advance confirmation that prescriptions were individualised to best therapy for patients and reactive if a prescription was incorrectly written or no clarification was sought from the pharmacist during ward round. Mini-AI interviews were conducted with the pharmacists at the end of the QI project to assess their opinions on changes to the antimicrobial stewardship programme.

Results The chart reviews by nursing staff highlighted 98 pharmacist interventions at baseline, 275 during the intervention phase and 80 post intervention. The pharmacists recorded an extra 138, 340 and 135 baseline, during and post intervention. Proactive intervening increased during each phase 68 (49.2%), 183 (53.8%) and 84 (62.2%), respectively. Thirty eight out of the 613 (6.2%) extra interventions were not accepted, with 25 (65.7%) of these being reactive.

Gold standard prescribing improved during the intervention stage and was sustained in the post intervention phase. QI interventions brought out from the AIs involving pharmacists included RAG rating antibiotics according to priority to de- escalate to a narrower spectrum and presence at the daily microbiology round to document and communicate decisions to the wider team. AIs held with the pharmacists post project included the following themes: improved antimicrobial knowledge and understanding for directed therapy, greater communication 'as now part of the PICU microbiology team', 'increased confidence to challenge antimicrobial decisions'. The pharmacists perceive there continues to be an increase in antimicrobial discussions on the daily PICU ward round.

Conclusion Positive re-enforcement can improve a prescriber's antimicrobial prescribing and documentation and encourage them to proactively seek pharmacy input to ensure best directed therapy for antimicrobials. This contributes to the overall quality of antimicrobial stewardship and patient care on the unit.

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P050 ANALYSIS OF POSACONAZOLE THERAPEUTIC DRUG MONITORING IN PAEDIATRIC HAEMATOLOGY AND ONCOLOGY PATIENTS

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Posaconazole is a broad spectrum triazole antifungal with activity against a range of invasive fungal pathogens including Candida and Aspergillus species.[1] Due to its range of activity it has been shown, by randomised controlled trials, to be superior to fluconazole and itraconazole for prevention of fungal infection in neutropenic patients,[2] as well as being cost saving.[1] Fungal prophylaxis with posaconazole has become the drug of choice within a paediatric cancer unit due to its broad spectrum of activity however there are significant differences in bioavailability of the suspension and tablet preparations and there is limited data relating to its use in the paediatric population.

Objective To determine if the paediatric cancer unit is undertaking effective dosing and appropriate therapeutic drug monitoring (TDM) of posaconazole in paediatric haematology and oncology patients.

Methods A retrospective analysis of clinical data from 38 paediatric patients treated with posaconazole was undertaken. Patients received either 18–24-mg/kg/day posaconazole suspension in divided doses (maximum 800-mg/day,[3] or 6–8-mg/kg/day posaconazole tablets (maximum 300-mg/day). Compliance with this guidance, initial and subsequent levels, efficacy and tolerability were analysed.

Setting The study was undertaken within the XXXX cancer unit; data for patients treated with posaconazole between January 2016 and August 2017 was reviewed.

Key findings There was good compliance with the dosing advice for liquid and tablet posaconazole with 82% of patients dosed correctly. Due to this, the initial trough level of $\geq$0.7 mg/L was achieved in 82% of patients within 14 days of treatment initiation; there were no significant differences between formulations. Trough levels were monitored on a monthly basis for 71% of patients but dose adjustments were necessary in 34% of patients. Posaconazole had a good tolerability profile during the study with most side effects resolving on continuation of treatment however one patient had to discontinue the drug due to widespread rash. No patients developed a fungal infection whilst on posaconazole.

Conclusion Safe and effective dosing and monitoring of posaconazole suspension and tablet formulations has been undertaken at the XXXX. Trough levels attained the desired target concentration of $\geq$0.7 mg/L in the majority of patients but dose adjustments were required with both formulations emphasising the need for regular TDM. Posaconazole was well tolerated and clinically effective in preventing fungal infection indicating its appropriateness in this patient group. From this review, a guideline for initiation and appropriate TDM of posaconazole can be developed.

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P051 THE BIGGER YOU ARE THE HARDER YOU FALL? SHORT TERM EFFECTS OF LUM/IVA (ORKAMBI) ON LUNG FUNCTION IN CHILDREN WITH CYSTIC FIBROSIS

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Aim Cystic Fibrosis conductance Transmembrane Regulator (CFTR) protein modulators represent a major breakthrough in the pharmacological management of Cystic Fibrosis (CF). Previous studies report acute changes in lung function after first administration of lumacaftor/ivacaftor (LUM/IVA) without a clear underlying mechanism.[1 2] Our aim was to explore links between changes in percent predicted forced expiratory