

Medication Safety Today



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Priadel® liquid

Priadel® liquid contains lithium citrate 520mg/5ml, which is equivalent to lithium carbonate 200mg/5ml. This has caused problems where patients have been changed from Priadel® tablets, which are lithium carbonate, to Priadel® liquid, which is lithium citrate. The packaging of Priadel® liquid has changed so that the concentration shown is now the equivalent strength of lithium carbonate.



When prescribing Priadel® liquid:

- Always prescribe by brand name.
- Prescribe the volume required and state the dose as the lithium carbonate equivalent, for example 200mg/5ml or 400mg/10ml.
- Where any existing prescriptions for Priadel® liquid have been stated as lithium citrate, for example 520mg or 1040mg, these should be rewritten as the lithium carbonate equivalent, which is 200mg/5ml or 400mg/10ml respectively.

Medicine					06.00
PRIADEL LIQUID					
Dose	Route	Strength	Frequency	Signature	12.00
400mg/10ml	Po	520mg			16.00
Signature				Pharmacy	20.00
A. Decker					23.00
Special Instructions / Directions					24.00

If you have any comments on this newsletter, please contact Sharon O'Donnell, Medicines Governance pharmacist on Ext: 2600 at Belfast City Hospital or by e-mail at Sharon.ODonnell@belfasttrust.hscni.net Further copies of this newsletter can be viewed at www.medicinesgovernanceteam.hscni.net or on your Trust intranet.

Duplicity

Medication incidents continue to be reported involving combination medicines. A patient may inadvertently receive the same medicine twice or two medicines from the same therapeutic class.

For example,

- paracetamol and co-dydramol (paracetamol/dihydrocodeine)
- metformin and Avandamet® (rosiglitazone/metformin)
- diltiazem and Exforge® (amlodipine/valsartan)

For some combination medicines this duplication will be more apparent where there is an approved generic combination or 'co-' name, for example co-codamol (paracetamol and codeine). However for other medicines where there is no approved generic name, for example Inegy® (simvastatin/ezetimibe), this duplication may not be immediately apparent.

When prescribing combination medicines:

- ✓ Use the generic 'co-' name if one exists.
- ✓ Where no generic 'co-' name exists, endorse the component medicines in the special instructions/directions section of the prescription, for example:

Medicine					06.00
COZAR-L					
Name	Form	Strength	Frequency	Signature	12.00
SUBL 5mg	Po	5-10			16.00
Signature				Pharmacy	20.00
A. Decker					23.00
Special Instructions / Directions					24.00
LOSARTAN / IRBESARTAN / COZAR-L					24.00

- ✓ Check that any of the individual medicines in the combination or medicines from the same therapeutic class are not prescribed for the patient.

When administering or dispensing combination medicines:

- ✓ Confirm the individual medicines in the combination.
- ✓ Check that the same medicines or other medicines from the same therapeutic class are not prescribed for the same patient.

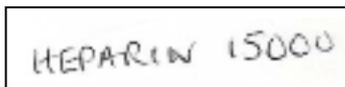
Back to Basics (Part 3) – The right dose

The five rights are used to describe the basic principles of medication safety; right patient, right medicine, right dose, right time and right route.

The following can contribute to a patient receiving the **wrong dose**:

Abbreviations

Abbreviating the units of measurement, for example '*international units*' or '*units*' to 'IU' and 'U', can result in the abbreviation being misinterpreted as a number leading to overdose. This applies to medicines such as heparin, insulin and erythropoietins.



Heparin 1,500 units or 15,000 units?

- ✓ Do not abbreviate units of measurement.
- ✓ Do not dispense or administer doses where the units have been abbreviated.

Illegible or unclear numbers

Handwritten numbers can be misinterpreted leading to over or underdose.



2 or 7?



4 or 9?

- ✓ Write medicine doses carefully.
- ✓ How do you write your numbers? Could anyone misread them?
- ✓ If you are unsure about a medicine dose, check with reference sources and the prescriber and ask for the dose to be rewritten.

Decimal Points

Unclear decimal points can lead to overdoses, therefore:

- ✓ Where decimal points are used, make sure they are clearly visible. Otherwise a dose of 2.5mg may be misinterpreted as 25mg.
- ✓ Do not use a decimal point where it is not required. Quantities less than 1g should be written as milligrams e.g. 750mg rather than 0.75g.
- ✓ Never use '*trailing zeros*' (a zero after the decimal point) – if a dose of 2mg is prescribed as 2.0mg, it could be misread as 20mg leading to a 10 fold overdose.
- ✓ Always use '*leading zeros*' (a zero before the decimal point) – a volume written as .5ml could be misinterpreted as 5ml and should be written as 0.5ml.

Incomplete dose information

Expressing the dose as the number of dose units for example number of tablets, patches, puffs or the volume of a liquid without stating the strength or concentration can lead to over or underdose.



- ✓ Dose details should be expressed clearly, for example in grams, milligrams or micrograms as appropriate.
- ✓ If expressing the dose in dose units, include the strength or concentration.
- ✓ If dose information is incomplete, do not assume the strength or concentration. Contact the prescriber to complete the dose details.

Calculations

Some medicine doses require calculation, for example weight based doses or calculation of the correct rate of administration. To minimise calculation errors always:

- ✓ Write down any calculations.
- ✓ When using calculators, always think, does the answer make sense?
- ✓ Have the calculation double-checked but don't show the other person your working out, compare answers at the end.
- ✓ Make sure any patient details used in calculations, such as weight, are correct and up to date.

More than three 'rule'

The 'More than three' rule can be a useful practical approach to preventing adult patients receiving overdoses. The 'rule' states that:

If you need **more than three** tablets, capsules, ampoules etc. of any one medicine to prepare a single dose, stop and check:

- Have I read the prescription correctly? Is it actually 1.5mg but I read 15mg?
- Is the prescription correct? Does it state 15mg when it should be 1.5mg?
- Have I selected the correct preparation to prepare the dose?

The 'rule' is based on the fact that most medicines are manufactured in dose units that fit typical adult doses. However there are some exceptions to the 'rule':

- Paediatrics - even one adult dose unit may be an overdose for a child.
- Liquid medicines – any volume can be measured.
- Certain medicines - such as prednisolone or warfarin where more than three tablets are used for typical adult doses. However it is important to remember that using large numbers of tablets or capsules is not 'the norm'.

For all patients, use reference sources to check doses are within expected dose range and check with the prescriber if you are unsure.