Key Messages: IV Amoxicillin-Clavulanate

- Added to the BC Health Authority Drug Formulary with no restrictions
- Usual dose: amoxicillin-clavulanate 1.2 g (1000mg/200mg) IV Q8H to treat respiratory tract infections
- Higher dose: amoxicillin-clavulanate 2.2 g (2000mg/200mg) IV Q8H to treat intra-abdominal infections, complicated urinary tract infections, moderate-severe diabetic foot infections, and invasive Enterobacterales infections

The Background

- IV formulation of amoxicillin-clavulanate, a broad-spectrum, semi-synthetic aminopenicillin / beta-lactamase inhibitor, added to the BC Health Authority Drug Formulary with no restrictions

The Rationale

- Narrower-spectrum than piperacillin-tazobactam with no activity against *P. aeruginosa*
- Facilitates IV to PO step-down therapy
- Uses:
  - Community-acquired pneumonia (CURB65 score 3-5) – alternative to ceftriaxone*
  - Acute exacerbations of chronic obstructive pulmonary disease or bronchiectasis (no risk factors for *P. aeruginosa*)
  - Aspiration pneumonia – community acquired – if poor oral hygiene, severe periodontal disease, putrid sputum
  - Urinary tract infections (UTI) in patients who cannot take oral therapy
  - Human and animal bite infections – where IV to PO therapy indicated
  - Polymicrobial skin and soft tissue infections (e.g. diabetic foot infections) (no risk factors for *P. aeruginosa*), especially where IV to PO therapy indicated
  - Intra-abdominal infections – alternative to ceftriaxone ± metronidazole*
  - Head and neck infections
  *ceftriaxone is less costly, easier to administer and should be used preferentially when standard of care*
- Good activity against Gram positive aerobes (*Streptococcus spp., E. faecalis*, methicillin-susceptible *S. aureus, H. influenzae*, and *Moraxella spp.*) and anaerobes
- Good dose-dependent activity against Gram negative aerobes such as *E. coli, Klebsiella spp.* (except *K. aerogenes*), *Proteus spp.* but no activity against *P. aeruginosa, Enterobacter spp., Citrobacter spp., Serratia spp., Morganella spp.*, and *Providencia spp.*
- Usual dose: amoxicillin-clavulanate 1.2g (1000mg/200mg) IV Q8H for respiratory tract infections, head/neck infections, acute cystitis, and skin and soft tissue infections
- Higher dose: amoxicillin-clavulanate 2.2g (2000mg/200mg) IV Q8H for infections caused by Gram negative organisms such as intra-abdominal infections, complicated UTI, moderate-severe diabetic foot infections and invasive Enterobacterales infections with a minimum inhibitory concentration of 8 mcg/mL.
- Preparation for use: stable 15 minutes after vial reconstituted and 4 hours after dilution in a minibag. Use of the Baxter Mini-bag Plus® system allows nursing unit preparation just before administration. Consult your parenteral manual or pharmacy department for more information about preparation and administration.
- Adverse effects (most common): diarrhea, nausea, vomiting