for genital mycoplasmas (GM) and complete blood counts within 24 hrs. of birth. Infants with GM+ve were compared with GM-ve for perinatal and neonatal variables.

**Results**

Of the 361 infants with tracheal aspirate cultures sent for GM, 50 positive were GM+ve (See Table). Infants GM+ve had significantly higher platelet counts compared to those GM-ve (285 ± 177 vs. 196 ± 83; p = 0.007). After controlling for perinatal variables (GA ≤32 wk., premature rupture of membranes, delivery mode, prenatal antibiotics and prenatal steroid) in GM+ve the adjusted odds ratio for an initial platelet count of > 250,000 was 3.83 (95% CI 1.5–9.8) with p value of 0.0049. However, GM+ve infants had no significant changes in other haematological parameters such as total WBC counts, neutrophil, monocyte, lymphocyte or eosinophil counts.

**Conclusions**

Vertical transmission of GM to the infant is manifested subtly at birth without significant changes in haematological parameters except an increase in platelet count > 250 K. Increase in platelet counts at birth may be an important marker for the effects of GM on premature newborn infants.

### PS-300 CHORIAMNIONITIS AND CRP AS MARKERS FOR SHORT AND LONG TERM OUTCOMES IN PREMATURE INFANTS

**Aim**

To describe intestinal microbiota in preterm infants admitted to the Neonatal Unit using molecular techniques, and assess the impact of different conditions.

**Methods/study design**

A two year period Descriptive study (2011–2012) of gut microbiota in stools from newborns born under 35 week gestational age (WGA) at birth, admitted in a Neonatal Care Unit. Stool samples were collected: M1 (mecocolon), M2 (first week), M3 (first month). 5 groups of bacteria were analysed using qPCR technique: Bacteroïdes, Bifidobacterium, Escherichia coli, Clostridiums and Lactobacillus. Maternal, perinatal and neonate variables were registered. Statistic programs SPSSv20.

**Results**

In the first month a marked increase (x120) in bifido bacteria is observed. The increase of Lactobacillus (x2) and E. coli (x7) is lower. Bacteroides and Clostridiums remain stable.

### Abstract PS-301 Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>GM+ve</th>
<th>GM-ve</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number infants</td>
<td>50</td>
<td>311</td>
<td></td>
</tr>
<tr>
<td>GA (wk)</td>
<td>26.6 ± 3.2</td>
<td>28.7 ± 3.5</td>
<td>0.0001</td>
</tr>
<tr>
<td>Premature Rupture Membranes</td>
<td>60%</td>
<td>38%</td>
<td>0.0032</td>
</tr>
<tr>
<td>Prolonged Rupture Membranes &gt;12 hr</td>
<td>40%</td>
<td>23%</td>
<td>0.0047</td>
</tr>
<tr>
<td>Delivery Mode C-section</td>
<td>62%</td>
<td>75%</td>
<td>0.0492</td>
</tr>
<tr>
<td>Prenatal macrolide antibiotics</td>
<td>44%</td>
<td>27%</td>
<td>0.0143</td>
</tr>
</tbody>
</table>

**Background**

Early infant CRP levels in the setting of Chorioamnionitis (CA) have been fully defined as a predictor of cognitive, behavioural, and neuro-developmental outcomes among extremely preterm neonates.

**Methods**

499 preterm neonates had Placental pathology, CRP level and Vermont Oxford outcomes recorded. Death and developmental outcomes at 2 yrs were examined for 247 preterm infants <32 wks and <1.5 kg. Multivariable logistic and linear regression models were developed to assess the association between CA and outcomes controlling for gestational age.

**Results**

499 preterm infants were included with mean birth weight of 1074 +/- 273 g and gestational age of 28.5 +/-2.7 weeks. Infants with CA (N = 127) had lower GA and birth weight and higher rates of early onset sepsis. The Fetal inflammatory response was associated with: Apgar <7 at 10 mins; intubation in the delivery room; PDA; RDS; pneumothorax and oxygen on Day 28.

Infants with Day 1 CRP >10 mg/L needed significantly more resuscitation in the Delivery room (DR) including adrenaline and cardiac compressions. They were significantly more at risk of RDS, ROP grade III/IV IVH.

**Conclusion**

There is a correlation between both initial CRP and histological CA with adverse short term outcomes.