Introduction
Reduction of high order multiple gestations improves pregnancy outcome. Information about reduction of a twin gestation to singleton is inconclusive. The aim of this study was to evaluate if such fetal reductions may be beneficial.

Methods
A Retrospective cohort study in a single tertiary medical center, of all bichorionic-biamniotic twin pregnancies, who underwent selective fetal reduction, for any indication at all gestational weeks. Pregnancy outcome was compared to women with ongoing, non-reduced, bichorionic-biamniotic twins. Main outcome measures were preterm birth prior to 37 or 34 gestational weeks. Secondary outcomes included: gestational age at delivery, birthweight, small for gestational age, hypertensive disorders, gestational diabetes and intrauterine fetal death.

Results
92 reduced pregnancies were compared with 258 ongoing twin gestations. Preterm birth <37 weeks (42.22% vs. 60.08%, p<0.01) and birthweight < 10th percentile (8.43% vs. 19.07%, p=0.02) were significantly lower in the reduced group compared to the ongoing group, respectively. There were no significant differences between groups in terms of preterm birth <34 weeks, birthweight < 5th percentile, stillbirth and maternal complication. A subgroup analysis for our primary outcome (preterm birth <37 weeks), according to procedure indication and timing, showed significant differences in favor of those undergoing elective reduction (OR=0.277, 95% CI 0.095-0.810) or a reduction due to fetal anomalies (OR=0.494, 95% CI 0.280-0.869) compared to women with ongoing twins, and not to reductions due to risk factors for preterm birth (OR=1.550, 95% CI 0.392-6.132).

A Kaplan-Meier survival curve was constructed to analyze proportions of non-delivered women at each gestational week, compared to the non-reduced twins, after 29 gestational weeks.

Conclusion
Fetal reduction from twins to a singleton pregnancy reduces the risk of preterm birth prior to 37 gestational weeks and of infant birthweight less than the 10th percentile, but not for more severe maternal and neonatal complications.