

# Chengdu KaiJie Biopharm Co., Ltd.

Segment 1, Industrial Road, Dayi county, Chengdu, Sichuan, P. R. China, 611330 Tel: 86-28-88203603, Fax: 86-28-88203605 WEB: www.kjpep.com

# **About Author**

Chengdu Kaijie Biopharm Co, Ltd. (KJBP) is one of leading peptide manufacturers in Asia. With its highest capacity of production in China and the outstanding quality of peptide products, Kaijie holds a unique position.

# **Somatostatin**

# 1.1.A Epidural route

# 1.1.A.1 Pain

- a) Post-operative pain
- 1) A continuous epidural infusion of **somatostatin** 125 micrograms/hour, preceded by an epidural bolus of 250 micrograms, has been effective in treating postoperative pain in limited studies

## 1.1.B Intrathecal route

## 1.1.B.1 Pain

a) Cancer pain



# Chengdu KaiJie Biopharm Co., Ltd.

Segment 1, Industrial Road, Dayi county, Chengdu, Sichuan, P. R. China, 611330 Tel: 86-28-88203603, Fax: 86-28-88203605 WEB: www.kjpep.com

1) Intrathecal **somatostatin** 250 micrograms initially via bolus injection, followed by an infusion of 10 to 50 micrograms/hour, has been used for analgesia in patients with terminal cancer (Chrubasik et al, 1984).

#### 1.1.C Intravenous route

#### 1.1.C.1 Enterocutaneous fistula

**a)** Continuous intravenous infusion of **somatostatin** 250 micrograms/hour for up to 2 weeks has been administered to patients with external gastrointestinal fistulas.

### 1.1.C.2 Gastrointestinal hemorrhage

- a) For the treatment of esophageal varices, infusion of **somatostatin** 500 micrograms per hour for 120 hours was more effective than 250 micrograms per hour for 120 hours or than 250 micrograms per hour for 48 hours.
- **b)** In patients with nonvariceal gastrointestinal bleeding, **somatostatin** has been administered as a continuous intravenous infusion in doses of 250 micrograms/hour for 48 to 72 hours. The infusion has been preceded by an intravenous bolus injection of 250 micrograms in most studies
- c) A continuous intravenous infusion of 250 to 500 micrograms/hour for 1 to 5 days, usually with an initial intravenous bolus of 250 micrograms, has been administered to patients with bleeding esophageal varices. Continuous intravenous infusion of 250 micrograms/hour for 5 days followed by daily boluses of 250 micrograms over 2 minutes in acute variceal bleeds, was as effective as injection sclerotherapy and with fewer complications.

# 1.1. C.3 Hypotension, Postprandial; Prophylaxis

a) Somatostatin 500 micrograms/hour via continuous intravenous infusion has been effective in preventing postprandial hypotension in a patient with autonomic neuropathy

#### 1.1. C.4 Pancreatitis

a) Somatostatin 250 micrograms via intravenous bolus initially, followed by a continuous infusion of 100 micrograms/hour for 48 hours, produced beneficial effects in patients with acute pancreatitis in 1 randomized study. In one double-blind, multi-center trial, 250 micrograms/hour continuous intravenous infusion for 3 days, did not demonstrate significant benefits.

# 1.1.D Intraventricular route

#### 1.1.D.1 Pain

- a) Cancer pain
- 1) Intraventricular **somatostatin**, given as an initial bolus of 250 micrograms and followed by 10 to 25 micrograms/hour, has been employed for terminal cancer pain.

#### 1.1.E INTRAVENOUS SOLUTION PREPARATION

1) Due to its short plasma half-life, **somatostatin** is administered by continuous intravenous infusion. It has been diluted in 5% dextrose in water or normal saline. Three milligrams



# Chengdu KaiJie Biopharm Co., Ltd.

Segment 1, Industrial Road, Dayi county, Chengdu, Sichuan, P. R. China, 611330 Tel: 86-28-88203603, Fax: 86-28-88203605 WEB: www.kjpep.com

**somatostatin** were diluted in 50 milliliters 5% dextrose in water and infused every 12 hours (250 micrograms/hour) continuously via a syringe pump to treat patients with variceal bleeding.

2) There is some evidence that significant adsorption of **somatostatin** occurs when administered via polypropylene bags. The diluent in this study was normal saline. Until further data are available, this type of delivery system should be avoided.

## 2. Pediatric Dosage

#### 2.1. A Intravenous route

### 2.1. A.1 Persistent hyperinsulinemic hypoglycemia of infancy

- a) A 2-week continuous intravenous infusion of **somatostatin** (15 micrograms/hour initially, with subsequent adjustments based on maintaining the blood glucose level between 50 and 90 milligrams/deciliter (maximum, 44 micrograms/hour)), was effective in temporarily controlling hypoglycemia in a neonate with INSULIN EXCESS due to a beta-cell adenoma. Intravenous glucose infusion (1 to 4 grams/hour) was given concurrently with **somatostatin**.
- 2) **Somatostatin** administered as a continuous intravenous infusion of 1.5 micrograms/kilogram/hour for 2 days, then increased to 3 micrograms/kilogram/hour for an additional 7 days, was effective in promoting fistula closure in a premature infant with an ENTERIC FISTULA. Fistula output had remained constant in this infant after 7 days of total parenteral nutrition; the addition of **somatostatin** resulted in fistula closure after 3 days.

# 2.1. B Subcutaneous route

# 2.1. B.1 Persistent hyperinsulinemic hypoglycemia of infancy

a) Continuous subcutaneous infusion of **somatostatin** 8.3 micrograms/kilogram/hour for 8 days was reported effective in treating hypoglycemia secondary to insulin excess in a 6-month-old infant. Continuous infusion of glucagon (5.4 micrograms/kilogram/hour) was also administered, beginning on day 4 of the **somatostatin** regimen. A 90% pancreatectomy was performed after the 8-day course of stabilizing therapy.