Conclusion CRL discordance is of poor predictive value for adverse perinatal outcome after 14 weeks of gestation in either MC or DC twin pregnancies.

**PP11** ONE THIRD OF NON-ANOMALOUS TERM STILLBIRTHS ARE ASSOCIATED WITH ABNORMAL FETAL GROWTH
doi:10.1136/archdischild-2013-303966.292

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Background Approximately one third of all stillbirths occur at term. These losses are potentially preventable by early delivery at 37 weeks. One means of screening to detect babies at risk of term stillbirth would be to use ultrasound to assess abnormalities of fetal growth. However, there is limited information on the importance of fetal growth in determining the risk of stillbirth at term.

Methods/Results We studied registries of Scottish maternity and stillbirth data and identified 668,887 eligible records of term births since 1992. Birth weight was classified on the basis of sex and gestational age specific percentiles. The relationship between birth weight percentile and the risk of stillbirth was assessed using the birth weight categories was 33% (95% CI: 28 to 37%).

Results The associations were minimally affected by adjusting for maternal characteristics, including smoking.

Conclusion Approximately one third of all term stillbirths are associated with growth abnormality. These data indicate that population screening for growth abnormalities could identify babies at increased risk of term stillbirth.

**PP12** WEIGHT DISCORDANCE AND PERINATAL MORTALITY IN TWINS: THE STORKE MULTIPLE PREGNANCY COHORT
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Objectives The main aim of this study was to ascertain the performance of BW and ultrasound EFW discordance in the prediction of perinatal loss in twin pregnancies.

Methods A retrospective study of all twin pregnancy births from a large regional cohort of 9 hospitals over a ten year period. Inter-twin BW and ultrasound EFW discordance were related to stillbirth and neonatal death of one or both twins obtained from a mandatory national register. Receiver operating characteristic (ROC), survival and logistic regression analyses were performed to evaluate the contribution of weight discordance in determining perinatal loss.

Results A total of 2,161 twin pregnancies were included in the analysis. A BW discordance of ≥25% was associated with the highest AUC for the prediction of stillbirth and neonatal death (BW AUC = 0.72; 95% CI: 0.65–0.80). The perinatal loss in twins with a BW discordance of ≥25% was significantly greater (60.9 per 1,000 fetuses) than that in twins with an EFW discordance <25% (6.6 per 1,000 fetuses) (p < 0.0001); the predictive accuracy was similar using either BW or ultrasound EFW discordance (EFW AUC = 0.69; 95% CI: 0.62–0.77, p = 0.62). Logistic regression analysis demonstrated that BW discordance and gestational age, but not choriomnity or individual fetal size percentile, were independently associated with perinatal mortality.

Conclusions An EFW discordance of ≥25% represents the optimal cut-off for the prediction of stillbirth and neonatal mortality irrespective of chorionicity or individual fetal size. A policy of increased fetal surveillance commencing from 26 weeks’ gestation and elective delivery by 38 weeks might be reasonable.

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Background A previous study (Lancet 2003; 362:1779–84) reported an increased risk of unexplained stillbirth in women with previous caesarean delivery among women having second births in Scotland, 1992–1998. Subsequent studies have yielded heterogeneous results but have employed data, analytic approaches and interpretation of variable quality.

Methods/Results We replicated our previous methods and analysed 128,585 eligible singleton second births between 1999 and 2008. There were 88 stillbirths among 23,683 women with a previous caesarean (2.33 per 10,000 women per week) and 288 stillbirths in 104,897 women who previously delivered vaginally (1.67 per 10,000 women per week, P = 0.002). When analysed by cause, women with a previous caesarean had an increased risk (hazard ratio [95%CI] P of unexplained stillbirth (1.47 [1.12–1.94] P = 0.006) and the excess risk was apparent from 34 weeks onwards (1.75 [1.23–2.49] P = 0.002). When the analysis was confined to 96,983 women with linked records from the first and second pregnancy (confirming exact mode of previous delivery) the association was stronger (2.12 [1.55–2.88] P < 0.001). Adjustment for maternal characteristics and first pregnancy complications had a minimal effect (1.97 [1.43–2.72] P < 0.001). The association was similar whether the previous caesarean was performed prior to labour (2.1 [1.24–3.80] p = 0.007) or during labour (2.50 [1.58–4.08] p < 0.001) and when the analysis was confined to previous term births (2.50 [1.50–3.58] p < 0.001).

Conclusion We confirm that previous finding that previous caesarean delivery is a risk factor for unexplained stillbirth. The association is independent of maternal characteristics, obstetric outcome or the indication for the caesarean delivery.