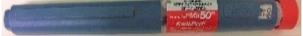


Category	Appearance	Insulin brand name (active ingredient name) 100 units/mL unless otherwise stated	When to administer
Ultra-rapid acting~	Appearance	 Fiasp® (faster-acting insulin aspart)#^	immediately before meals
Rapid Acting~	Clear	 NovoRapid® (insulin aspart)#^  Apidra® (insulin glulisine)^  Humalog® U200 (insulin lispro) <b>200 units/mL (high concentration)</b>  Humalog® (insulin lispro)^	immediately before meals
Short acting~	Clear	 Actrapid® (insulin neutral)^  Humulin® R (insulin neutral)^ Insuman® Infusat (insulin neutral): available via SAS	up to 30 minutes before meals
Intermediate acting~	Cloudy	 Humulin® NPH (insulin isophane)^  Protaphane® (insulin isophane)^  Protaphane® Innolet® (insulin isophane)	ONCE or TWICE daily with/without food
Mixed rapid acting and intermediate acting~	Cloudy	 NovoMix® 30 (insulin aspart 30% + insulin aspart protamine 70%)*  Humalog® Mix25 (insulin lispro 25% + insulin lispro protamine 75%)*  (Less commonly used) Humalog Mix50® (insulin lispro 50% + insulin lispro protamine 50%)*	ONCE or TWICE daily immediately before meals
Mixed short acting and intermediate acting~	Cloudy	 Humulin® 30/70 (insulin neutral 30% + insulin isophane 70%)^  Mixtard® 30/70 (insulin neutral 30% + insulin isophane 70%)  Mixtard® 30/70 Innolet® (insulin neutral 30% + insulin isophane 70%) Other less commonly used product: Mixtard 50/50® (insulin neutral 50% + insulin isophane 50%) cartridge	ONCE or TWICE daily up to 30 minutes before meals
Ultra long acting with rapid acting~	Clear	 Ryzodeg® 70/30 (insulin degludec 70% + insulin aspart 30%)* Note: the order of insulins in this product are expressed differently to mixed insulin products (in reverse order)	ONCE or TWICE daily immediately before meals
Long acting	Clear	 Levemir® (insulin detemir)*	usually ONCE daily <sup>‡</sup> sometimes prescribed TWICE daily <sup>‡</sup> with/without food
	Clear	 Optisulin® (insulin glargine)*  Semglee® (insulin glargine)	
	Clear	<div style="background-color: red; color: white; padding: 5px; text-align: center;"> <b>Different concentrations of insulin glargine are NOT directly interchangeable.</b>            Continue the patient's usual insulin glargine product whilst in hospital, whenever possible.         </div>  Toujeo® (insulin glargine) <b>300 units/mL (high concentration)</b>	

\*Cartridges or ^vials may be available for various subcutaneous/intravenous routes of administration to inpatients, e.g. infusions, non-disposable pens or insulin pumps. Refer to local policy.

#The ultra-rapid acting insulin aspart product Fiasp® and rapid acting NovoRapid®, are NOT directly interchangeable; see local policy/endocrinology team if brand change required.

~Description of the duration of action of insulins may vary between resources e.g. AMH, eTG, Thinksulin app, Product Information.

## Key practice points when prescribing or administering insulin (A HIGH RISK MEDICINE) in hospital

- Prescribe as 'units', not 'U'.
- Prescribe insulin by brand name, with the addition of the active ingredient(s) whenever possible, to reduce risk of errors.
- Continue patients on their usual insulin brand. See local policy/endocrinology team for exemptions & monitoring needs.
- If a patient is fasting, ask the doctor to review the prescription prior to insulin administration.
- Visually inspect pens for manufacturing defects. Report any faulty pens to your Pharmacy Department.
- Prior to each injection, prime each pen (with needle) using 2 units of insulin to avoid injection of air and ensure proper dosing.
- In-use insulin pens & cartridges may be kept at room temperature for 21-28 days as per the product information.
- **NEVER WITHDRAW INSULIN FROM A PEN** – this increases the risk of overdose and may cause pen malfunction & potential insulin contamination.
- **High concentration** insulin is widely available - ALWAYS CHECK appropriate product selection. Products include:
  - 200 units/mL: Humalog® U200 KwikPen® (insulin lispro)
  - 300 units/mL: Toujeo® Solostar® (insulin glargine)
  - Others may become available in the future (or be available overseas).
- Do not store insulin pens with needles attached.
- Pens, cartridges and Innolets® are for single patient use only. Label with patient's details.
- Check discharge medicines to ensure insulin product supplied for home use is appropriate and correct.



Contact your pharmacist or diabetes educator for more information.

ACI clinical decision support app [ThinkSulin](#):