Preterm neonates benefit from low prophylactic platelet transfusion threshold despite varying risk of bleeding or death.

SUPPLEMENTARY MATERIALS

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Table S1. Published prediction models assessing major bleeding or mortality in preterm neonates.

Author, year	Model description	Reference
Luque, 2014	A prediction model for severe intraventricular hemorrhage (IVH) was developed in 4747 very low birthweight infants in 6 South-American countries. Model variables were selected using stepwise selection procedures, and no external validation was performed. It is unclear to what extent the variables in the model are predictors or consequences of the bleeds, as no attempt was made to correct for timing of the exposure relative to the outcome. Significant predictors for major IVH were lower gestational age (GA), lower birth weight (BW), male, antenatal steroids, cesarean section, lower 1 min Apgar, mechanical ventilation, respiratory distress syndrome (RDS). Mechanical ventilation is not available in the PlaNet-2 database, and RDS is diagnosed later in life (not at baseline or moment of randomisation).	1
Vogtman, 2012	A prediction model for severe IVH was developed in 1782 neonates with GA <32 weeks or BW <1500 grams in Germany. Thirty predictors were tested using stepwise selection while only 149 events occurred during the study. Significant predictors for major IVH were lower GA, 1 min Apgar <6, early sepsis (<3 days), no pathological Doppler results, intrapartum tocolytics. Doppler results and presence or absence of intrapartum tocolytics are not available in the PlaNet-2 database.	2
Singh, 2013	A prediction model for severe IVH was developed in 2917 neonates with GA <34 weeks and who had not received indomethacin. Neonates with missing outcome records (n=253) were excluded. It is unclear how selection of predictors was performed. Significant predictors for major IVH were low GA, mode of delivery, low BW, gender, antenatal corticosteroids, caesarean section, outborn delivery and low 5 minute Apgar score.	3
Fustolo-Gunnink, 2019	A dynamic prediction model for severe bleeding was developed in 640 neonates with GA <34 weeks and at least one platelet count $<50x10^9$/L. In this model, though not a baseline model, postnatal age and mechanical ventilation were predictors with a time-constant effect. Intra-uterine growth retardation (IUGR) and platelet count were predictors with time-varying effect, their effect may not have been present at baseline. In a sensitivity analysis, the model also accurately predicted mortality risk.	4
NICHD, 2008	The NICHD outcomes model predicts a set of outcomes including mortality in infants with GA 22-25 weeks. This model contains GA, BW, sex, singleton birth and antenatal corticosteroids.	5

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