



	SERVICES					
Action		Insulin Name	Onset	Peak	Effective Duration	Considerations
Bolus	Rapid Acting Analogs	Aspart (Fiasp)	2.5 min	~ 60 min	3 - 5 hrs	Bolus insulin lowers after-meal glucose. Post meal BG reflects efficacy. Basal insulin
		Aspart (Novolog)	5 - 15 min	30 - 90 min	< 5 hrs	
		Lispro (Humalog)*, Admelog				
		Glulisine (Apidra)				
	Short Acting	Regular*	30 - 60 min	2 - 3 hrs	5 - 8 hrs	hrs controls BG between meals and
Basal	Intermediate	NPH	2 - 4 hrs	4 - 10 hrs	10 - 16 hrs	BG reflects efficacy. Side effects: hypoglycemia, weight gain. Typical dosing range: 0.5-1.0 units/ kg body wt/day.
	Long Acting	Detemir (Levemir)	3 - 8 hrs		6 - 24 hrs	
		Glargine (Lantus*/ Basaglar)	2 - 4 hrs	No peak	20 - 24 hrs	
		Degludec (Tresiba)*	~ 1 hr		< 42 hrs	
Basal + Bolus	Intermediate + short	Combo of NPH + Reg 70/30 = 70% NPH + 30% Reg 50/50 = 50% NPH + 50% Reg	30 - 60 min	Dual	10 - 16 hrs	
	Intermediate + rapid	Novolog® Mix - 70/30 Humalog® Mix - 75/25 or 50/50	5 - 15 min	peaks		
		Ryzodeg Mix 70/30 (degludec/aspart)			24 hrs	

<sup>\*</sup>Concentrated insulins available - see next page for details.

Name/Concentration	Insulin/Action	Considerations		
Humulin Regular U-500 • 500 units insulin/mL • KwikPen or Vial	Regular Bolus / Basal	5 xs concentration of u-100 insulin. Indicated for pts taking 200+ units insulin daily. 3 mL Pen – Once opened, good for 28 days. 20 mL Vial – Once opened, good for 40 days. Use designated U-500 insulin syringe.		
Humalog KwikPen U-200	Lispro (Humalog)	2 xs concentration of u-100 insulin.		
200 units insulin/mL	Bolus	3 mL Pen. Once opened, good for 28 days		
Toujeo Solostar U-300 Pen	Glargine (Lantus)	3 xs concentration of u-100 insulin		
300 units insulin/mL	Basal	1.5 mL or 3 mL (Max Solostar) Pen.		
Tresiba FlexTouch U-200 Pen	Degludec (Tresiba)	2 xs concentration of u-100 insulin		
200 units insulin/mL	Ultra basal	3 mL Pen. Once opened, good for 8 weeks		

All concentrated insulin pens and the U-500 syringe automatically deliver correct dose (in less volume). No, conversion, calculation or adjustments required. For example, if order reads 30 units, dial the concentrated pen to 30 units or draw up 30 units on the U-500 syringe. Important – never withdraw concentrated insulin from the pen using a syringe.

## **Inhaled Insulin**

Action	Insulin Name	Dose Range	Onset	Peak	Duration	Considerations
Bolus – Rapid-acting	Afrezza Inhaled regular human insulin	4, 8, and 12 unit cartridges before meals	~ 12 min	35 - 45 mins	1.5 - 3 hrs	Assess lung function. Avoid in lung disease — bronchospasm risk. Side effects: hypo, cough, throat irritation.