

EP08.38 Performance of three fetal weight estimation curves in detecting small and large gestational age newborns with or without adverse perinatal outcomes.

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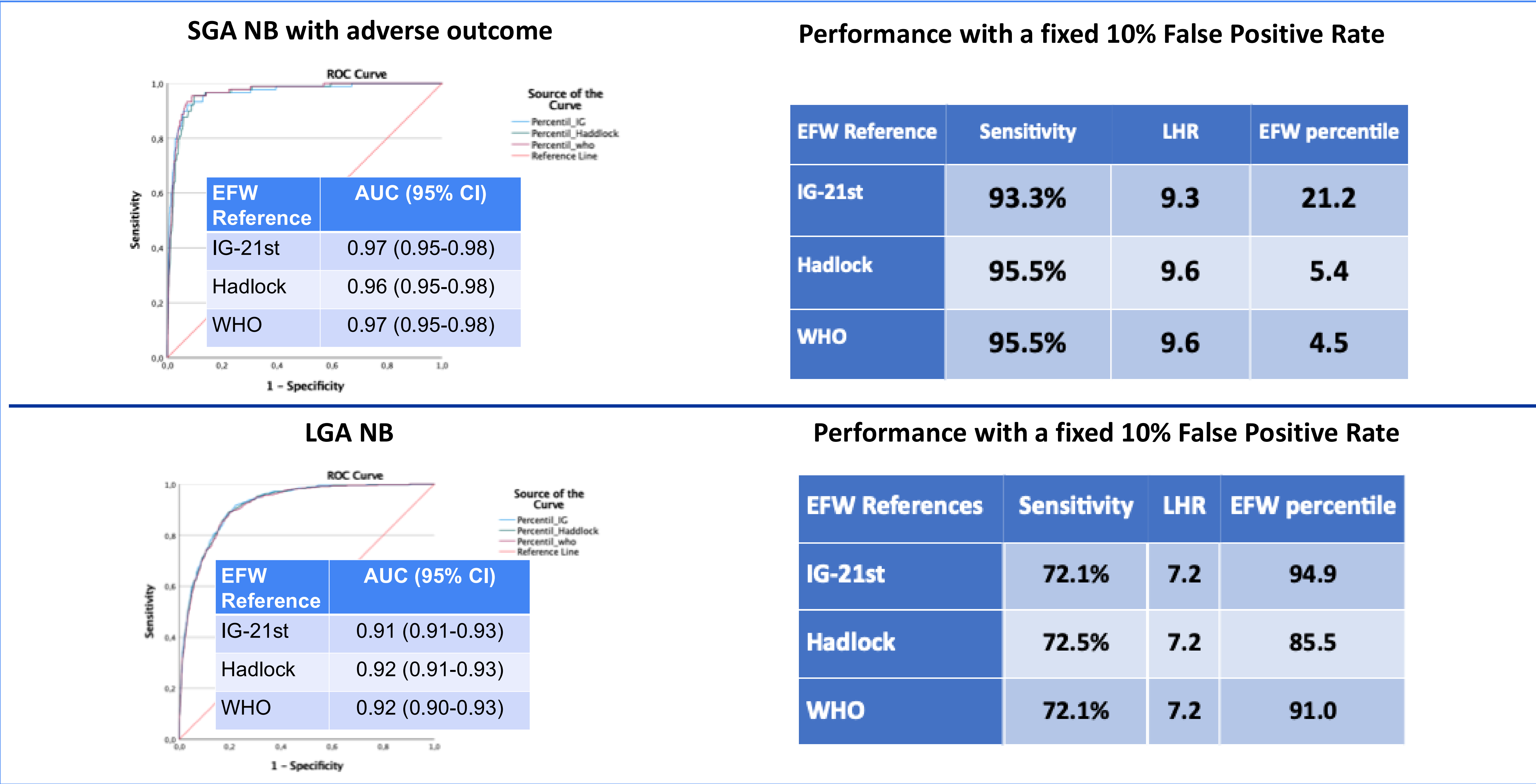
Aims of this study:

To assess the performance of three fetal weight estimation (EFW) curves in detecting large (LGA) and small (SGA) for gestational age newborns (NB), with or without adverse perinatal outcomes

Subjects and Methods:

- **Population:** 3,594 singleton pregnancies born between 22-42 weeks with an US two weeks before delivery
- **EFW reference charts:** 1) WHO, 2) IG-21st and 3) Hadlock
- **NB reference chart:** Chilean NB reference chart
- **Variables:**
 - **Dependent:**
 - SGA < 10th and LGA >90th centile for NB Chilean reference chart +/- adverse outcome
 - **Independent:**
 - EFW three reference charts
- **Statistics:**
 - EFW performance assessed by diagnostic accuracy statistical methods: 1) AUC of ROC, 2) sensitivity, specificity, negative and positive predictive values

Results:



Variables	AGA (n=2,450)	LGA NB (n=455)	SGA NB (n=689)
GA at delivery (week)	38.3 ± 2.2	38.6 ± 1.7	36.3 ± 3.3*
NB weight percentile	48.5 ± 23.4	95.8 ± 3.1*	4.1 ± 3.0*
BMI	26.0 ± 4.9	28.0 ± 5.3*	25.1 ± 4.6
Apgar < 7 at 5 min	13 (0.5%)	0 (0%)	24 (3.5%)*
Preeclampsia	99 (4.0%)	7 (1.5%)*	87 (12.6%)*
Diabetes	80 (3.2%)	22 (4.8%)*	11 (1.6%)*

CONCLUSION

The the three EFW reference charts show similar performance in detecting SGA and LGA NB within two weeks before delivery. However, the required EFW percentiles to achieve similar sensitivity and FPR differ among the charts