performing the colonoscopy and the medical student scoring the quality of the bowel preparation using the Boston Bowel Preparation Scale (BBPS)1 were blinded to which bowel preparation had been given. 3 sections of the bowel were scored out of 3 (ascending colon, transverse colon and descending colon) to give a total score out of 9.

Results 18 patients between ages 7 and 17 were recruited; 9 given senna and sodium picosulfate and 9 given Picolax®. A total BBPS score of 5 or more is considered adequate. All of the Picolax® group had adequate bowel preparation compared to 67% of the senna and picosulfate group. Mean BBPS scores were: senna and sodium picosulfate = 5.2 and Picolax® = 6.3.

Conclusion In this small study the patients who received Picolax® had a higher BBPS score, indicating a more effective clearance of the bowel pre-colonoscopy. The sample size is small; this was in part due to manufacturing problems affecting the supply of senna liquid. A further confounding factor could be variable adherence to the medication and diet plan as this was not assessed. Due to the positive results from the comparison, the standard treatment at this centre was switched to Picolax® for bowel preparation pre-colonoscopy in paediatrics.

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P02 LIDOCAINE INFUSION IN A PATIENT ON ECMO AND MONITORING LEVELS

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Background A 12-year-old patient was admitted to the cardiac intensive care unit (CICU) due to cardiogenic shock along with dilated cardiomyopathy. Whilst on CICU, the patient continuously experienced episodes of bigeminy, ventricular arrhythmias and bradycardia. Due to clinical deterioration, the patient was initiated on veno-arterial extracorporeal membrane oxygenation (VA ECMO). Following initiation of VA ECMO, the patient experienced episodes of torsades de pointes requiring electrolyte corrections, amiodarone infusions and boluses, lidocaine boluses and electrical cardioversion. Due to the patient's bradycardia, esmolol infusions were not recommended and amiodarone boluses were avoided with plans to wean the infusion therefore a lidocaine infusion was trialled. Despite this infusion the patient continued to experience episodes of torsades de pointes and therefore the clinical team wanted to take lidocaine levels to ensure optimisation of therapy. However, lidocaine levels are uncommon and are not conducted by many centres.

Pharmacist Contributions Firstly, as lidocaine infusions are not commonly used, the clinical team needed to be directed to the British National Formulary for Children for advice on how to prescribe this as careful loading is required.[1] For the maintenance dose, careful consideration needed to be given as there is no set dosing instructions past 24 hours for lidocaine infusions. Lidocaine is a lipophilic molecule and evidence has shown that lipophilic molecules are more likely to bind to ECMO circuits leading to sub therapeutic levels.[2 3] Therefore, to ensure adequate control, a higher infusion rate of 0.8 mg/min was chosen. As many centres do not undertake levels, it required liaising with our internal laboratories to determine where levels could be sent. It was deduced that levels could be sent to a laboratory in Belfast for them to sample. 2 mL of blood would be required for analysation as agreed by Belfast and our internal laboratories. Additionally, a literature search was conducted to determine what levels should be targeted and what might be deemed to be toxic. Through literature, it was found that target levels of 1.5 mg/L are required for adequate control of ventricular arrhythmias. On the opposite end of the spectrum, levels of 5 mg/L and above are associated with side effects such as vertigo, paraesthesia, and slurring of speech.[4] Literature is based off levels conducted in adults however, as this patient was 12 years old and weighed 43 kg, the literature could be extrapolated to be applicable for use in this patient.

Outcome The patient was listed as super urgent on the heart transplant waiting list and therefore received a transplant before the lidocaine levels were returned and were no longer required.

Learning Points As the patient was on ECMO, they are not at risk of sudden cardiac arrest due to the heart being fully supported by the ECMO circuit. Additionally, whilst in CICU, the patient would have close ECG monitoring and therefore rather than sending levels of lidocaine which take a significant time to return, it may be more appropriate to monitor the patient for side effects alongside monitoring ECG changes and titrating the dose as necessary.

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P03 EFFECT OF KAFTRIO ON SWEAT CHLORIDE LEVELS IN CHILDREN: A REAL-WORLD EXPERIENCE

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Aims In clinical trials, Kaftrio (ivacaftor/tezacaftor/elexacaftor) has shown significant improvement in clinically important parameters in children with cystic fibrosis (cwCF) including a reduction in sweat chloride levels.[1] In our study we aimed to check the effect of Kaftrio on sweat chloride levels in cwCF in real-world clinical practice.

Method Data of cwCF (aged 6–18 years) who received Kaftrio from 2020 to 2023 was collected retrospectively using the electronic patient record system. All children had sweat tests performed after starting Kaftrio and sweat chloride levels were compared with pre-Kaftrio levels.

Results 31 cwCF received Kaftrio between 2020–2023. 17 were homozygous for F508del and 14 heterozygous. 96.8% of cwCF on Kaftrio (30/31) had a reduced level of sweat