Supplement paper II

Detailed information about the notation of the mixed model

Specifically, the estimated growth trajectories in Figure 2A were based on the estimated fixed effects from the equation

$$y_{ij} = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \beta_3 x_{1i} x_{2i} + b_{0i} + \varepsilon_{ij},$$

where i = 1, ..., n, $j = 1, 2, \beta_0, \beta_1, \beta_2$ and β_3 are the fixed effects, x_1 is the unit, x_2 is the PMA, $b_{0i} \sim N(0, \sigma_{b_0}^2)$ and $\varepsilon_{ij} \sim N(0, \sigma^2)$.

The variable "mode of delivery" was highly non-significant, and was therefore not included in the equation when we estimated the lines for the figure.

Similarly, the estimated growth trajectories in Figure 2B were based on the estimated fixed effects from the equation

$$y_{ij} = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \beta_4 x_{2i}^2 + \beta_3 x_{1i} x_{2i} + b_{0i} + \varepsilon_{ij},$$

No interaction with unit was found for the second-order polynomial term for PMA, and such a term was therefore not included in the equation when we estimated the lines for the figure.

The estimated growth trajectories in Figure 2C were based on the same equation as used for Figure 2B.