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Information included is specific to the use of medicines in the **adult** setting.

1. Oral Anticancer Medicines

There have been a number of clinical incidents involving acutely unwell patients who have been admitted to hospital and have been inappropriately continued on their oral anticancer medicines.

The patient may be unwell for many reasons e.g. adverse effects of their anticancer medicine or symptoms of their disease. **The implications of continuing to administer the anticancer medicine in these circumstances are potentially very serious.** Common toxicity from systemic anti-cancer treatment includes myelosuppression, vomiting, diarrhoea, mucositis, hypertension and impaired wound healing; although side-effects are numerous and drug-specific.

Oral anticancer medicines (including chemotherapy and biological modifiers) **should be withheld in all circumstances** and advice should be sought urgently from the on-call haematology or oncology registrar.

2. Level 2 Individual Patient Treatment Requests (IPTRs)

The process for managing level 2 IPTRs was changed in October 2012 to focus on a small group of medicines and introduce formal approval prior to supply. IPTR2 forms now need to be completed by the requesting consultant whenever a supply of the following medicines is required for an individual patient:

- Agomelatine
- Buprenorphine patches
- Prucalopride
- Tapentadol immediate release
- Tramacet
- Ranolazine

The relevant Clinical Director for the specialty requesting the medicine will then evaluate the request, and if appropriate, approve the request.

It is important that any patients who are initiated on these medicines during admission have a record of the approved IPTR documented on their discharge prescription or discharge letter. This is so the patient's GP is fully aware that due process and consideration was given prior to the medicine being initiated.

Details of the IPTR2 process can be found in the NHS GGC [IPTR Policy](#) and Form IPTR2 is available to download from StaffNet ([click here](#))

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3. Gentamicin and Vancomycin Online Calculators

Both the adult intravenous gentamicin online calculator and the adult intravenous vancomycin online calculator are being updated. Updated versions of the calculators will replace the existing versions on StaffNet by mid April 2013. Access to the calculators via StaffNet will not change.

The calculators have been updated to:

- Require patient height to be entered before a dosage regimen is determined.
- Restrict patient parameters to reduce the risk of key-stroke errors and highlight patients with unusual characteristics, such as a weight above 150 kg.
- Use colours for the calculators that reflect the prescribing and monitoring charts in use (gentamicin) or under discussion (vancomycin).
- Allow the initial dosage regimen obtained from the calculator to be printed (optional).

Both gentamicin and vancomycin **dosing guidelines remain unchanged.**

GENTAMICIN GG&C DOSE CALCULATOR FOR ADULT PATIENTS			
* Height is a required field - please enter *		Recommended dose and dosage interval are shown in black below	
		GENTAMICIN GG&C DOSAGE REGIMEN	
Age (years)	56	Dose	
Height (cm)			
OR Height (feet)		Duration of infusion	
(inches)			
Weight (kg)	60.0	Interval	
Sex (m/f)	f		
Creatinine (µmol/L)	85		
Height (cm)			
Ideal body weight (kg)			
Weight for creatinine clearance (kg)			
Creatinine CL (mL/min)			
		REVIEW ANTIMICROBIAL THERAPY DAILY	
		Seek advice from microbiology if gentamicin is required beyond 3 - 4 days	
<small>Gentamicin dose is based on actual body weight Developed by Stephen Dewar, Southern General Hospital, Glasgow 0141 2011396, March 2013 Version 1.1 Originally devised by Alison Thomson, Pharmacy Dept., Western Infirmary, Glasgow, 0141 211 2022</small>			
			Print Calculator Record

