quality safe use of medicines

Medication Alert

HUMALOG® INSULIN Preparations

Alert 10 April 2010

For the attention of:	**All prescribers, pharmacists and nurses**
For action by:	**Primary Care Facilitators, PHO Clinical Leaders – for dissemination to all GPs in your PHO, DHB Medicines Advisory Committees, Medication Safety Pharmacists, Quality Managers**
For information to:	**College of GPs, Pharmaceutical Society of NZ, Pharmacy Council, College of Nurses, Schools of Medicine, Pharmacy and Nursing, NZ Hospital Pharmacists' Association, New Zealand Nurses Organisation**

Purpose of this alert

To highlight the risk of errors caused by the confusion that can occur during the prescribing, dispensing and administration of the following insulin products: Humalog®
Humalog Mix25®
Humalog Mix50®

Background to this Safe Use of Medicines Alert

- **There is the potential for serious harm if a patient receives rapid acting plain Humalog® when a mixed rapid/intermediate acting Humalog Mix® product is intended, especially for those on high doses**
- **Humalog® has been available in New Zealand for a number of years, but Humalog Mix 25® and Humalog Mix 50® have been introduced recently**
- **One DHB has reports of six prescribing and two administration incidents in a 10 week period involving confusion between Humalog® and Humalog Mix® products**
- **Dispensing errors have been reported where Humalog® has been dispensed instead of Humalog Mix25® or Humalog Mix50®**

Recommended Action

- **Prescribe insulin using the FULL BRAND name; prescribe units in FULL**
- **Highlight this potential for error to as many healthcare professionals as possible - distribute this Alert widely throughout your DHB**
- **Highlight the potential for error to patients prescribed Humalog® or Humalog Mix®**
- **When using electronic prescribing or dispensing systems cross check you have selected the correct item from the drop-down menu – remember there are three Humalog products available**
- **Check what type of insulin the patient should be on e.g. rapid acting or a mixture of rapid and intermediate acting insulin and prescribe the insulin using the FULL BRAND name**
- **Confirm with the patient (or carer) that the correct insulin is being prescribed, dispensed or administered**

For further action by DHBNZ Safe and Quality Use of Medicines Group

1. **The group will work with Patient Management Systems and dispensary systems to introduce alerts to highlight the different formulations**

HUMALOG® Product Descriptions

Brand Name	Humalog®	Humalog Mix25®	Humalog Mix50®
Type of insulin	RAPID ACTING	INTERMEDIATE-ACTING PREMIXED INSULIN LISPRO	INTERMEDIATE- ACTING PREMIXED INSULIN LISPRO
Appearance	CLEAR	CLOUDY	CLOUDY
Generic Name	insulin lispro Rbe (rapid acting)	25% insulin lispro (rapid acting) PLUS 75% insulin lispro protamine suspension Rbe (intermediate acting)	50% insulin lispro (rapid acting) PLUS 50% insulin lispro protamine suspension Rbe (intermediate acting)
Presentation	10ml vials 3ml cartridges	3mL cartridges	3 mL cartridges
Onset of action	0 to 15 minutes	0 to 15 minutes	0 to 15 minutes
Peak	1 hour	1 hour	2 hours
Duration	2 to 5 hours	16 to 18 hours	16 to 18 hours

CASE STUDY

A hospital inpatient was commenced on Humalog Mix25® with a dose of 20 units each morning, and 24 units each evening.

The prescription was faxed to the hospital Pharmacy; Humalog Mix25® was dispensed with an individualised patient label, and stored in the ward fridge. A vial of Humalog® was already in the ward fridge.

24 units of Humalog® were administered in the evening and another 20 units of Humalog® the following morning. The patient had a hypoglycaemic episode two hours after the first dose, and had hyperglycaemia the following morning prior to receiving the second dose of Humalog®, resulting in a prolonged hospital stay to stabilise the blood sugar level.

For an electronic version of this alert download from the website, www.safeuseofmedicines.co.nz or contact Beth Loe, Beth.Loe@waitematadhb.govt.nz

If you require any further information or wish to provide feedback on this alert, please go to www.safeuseofmedicines.co.nz