

TABLE 4.1
Insulin Products for Dogs

Insulin Product	Product Description	Brand Name (Manufacturer)	Veterinary FDA Approval Status	Peak Action (Nadir) and Duration of Effect	Starting Dose	Concentration
Intermediate-Acting Insulin						
Lente	Porcine insulin zinc suspension	Vetsulin (Merck Animal Health)	Approved	Nadir 1–10 hr. ^a Duration 10–24 hr. ^a	0.25–0.5 U/kg <i>q</i> 12 hr. Manufacturer recommended starting dose: 0.5 U/kg <i>q</i> 24 hr.	U-40
					Comments: - Commonly used in dogs; injection pens (in either 0.5 U or 1 U increments) are available. - Shaking insulin bottle is required until the suspension appears homogeneously white and frothy.	
Glargine U-100	Recombinant DNA origin human insulin	Lantus (Sanofi) Basaglar (Lilly) Semglee (Viatris & Biocon Biologics) Glargine yfgn (Viatris & Biocon Biologics) Rezvoglar (Lilly)	Not approved	Nadir 6–10 hr. ^b Duration 12–20 hr. ^b	0.3 U/kg <i>q</i> 12 hr. ^c 0.25–0.5 U/kg <i>q</i> 12 hr. ^b	U-100
					Comments: Potential option in dogs.	
Neutral protamine Hagedorn (NPH)	Recombinant DNA origin human insulin	Novolin N (Novo Nordisk) Humulin N (Lilly)	Not approved	Nadir 0.5–8.5 hr. ^d Duration 4–10 hr. ^d	0.25–0.5 U/kg <i>q</i> 12 hr. ^d	U-100
Long-Acting Insulin						
Protamine zinc insulin (PZI)	Recombinant DNA origin human insulin	ProZinc (Boehringer Ingelheim)	Approved	Nadir 8–12 hr. ^d	0.25–0.5 U/kg <i>q</i> 12 hr. ^d Manufacturer recommended dose: 0.5–1 U/kg <i>q</i> 24 hr. ^e	U-40
					Comments: - Once-daily dosing in dogs is FDA approved. Can have a prolonged duration of action in dogs, which requires consideration of starting only once-daily administration or closely monitoring initial insulin response with a CGM to minimize the risk of clinical hypoglycemia and/or rebound hyperglycemia.^f - Some clinicians recommend a starting dose for new diabetics of 0.25 U/kg <i>q</i> 12 hr, with 0.5 U/kg <i>q</i> 12 hr reserved for challenging diabetics.	

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TABLE 4.1, CONTINUED
Insulin Products for Dogs

Insulin Product	Product Description	Brand Name (Manufacturer)	Veterinary FDA Approval Status	Peak Action (Nadir) and Duration of Effect	Starting Dose	Concentration
Basal Insulin						
Degludec	Recombinant DNA origin human insulin	Tresiba (Novo Nordisk)	Not approved	Peakless	0.5 U/kg q 24 hr ^a	U-100, U-200 U-200 requires administration using the manufacturer provided pre-filled insulin pen, and is best used in large breed dogs due to the pen's dosing increments of 2 units.
Comments: • Can be considered as a first option insulin in dogs. • Does not need to be given in association with a meal. • Administration q 12 hr may be needed in some dogs and may reduce inter-day glycemic variability.^h • Unbranded generic available from manufacturer.						
Glargine U-300	Recombinant DNA origin human insulin	Toujeo (Sanofi)	Not approved	Peakless	0.5 U/kg q 24 hr ⁱ	Requires administration using the manufacturer provided pre-filled insulin pen in increments of 1 unit.
Comments: • Can be considered as a first option insulin in dogs. • Does not need to be given in association with a meal. • Administration q 12 hr may be needed in some dogs and may reduce inter-day glycemic variability.^h • Unbranded generic available from manufacturer.						

BG, blood glucose; CGM, continuous glucose monitor; NPH, neutral protamine Hagedorn; PZI, protamine zinc insulin; U, unit.

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The 2026 AAHA Diabetes Management Guidelines for Dogs are available at aaha.org/diabetes-management-dogs

These guidelines were prepared by a Task Force of experts convened by the American Animal Hospital Association (AAHA) and were subjected to a formal peer-review process. This document is intended as a guideline only, not an AAHA standard of care. These guidelines and recommendations should not be construed as dictating an exclusive protocol, course of treatment, or procedure. Variations in practice may be warranted based on the needs of the individual patient, resources, and limitations unique to each individual practice setting. ©2026 AAHA.

