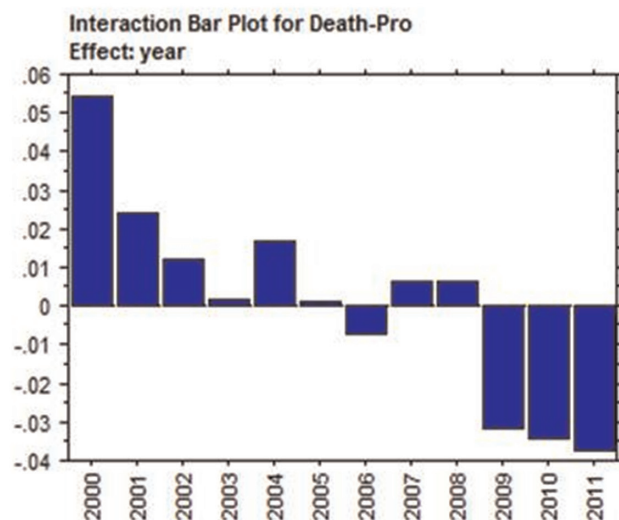


Abstract PO-0694 Figure 1

**Conclusions** These preliminary data suggest that SB is strongly correlated to UB. SB could be related to neurotoxicity as it may be formed by UB passed from circulation to a tissue. Further investigations are needed to clarify this relationship and possible influencing factors.



**Conclusions** The use of LR is better than GA and BW in predicting M of VLBWs. RAM can be used as a tool for quality improvement.

**PO-0694 RISK-ADJUSTED MORTALITY OF VLBW IN TAIWAN- A POPULATION-BASED STUDY**

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10.1136/archdischild-2014-307384.1333

**Background and aims** Preterm babies have higher mortality than terms. Risk-adjusted mortality (RAM) is useful for making comparisons among different NICUs. GA, BBW, sex, singleton birth and antenatal steroid have been used to estimate mortality (M) of preterm. The aims of this study are 1. To compare the performance of GA, BW, and Logistic Regression (LR) in predicting M of VLBW infants. 2. To compare the RAM in different areas and periods.

**Methods** Cohort data from 2000 to 2011 were used. M is defined as death prior to discharge. Exclusion criteria included 1) Transferred after 24 h of age; 2) Death within 24 h of admission and 3) Lethal malformation. We developed a LR model to predict M [expected probability (Pro)]. ROC curves were used for assessing performance of predicting M. To compare the RAM, we calculated (O-E) Pro (observed Pro - expected Pro) values in each patient and used these values for comparisons.

**Results** 9207 VLBWs were enrolled. The calculated probability of death by LR model was:  $P = 1/(1+e^{-z})$ , where e= natural logarithms and  $z = (-0.62 \cdot [\text{prenatal steroid}]) - (0.219 \cdot \text{GA}) - (0.004 \cdot \text{BBW}) - (0.327 \cdot [\text{singleton}]) + (0.286 \cdot [\text{male}]) + 8.438$ . Area under ROC were 0.858 for LR (95% CI: 0.847-0.869), 0.841 for BBW (95% CI: 0.829-0.853) and 0.827 for GA (95% CI: 0.815-0.839).

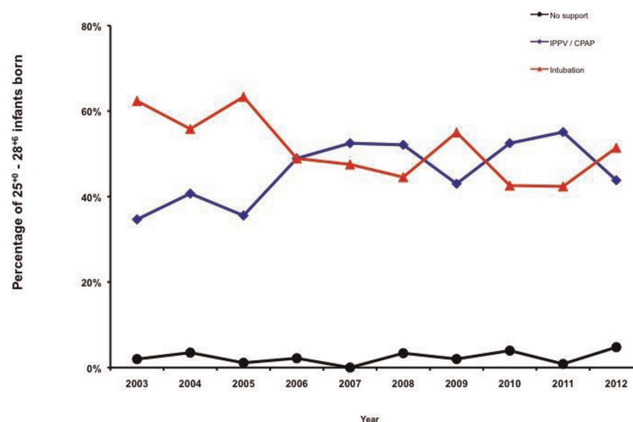
There were significant differences of RAM in different locations and years (Figure 1).

**PO-0695 DELIVERY ROOM MANAGEMENT OF EXTREMELY PRETERM INFANTS IN A TERTIARY NEONATAL CENTRE: A TEN YEAR REVIEW**

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10.1136/archdischild-2014-307384.1334

**Background and aims** In the delivery room (DR), respiratory support for preterm infants has traditionally been provided through mechanical ventilation following intubation, which is known to increase neonatal morbidities including BPD and sepsis. The Nasal CPAP or Intubation at birth for very preterm infants (COIN) Trial demonstrated that infants spontaneously breathing at birth may be managed in the DR with non invasive support (CPAP) rather than intubation, which may be preferred. We aimed to review the management of extremely preterm infants in the DR at the Royal Women's Hospital (RWH) during a ten-year period and evaluate whether respiratory support practices differed during and after the COIN trial.



Abstract PO-0695 Figure 1