



25 January 2023

Medicine Supply Alert Notice

- **Insulin isophane biphasic human 25/75 (Insuman[®] Comb 25) 100units/ml suspension for injection 3ml cartridge**
- **Insulin isophane biphasic human 25/75 (Insuman[®] Comb 25 SoloStar) 100units/ml suspension for injection pre-filled pens**
- **Insulin human isophane (Insuman[®] Basal) 100units/ml suspension for injection 3ml cartridge**
- **Insulin human isophane (Insuman[®] Basal SoloStar) 100units/ml suspension for injection 3ml pre-filled pens**
- **Neutral (soluble) insulin (Insuman[®] Rapid) 100units/ml suspension for injection 3ml cartridge**

Priority: Level 2*

Valid until: discontinuation, stock to be exhausted by May 2023

Issue

1. Insuman[®] Comb 25 100units/ml suspension for injection 3ml cartridges and prefilled pens will be discontinued with stocks being exhausted in May and June 2023 respectively.
2. Insuman[®] Basal 100units/ml suspension for injection 3ml cartridges and prefilled pens will be discontinued with stocks being exhausted in June 2023.
3. Insuman[®] Rapid 100units/ml suspension for injection 3ml cartridges will be discontinued with stocks being exhausted in May 2023.
4. Humalog[®] Mix 25 remains available, as do other biphasic insulin preparations.
5. Alternative human isophane insulins remain available.
6. Alternative neutral (soluble) insulins remain available.

Advice and Actions

7. Prescribers should:

- not initiate any new patients on Insuman[®] products.
- review all patients prescribed Insuman[®] Comb 25 100units/ml suspension for injection 3ml cartridges; and consider prescribing Humalog[®] Mix 25 in the first instance (see Additional Information);
- consider prescribing another biphasic insulin preparation if the above option is not deemed suitable (see Additional Information)

- review all patients prescribed Insuman® Basal and consider prescribing alternative human isophane insulin preparations (See additional information)
- review all patients prescribed Insuman® Rapid and consider prescribing alternative neutral (soluble) insulin
- ensure that after switching, patients are counselled on how to use the new device, explain that the dose of insulin remains the same, but adjustments may be needed depending on blood glucose levels and signs of hypoglycaemia.

Additional Information

Clinical Information

8. Choice of alternative will be determined by onset of action, peak activity and duration of action. Patients should be advised to be more vigilant with checking their blood glucose following a switch to an alternative. Patients should also be counselled on the symptoms of hypoglycaemia.
9. There is unlikely to be any dose change when switching between insulins. However, after the switch, the dose should be guided by blood glucose control and signs of hypoglycaemia. As the injector device will also be different, patients should be counselled on how to use the new device.

Insuman® Comb 25:

- Insuman® Comb 25 is a biphasic isophane insulin consisting of 25% dissolved insulin and 75% crystalline protamine insulin. The only other biphasic formulation containing equal proportions of rapid- and long-acting insulin is Humalog® Mix 25 (25 % insulin lispro solution and 75 % insulin lispro protamine suspension). It is available in a KwikPen, a disposable pre-filled pen containing 3 ml (300 units, 100 units/ml) of insulin and also in a 3ml cartridge for use in a Lilly 3 ml pen. Insuman Comb 25 is injected subcutaneously 30 to 45 minutes before a meal whereas Humalog® Mix25 may be given shortly before meals or when necessary, soon after meals. Patients switched from Insuman® Comb 25 to Humalog® Mix 25 would need to be advised on difference in timing of administration of insulin.
- Other human biphasic insulin preparation containing different proportions of rapid- and long-acting insulin include; Humalog® Mix 50, Humulin® M3 and NovoMix® 30 (insulin aspart).
- Humulin® M3 (30% soluble insulin and 70% isophane insulin) and Novomix® 30 (30% soluble insulin aspart and 70% protamine-crystallised insulin aspart) are a closer match to Insuman® Comb 25 than Humalog® Mix 50 (50% insulin lispro solution and 50% insulin lispro protamine suspension).

Insuman® Basal:

- Insuman® basal is a human isophane insulin; these insulins are intermediate-acting: onset of action ~ 1–2 hours, peak activity between 3–12 hours, and duration of action of 11–24 hours. Other human isophane insulin products include Humulin® I and Insulatard®.

Insuman® Rapid:

- Insuman® Rapid is a neutral (soluble) insulin solution; these insulins are short acting insulins: onset of action ~ 30–60 minutes, peak activity between 1–5 hours, and duration of action of 5–9 hours. Other human neutral insulin products include Humulin® S and Actrapid®.

Table 1: Available alternative insulins

Insulin type	Brand	Device type	Able to support an uplift in demand
Biphasic isophane insulin	Novomix® 30	Cartridge and pre-filled pen	Full uplift
	Humalog® Mix 25	Vials, cartridges and pre-filled pens	Full uplift
	Humalog® Mix 50	Cartridges and pre-filled pens	Full uplift
	Humulin® M3	Vials, cartridges and pre-filled pens	Full uplift
Human isophane insulin	Humulin® I	Vials, cartridges and pre-filled pens	Full uplift
	Insultard®	Vials, cartridges and pre-filled pens	Partial uplift
Neutral (soluble) insulin	Actrapid®	Vials	Full uplift
	Humulin® S	Vials and cartridges	Full uplift

Please see the following links for further information

- [BNF insulin](#)
- [University of Leicester table of typical insulin profiles](#)
- [BNF treatment summary](#)
- [NICE CKS- Insulin therapy](#)
- [SmPC Insuman products](#)
- [SmPC Novomix 30](#)
- [SmPC Humalog Mix 25 and Mix 50](#)
- [SmPC Humulin M3](#)
- [SmPC Humulin I](#)
- [SmPC Insultard](#)
- [SmPC Actrapid](#)
- [SmPC Humulin S](#)

Specialist Pharmacy Service (SPS) website

10. The UK Department of Health and Social Care (DHSC) in conjunction with SPS have launched an online Medicines Supply Tool, which provides up to date information about medicine supply issues.
11. To access the online Medicines Supply Tool you need to register with the [SPS website](#). Registration for access to the website is available to UK healthcare professionals and organisations providing NHS healthcare. The tool is located under the Planning tab and then click on the Medicines Supply option.
12. We encourage prescribers, pharmacy professionals, and pharmacy procurement leads in Scotland to register with the SPS website and use its Medicine Supply Tool in order to stay up to date concerning medicines supply disruptions.
13. Please be aware that while medicines supply issues will appear on the SPS website, some of the recommended actions may not always be appropriate / relevant within the Scottish context.

Enquiries

14. Enquiries from Health Boards or healthcare professionals should be directed in the first instance to PharmacyTeam@gov.scot (primary care) or NSS.NHSSMedicineShortages@nhs.scot (secondary care).