














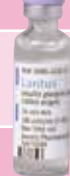







	Insulin	Manufacturer	Onset (approximately)	Peak (approximately)	Duration (approximately)		Room Temperature Storage Range (59°–86° F)	Need to Roll Briskly 10+ Times?	Cartridge Sizes	Pens That Fit the Cartridges
RAPID ACTING	Humalog® Vial (insulin lispro injection, USP [rDNA origin]) 	Eli Lilly and Company	15–30 minutes	0.5–2.5 hours	5 hours or less		Up to 28 days	No	N/A	N/A
	Humalog® Cartridge (insulin lispro injection, USP [rDNA origin])	Eli Lilly and Company	15–30 minutes	0.5–3.0 hours	5 hours or less		Up to 28 days ^c	No	3 mL	HumaPen® Luxura™ HD
	Humalog® Junior KwikPen® [insulin lispro injection 100 units/mL] 	Eli Lilly and Company	15–30 minutes	0.5–3.0 hours	5 hours or less		Up to 28 days ^c	No	3 mL	HumaPen® Luxura™ HD
	Humalog® KwikPen™ (insulin lispro injection, USP [rDNA origin])	Eli Lilly and Company	15–30 minutes	0.5–3.0 hours	5 hours or less		Up to 28 days ^c	No	N/A	N/A
	Humalog® KwikPen™ U-200 	Eli Lilly and Company	15–30 minutes	0.5–3.0 hours	5 hours or less		Up to 28 days ^c	No	N/A	N/A
	Lyumjev™ Vial (insulin lispro-aabc injection 100 units/m), U-100 KwikPen, U-200 KwikPen 	Eli Lilly and Company	15–20 minutes (Vial)	1.0–3.0 hours (Vial)	5 hours or less		Up to 28 days ^c	No	N/A	N/A
	Afrezza® (Insulin human) Inhalation Powder 	MannKind	< 15 minutes	12–15 minutes	180 minutes		Up to 10 days ^c	No	4 Unit, 8 Unit, 12 Unit	N/A
	NovoLog® Vial Insulin aspart (rDNA origin) injection 	Novo Nordisk	34 minutes	1–3 hours	3–5 hours		Up to 28 days ^c	No	N/A	N/A
	NovoLog® PenFill® Insulin aspart (rDNA origin) injection 	Novo Nordisk	10–20 minutes	1–3 hours	3–5 hours		Up to 28 days	No	3 mL	NovoPen Echo
	NovoLog® FlexPen (prefilled) 	Novo Nordisk	10–20 minutes	1–3 hours	3–5 hours		Up to 28 days ^c	No	3 mL	N/A
	Admelog® Vial 	Sanofi	15– 30 minutes	2 hours	<7 hours		Up to 28 days	No	NA	N/A
SHORT ACTING	Apidra® Vial (insulin glulisine [rDNA origin] injection) 	Sanofi	34 minutes	60–90 minutes	<5 hours		Up to 28 days	No	N/A	N/A
	Apidra® SoloStar® (prefilled) 	Sanofi	34 minutes	60–90 minutes	<5 hours		Up to 28 days ^c	No	N/A	N/A
	Humulin® R (Regular insulin human injection, USP [rDNA origin]) 	Eli Lilly and Company	30–60 minutes	2–4 hours	5–8 hours		Up to 31 days ^c	No	N/A	N/A
INTERMEDIATE ACTING	Humulin® R U-500 insulin human injection (500 units/mL, 20 mL vial) KwikPen®(insulin human injection) 500 units/mL 	Eli Lilly and Company	30–45 minutes	Peaks between 2 to 4 hours with 50 unit dose	Up to 24 hours		Up to 40 days	No	N/A	N/A
	Novolin® R Vial (Regular human insulin) 	Novo Nordisk	30 minutes	1.5–3.5 hours	8 hours		Up to 42 days below 77	No	N/A	N/A
INTERMEDIATE ACTING	Humulin® N Vial (NPH human insulin [rDNA origin] isophane suspension)	Eli Lilly and Company	1–2 hours	2–8 hours	14–24 hours		Up to 31 days	Rotate between hands and invert	N/A	N/A
	Humulin® N KwikPen® (prefilled) (NPH human insulin [rDNA origin] isophane suspension)	Eli Lilly and Company	1–2 hours	2–8 hours	14–24 hours		Up to 14 days ^c	Yes	N/A	N/A
	Novolin® N Vial (NPH human insulin isophane)	Novo Nordisk	1.5 hours	4–12 hours	24 hours		Up to 42 days below 77	Yes	N/A	N/A

