



THE UNIVERSITY  
OF QUEENSLAND  
AUSTRALIA

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**CATS**

**General information**

**BASIC INFORMATION**

- Glargine (Lantus) is readily available from most pharmacies with a script, is not licensed for use in cats. Detemir (Levemir) can be used instead of glargine using the same dosing protocols.
- Glargine must not be diluted or mixed with anything because the prolonged action is dependent on its pH.
- Insulin glargine should be kept refrigerated to prolong its life.
- Insulin glargine has a shelf-life of 4 weeks once opened and kept at room temperature. Opened vials stored in the refrigerator can be used for up to 6 months.
- Discard vial immediately if there is any discolouration. Bacterial contamination and precipitation associated with pH change can cause cloudiness.
- If using an insulin pen, the manufacturer recommends that the pen and cartridge be kept at room temperature and not refrigerated. This is to reduce the changes in volume of insulin dispensed associated with changes in temperature.
- When performing a blood glucose curve, samples probably only need to be taken every 3-4 hrs over 12 hrs in many cats (i.e. 0h [before morning insulin], 4h, 8h and 12h after morning insulin or 0, 3, 6, 9, 12h).
- Dose changes should be made based on pre-insulin glucose concentration, nadir (lowest) glucose concentration, daily water drunk, and urine glucose concentration.
- Better glycemic control is achieved with twice daily dosing rather than once daily.
- Some cats that have been treated with other insulin will go into remission, usually within 1-4 months after instituting glargine. Remission in cats that have been treated for more than 2 years is extremely rare.
- Remission is likely to occur if the nadir glucose is in the normal range and pre-insulin blood glucose is less than 216 mg/dL (12 mmol/l). However, for some cats to achieve remission, the dose needs to be very gradually reduced, tapering off to ½ U SID before being withdrawn. Too rapid withdrawal often requires restabilizing at a higher dose for some weeks.

**INDICATIONS FOR USING GLARGINE**

- All newly diagnosed diabetic cats (to increase chance of remission).
- Poor controlled or unstable diabetic cats (glargine's long duration of action is likely to benefit these cats).
- When SID dosing is desired or demanded (it is important to note that better glycemic control and higher remission rates will be obtained with BID dosing. SID dosing only provides similar control and remission rates to lente BID).
- Ketoacidosis - combined with regular insulin IM or IV, or glargine can be used instead of regular insulin IM or IV simultaneously with subcutaneously administered glargine
- When corticosteroid administration is required in cats in remission. Similarly in cats at high risk of developing clinical signs of diabetes with corticosteroid administration.