STUDY DESIGN:

OBJECTIVE:
- We assessed the detection and false positive rates of MCA-PSV in fetuses undergoing serial IUTs and searched for an effect of gestational age.
- Fetal hemoglobin level was also estimated from the expected daily decrease between transfusions.

RESULTS (1)
- 201 in-utero transfusions in 64 women
- In a single center from 2003 to 2009 (allo-immunization RhD: 74%; Kell: 20%; c: 3%; others 3%)
- All at least 1 IUT: 64 (100%)
- All at least 2 IUT: 43 (67%)
- All at least 3 IUT: 23 (36%)

CONCLUSION

• MCA-PSV:
  - Accuracy of MCA-PSV decreases with increasing order of IUTs
  - But: negative predictive value remains high (>90%) whatever the gestational age

• Prediction of fetal Hb from post-transfusion Hb value:
  - Is rather inaccurate after the first IUT (wide variability)
  - Is more accurate with increasing order of IUTs (slower decrease, less variability)
  - Is not influenced by gestational age