Conclusion CRP has good specificity (96% at 1 mg/L) for CA in preterm infants. Higher initial CRP levels in infants correlate with severity of histological CA.

Methods Descriptive study. A cohort of late preterm infants born in a Spanish third level hospital (2010–2014) was enrolled. Medical records were reviewed. Risk factors for RSV infections were reviewed. Recommendations for immunoprophylaxis issued by the Spanish Society of Neonatology 2010 were followed. Results 887 late preterm infants were enrolled. 4.1% were hospitalised for RSV bronchiolitis, median age was 5 months old. According to the gestational age: 16% were 34 weeks (one RSV prophylaxis), 45% 35 weeks (three RSV prophylaxis), and 38% 36 weeks (one RSV prophylaxis).

The risk factors for RSV hospitalisation: 56% were born in RSV season, 48% had school age siblings, 54% were male gender. Anyone was exposed to passive cigarette smoke. 16% were admitted to ICU. All the hospitalised infants required oxygen at any time. No deaths were reported. Conclusions Hospitalisation rate for RSV bronchiolitis in late preterm infants of our cohort was higher than the estimated one in overall population. RSV prophylaxis was not routinely scheduled to late preterm infants according to the Guidelines issued by the Spanish Society of Neonatology. Its risk scoring tool for prophylaxis can be used to identify infants at higher risk.

Methods Ingestion of microbes during neonatal sepsis

Background and aims Complement and IgG are humoral opsonins. We theorised platelets might be opsonins in neonates. We proposed that persistent neonatal bloodstream infections and thrombocytopenia might provide proof of the concept if there was high rather than low mean platelet volumes [MPVs] during infections (i.e., platelets consumed during phagocytosis).

Methods From 2008 to 2013, all neonates were included if they had positive blood cultures underwent a record review. Infants were included if they had ≥ 3 days of age and that had positive blood cultures underwent a record review. Infants were included if they had ≥ 2 positive blood cultures and had platelet counts <105 per mm3. Exclusion criteria were necrotizing enterocolitis, coagulopathy, organ or catheter-related thrombosis or endocarditis.

Results Among 77 positive blood cultures, two methicillin-resistant Staphylococcus aureus [MRSA] and two Candida bloodstream infections persisted and had thrombocytopenia. The four infants had initial elevated MPVs that declined to normal only with the resolution of infection. Blood smears had no aggregates of platelet, microbes and phagocytes. One MRSA and two Candida infections with associated thrombocytopenia occurred in extremely preterm infants; they had no elevation in MPVs and expired quickly. A review of all 77 infants with late-onset sepsis revealed the infecting microbe and extreme prematurity modulated the kinetics of MPVs during infection.

Conclusions Two pathogens that likely resisted opsonization with complement and IgG were associated with continuing neonatal sepsis and thrombocytopenia. High MPVs suggest defective platelet production was not responsible for thrombocytopenia, but macrophages and neutrophils likely removed platelet-microbe-aggregates from the blood. These findings offer indirect proof that platelets may act as opsonins during neonatal phagocytosis.

Conclusion CRP has good specificity (96% at 1 mg/L) for CA in preterm infants. Higher initial CRP levels in infants correlate with severity of histological CA.