

Supplementary Online Content

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eFigure 1. Reduction in Standardized Mean Difference After Stabilized Inverse Propensity Score Weighting

eFigure 2. Distribution of Raw Propensity Scores by Platelet Exposure

eFigure 3. Flow Diagram of Death and Neurodevelopmental Follow-up Rates for Transfused and Non-Transfused Infants Included in the Study

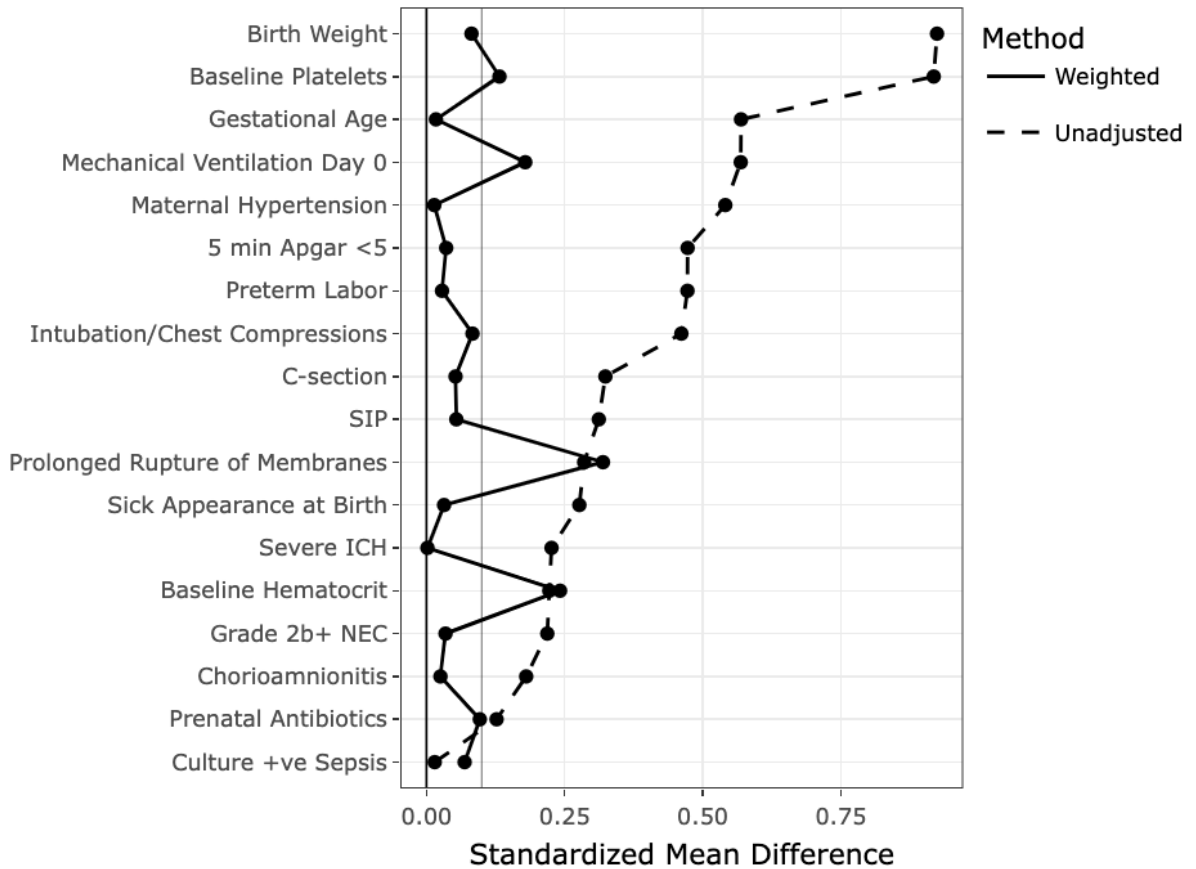
eFigure 4. Variation in Platelet Exposure and Number of Infants Exposed by Study Site

