statistically associated with AR. The MLR correctly classified 87% of the observations.

Conclusion NB of pregnant women presenting the following RF: GA < 37, EC, MFL, CC, FB, AP, MSAF, ECS, Ga and PROM (Premature rupture of membranes) > 18 h have an increased need of Advanced Resuscitation (AR). Team trained to should be present at the delivery for pregnant women with the above risk factors.

MLR to AR

### PS-226

**EFFECTS OF DIFFERENT VENTILATION RATE (VR) TARGETS IN A MODEL OF NEONATAL MANUAL POSITIVE PRESSURE VENTILATION (PPV)**

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10.1136/archdischild-2014-307384.525

**Background** Current recommendations for manual PPV in the delivery room allow a VR range of 40–60 ventilations/min. However, not enough studies have explored the effects of VR on resuscitation.

**Objective** To evaluate the effect of different VR targets on other ventilatory variables during manual PPV.

**Methods** 20 physicians manually ventilated an intubated neonatal manikin with both a self-inflating bag (SIB) without a PEEP valve and a T-piece resuscitator (TP). Peak inspiratory pressure (PIP) target was 25 cmH2O, PEEP was set to 5 on the TP and flow was kept at 8 l/min. VR (40, 60 and 80 vent/min) was paced by a metronome. Both, VR targets and PPV device sequences, were randomly assigned. Variables were compared by one-way repeated measures ANOVA.

**Results** Participants performed 9450 ventilations in 6 series of 90 seconds. For both devices there were no significant modifications in PIP and inspiratory time (Ti) between VR targets.

**Conclusions** Higher VR increased I/E ratio and provided higher MAP despite similar PIP. Further studies are needed to evaluate if targeting VR can influence the response to PPV in delivery room.

### PS-227

**A RANDOMISED TRIAL OF USING THERMAL BLANKET TO IMPROVE THERMOREGULATION AMONG PRETERM INFANTS**

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10.1136/archdischild-2014-307384.526

**Background** Thermal protection is critical in caring very low birthweight (VLBW).

**Methods** VLBW infants born at Chang-Gung Memorial Hospital were randomly assigned to TB or control group from February to July 2013. All infants were placed on a pre-warmed radiant warmer upon admission. For TB group, blanket of Blanketrol® II (Cincinnati Sub-Zero Products) was additionally applied (Figure 1) and system temperature was set 37°C. Individual’s temperature, heart rate, mean blood pressure (MAP), and oxygen saturation were measured immediately at admission and at 30th, 60th, 90th, 120th minute later, respectively. We defined hypothermia as temperature <36°C and hypotension as MAP < index infant’s gestational age (GA).

**Abstract PS-227 Table 1**

<table>
<thead>
<tr>
<th>VR</th>
<th>TP</th>
<th>SIB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40 (SD)</td>
<td>60 (SD)</td>
</tr>
<tr>
<td></td>
<td>39.7(0.2)</td>
<td>59.8(0.5)</td>
</tr>
<tr>
<td>p Value</td>
<td>&lt; 0.001**</td>
<td>&lt; 0.001**</td>
</tr>
</tbody>
</table>

**Abstract PS-227 Figure 1**

**Abstract PS-227 Figure 2**

*Mean (SD) * RM ANOVA **RM ANOVA on ranks*