References on the Administration of Somatostatin Using ALZET® Osmotic Pumps

**R0355**: J. Morisset. Somatostatin: One of the Rare Multifunctional Inhibitors of Mammalian Species. Pancreas 2017;46(1):8-18

**ALZET Comments**: Somatostatin; SC; 2 weeks; When given to rats implanted subcutaneously (sc) with an Alzet mini-pump, somatostatin delivered at 1.5 μg∙h⁻¹ for 14 days had no effect on their weight gain. However, the infusion of a somatostatin antagonist led to a significant increase in weight gain over control; Dose (1.5 μg/hour).


**ALZET Comments**: Somatostatin analogue; Gabexate mesilate; Imipenem; Saline; SC; Rat; 2ML1; 1 week; Dose (5 mg/kg/day of somatostatin analogue, 10 mg/kg/day of gabexate mesilate, and 16.6 mg/kg/day imipenem); animal info (Eight-week-old male Fisher 344 rats weighing 250e300 g); Therapeutic indication (pancreatic fistula).

**Q3289**: M. A. Caruso, *et al.* Differential regulation of the multiple insulin and insulin receptor mRNAs by somatostatin. MOLECULAR AND CELLULAR ENDOCRINOLOGY 2014;384(1-2):126-133

**ALZET Comments**: Somatostatin, bovine; Saline; IP; Fish (trout); 29 days; Controls received mp w/ vehicle; animal info (rainbow trout, juvenile, 120g); 0.75% saline used; no stress (see pg. 128); post op. care (Neosporin); behavioral testing (food intake); diabetes.


**ALZET Comments**: Somatostatin-14-I; Saline; IP; Fish (trout); 15 days; Controls received mp w/ vehicle; functionality of mp verified by plasma levels; peptides; animal info (male, female, juvenile, rainbow trout, 58 grams).


**ALZET Comments**: Transforming growth factor-a; Brain-derived neurotrophic factor; Vasoactive intestinal polypeptide; Peptide, histidine-isoleucine; Gastrin releasing peptide; Substance P; Neuropeptide Y; Neuropeptide K; Neuropeptide Y; Somatostatin; Antrin; Cholecystokinin; Thyrotropin-releasing hormone; Neutrosensin; Neuromedin N;; CSF, artificial; CSF/CNS (third ventricle); hamster; 2002; 18-22 days; peptides.


**ALZET Comments**: Somatostatin antagonist; Saline; IP; Rat; 2ML1; 7 days; controls received mp w/ vehicle; functionality of mp verified by plasma drug levels; comparison of sc injections vs. mp; peptides; The somatostatin antagonist is cyclo-7-aminoheptanoyl-phe-d-trp-lys-thr (also known as BZL); SC injections examined pulsatile administration of the agent; pump model 2ML1 used (2001 incorrectly listed).


**ALZET Comments**: Antibody, anti-somatostatin;; PBS; CSF/CNS (dorsal hippocampus); Rat; 2002; 30 days; pumps replaced at day 14.


**ALZET Comments**: Somatostatin analog; Saline; Rat; 7 days; peptides.

ALZET Comments: Octreotide; Somatostatin; Testosterone propionate; Propylene glycol; SC; mice; 10 days; concomitant infusion of T and SMS from 2 pumps implanted simultaneously; functionality of mp verified after delivery; peptides; somatostatin analog.

ALZET Comments: Somatostatin; Substance P; Vasoactive intestinal peptide; SC; mice; 7 days; immunology; peptides.

ALZET Comments: Antibody, somatostatin; Saline; Serum, goat; SC; bird (chicken); 2002; 2 weeks; controls received mp w/ saline or goat serum; comparison of bolus inject. vs. IV inject. vs. mp infusion; immunology; peptides.

ALZET Comments: Somatostatin; Thyrotrop-rel. factor; Saline; CSF/CNS; SC; Rat; 2001; no duration posted; mp connected to cannula in ventricle; half-life; rats infused sc and icv simultaneously; stability of agents discussed; peptides.

ALZET Comments: L-362823; Somatostatin; Saline; SC; Rat; 1 week; comparison of agents effects; simulateneous admin. of pergolide mesylate; cancer hormone therapy; peptides.

ALZET Comments: Glucagon; Somatostatin; Thyroxine; SC; Rat; 2001; 2-3 days; separate pumps delivering glucagon and somatostatin were implanted simultaneously in same rat; peptides.

ALZET Comments: Somatostatin; SC; Rat; no duration posted; no comment posted.

ALZET Comments: Bombesin; Somatostatin; SC; Rat; no duration posted; Comparison of agents effects; see p416-417 for mp experiment; peptides.