**Methods**  A prospective cohort of MC twins complicated by severe TTTS (n = 23) were studied, between October 2006 and December 2007. Cytokines (TH1: interferon-gamma (IFN-γ), tumour necrosis factor-α (TNF-α)) and interleukins (IL-2, IL-6, IL-8, IL-12, IL-1β); TH2: IL-4, IL-5, IL-10 and IL-13; as well as keratinocyte growth factor (KGF), platelet derived growth factor-BB (PDGF-BB), fibroblast growth factor-basic (FGF-basic), tissue inhibitor of metalloproteinases-1 (TIMP-1) and intercellular adhesion molecule-1 (ICAM-1) were measured in plasma and AF before and after FLA by Human TH1/TH2/Human Angiogenesis FASTQuant kits or ELISA.

**Results**  There was a significant difference in the plasma PDGF-bb and TIMP-1 concentrations noted between uncomplicated MC and MC twin pregnancies complicated by TTTS. Median maternal plasma PDGF-bb was lowest in uncomplicated MC twins than in TTTS pregnancies and DC twin pregnancies pg/ml (P = 0.0486). However, TIMP-1 was higher in TTTS pregnancies than in uncomplicated twins (P = 0.0031). There was a significant difference between plasma and amniotic fluid concentrations of IL-6, IL-1β, TNF-α, IL-10, IL-4, IL-8, IFN-γ, TIMP-1 and ICAM-1. There were no significantly differences in either plasma or amniotic fluid cytokines after fetoscopic laser ablation.

**Conclusion**  TTTS is associated with minimal changes in cytokine levels although the majority of cytokine levels were higher in amniotic fluid than maternal blood. It does not appear that FLA provokes a significant cytokine response.

**Objective**  To construct fetal biometric charts in the Irish population using methodology recommended by Altman and Chitty with up-to-date ultrasound equipment.

**Study design**  This was a prospective, cross-sectional study involving low-risk women attending Cork University Maternity Hospital. Women were recruited from their first trimester dating scan and randomly allocated to a single scan between 14–40 weeks gestation. Scans were performed by a sole researcher. Gestation was calculated using the estimated due date assigned by the project was performed in accordance with HFEA.