

INSULINS

Preparation	Brand		Route	Onset (mins)	Peak (hrs)	Duration (hrs)	Source
RAPID-ACTING							
insulin	Afrezza ¹	℞	oral inh	12	0.5–1	1.5–4.5	human
insulin aspart	Fiasp ²	℞	SC, IV ⁴ , CSII	2.5	1.5–2	5–7	human
	Novolog ²	℞	SC, IV ⁴ , CSII	10–20	1–3	3–5	human
insulin glulisine	Apidra ³	℞	SC, IV ⁴ , CSII	≤15	1	2–4	human
insulin lispro	Admelog ³	℞	SC, IV ⁴ , CSII	≤15	2	<6	human
	Humalog ³	℞	SC, IV ^{4,5} , CSII ⁵	≤15	0.5–1.5	3–5	human
insulin lispro-aabc	Lyumjev ³	℞	SC, IV ⁴	15–17	2–2.9	4.6–7.3	human
SHORT-ACTING							
insulin regular	Humulin R U-100 ¹	OTC	SC, IV ⁴	30	2–4	6–8	human
	Humulin R U-500 ¹	℞	SC	30	4–8	24	human
	Novolin R ²	OTC	SC, IV ⁴	30	1.5–2.5	8	human
INTERMEDIATE-ACTING							
insulin isophane suspension (NPH)	Humulin N ¹	OTC	SC	60–120	6–12	18–24	human
	Novolin N ²	OTC	SC	60–120	4–12	up to 24	human
SHORT- AND INTERMEDIATE-ACTING MIXTURES							
insulin aspart protamine/insulin aspart	Novolog Mix 70/30 ²	℞	SC	10–20	1.8–3.6	up to 24	human
insulin isophane suspension (NPH)/insulin regular	Humulin 70/30 ¹	OTC	SC	30–90	1.5–6.5	18–24	human
	Novolin 70/30 ²	OTC	SC	30	2–12	up to 24	human
insulin lispro protamine/insulin lispro	Humalog Mix 50/50 ³	℞	SC	≤15	1–5	11–22	human
	Humalog Mix 75/25 ³	℞	SC	≤15	1–6	13–22	human
LONG-ACTING							
insulin degludec	Tresiba ²	℞	SC	60	none	≥42	human
insulin detemir	Levemir ²	℞	SC	60	none	up to 24	human
insulin glargine	Basaglar ³	℞	SC	60	none	≥24	human
	Lantus ³	℞	SC	60	none	≥24	human
	Semglee ⁶	℞	SC	varies	none	≥24	human
	Toujeo ³	℞	SC	360	none	24–120	human

NOTES

Key: CSII = continuous subcutaneous insulin infusion; inh = inhalation; IV = intravenous infusion; SC = subcutaneous inj

¹Recombinant (using *E. coli*)

²Recombinant (using *S. cerevisiae*)

³Recombinant human insulin analogue (using *E. coli*)

⁴IV to be used in a clinical setting under proper medical supervision

⁵IV and CSII administration for Humalog U-100 only.

⁶Recombinant human insulin analogue (using *P. pastoris*)

The time course of action of insulin and insulin analogs may vary considerably in different individuals or within the same individual. All times are approximate. The parameters of insulin activity (time of onset, peak time and duration) should be considered only as general guidelines. Onset for injectable formulations is always for the SC route. Injectable insulins listed are available in a concentration of 100Units/mL; Humulin R, in a concentration of 500Units/mL for SC injection only, is available by prescription from Lilly for insulin resistant patients who are hospitalized or under close medical supervision.

Not an inclusive list of medications and/or dosing instructions. Please see drug monograph at www.eMPR.com and/or contact company for full drug labeling.

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