

## Appendix 1. Types of insulin available

Type	Brand name	Manufacturer	Nature
<b>Mealtime or prandial insulins</b>			
<b>Ultra rapid-acting (onset in 5–10 minutes, peak at 30 minutes, duration for 3.5–4 hours)</b>			
Faster insulin aspart	FiAsp	Novo Nordisk	Analogue
<b>Rapid-acting (onset in 15–20 minutes, peak at one hour, duration for 3.5–4.5 hours)</b>			
Insulin lispro	Humalog	Lilly	Analogue
Insulin aspart	NovoRapid	Novo Nordisk	Analogue
Insulin glulisine	Apidra	Sanofi	Analogue
<b>Short-acting (onset in ~1 hour, peak at two to five hours, duration for six to eight hours)</b>			
Neutral	Actrapid	Novo Nordisk	Human
	Humulin R	Lilly	Human
<b>Basal insulins</b>			
<b>Intermediate-acting</b>			
Isophane	Humulin NPH	Lilly	Human
	Protaphane	Novo Nordisk	Human
Insulin detemir Onset in three to four hours, peak at three to eight hours, duration for 20–24 hours	Levemir	Novo Nordisk	Analogue
Insulin glargine (U100) Onset in one to two hours, flat, duration for 18–24 hours	Optisulin	Sanofi	Analogue
	Semglee	Alphapharm	Analogue
Insulin glargine (U300) Onset in one to two hours, flat, duration for 24–36 hours	Toujeo	Sanofi	Analogue
<b>Premixed insulins</b>			
Lispro 25%/lispro protamine 75% Onset in 15–20 minutes, peak at one hour, duration for 14–24 hours	Humalog Mix 25	Lilly	Analogue
Lispro 50%/lispro protamine 50% Onset in 15–20 minutes, peak at one hour, duration for 14–24 hours	Humalog Mix 50	Lilly	Analogue

Type	Brand name	Manufacturer	Nature
Insulin aspart 30%/insulin aspart protamine 70% Onset in 15–20 minutes, peak at one hour, duration for 14–24 hours	NovoMix 30	Novo Nordisk	Analogue
Neutral 30%/isophane 70% Onset in one to two hours, peak at two to five hours, duration for 12–18 hours	Humulin 30/70	Lilly	Human
	Mixtard 30/70	Novo Nordisk	Human
Neutral 50%/isophane 50% Onset in one to two hours, peak at two to five hours, duration for 12–18 hours	Mixtard 50/50	Novo Nordisk	Human
<b>Insulin co-formulation</b>			
Insulin degludec 70% and insulin aspart 30% Onset in 5–20 minutes, peak at one hour, duration for 36–48 hours	Ryzodeg 70/30	Novo Nordisk	Analogue
<p>Ultra-rapid acting insulin should be administered from up to two minutes before a meal, or at the start of a meal, or up to 20 minutes after starting a meal.</p> <p>Rapid-acting, pre-mixed and co-formulated insulin should be administered 15 minutes prior to a meal.</p> <p>Short-acting insulin should be administered 20–30 minutes prior to a meal.</p> <p>Intermediate- and long-acting basal insulins can be given irrespective of a meal.</p>			