Transitioning Canine Patients with DIABETES MELLITUS TO VETSULIN® (porcine insulin zinc suspension)

1. Is the dog adequately regulated on its current insulin?
   - Yes
   - No

2. Veterinarian/owner wants to try Vetsulin SID
   - Yes
   - No

3. Switching a dog from a BID dose of another insulin product to Vetsulin SID
   - Discontinue evening dose of the other insulin.
   - The next morning, administer the same number of units of Vetsulin as would have been given of the other insulin (eg, a dog receiving 20 IU insulin BID would be given 20 IU Vetsulin SID). However, twice-daily dosing may be necessary for optimal control.

3. Switching a dog from a BID dose of another insulin product to Vetsulin BID
   - Discontinue the other insulin.
   - Use an initial dose of Vetsulin that is 75% of the previous insulin dose (eg, a dog receiving 20 IU insulin BID would be given 15 IU Vetsulin BID).

3. Switching an inadequately regulated dog from another insulin to Vetsulin therapy
   - Discontinue the other insulin.
   - Weight dog.
   - If the dog’s body weight in kilograms (kg) is a fraction, round down the body weight (eg, a 12.9-kg dog would be dosed as a 12-kg dog). If the dog is grossly overweight, use the optimal body weight to calculate the initial Vetsulin dose.
   - Establish the starting dose based on 0.5 IU insulin/kg body weight.
   - Administer dose once daily concurrently with, or right after a meal.

4. Evaluate dog 5–7 days after starting Vetsulin
   - Has the dog’s water drinking increased, decreased, or stayed the same since your last visit?
   - Has the frequency of your dog urinating changed since your last visit? Has the volume of urine changed?
   - How is your dog’s activity level? Does his/her activity seem normal? Or does he/she seem sluggish or too active?
   - When you go for walks, does your dog tire easily?

5. Generate serial blood glucose curve
   - Ask owner about changes in clinical signs
     - Has there been any significant change in weight? (Weight loss is suggestive of underdosing; weight gain is suggestive of adequate dosing or overdosing.)

6. If SID dosing, what is the duration of insulin effect?
   - Blood glucose begins to increase above 200–250 mg/dL <1 4–18 hours after SID dose
   - Reevaluate dog in 5–7 days

   - Blood glucose begins to increase above 300–250 mg/dL >1 4–16 hours after SID dose
   - Continue to administer Vetsulin SID
   - Reevaluate dog in 2–4 months

General Recommendations:
1. The dose will most likely need to be adjusted until adequate regulation is achieved and may require future adjustments based on changes in weight or medical history.
2. Dose adjustments should be based on clinical signs and evaluation of a serial blood glucose curve.
3. Allow 5–7 days between dose changes unless evidence of hypoglycemia.
4. Dose adjustments should be in increments of 10% of the current dose.
5. Educate the client on the need for and importance of using U-40 syringes with Vetsulin.
6. Discard open Vetsulin 42 days after first vial puncture.
**vetsulin®** (porcine zinc suspension insulin)
120267.83

**NADA # 127-26**. Approved by USDA

**CAUTION**

This drug is for use on or under the direction of a licensed veterinarian.

**DESCRIPTION**

vetsulin® is a sterile aqueous zinc suspension of purified porcine insulin. Mixed in a 7:3 zinc:insulin ratio of 1000 units/mL. Each mL contains:

- Insulin porcine (anterior) 700 units/mL
- Zinc chloride (ZnCl₂) 40 units/mL
- Methylparaben (preservative) 1.0 mg

vetsulin® is adapted with hypoallergenic and azo-free red dyes.

**INDICATION**

vetsulin® is used in cats as an adjunct in the treatment of hypoglycemia associated with diabetes mellitus to achieve and maintain a safe and realistic blood glucose level. 

**DOSE AND ADMINISTRATION**

Use of a syringe of adequate insulin and adjustable insulin activity and adjust the dose by oral strategy until adequate glycemic control is achieved. 

**PRECAUTIONS**

Use in puppies and kittens:

- Use in puppies and kittens:
- Use in dogs:

**DRUG INTERACTIONS**

Animals presenting with severe ketoacidosis, anorexia, lethargy, and/or vomiting should be stabilized with short-acting insulin and appropriate supportive therapy with the condition stabilized. As with all insulin products, until patient monitoring and titration of insulin activity for hypoglycemia and hyperglycemia are essential to achieve adequate glycemic control and prevent associated complications. Do not exceed a total endogenous insulin plus insulin given to achieve adequate activity. Insulin therapy may need to be adjusted or discontinued if necessary.

**REPRODUCIVE SAFETY**

The safety and reproductive of vetsulin® in breeding, pregnant, and lactating dogs and cats has not been evaluated.

**HOW SUPPLIED**

vetsulin® is available in 10 mL vials. For additional information about adverse drug experience reporting for veterinary products, call the Animal Health Information Center at 1-800-224-5318.

**REFERENCES**