Results: Population Data

i. The population consisted of 27 appropriate-, 13 small- and 16 large-for gestational age fetuses.

ii. The mean gestational age at measurement was 38.94 weeks of gestation.

iii. The mean BMI at scanning date was 31.78 kg/m² and the mean birth weight was 3428 g.
Results: Overall Fetal Weight Estimation

i. Overall, the most accurate birth weight estimation was generated by the Hadlock model (-1.68 ± 8.35%).

ii. Fractional thigh and upper arm volume showed an overall deviation of -7.82 ± 7.52 and -9.01 ± 7.82%, respectively.
Results: LGA Fetal Weight Estimation

i. In large-for gestational age fetuses, the fractional limb volume showed a better performance.

ii. The deviation was $-4.59 \pm 5.34$ (thigh) and $-5.50 \pm 8.32\%$ (upper arm), whereas the error using the Hadlock model was $3.19 \pm 7.66\%$. 
Results: SGA Fetal Weight Estimation

i. The fractional limb volume deviation was $-8.02 \pm 10.56$ (thigh) and $-6.80 \pm 7.80\%$ (upper arm).

ii. The error using the Hadlock model was $-3.43 \pm 9.17\%$.

**Mean percentage difference:**
Systematic error, accuracy

**Standard deviation:**
Random error, precision
Conclusions

i. The birth weight estimation by use of semi-automated fractional limb volume measurement can help to generate precise results, especially in large-for gestational fetuses.

ii. In addition, this fast and easy to learn method might supply the unexperienced investigator in precisely predicting fetal birth weight.

iii. Use of correction factors may be necessary to adjust underestimated automated fractional limb volume.