for foetal distress in one of the twins. Mother was Gravida 3 Para 2 with no known medical illness and normal antenatal scans but was colonised with Group B Streptococcus. The twins were born in good condition but needed ventilation soon after birth.

Twin 1 was extubated after 24 hours of ventilation. She deteriorated and had to be re-ventilated and was treated for possible meningitis. Her initial ECHO showed large PDA with left ventricular overload and the PDA was medically treated. She deteriorated further and ECHO at this stage showed severe left ventricular dysfunction with Pulmonary Hypertension requiring inotropes to maintain BP. ECG showed significant ST changes and troponin was significantly raised suggesting myocardial injury. Repeat ECHO showed dilated hypokinetic left ventricle, tense left atrium and bulging right atrium.

Twin 2 was also extubated after brief ventilation. She had to be re-ventilated because of significant pulmonary haemorrhage. She was haemodynamically unstable needing Inotropes and initial ECHO showed large PDA with high pulmonary pressures. She then developed recurrent narrow complex tachycardia. Repeat ECHO showed poor left ventricular function, left atrium and left ventricle moderately dilated, good right ventricle function. ECG showed gross ST changes.

Both the twins died of poor cardiac function with no output. Post mortem in both of them showed macroscopic and microscopic changes only in Left side of the heart with right side remaining unaffected.

Enterovirus DNA was detected in serum by PCR.

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PREDICTED AND MEASURED PAGIBAXIMAB SERUM LEVELS IN HIGH-RISK NEONATES

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Pagibaximab, a monoclonal antibody for prevention of staphylococcal sepsis in VLBW infants reported no staphylococcal sepsis when serum levels

were $\geq 500\text{ug/ml}$. Prior to phase 3 studies, we sought to develop a dosing scheme to maintain pagibaximab serum levels $\geq 500\text{ug/ml}$ for 35 days in VLBW infants. Serum levels from 100 VLBW infants infused with pagibaximab 10 to 90 mg/kg, for one to three doses were used to develop a pharmacokinetic model and dosing regimen. This regimen was prospectively evaluated in planned and scavenged samples obtained for 35 days from VLBW infants infused with pagibaximab. Observed and predicted pagibaximab levels were compared. The pharmacokinetics described the concentration time course of pagibaximab as a two compartment model with linear central compartment elimination. Pharmacokinetic parameters from this model were (mean $\pm$ SE): Cl (ml/h) 0.446, VI 75, V2 138, C_{0int} 12.3, Ke 0.000836, t_{1/2} 15.4 days. Using this model a dosing scheme of 100mg/kg daily for 3 days and then weekly for 3 weeks was developed to maintain target levels. Observed pharmacokinetic estimates from infants who received this regimen from both scavenged and planned samples were similar and as predicted by the model. Inclusion of scavenged samples caused some model instability due to lack of accurate sampling times. In either set of samples, all serum levels were $\geq 500\text{ ug/ml}$. We developed a dosing regimen for pagibaximab in VLBW infants to maintain serum levels of $\geq 500\text{ug/ml}$ and prospectively confirmed this regimen. Phase 3 studies can proceed with confidence that pagibaximab target levels can be achieved and maintained.

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PROCALCITONIN, INTERLEUKIN-6, LIPOPOLYSACCHARIDE-BINDING PROTEIN AND C-REACTIVE PROTEIN IN THE DIAGNOSIS OF SEPSIS OF FEBRILE NEUTROPENIC CHILDREN

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Background and aims: The diagnosis of sepsis in children with febrile neutropenia (FN) remains difficult. The aim of the study was to evaluate the role of procalcitonin (PCT), interleukin-6 (IL-6), lipopolysaccharide-binding protein (LBP) and C-reactive protein (CRP) in the diagnosis of bacteremia and sepsis of children with FN.