	Insulin	Manufacturer	Onset (approximately)	Peak (approximately)		Duration (approximately)	Room Temperature Storage Range (59°–86° F)	Need to Roll Briskly 10+ Times?	Cartridge Sizes	Pens That Fit the Cartridges
	BASAGLAR® (insulin glargine injection 100 units/mL)	Eli Lilly and Company	1 hour	No pronounced peak ^b		24 hours	Up to 28 days	No	N/A	N/A
LONG ACTING	Tresiba® (insulin degludec injection) FlexTouch U100 and U200, Novo Nordisk, 1 hour	Novo Nordisk	1.6 hours	No pronounced peak ^b		Beyond 42 hours	Up to 56 days	No	3 mL	N/A
	Levemir® Vial (insulin detemir [rDNA origin] injection)	Novo Nordisk	1.6 hours	No pronounced peak ^b		Up to 24 hours	Up to 42 days	No	N/A	N/A
	Levemir® FlexTouch®	Novo Nordisk	1.6 hours	No pronounced peak ^b		Up to 24 hours	Up to 42 days ^c	No	3 mL	N/A
	Xultophy® 100/3.6 (Insulin degludec and liraglutide) pen in 1-unit increments	Novo Nordisk	Several hours after injection	Works evenly over 24 hours		24 hours	21 days	No	N/A	N/A
	Lantus® Vial (insulin glargine injection) 100 Units/mL	Sanofi	1.1 hours	No pronounced peak		24 hours	Up to 28 days	No	N/A	N/A
	Lantus® SoloStar® (insulin glargine injection) 100 Units/mL	Sanofi	1.5 hours	No pronounced peak		24 hours	Up to 28 days ^c	No	N/A	N/A
	Soliqua 100/33 insulin glargine U100 and lixisenatide SoloStar® pen	Sanofi	Several hours after injection	Works evenly over 24 hours		24 hours	28 days	No	N/A	N/A
	Toujeo® SoloStar® (insulin glargine injection) 300 Units/mL	Sanofi	6 hours	No pronounced peak		24 hours	Up to 56 days ^c	No	N/A	N/A
	Toujeo® Max SoloStar®	Sanofi	6 hours	No pronounced peak		24 hours	Up to 56 days ^c	No	N/A	N/A
INTERMEDIATE/RAPID ACTING	Humalog® Mix 50/50™ Vial (50% insulin lispro protamine suspension, 50% insulin lispro injection [rDNA origin])	Eli Lilly and Company	6 hours	No pronounced peak		24 hours	Up to 56 days ^c	No	N/A	N/A
	Humalog® Mix 50/50™ KwikPen™ (50% insulin lispro protamine suspension, 50% insulin lispro injection [rDNA origin]) *	Eli Lilly and Company	15–30 minutes	0.5–3 hours		14–24 hours	Up to 10 days ^c	Roll between hands and invert	N/A	N/A
	Humalog® Mix 75/25™ Vial (75% insulin lispro protamine suspension, 25% insulin lispro injection [rDNA origin])	Eli Lilly and Company	15–30 minutes	0.5–2.5 hours		14–24 hours	Up to 28 days	Yes	N/A	N/A
	Humalog® Mix 75/25™ KwikPen™ (prefilled) (75% insulin lispro protamine suspension, 25% insulin lispro injection [rDNA origin]) *	Eli Lilly and Company	15–30 minutes	0.5–2.5 hours		14–24 hours	Up to 10 days ^c	Yes	N/A	N/A
	NovoLog® Mix 70/30 Vial® (70% insulin aspart protamine suspension/30% aspart)	Novo Nordisk	10–20 minutes	2.4 hours		Up to 24 hours	Up to 28 days ^c	Yes	N/A	N/A
	NovoLog® Mix 70/30 FlexPen® 70% insulin aspart protamine suspension/30% aspart insulin injection, (rDNA origin)	Novo Nordisk	10–20 minutes	2.4 hours		Up to 24 hours	Up to 14 days ^c	Yes	3 mL	N/A
INTERMEDIATE/SHORT ACTING	Humulin® 70/30 Vial (70% human insulin isophane suspension, 30% human insulin injection [rDNA origin])	Eli Lilly and Company	30–90 minutes	1.5–6.5 hours		18–24 hours	Up to 31 days	Yes Carefully shake/rotate	N/A	N/A
	Humulin® 70/30 KwikPen™ (prefilled) (70% human insulin isophane suspension, 30% human insulin injection [rDNA origin]) *	Eli Lilly and Company	30–90 minutes	1.5–6.5 hours		18–24 hours	Up to 10 days ^c	Yes	N/A	N/A
	Novolin® 70/30 Vial® (70% NPH/30% Regular)	Novo Nordisk	30 minutes	2–12 hours		24 hours	Up to 42 days below 77	Yes	N/A	N/A