## Initial Management of Febrile Neutropenia

### Inpatient
- Fever $> 38.0\,^\circ C$ & Neutrophils $< 1.0 \times 10^9/L$

### Emergency Department
- Fever $> 38.0$ or a good history of fever at home & has recently received cytotoxic chemotherapy (last 4 weeks)

### Clinical assessment
- BP, HR, T, SaO2
- chest, urine, skin, IV catheter site, peri-anal
- Do NOT do a PR

### Blood cultures
- one set (i.e. 1 aerobic & 1 anaerobic bottle) from each lumen of central line + 1 peripheral set (20 mL per set), (2 peripheral cultures if no central line)

### Other Investigations*
- CXR, urine m/c/s, +/- line exit site swabs
- +/- resp. virus PCR
- +/- sputum m/c/s
- +/- stool for m/c/s, *C. difficile*

### Give antibiotics within 30 mins*
- *do not delay antibiotics for investigations, however blood cultures should be collected prior to antibiotics if possible

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<th>Gentamicin IV (give first) +</th>
<th>Piperacillin-Tazobactam‡ 4.5g IV (then q6h)</th>
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####† Mild penicillin hypersensitivity (e.g. rash)
- Gentamicin
- + Ceftazidime 2g q8h
- + Metronidazole 500mg q8h IV if there is any evidence of intra-abdominal infection (incl. diarrhoea)

####‡ Severe penicillin hypersensitivity (e.g. anaphylaxis)
- Meropenem 1g q8h IV as a single agent

+ Vancomycin 30 mg/kg IV loading dose, then 15 – 20mg/kg bd IV for patients known to be colonised with MRSA or have septic shock, or a line infection clinically.

For patients known to be colonised with multi-resistant organisms: (call ID)
- **MRSA**: IV vancomycin as above, in addition to gentamicin and piperacillin-tazobactam
- **ESBL-producing gram-negatives**: IV Meropenem 1g q8h +/- vancomycin if indicated as above

For all patients **Ensure appropriate fluid resuscitation**. If normal BP and perfusion cannot be achieved with IV fluids alone contact ICU (and if after hours or in ED discuss with the treating team).

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v. 16/08/2013