

## Pramlintide (Symlin)

Pramlintide (Symlin) is an injectable hypoglycemic drug indicated for type 1 and 2 diabetes. As a synthetic amylin analog, pramlintide is used to supplement mealtime insulin in diabetic patients unable to maintain glucose control despite insulin therapy. Side effects of pramlintide include nausea and reactions at the injection site. While administering the medication, monitor the patient for symptoms of hypoglycemia. Since it delays the absorption of other medications, avoid giving pramlintide concurrently with other drugs.



PLAY PICMONIC

### Mechanism

#### Synthetic Amylin Analog

##### [Amber-man On-a-log](#)

Pramlintide is a synthetic amylin analog that mimics the effects of amylin. Amylin decreases postprandial levels of glucose by delaying gastric emptying and suppressing glucagon secretion. Amylin also helps decrease caloric intake by increasing the sense of satiety.

### Indications

#### Diabetes Type 1 and 2

##### [Dyed-bead-pancreas with \(1\) Wand and \(2\) Tutu](#)

In addition to caloric restriction and regular exercise, pramlintide is administered to help achieve glucose control in patients with type 1 or type 2 diabetes. As a synthetic amylin analog, the medication suppresses glucagon secretion and subsequently reduces levels of circulating glucose. In patients with type 2 diabetes, pramlintide may be used in combination with insulin, metformin, and a sulfonylurea.

#### Supplement Mealtime Insulin

##### [Meal-time with Insect-syringe](#)

As an amylin mimetic, pramlintide is used to supplement mealtime insulin in patients with diabetes who are unable to achieve glucose control despite optimal insulin therapy. Administering the pramlintide with mealtime insulin decreases postprandial glucose levels and minimizes glucose fluctuations. The medication also decreases the amount of mealtime insulin needed.

### Side Effects

#### Nausea

##### [Vomiting](#)

Nausea is a common complaint of patients taking pramlintide. Patients with type 2 diabetes experience nausea more frequently. The effects of nausea may be minimized by gradually titrating the dosage of pramlintide.

#### Skin Reactions at Injection Site

##### [Skin-suit Reacting to Injection](#)

Pramlintide is administered as a subcutaneous injection. Injection site reactions characterized as redness, swelling, or itching may occur. However, the symptoms generally resolve within a few days to weeks.

### Considerations

### **Hypoglycemia When Combined with Insulin**

#### **Hippo-glue-bottle and Insect-syringe**

Pramlintide administration alone does not cause hypoglycemia. However, when combined with insulin, pramlintide may cause severe hypoglycemia within 3 hours of dosing. Patients with type 1 diabetes are particularly at risk of developing hypoglycemia. Decreasing insulin dosage may decrease the risk. Pramlintide should not be given to patients who have hypoglycemia unawareness or with a history of poor adherence to their insulin regimen (A1c level above 7%).

### **Delayed Absorption of Oral Drugs**

#### **Oral Drugs Delayed from Absorbing-sponge**

Since pramlintide delays gastric emptying, the medication slows the absorption of oral drugs and decreases peak plasma levels. Oral contraceptives and antibiotics require high peak concentrations for maximal effectiveness. To minimize absorption problems, administer oral drugs at least 1 hour before giving pramlintide. Avoid combining pramlintide with other drugs that slow intestinal motility or nutrient absorption.