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2 **Supplementary information**

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4 **Supplementary Table 1.** Baseline characteristics of the mothers of the 2 year old
5 children in the INTERGROWTH-21st Project Neurodevelopment Assessment cohort.
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| | Brazil (n=199) | India (n=318) | Italy (n=311) | Kenya (n=311) | UK (n=168) |
|--|--------------------------|-------------------------|-------------------------|-------------------------|----------------------|
| Maternal age (years) | 28.4 (4.0) | 26.8 (3.5) | 28.7 (4.1) | 28.6 (3.6) | 30.1 (3.2) |
| Maternal height (cm) | 162.9 (5.5) | 158.5 (3.4) | 163.5 (6.1) | 162.2 (5.5) | 166.1 (6.3) |
| Maternal weight (kg) | 64.5 (8.7) | 56.3 (8.4) | 60.3 (8.1) | 63.3 (9.1) | 64.6 (8.8) |
| Paternal height (cm) | 173.2 (6.2) | 168.1 (5.6) | 177.3 (8.9) | 174.9 (5.7) | 180.4 (6.8) |
| Maternal BMI (kg/m ²) | 24.3 (2.9) | 22.4 (3.1) | 22.5 (2.7) | 24.0 (3.1) | 23.4 (2.8) |
| Gestational age at first ultrasound visit (weeks) | 11.3 (1.3) | 11.6 (1.6) | 12.1 (0.8) | 11.7 (1.5) | 12.2 (1.1) |
| Years of formal education | 13.6 (3.3) | 16.1 (1.3) | 13.8 (3.9) | 15.5 (1.3) | 16.3 (3.0) |
| Haemoglobin concentration <15 weeks' gestation (g/l) | 12.5 (0.9) | 11.7 (0.6) | 12.9 (0.9) | 13.0 (1.2) | 12.7 (0.8) |
| Married or cohabiting | 193 (97.0) | 314 (98.7) | 305 (98.1) | 277 (89.1) | 167 (99.4) |
| Nulliparous | 147 (73.9) | 229 (72.0) | 195 (62.7) | 198 (63.7) | 111 (66.1) |

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8 Data are mean (SD) or n (%). BMI: body mass index.
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12 **Supplementary Table 2.** Number of observations available for individual domains of
 13 the INTERGROWTH-21st Neurodevelopment Assessment, Cardiff tests and age of
 14 achievement of two WHO gross motor development milestones.

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| Domain | Brazil | India | Italy | Kenya | UK | TOTAL |
|------------------------------------|---------------|--------------|--------------|--------------|-----------|--------------|
| Cognitive | 199 | 317 | 310 | 309 | 159 | 1294 |
| Executive function-like | 199 | 317 | 310 | 310 | 161 | 1297 |
| Attentional problems | 199 | 318 | 311 | 311 | 141 | 1280 |
| Visual acuity | 198 | 315 | 305 | 288 | 161 | 1267 |
| Visual contrast sensitivity | 191 | 316 | 303 | 286 | 158 | 1254 |
| Fine motor | 199 | 317 | 310 | 309 | 159 | 1294 |
| Gross motor | 199 | 317 | 310 | 309 | 159 | 1294 |
| Receptive language | 199 | 317 | 310 | 309 | 157 | 1292 |
| Expressive language | 199 | 317 | 310 | 309 | 159 | 1294 |
| Positive behaviour | 199 | 317 | 310 | 310 | 161 | 1297 |
| Negative behaviour | 199 | 317 | 310 | 310 | 161 | 1297 |
| Total behaviour | 199 | 317 | 310 | 310 | 161 | 1297 |
| Emotional reactivity | 199 | 318 | 311 | 311 | 141 | 1280 |
| Positive affect | 199 | 318 | 311 | 311 | 141 | 1280 |
| Standing alone | 194 | 318 | 311 | 306 | 162 | 1291 |
| Walking alone | 194 | 318 | 309 | 309 | 164 | 1294 |

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