypothalamic EGF receptor signaling. *Science* 2001;294(5551):2511-2515

Agents: Transforming growth factor- α ; Brain-derived neurotrophic factor; Vasoactive intestinal polypeptide; Peptide, histidine-isoleucine; Gastrin releasing peptide; Substance P; Neuromedin-C; Neurokinin A; Neuropeptide K; Neuropeptide Y; Somatostatin; Antrin; Cholecystokinin; Thyrotropin-releasing hormone; Neurotensin; Neuromedin N; **Vehicle:** CSF, artificial;
Route: CSF/CNS (third ventricle); **Species:** Hamster; **Pump:** 2002; **Duration:** 18,22 days;
ALZET Comments: Peptides

P4409: J.-J. Maoret, *et al.* Neurotensin and a non-peptide neurotensin receptor antagonist control human colon cancer cell growth in cell culture and in cells xenografted into nude mice. *Int. J. Cancer* 1999;80(4):448-454

Agents: Neurotensin **Vehicle:** PBS; BSA; **Route:** SC; **Species:** Mice (nude); **Pump:** Not Stated; **Duration:** 22 days;
ALZET Comments: Controls received mp w/vehicle; cancer; peptides

P6307: C. K. Rayn, *et al.* Epidermal Growth Factor and Neurotensin Induce Microvillus Hypertrophy Following Massive Enterectomy. *JOURNAL OF GASTROINTESTINAL SURGERY* 1996;1(5):467-473

Agents: Epidermal growth factor; neurotensin **Vehicle:** Saline; **Route:** SC; **Species:** Rabbit; **Pump:** Not Stated; **Duration:** 1 week;
ALZET Comments: Controls received mp w/ vehicle; replacement therapy (enterectomy); good methods p.468; peptides; post op. care (IM gentamycin; IV banamine)

P3251: A. D. Campbell, *et al.* Changes in mouse brain neurotensin receptor density following chronic infusion of neurotensin. *Peptides* 1995;16(3):501-504

Agents: Neurotensin **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice; **Pump:** Not Stated; **Duration:** 3, 7 days;
ALZET Comments: Controls received mp w/saline; peptides; loop of tubing allowed flow cessation



P2713: I. Dubuc, *et al.* Tolerance to the hypothermic but not to the analgesic effect of (D-Trp11)neurotensin during the semichronic intracerebroventricular infusion of the peptide in rats. *Peptides* 1994;15(2):303-307

Agents: Neurotensin, (D-Trp11)- **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Rat; **Pump:** 2002; **Duration:** 10 days;

ALZET Comments: controls received mp w/ saline; comparison of icv injections vs. mp; peptides; tolerance; (D-Trp11)neurotensin is a peptidase-resistant derivative of neurotensin, allowing a longer duration of effect without inactivation

P3267: L. K. Malendowicz, *et al.* Effects of prolonged administration of neurotensin, arginine-vasopressin, NPY, and bombesin on blood TSH, T3, and T4 levels in the rat. *In Vivo* 1990;4(259-262)

Agents: Neurotensin; Vasopressin, arginine; Bombesin **Vehicle:** Saline; **Route:** IP; **Species:** Rat; **Pump:** Not Stated; **Duration:** 7,8 days;

ALZET Comments: controls received mp w/saline; peptides

R0089: A. Amkraut, *et al.* Osmotic delivery of peptides and macromolecules. *Advanced Drug Delivery Reviews* 1990;4(255-276)

Agents: Atrial natriuretic factor; cholecystokinin; Granulocyte-colony stimulating factor.; glucagon; insulin; interleukin-2; interleukin-3; melatonin; nerve growth factor; neurotensin; prolactin; theophylline **Vehicle:** Not Stated; **Route:** CSF/CNS; IA (femoral); intrasplenic; IP; SC; **Species:** Not Stated; **Pump:** Not Stated; **Duration:** Not Stated;

ALZET Comments: Peptides; ALZA-authored, review of peptide delivery issues and applications; tissue perfusion (spleen)

P0783: G. E. Feurle, *et al.* Action of neurotensin on size, composition, and growth of pancreas and stomach in the rat. *Regul. Pept* 1985;13(1):53-62

Agents: Neurotensin **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 2002; **Duration:** 14 days;

ALZET Comments: controls received mp size plastic cylinders; injection vs. infusion; 2 doses of agent infused; functionality of mp verified (pump rates);stress/adverse reaction (local infection at site of implantation); peptides

P0572: S. M. Simasko, *et al.* Effect of neurotensin, substance P and TRH on the regulation of dopamine receptors in rat brain. *European Journal of Pharmacology* 1984;106(3):653-656

Agents: Neurotensin; Substance P; Thyrotropin-rel. factor **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Rat; **Pump:** Not Stated; **Duration:** 8 days;

ALZET Comments: portion of tubing connecting mp to icv cannula was externalized to allow shut off of flow; stability of agents verified; concomitant haloperidol admin.; peptides

P0512: L. Peric-Golia, *et al.* The effect of neurotensin on the concentration of cholesterol and bile acids in the guinea pig. *Lipids* 1984;19(10):749-755

Agents: Neurotensin **Vehicle:** Saline; **Route:** SC; **Species:** Guinea pig; **Pump:** Not Stated; **Duration:** 3, 5 days;

ALZET Comments: Comparison of single iv injec vs. mp infusion; release rate performance of mp verified; peptides

P0332: A. Cowan, *et al.* Defining the antinocisponsive actions of neurotensin. *Annals of the New York Academy of Sciences* 1982;400(438-439)

Agents: Morphine; Neurotensin **Vehicle:** Saline; **Route:** CSF/CNS; SC; **Species:** Rat; **Pump:** 2001; **Duration:** 1 week;

ALZET Comments: peptides