eTable 1. Sensitivity Analyses—Any Platelet Exposure

eTable 2. Sensitivity Analyses—Number of Platelet Exposures

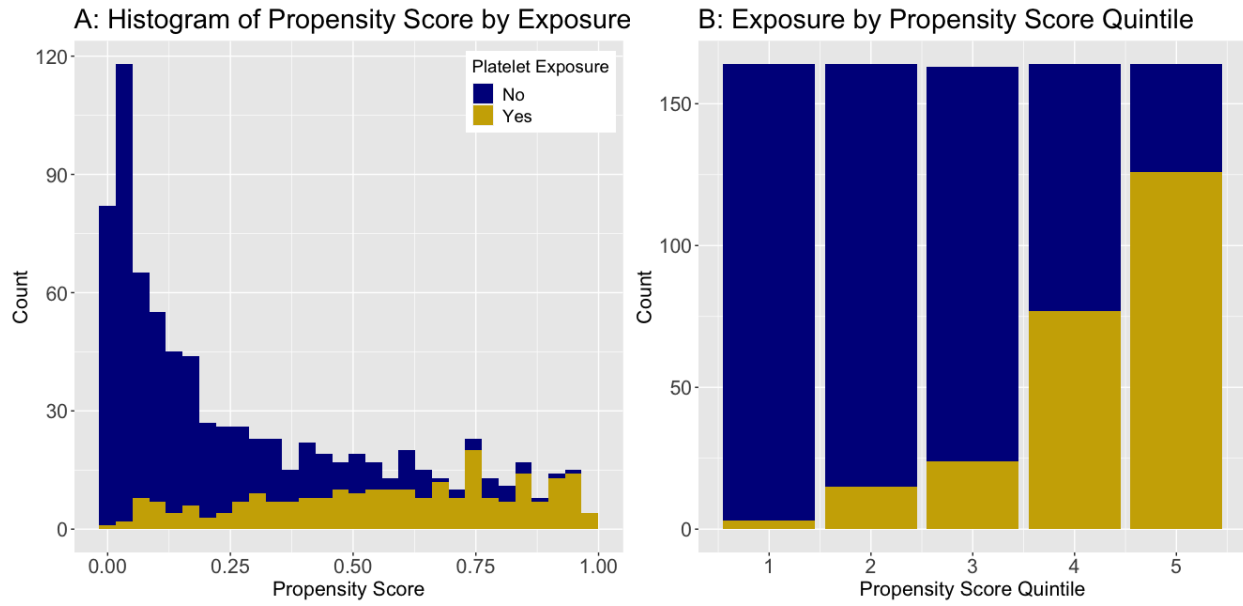
This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure 1. Reduction in Standardized Mean Difference after Stabilized Inverse Propensity Score Weighting.

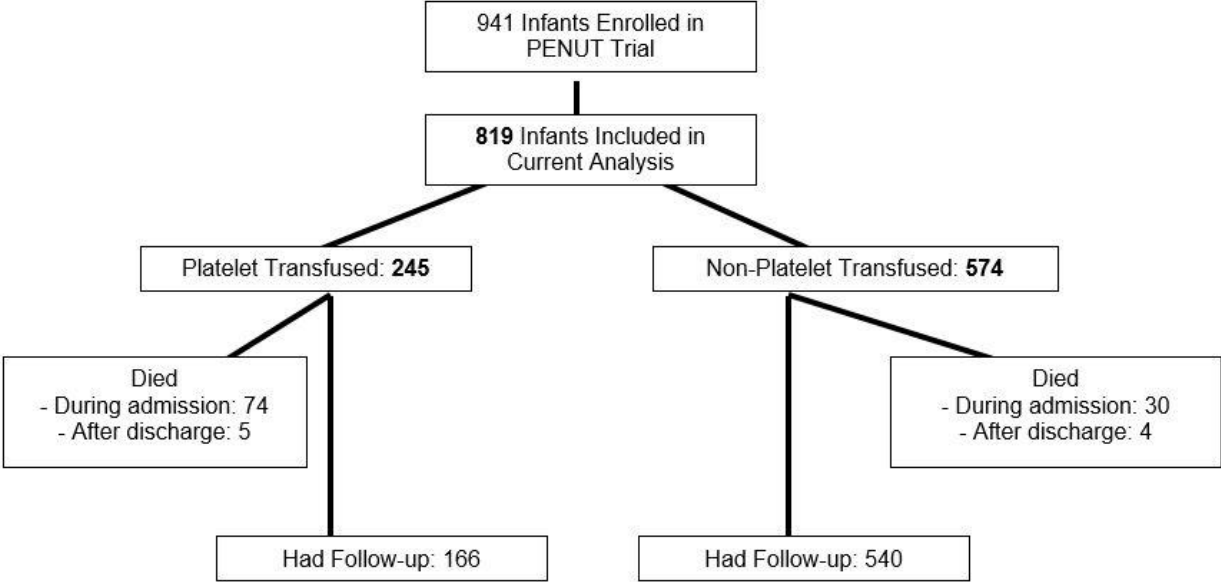


Abbreviations: SIP, spontaneous intestinal perforation; ICH, intracranial/intraventricular hemorrhage; NEC, necrotizing enterocolitis.
 All events are those occurring prior to first platelet exposure.

