













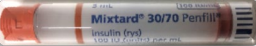








| Category | Appearance | Insulin brand name (active ingredient name) 100 units/mL unless otherwise stated | When to administer |
|---|------------|--|--|
| Ultra-rapid acting~ | |  Fiasp® (faster-acting insulin aspart)#^ | immediately before meals |
| Rapid Acting~ | Clear |  NovoRapid® (insulin aspart)#^  Apidra® (insulin glulisine)^  Humalog® (insulin lispro)^  Humalog® U200 (insulin lispro) 200 units/mL (high concentration) | 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 [‡] sometimes prescribed TWICE daily [‡] with/without food |
| | Clear |  Optisulin® (insulin glargine)*  Semglee® (insulin glargine) | |
| | Clear | <div style="background-color: red; color: white; padding: 5px; text-align: center;"> Different concentrations of insulin glargine are NOT directly interchangeable. Continue the patient's usual insulin glargine product whilst in hospital, whenever possible. </div>  Toujeo® (insulin glargine) 300 units/mL (high concentration) | |

*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, TG, Thinksulins 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 [Thinksulins](#):