INTRAVENOUS VANCOMYCIN DOSE CALCULATOR FOR ADULT PATIENTS			
Type in the data shown in blue and press <enter>		Recommended doses and dosage intervals are shown in black below	
		INITIAL IV LOADING DOSE (intermittent and continuous infusion)	
Age (years)	62	REGULAR IV MAINTENANCE DOSE	
Height (cm)	165		
OR Height (feet)		Prescribe an intermittent (pulsed) IV infusion OR a continuous IV infusion	
(inches)			
Weight (kg)	165	MODE OF ADMINISTRATION	
Sex (m/f)			
Creatinine (µmol/L)		INTERMITTENT infusion	
Height (cm)		CONTINUOUS infusion	
Ideal body weight (kg)			
Weight for creatinine clearance (kg)		Duration of infusion	
Creatinine CL (mL/min)			
		See individual intermittent (pulsed) or continuous infusion worksheets below for vancomycin monitoring guidelines	
<small>Vancomycin loading dose is based on actual body weight Developed and tested by Stephen Dewar, Pharmacy Dept., Southern General Hospital, Glasgow, 0141 201 1396 March 2013 Version 1.1 Devised by Alison Thomson, Pharmacy Dept., Western Infirmary, Glasgow, 0141 211 2022</small>			
			Print Calculator Record

If you require any further information or encounter any problems, please report them as soon as possible to Stephen Dewar (Stephen.dewar@ggc.scot.nhs.uk), copied to Alison Thomson (alison.h.thomson@strath.ac.uk), Yvonne Semple (Yvonne.semple@ggc.scot.nhs.uk) and clinical.guidelines@ggc.scot.nhs.uk.

4. Learning from incidents

Gentamicin: duplicate dosing

Errors resulting in duplicate dosing of gentamicin have been reported recently. In one case a second dose was administered 5 hours after the first.

Potential contributory factors:

- the administration of the first dose was documented on the gentamicin prescription chart but not on the kardex
- the gentamicin was prescribed on the kardex with a dose rather than the correct prescription 'as per chart'
- the doses were administered during different shifts

Gentamicin: take home messages

- Nurses to sign both the kardex *and* the gentamicin prescription chart.
- Nurses to communicate information about gentamicin therapy at all shift changes.
- Prescribe the dose 'as per chart' on the kardex with no dose time stated.
- Ensure administration of all gentamicin doses are subject to a second check which should include a check of the time that the previous dose was administered.
- Refer to [PostScript Acute Issue 9](#) for a more in depth reminder of 'How to prescribe and administer gentamicin'.

Triptorelin: wrong dosage intervals

The oncology teams have become aware of several cases where patients have received GnRH analogues at the wrong dosage intervals e.g. triptorelin 3mg injection administered every 3 months rather than every 28 days. [Click here](#) for more information.

Please note: Errors relating to dosage interval have been reported for other drugs for chronic diseases. In particular, depot antipsychotics and buprenorphine patches. The dosage interval should be confirmed for ALL chronic medicines (ideally with the patient).

Kardex: re-writes & use of more than one

Errors involving kardex re-writes occur regularly. For example, intravenous levetiracetam 250 mg twice a day was re-written as 2 grams four times a day and digoxin 62.5 micrograms once a day was re-written as 250 micrograms once a day.

Errors involving the use of two kardexes for an individual patient are common. For example, IV levofloxacin was prescribed on a second kardex and doses were missed for 3 days.

Kardex: take home messages

- Please double check that all drugs are prescribed correctly when re-writing the kardex to ensure that there are no transcription errors.
- Please, where possible, *re-write* a kardex rather than add in a second one.
- Two kardexes should only be used when the prescribed medicines do not fit onto one kardex.

5. Guideline news

SIGN & NICE clinical guidelines and GGC guidelines approved by the Medicines Utilisation & Prescriber Education subgroup of the ADTC, since January 2013:

NHSGGC Acute Care Guidelines

[NHSGGC Parkinson's Disease medication stock list in acute hospitals](#)

[Dexamethasone implants in retinal vein occlusion](#)

SIGN Clinical Guidelines

[Brain injury rehabilitation in adults \(SIGN 130\)](#)

NICE Clinical Guidelines

[Psychosis and schizophrenia in children and young people \(CG 155\)](#)

[Fertility \(CG 156\)](#)

[Hyperphosphataemia in chronic kidney disease \(CG 157\)](#)

6. Reminder: Drug Safety Update

Drug Safety Update – an extremely useful monthly publication from the Medicines & Healthcare Regulatory Agency (MHRA).

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