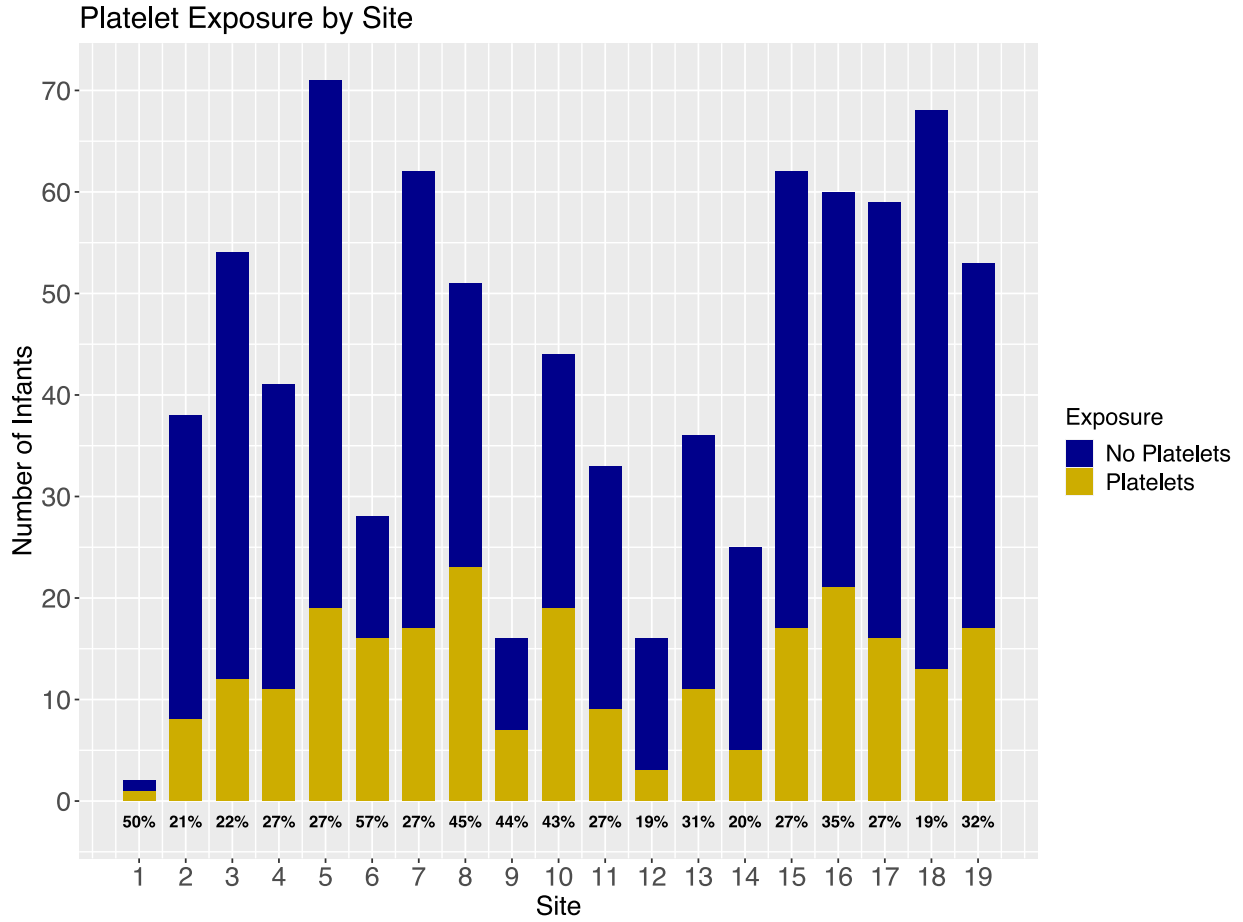
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eFigure 4. Variation in Platelet Exposure and Number of Infants Exposed by Study Site



