

In This Issue...

<i>Changes to Formulary</i>	1
<i>BCHA Therapeutic Interchanges</i>	3
<i>Lactulose and Lactose Intolerance</i>	4
<i>Enhanced Pharmacy Services 2400 to 0630</i>	4
<i>Methadone Liquid Dilution</i>	4
<i>TPN Auto-Stop Removal</i>	4
<i>Imipenem to Meropenem Conversion</i>	4

This and other Pharmacy and Therapeutics Newsletters are on the Web at www.vhpharmsci.com

Changes to Formulary

In order to align with the provincial BCHA Formulary, the following medications have been added as stock or deleted at Vancouver Acute.

Additions

- 1. Dexmedetomidine 100 mcg/mL injection (Precedex®)**
 - Sedative agent restricted to adults in ICU and CSICU with the following criteria:
 - ⇒ Post-op cardiovascular/vascular surgery patients requiring mechanical ventilation **OR**
 - ⇒ Patients with confirmed delirium with an inadequate response or who are refractory to a trial of propofol and/or anti-psychotic agents who are being mechanically ventilated **OR**
 - ⇒ Patients in whom extubation is anticipated within 24 hours **OR**
 - ⇒ Sedation for invasive procedures or awake fiberoptic intubation in critical care patients for whom other agents are not appropriate due to lack of efficacy or adverse effects

- 2. Terbinafine 1% cream (Lamisil®)**
 - Topical antifungal agent
- 3. Betahistine 16 mg tablets (Serc®)**
 - Antihistamine, antivertigo agent
- 4. Bosentan 125 mg tablets (Tracleer®)**
 - Vasodilator (endothelin antagonist)
 - Restricted to treatment of pulmonary arterial hypertension (PAH)
- 5. Finasteride 5 mg tablets (Proscar®)**
 - 5-alpha reductase inhibitor; inhibits the conversion of testosterone to dihydrotestosterone
 - Used for treatment of benign prostatic hypertrophy (BPH)
- 6. Tigecycline 50 mg injection (Tygacil®)**
 - Glycylcycline (tetracycline-type) antibiotic
 - Restricted to Infectious Diseases (ID) and ICU as a last line for patients with multi-drug resistant organism infections **OR** intolerance to other antibiotics
- 7. Daptomycin 500 mg injection (Cubicin®)**
 - Lipopeptide antibiotic
 - Restricted to Infectious Diseases (ID) and ICU for infections caused by gram positive organisms that are resistant to vancomycin and linezolid **OR** in patients intolerant to vancomycin or linezolid

EDITORIAL STAFF:

Karen Shalansky, Pharm.D., FCSHP
 Tim Lau, Pharm.D., FCSHP
 Jane Day, B.Sc.(Pharm.), ACPR
 Nilu Partovi, Pharm.D., FCSHP

Any comments, questions, or concerns with the content of the newsletter should be directed to the editors. Write to CSU Pharmaceutical Sciences Vancouver General Hospital, 855 W12th Ave, Vancouver BC V5Z 1M9, send a FAX to 604-875-5267 or email karen.shalansky@vch.ca
 Find us on the Web at www.vhpharmsci.com

8. Tacrolimus 1 mg, 5 mg extended release capsules (Adgraf[®])

- Immunosuppressive agent
- Restricted to SOT or L/BMT patients

9. Cinacalcet 30 mg tablets (Sensipar[®])

- Calcimimetic agent used to treat hyperparathyroidism
- Restricted to indications outlined by BCPRA and patients registered with BCPRA

10. Polycarbophil calcium 625 mg tablets (Prodiem[®])

- Bulk forming laxative
- Orders for psyllium (Metamucil[®]) powder 1.7 g will be therapeutically interchanged to either polycarbophil 625 mg (max 8 caps/day) or fibre 469 mg tablets (max 12 tabs/day).

