

Appendix 2 Attributes of the main types of insulins: group, onset of action, peak (if any) duration of action and role glycaemic control

Type of insulin & (brand names)	Onset	Peak	Duration	Role in blood glucose management
Rapid-Acting Insulins				<p>These cover insulin needs for meals eaten at the same time as the injection.</p> <p>This type of insulin is used with longer-acting insulin.</p>
Lispro (Humalog)	15-30 min.	30-90 min	3-5 hours	
Aspart (NovoRapid)	10-20 min	40-50 min	3-5 hours	
Glulisine (Apidra)	20-30 min	30-90 min	1-2½ hours	
Short-Acting Insulins				<p>Short-acting insulin covers insulin needs for meals eaten within 30-60 minutes</p>
Regular (R) Humulin or Actrapid	30-60 min	2-5 hours	5-8 hours	
Intermediate-Acting Insulins				<p>Intermediate-acting insulin covers insulin needs for about half the day or overnight.</p> <p>This type of insulin is often combined with rapid- or short-acting insulin.</p>
NPH	60-12 min	4-12 hours	18-24 hours	
Long-Acting Insulins				<p>Long-acting insulin covers insulin needs for about 1 full day.</p> <p>This type of insulin is often combined, when needed, with rapid- or short-acting insulin.</p>
Glargine (Lantus)	60-90 min	No peak time	20-24 hours	
Detemir (Levemir)	60-90 min	6-8 hours	Up to 24 hours	