

Insulin Comparison Chart

Insulin Name	When does it start working? (onset)	When will the effect be the greatest? (peak)	How long will it lower blood glucose? (duration)	Notes for Use	Cost estimate
Rapid Acting					
Lispro (Humalog™)	<15 minutes	0.5-3 hours*	3-5 hours	If mixing with NPH, rapid acting insulin should be drawn into syringe first. Mixture should be given immediately to avoid effects on peak action.	\$96 (10 ml vial) \$183 (5x3 ml pen cartridges)
Aspart (Novolog™)	<15 minutes	0.5-3 hours*	3-5 hours		\$102 (10 ml vial) \$205 (5x3 ml pen cartridges)
Glulisine (Apidra™)	<15 minutes	0.5-3 hour*	3-5 hours		\$96 (10 ml vial) \$184 (5x3 ml pen cartridges)
Short Acting					
Regular (Novolin R™ or Humulin R™)	0.5-1 hour	2-4 hours	4-8 hours	May be mixed with NPH in same syringe. Mixing order should be the clear regular drawn up first, then the cloudy NPH (ie “clear to cloudy”).	\$53 (10 ml vial Humulin or Novolin) \$121 (5x3 ml Novolin pen cartridges) \$89 (5x3 ml Innolet cartridges)
Intermediate Acting					
NPH (Novolin N™ or Humulin N™)	2-4 hours	4-10 hours	10-18 hours	Available as pen or in vial to be used with syringe.	\$52 (10 ml vial Humulin or Novolin) \$121 (5x3 ml pen cartridges) \$91 (5x3 ml Innolet cartridges)
Long Acting					
Glargine (Lantus™)	4-6 hours	Same action throughout the day	24 hours	Do not mix with other insulins. Available as pen or in vial. Duration (clinical trial data): 6 hrs (0.1 U/kg), 12 hrs (0.2 U/kg), 20 hrs (0.4 U/kg), 23 hrs (0.8 U/kg and 1.6 U/kg)	\$97 (10 ml vial) \$177 (5x3 ml Solostar pen cartridges)
Detemir (Levemir™)	2-3 hours	6-8 hours	Dose-dependent 5.7-23.2 hours		\$95 (10 ml vial) \$182 (5x3 ml pen cartridges)
Combinations					
Humulin or Novolin 70/30	0.5-1 hour	2-10 hours	10-18 hours	70% NPH +30% regular insulin. Insulin action includes 2 peaks (1 from each formulation).	\$54 (10 ml vial) \$135 (5x3 ml pen cartridges) \$94 (5x3 ml Innolet cartridges)
Novolog Mix 70/30 Humalog Mix 75/25 or 50/50	<15 minutes	1-2 hours	10-18 hours	Novolog Mix: aspart protamine 70% + aspart 30% Humalog mix: 75/25=75% lispro protamine + 25% lispro 50/50=50% lispro protamine + 50% lispro Insulin action includes 2 peaks (1 from each formulation).	Humalog Mix 75/25: \$102 (10 ml vial), \$174 (5x3 ml pen cartridges)

*variable onset simplified to 0.5-3 for ease of learning. Onset may vary between products for each patient.

Information based on manufacturer prescribing information and clinical studies. Price information based on Drugstore.com (if available).
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