11. Entecavir 0.5 mg tablets (Baraclude[®])

- Antiretroviral agent
- Restricted to indications outlined by BCTS (ie. for pre- and post-transplant patients who are hepatitis B positive)

12. Tenofovir 300 mg tablets (Viread[®])

- Antiretroviral agent
- Restricted to indications outlined by BCTS (ie. for pre- and post-transplant patients who are hepatitis B positive) **OR** to approval of the Centre for Excellence in HIV/AIDS

13. Pioglitazone 15 mg , 30 mg tablets (Actos[®])

- Oral hypoglycemic agent

14. Flecainide 50 mg tablet (Tanbocor[®])

- Oral antiarrhythmic agent

Deletions**1. Ethanol (Brandy, Rye, Sherry)****2. Acetone, Methanol liquids****3. Disulfiram oral tablets (Antabuse[®])****4. Levofloxacin injection (Levaquin[®])**

- Alternative: Moxifloxacin

5. Castor Oil**6. Chloramphenicol ophthalmic drops and ointment (Chloroptic[®])**

- Alternatives: Tobramycin 0.3% drop, ointment

7. Neomycin and Polymyxin B topical irrigating solution (Neosporin[®])**8. Cortisporin[®] topical ointment (polymixin B, bacitracin, neomycin, hydrocortisone)**

- Alternative: Viaderm[®] KC ointment (gramicidin neomycin, nystatin, triamcinolone)

9. Miconazole vaginal cream (Monistat[®])

- See Therapeutic Interchange to clotrimazole vaginal cream, pg 3

10. Nystatin vaginal cream (Mycostatin[®])

- See Therapeutic Interchange to clotrimazole vaginal cream, pg 3

11. Flucinolone 0.01% scalp oil (Synalar[®])**12. Hydrocortisone 0.5% cream and ointment**

- See Therapeutic Interchange for topical corticosteroids, pg 3

13. Betamethasone valerate 0.05% cream, ointment and lotion (Betnovate[®])

- See Therapeutic Interchange for topical corticosteroids, pg 3

14. Triamcinolone topical cream (Kenalog[®])

- See Therapeutic Interchange for topical corticosteroids, pg 3

15. Triamcinolone acetonide dental paste (Kenalog[®] in Orabase)**16. Dibucaine ointment (Nupercainal[®])**

- Alternative: lidocaine ointment

17. Tretinoin cream (Retin-A[®])**18. Glycerin and Lactic acid lotion (Epi-Lyte[®])****19. Benzoyl peroxide lotion (Benoxyl[®], Oxyderm[®])****20. Podophyllin liquid (Podofilm[®])**

Changes to Formulary

1. BCHA THERAPEUTIC INTERCHANGES

a) Topical Vaginal Antifungals to Clotrimazole
 Clotrimazole, miconazole, and nystatin vaginal preparations will be interchanged to clotrimazole 1% cream and 200 mg vaginal inserts per Table 1.

Drug Ordered	Drug Dispensed
Clotrimazole vaginal cream (any strength)	Clotrimazole vaginal cream 1%; 1 applicatorful into vagina QHS x 6 days
Miconazole vaginal cream (any strength)	
Nystatin vaginal cream (any strength)	
Clotrimazole vaginal tablet/insert (any strength)	
Miconazole vaginal suppository (any strength)	Clotrimazole vaginal insert 200 mg into vaginal QHS x 3 days AND Clotrimazole 1% cream to vaginal area PRN
Nystatin vaginal suppository (any strength)	

b) Cefaclor PO to Cefuroxime Axetil PO
 All orders for cefaclor capsules TID will be interchanged to cefuroxime axetil capsules (same dose) PO BID

c) Norfloxacin PO to Ciprofloxacin PO
 All orders for norfloxacin 400 mg PO will be interchanged to ciprofloxacin 250 mg PO (same frequency)

e) Topical Corticosteroids Interchange
 Topical corticosteroids will be interchanged per Table 2 to High, Moderate or Low potency corticosteroid topical agents in the formulation as ordered (cream, ointment, lotion). If the dosage form is not specified, then the cream will be dispensed. If the strength is not specified, betamethasone valerate 0.1% or hydrocortisone 1% will be dispensed based on potency of the prescribed topical corticosteroid.

