**Supplementary material.**

**Table S1**. Prevalence of individual adverse outcomes included in composite measure in preterm and term pregnancies

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Term NICU admission | HIE | Perinatal Death | Apgar < 7 at 5’ | Total |
| Preterm births (*n = 612)* | / | 0 | 16 | 23 | 39 |
| Term births *(n = 16649)* | 393 | 22 | 16 | 58 | 489 |
| Total *(n = 17261)* | 393 | 22 | 32 | 81 | 528 |

*NICU = Neonatal Intensive Care Unit; HIE (Hypoxic Ischemic Encephalopathy). Since adverse events are not mutually exclusive, the total sums up to slightly higher figures than the reported CAPO of 3% in the cohort (521/17261).*

**Table S2**. Performance of estimated fetal weight charts (first row) in detecting fetal growth restriction (FGR) associated with adverse outcome according to consensus definition (second row) in early (< 32 weeks) vs late (≥ 32 weeks) gestation

|  |  |  |  |
| --- | --- | --- | --- |
|  | **INTERGROWTH** | **HADLOCK** | **FMF** |
| **Consensus****Early FGR (<32 weeks)** | **Consensus****Late FGR (>= 32 weeks)** | **Consensus****Early FGR (<32 weeks)** | **Consensus****Late FGR (>= 32 weeks)** | **Consensus****Early FGR (<32 weeks)** | **Consensus****Late FGR (>= 32 weeks)** |
| **Prevalence (%)** | 3.61 | 1.18 | 4.4 | 3.4 | 7.37 | 4.17 |
| **Sn (%)** | 14.1 (8.1 – 22.3) | 1.93 (.84 – 3.8) | 16.9 (10.4 – 25.5) | 5.3 (3.6 – 7.9) | 21.7 (14.3 – 30.8) | 4.6 (2.8 – 7.1) |
| **Sp (%)** | 96.9 (96.1 – 97.7) | 98.8 (98.6 – 99) | 96.2 (95.3 – 97) | 96.6 (96.3 – 96.9) | 93.4 (92.2 – 94.4) | 95.8 (95.5 – 96.1) |
| **+ve LR** | 4.63 (2.7 – 7.9) | 1.66 (.82 – 3.3) | 4.46 (2.7 – 7.2) | 1.57 (1 – 2.4) | 3.28 (2.2 – 4.9) | 1.1 (.7 – 1.7) |
| **-ve LR** | 0.89 (.82 - .96) | 0.99 (.98 – 1.01) | 0.86 (.79 - .94) | 0.98 (.96 – 1) | 0.84 (.76 - .93) | 1 (.97 – 1.02) |
| **PPV (%)** | 19.7 (12.6 – 29.5) | 4.5 (2.3 – 8.6) | 19.15 (12.8 – 27.6) | 4.2 (2.8 – 6.3) | 14.8 (10.5 – 20.6) | 3 (1.94 – 4.6) |
| **NPV (%)** | 95.5 (91.6 – 93.8) | 97.28 (97.25 – 97.32) | 95.6 (95.2 – 96) | 97.3 (97.2 – 97.4) | 95.7 (95.3 – 96.1) | 97.3 (97.22 – 9.33) |

*FMF = Fetal Medicine Foundation; FGR = Fetal growth restriction; Sn = Sensitivity; Sp = Specificity; LR = Likelihood Ratio; PPV = Positive Predictive Value; NPV = Negative Predictive Value.*

**Table S3**. Performance of cerebroplacental ratio Doppler references of Wolf et al. and Baschat et al. in detecting late fetal growth restriction (FGR) according to consensus definition (second row) across different growth charts (first row)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **INTERGROWTH** | **HADLOCK** | **FMF** |
| **Consensus****Late FGR (>= 32 weeks) Baschat** | **Consensus****Late FGR (>= 32 weeks) Wolf** | **Consensus****Late FGR (>= 32 weeks) Baschat** | **Consensus****Late FGR (>= 32 weeks) Wolf** | **Consensus****Late FGR (>= 32 weeks) Baschat** | **Consensus****Late FGR (>= 32 weeks) Wolf** |
| **Prevalence (%)** | 0.95 | 0.9 | 3.36 | 3.3 | 4.1 | 4 |
| **Sn (%)** | 1.93 (.84-3.7) | 1.93 (.84-3.7) | 5.1 (3.2-7.6) | 5.1 (3.2-7.6) | 4.34 (2.6-6.8) | 4.34 (2.6-6.8) |
| **Sp (%)** | 99.07 (98.9-99.2) | 99.2 (99-99.3) | 96.7 (96.4-97) | 96.7 (96.5-97) | 95.9 (95.6-96.2) | 96 (95.6-96.3) |
| **+ve LR** | 2.07 (1.02-4.2) | 2.29 (1.13-4.65) | 1.52 (1-2.33) | 1.56 (1-2.38) | 1.06 (.7-1.7) | 1.07 (.7-1.7) |
| **-ve LR** | 0.99 (.98-1) | 0.99 (.98-1) | 0.98 (.96-1) | 0.98 (.96-1) | 1 (.98-1.02) | 1 (.98-1.02) |
| **PPV (%)** | 5.52 (2.8-10.6) | 6.06 (3.1-11.6) | 4.12 (2.73-6.2) | 4.2 (2.8-6.3) | 2.9 (1.85-4.5) | 2.93 (1.9-4.5) |
| **NPV (%)** | 97.3 (97.25-97.32) | 97.3 (97.26-97.33) | 97.3 (97.25-97.4) | 97.3 (97.2-97.4) | 97.3 (97.2-97.32) | 97.3 (97.2-97.32) |

*FMF = Fetal Medicine Foundation; FGR = Fetal growth restriction; Sn = Sensitivity; Sp = Specificity; LR = Likelihood Ratio; PPV = Positive Predictive Value; NPV = Negative Predictive Value.*

Data are presented only for late FGR since the reference provided by Wolf et al. relates to gestational age from 32 weeks onwards. In this regard, the proposed threshold of abnormal CPR defined by an absolute value below 1.11 was chosen.