



Prescribing Tip No. 196 Date: 15<sup>th</sup> March 2018

## Safety in insulin prescribing



Insulin treatment improves the quality of life in many diabetic patients and saves the lives of others. However, insulin management and prescribing errors are very common and can lead to patient harm. We need to ensure that we have –

- the right person
- the right insulin
- the right dose
- the right time
- the right device
- the right way

### 1. The right person

Everyone's insulin requirements are different and can vary with lifestyle and meal patterns

### 2. The right insulin

There are many different types of insulin and these may be prescribed by brand or generic name. Many of these names look and sound like one another. This creates a potential risk. Patient safety incidents involving confusion between the individual brand names of insulin can occur.

Humalog with Humalog Mix 25 or Humalog Mix 50  
Novorapid with Novomix 30  
Levemir with Lantus

Please always prescribe insulin by **BRAND** name to avoid errors. Please be aware that insulin preparations exist as **rapid onset, intermediate or long acting** preparations.

Until recently, all insulin was only available as 100 units per ml. However, there are now a number of different strengths of insulin such as Humalog Kwikpen **200 units per ml** and Toujeo Solostar **300 units per ml**.

### 3. The right dose

Insulin doses vary between patients and will also vary with the patient's lifestyle and health status. Insulin should always be prescribed with a number followed by "units" (e.g. 20 units). If "units" is abbreviated to "u", the "u" can be mistaken for a "0" and an incorrect dose of insulin given.

### 4. The right time

Problems can occur when insulin doses are delayed or omitted. Please ensure times of administration are clearly communicated to the patient.

### 5. The right device

Insulin comes in **vials** for use with insulin syringes and pumps, in **cartridges** for insulin pens and also in **prefilled pen devices**. There are 2 different designs of insulin cartridge so not all cartridges can be used in all insulin pens. Please take extra care when prescribing to ensure the correct insulin device is chosen for the patient.

### 6. The right way

Insulin is normally injected at a 90° angle, using the upper outer thigh, buttocks or abdomen as injection sites. Varying the place of injection will avoid the development of fatty lumps (lipohypertrophy).

**The Insulin Passport** - Adults who are using insulin therapy may benefit from receiving an Insulin Passport.  
<http://www.nrls.npsa.nhs.uk/resources/type/alerts/?entryid45=130397>

Local Diabetes Guidance can be found at <http://ccg.centrallancashire.nhs.uk/mmopt/Diabetes%20Prescribing/Forms/AllItems.aspx>

To contact the Medicines Optimisation Team please phone 01772 214302