Table 2. Topical Corticosteroids Therapeutic Interchange

Drug Ordered	Drug Dispensed
High Potency	
Betamethasone dipropionate Glycol 0.05%	Clobetasol propionate 0.05% (Dermovate®)
Halobetasol propionate 0.05%	
Moderate Potency	
Amcinonide 0.1%	Betamethasone valerate 0.1%
Betamethasone dipropionate 0.05%	
Desoximetasone 0.05%, 0.025%	
Flucinonide 0.01%, 0.05%	
Low Potency	
Betamethasone dipropionate 0.025%	Betamethasone valerate 0.1%
Betamethasone valerate 0.05%	
Clobetasone butyrate 0.05%	
Diflucortolone valerate 0.1%	
Fluocinolone acetonide 0.01%, 0.025%	
Hydrocortisone valerate 0.2%	
Mometasone furoate 0.1%	
Prednicarbate 0.1%	
Triamcinolone acetonide 0.05%, 0.1%, 0.5%	
Low Potency	
Desonide 0.05%	Hydrocortisone 1%
Hydrocortisone 0.5% to 2.5%	
Hydrocortisone acetate 1%	

f) Cefoxitin IV to Cefazolin IV + Metronidazole IV

All orders for cefoxitin Q6-8H IV will be interchanged to cefazolin (same dose) IV Q8H + metronidazole 500 mg IV Q8H. If the ordered interval is extended to Q12H or longer, the same interval will be used. Exceptions to this interchange are for Gynecological/Obstetrical or *Mycobacterium abscessus* infections.

g) Caspofungin IV to Micafungin IV

All orders for caspofungin IV will be interchanged to micafungin 100 mg IV daily

h) Penicillin G PO to Penicillin V PO

All orders for Penicillin G 500,000 units PO will be interchanged to Penicillin V 300 mg PO (same frequency)

2. LACTULOSE and LACTOSE INTOLERANCE

Lactulose solution contains some free lactose and galactose. Thus, lactulose should not be used in patients who require a low-galactose diet or are lactose intolerant.

3. PHARMACY SERVICES 2400 TO 0630

Effective April 22, 2013, a pharmacy assistant/technician will be on site in the VGH Pharmacy from 2400 to 0630. A pharmacist will still be available on-call during this time.

For medications that are not available on a nursing unit and are required urgently between these hours, please call the dispensary at 62481. The pharmacy assistant will triage and process orders according to urgency. If pharmacist input and approval is required, the pharmacy assistant will contact the on-call pharmacist. If pharmacist input is not required, the medication will be dispensed with the following label:

- This medication has NOT been verified by a pharmacist because pharmacist approval is not required. Nurses must check for all rights prior to administration to the patient.

4. METHADONE LIQUID DILUTION

If patients do not like the taste of methadone oral solution, the dose may be diluted in juice or milk just prior to administration. Once diluted, it cannot be stored for future use.

5. TPN AUTOMATIC STOP ORDER REMOVED

TPN orders (including intradialytic parenteral nutrition (IDPN) are no longer subject to the 7 day automatic stop order policy. Since all TPN patients on all services now have their orders reviewed on a regular basis during the week by pharmacists and/or dieticians, the stop order policy is no longer required.

5. IMIPENEM TO MEROPENEM CONVERSION

Effective July 2, 2013, all orders for imipenem will be converted to meropenem as indicated in Table 3, unless the prescriber indicates "no substitution". This cost containment initiative has been approved by the Antibiotic Utilization Subcommittee (AUS) and VA Pharmacy and Therapeutics (P&T) Committee.

Imipenem and meropenem have similar spectrums of coverage, activity, efficacy and toxicity. Wherever possible, clinicians are encouraged to limit the use of carbapenems unless coverage of highly resistant pathogens is absolutely necessary.

Please contact VCH Antimicrobial Stewardship (ASPIRES) for any clinical questions or concerns: Dr Jen Grant local 69503 or Dr Tim Lau local 63361 or the ASPIRES pager 604-871-1670.

Table 3. Imipenem to Meropenem Conversion

Ordered: Imipenem	Dispensed: Meropenem
500 mg IV Q6H (usual dose with eGFR above 50 mL/min)	500 mg IV Q6H (usual dose with eGFR above 50 mL/min)
1 g IV Q8H	1 g IV Q8H *OR* 2 g IV Q8H if meningitis/CF
500 mg IV Q8H	500 mg IV Q8H
500 mg IV Q12H	500 mg IV Q12H
500 mg IV Q12H (dialysis dependent)	1000 mg IV Q24H (dialysis dependent)