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PHARMACY AND THERAPEUTICS NEWSLETTER

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In This Issue...

Changes to Formulary

Additions

1. Ivabradine 5 mg, 7.5 mg tabs (Lancora®)

- Novel cardiac medication used in heart failure with reduced ejection fraction (HFrEF)
- Lowers heart rate by selectively inhibiting the funny current (I_f) in the sinoatrial node, without affecting blood pressure
- In the SHIFT trial, ivabradine was added to patients admitted to hospital for heart failure (HF) within the last year, with an left-ventricular ejection fraction (LVEF) ≤ 35%, a heart rate (HR) ≥ 70 bpm, and on stable background treatment. Ivabradine reduced the composite endpoint of cardiovascular death or hospitalization due to worsening HF (24% vs 29%, p<0.0001).[1]
- Adverse effects include bradycardia, increased risk of atrial fibrillation, and rare visual disturbances (phosphenes)
- Ivrabradine is restricted to new starts by Cardiology and Internal Medicine for treatment of HFrEF who meet the following eligibility criteria::
  - ⇒ Stable heart failure with New York Heart Association (NYHA) class II or III symptoms
  - ⇒ LVEF ≤ 35%
  - ⇒ Sinus rhythm with resting HR ≥ 77 bpm
  - ⇒ Persistent NYHA class II or III symptoms despite at least four weeks of treatment at the optimum stable doses of a combination of 1) an angiotensin-converting enzyme inhibitor (ACEI) or an angiotensin II receptor antagonist (ARB); 2) a beta-blocker; AND 3) an aldosterone antagonist (if tolerable)

Reference: [1]The Lancet 2010;376(9744):875-885.

2. Thiotepa 15 mg, 100 mg vials (Tepadina®)

- Anti-neoplastic agent
- Restricted to indications outlined in the BC Cancer Agency (BCCA) Drug List and patients who are registered with BCCA.

Deletions

1. Teniposide injection (Vumon®)

2. Hydromorphone 3 mg suppositories

3. Dimethyl Sulfoxide (DMSO) 50% (Rimsol-50)

- Discontinued by manufacturer

Updated Policies

1. AZACITIDINE SUBCUTANEOUS VOLUME

Effective Jan 21, 2019, the azacitidine subcutaneous injection volume has been increased to a maximum of 4 mL. The BC Cancer Manual monograph for azacitidine also reflects this higher 4 mL volume.

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2. VANCOMYCIN FOR TREATMENT OF *CLOSTRIDIUM DIFFICILE* INFECTION

Vancomycin is now the drug of choice for the treatment of all severity levels of *Clostridium difficile* infections (CDI) (mild-moderate, severe, fulminant). Metronidazole is no longer recommended as first-line therapy for mild to moderate cases of CDI, except where financial constraints make therapy with vancomycin inaccessible as an outpatient.[1]

The VCH-PHC CDI Treatment Guidelines and Pre-printed Order (PPO) have been updated to align with the revised 2018 guidelines from the Association of Medical Microbiology and Infectious Disease Canada and the Infectious Diseases Society of America.[1] The PPO is available on-line at: http://ppo.vch.ca/_vancouver-acute/vch-ppo-vancouver-acute

Prescribers should apply for PharmaCare Special Authority coverage of vancomycin prior to discharging patients to ensure continuity of care. PharmaCare criteria for approval of vancomycin for CDI has been revised as follows:

- ⇒ Patient is allergic, resistant, or intolerant to metronidazole **OR**
- ⇒ Patient has failed to respond to 4-6 days of oral metronidazole at a dose of 500 mg TID **OR**
- ⇒ Patient has symptoms of moderate to severe disease or is experiencing a second disease recurrence **OR**
- ⇒ Patient was initiated on vancomycin as an inpatient (e.g. in a hospital setting) and requires continuation of vancomycin to complete their full course of therapy

The last 2 criteria would meet our patients' needs upon discharge.

The VCH-PHC CDI Treatment Guidelines can be accessed through the VCH Shared Health Organizations Portal (SHOP) at: http://shop.healthcarebc.ca/vch.

Reference

1. Clinical Infectious Diseases 2018;66(7):e1-348.

3. OVERFILL VOLUME FOR INTERMITTENT IV MEDICATIONS (VANCOUVER ACUTE)

Pharmacy-prepared intermittent IV medication bags contain an **overfill volume**, which is extra volume beyond that indicated on the manufactures' solution bags that pharmacy uses to prepare IV medications.

As of **February 25, 2019** the VPP Alaris Drug Library will include estimates of the manufacturers' overfill volume for each intermittent IV medication bag as indicated in Table 1.

Table 1. Overfill Volume for Intermittent IV Medications Prepared by Pharmacy

Volume Indicated On Bag	New Volume in VPP Drug Library (accounting for overfill)
25 mL	30 mL
50 mL	55 mL
100 mL	110 mL
250 mL	275 mL
500 mL	550 mL
1000 mL	1050 mL

Exception: Manufacturer pre-made IV medications (e.g. ciprofloxacin) will not include an overfill volume in the drug library

Please note:

- Pharmacy labels will **not** change to include the overfill volume at this time. Therefore, the volume in the pump will be slightly more than what reads on the label.
- If there is remaining volume left in the IV bag, fully infuse until bag is empty.

Pharmacy Awards

- **Dr Karen Shalansky** was honoured with the **Distinguished Service Award** by CSHP–BC Branch in November 2018.
- **Dr Hilary Wu** was awarded the **New Hospital Pharmacy Practitioner Award** by CSHP–BC Branch in November 2018.
- **Dr Elaine Cheng** received a **2nd place poster award (Quality Initiative)** at the BC Kidney Days Annual Meeting in November 2018 for her project entitled "An Evaluation of the Prevalence of Hypokalemia and Hypomagnesemia in the VGH and BC Wide Peritoneal Dialysis Population and Associated Prescription Costs". Co-investigators: Jinglin Tang, Dr Suneet Singh.
- **Dr Karen Shalansky** received a **2nd place poster award (Clinical Research)** at the BC Kidney Days Annual Meeting in November 2018 for her project entitled "Hepatitis B Vaccination Program at Two Tertiary Hemodialysis Centres." Co-investigators are Lindsay Kufta, Dr Wynnie Lau, Dr Jacek Jastrzebski.