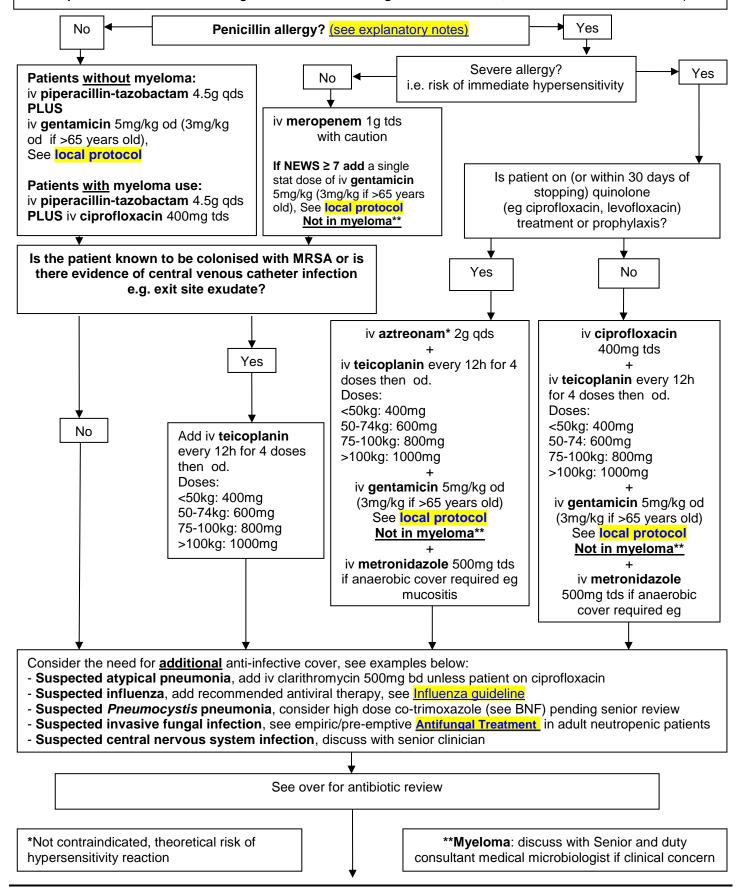
Suspected Neutropenic Sepsis - Initial empiric broad-spectrum intravenous antibiotic therapy algorithm

Suspected neutropenic sepsis is an acute medical emergency. All patients with suspected neutropenic sepsis require initiation of empiric broad-spectrum intravenous antibiotic therapy (as outlined below) within 1 hour of diagnosis. This applies to all patients i.e. includes those with suspected neutropenic sepsis at initial presentation to the trust as well as those who develop suspected neutropenic sepsis during a hospital admission. Click here for full pathway Note: Check previous microbiology results to assess past antibiotic resistance and guide which one of the regimens below to use, discuss with senior clinician if required.



GHNHSFT Neutropenic Sepsis Pathway - Initial broad-spectrum antibiotic therapy algorithm. Original document July 2013 A. Lees, A. Williams. Updated October 2018 A. Lees. Review date October 2020 From page 1 48 hour review of iv antibiotic therapy Note: Empiric broad-spectrum antimicrobial therapy may be modified before this in response to clinical confirmation of site of infection, microbiology results or clinical deterioration. Early de-escalation requires senior clinician approval. Afebrile with good clinical Persistent fever response, cultures negative Clinical response, Clinical concern, inflammatory markers worsening inflammatory Suspected central venous catheter improving eg CRP markers eg CRP infection? - Thorough clinical reassessment and Yes No review of existing microbiology results - Repeat blood cultures, consider additional microbiology investigations Discuss with consultant microbiologist Change of initial empirical antimicrobial regime: - If patient on piperacillin-tazobactam then change to iv Categorise patient as high or low risk. meropenem Assessed by MASCC score* (see page 2 of pathway document) based on criteria - discuss with consultant microbiologist / haematologist / present at onset of neutropenic sepsis ie day 1 Score ≤20 = high risk oncologist if required Score ≥21 = low risk *Except in patients with leukaemia where patient - consider adding iv **teicoplanin** if not already prescribed, risk categorisation is assessed by consultant see page 1 for dosing haematologist. - consider adding once daily iv gentamicin if not already prescribed, not in myeloma** See local protocol Low risk High risk Day 5 review of iv antibiotic therapy Note: Antimicrobial therapy may be altered before this in response to microbiology results or clinical deterioration Consider oral switch as Continue current per Trust iv antibiotic IV to oral switch guidance: regime for at least 5 days AND Afebrile +clinical response Persistent fever co-amoxiclav 625mg tds afebrile >48 hours (unless other ciprofloxacin 750mg bd cause of fever likely) Clinical response Clinical concern, - if penicillin allergy worsening inflammatory clindamycin 450mg qds Then either stop markers eg CRP antibiotic therapy and ciprofloxacin 750mg bd or prescribe oral switch therapy - Thorough clinical reassessment and review of Typically to complete 7 (see box left) existing microbiology results days total empiric typically to - Repeat blood cultures, consider additional antibiotic therapy complete 7 days microbiology investigations total empiric antibiotic therapy Discuss antimicrobial therapy with consultant microbiologist Consider antifungal therapy, see Empiric / pre-Recommence any antibacterial prophylaxis on emptive Antifungal Treatment in adult neutropenic cessation of treatment if indicated e.g. ongoing patients protocol neutropenia