

Emergency Insulin Compatible Substitutions

Sometimes patients who normally take insulin are admitted as an emergency without their own insulin and out of pharmacy opening hours. Wherever possible the patient should have the correct insulin as they have been prescribed. In some circumstances when the correct insulin is not available you may need to administer compatible alternative insulin to avoid delay/omission of insulin.

INSULIN MUST NEVER BE OMITTED IN SOMEONE WITH TYPE 1 DIABETES

Overleaf in column 2 shows insulin compatible with those in column 1 that are available on some wards as stock. The exact same insulin action cannot be guaranteed when substituting different insulin's. Substituting insulin should be avoided wherever possible but where it is necessary please do so with caution and ensure blood glucose is checked frequently.

If the patient is unable to administer their usual insulin themselves due to changes in physical/mental circumstances, insulin should be given via syringe. Not all insulin preparations are available in a vial suitable for use with a syringe. Below in column 3 are insulins available in 10 ml vial and are available as stock in pharmacy, suitable for use with a standard insulin syringe which are compatible with insulin in column 1.

Only **insulin** syringes should be used. Do not use intravenous syringes.

* = When substituting human insulin for analog insulin remember that the gap between insulin injection and meal should be shortened from 30 minutes to 5 minutes and vice versa

** = Always check with your patient if they have had a problem with human insulin in the past. Problematic hypoglycaemia has been observed in the past when patients who usually take animal insulin are given 'human' insulin.

*** = When substituting Humalog Mix 50 to 25 and vice versa the time action profile is significantly different. Frequent blood glucose monitoring is required to detect risk of hypoglycaemia early. This substitution should be avoided wherever possible.

Please see over for the substitute chart. Substitute insulin must still be prescribed on diabetes chart by a doctor or INP

Emergency Insulin Compatible Substitutions

| 1 | 2 | 3 |
|----------------------------|---|------------------------|
| Name of usual insulin | Compatible substitute insulin | Available via syringe? |
| Humalog | Actrapid* | Available in 10ml vial |
| Novorapid | Actrapid* | Available in 10ml vial |
| Apidra | Actrapid* | Available in 10ml vial |
| Actrapid | - | Available in 10ml vial |
| Humulin S | Actrapid | Available in 10ml vial |
| Hypurin porcine neutral | Actrapid** | Available in 10ml vial |
| Hypurin bovine neutral | Actrapid** | Available in 10ml vial |
| Insuman Rapid | Actrapid | Actrapid, Humulin S |
| Insulatard | - | Available in 10ml vial |
| Humulin I | Insulatard | Available in 10ml vial |
| Hypurin Bovine Isophane | Insulatard** | Available in 10ml vial |
| Hypurin Bovine Lente | Insulatard** | Available in 10ml vial |
| Hypurin Bovine PZI | Nothing compatible but Insulatard will meet need until own available | Available in 10ml vial |
| Hypurine Porcine Isophane | Insulatard** | Available in 10ml vial |
| Insuman Basal | Insulatard | Available in 10ml vial |
| Humulin M3 | Humalog Mix 25 * | Available in 10ml vial |
| Hypurine Porcine 30/70 mix | Humalog Mix 25 ** | Available in 10ml vial |
| Insuman Comb 15 | - | |
| Insuman Comb 25 | Humalog Mix 25* | Available in 10ml vial |
| Insuman Comb 50 | Humalog Mix 25*/*** | |
| Humalog Mix 25 | - | Available in 10ml vial |
| Humalog Mix 50 | Humalog Mix 25*** | |
| Novomix 30 | Humalog Mix 25 | Humalog Mix 25 |
| Levemir | Insulatard | Use Lantus |
| Lantus | Insulatard | Available in 10ml vial |