eTable 1. Sensitivity Analyses – Any Platelet Exposure

Outcomes	Adjusted OR or Adjusted Mean Difference (95% CI) for Any Platelet Exposure vs. No Exposure				
	Sensitivity 1	Sensitivity 2	Sensitivity 3	Sensitivity 4	Sensitivity 5
Primary Outcome					
Primary outcome (death/severe NDI)	2.43 (1.28, 4.59)	2.62 (1.74, 4.14)	3.46 (2.30, 5.23)	3.20 (2.52, 7.38)	2.90 (1.89, 4.46)
Components of Outcome					
Death	3.79 (1.84, 7.82)	3.91 (2.21, 6.90)	4.54 (2.72, 7.56)	4.12 (2.29, 7.44)	4.06 (2.31, 7.12)
Severe NDI (survivors)	0.98 (0.45, 2.13)	1.43 (0.77, 2.65)	1.98 (1.11, 3.52)	1.65 (0.87, 3.13)	1.89 (0.997, 3.57)
Secondary Outcomes (binary)					
Death or Moderate-Severe NDI	1.65 (0.92, 2.97)	2.16 (1.47, 3.17)	2.72 (1.87, 3.94)	2.39 (1.56, 3.66)	2.14 (1.46, 3.13)
Moderate-Severe NDI (survivors)	1.04 (0.56, 1.93)	1.45 (0.93, 2.26)	1.80 (1.19, 2.74)	1.51 (0.94, 2.43)	1.50 (0.96, 2.33)
Secondary Outcomes (continuous)					
BSID-III Cognitive	3.1 (-3.4, 9.6)	-0.9 (-4.3, 2.5)	-2.6 (-5.8, -0.6)	-2.2 (-5.6, 1.3)	-2.0 (-5.1, 1.1)
BSID-III Motor	-4.4 (-8.1, -0.7)	-5.5 (-9.3, -1.7)	-6.6 (-10.1, -3.1)	-6.3 (-10.1, 2.5)	-5.8 (-9.3, -2.4)
BSID-III Language	-0.5 (-6.7, 5.8)	-3.0 (-7.0, -1.0)	-3.6 (-7.2, -0.02)	-2.1 (-6.4, 2.2)	-3.8 (-7.5, -0.1)

Bolded point estimates are those whose 95% CIs do not cross 1 (aOR) or 0 (BSID-III subscales)

Sensitivity 1 - Main models with baseline platelet level, baseline hematocrit level, prolonged rupture of membranes, and mechanical ventilation at enrollment included as additional covariates

Sensitivity 2 - Unweighted GEE adjusting for propensity score quintiles

Sensitivity 3 - 1:1 propensity score matched GEE model with clustering by matched pairings

Sensitivity 4 - Weighted GEE models after optimal trimming of outlying propensity scores

Sensitivity 5 - Full regression models with all propensity score variables used as covariates

eTable 2. Sensitivity Analyses – Number of Platelet Exposures

Outcomes	Adjusted OR or Adjusted Mean Difference (95% CI) per Each Additional Platelet Transfusion (up to 20)			
	Sensitivity 1	Sensitivity 2	Sensitivity 3	Sensitivity 4
Primary Outcome				
Primary outcome (death/severe NDI)	1.24 (1.05, 1.46)	1.22 (1.12, 1.33)	1.24 (1.11, 1.39)	1.23 (1.13, 1.34)
Components of Outcome				
Death	1.21 (1.06, 1.40)	1.14 (1.07, 1.21)	1.16 (1.06, 1.28)	1.14 (1.07, 1.22)
Severe NDI (survivors)	1.11 (0.999, 1.24)	1.19 (1.07, 1.31)	1.17 (1.03, 1.32)	1.22 (1.11, 1.33)
Secondary Outcomes (binary)				
Death or Moderate-Severe NDI	1.15 (0.99, 1.34)	1.15 (1.05, 1.27)	1.18 (1.05, 1.33)	1.16 (1.05, 1.29)
Moderate-Severe NDI (survivors)	1.05 (0.93, 1.19)	1.09 (0.99, 1.19)	1.09 (0.97, 1.21)	1.10 (1.003, 1.20)
Secondary Outcomes (continuous)				
BSID-III Cognitive	-0.2 (-1.3, 1.0)	-0.5 (-1.3, 0.2)	-0.5 (-1.3, 0.4)	-0.6 (-1.2, 0.1)
BSID-III Motor	-1.0 (-2.1, 0.1)	-1.1 (-1.8, -0.3)	-1.3 (-2.3, -0.3)	-1.3 (-2.0, -0.6)
BSID-III Language	-0.6 (-1.7, 0.5)	-0.6 (-1.4, 0.1)	-0.3 (-1.2, -0.5)	-0.9 (-1.5, -0.2)

Bolded point estimates are those whose 95% CIs do not cross 1 (aOR) or 0 (BSID-III subscales)

Sensitivity 1 - Main models with baseline platelet level, baseline hematocrit level, prolonged rupture of membranes, and mechanical ventilation at enrolment as additional covariates

Sensitivity 2 - 1:1 propensity score matched GEE model with clustering by matched pairings

Sensitivity 3 - Weighted GEE models after optimal trimming of outlying propensity scores

Sensitivity 4 - Full regression models with all propensity score variables used as covariates