

**Table 1** ROP findings in preterm neonates receiving adult-RBC or CB-RBC transfusions

| Patients | Gestational age (weeks) | Birth weight (grams) | ROP (stage) | Transfusion regimen | Number of transfusions |
|----------|-------------------------|----------------------|-------------|---------------------|------------------------|
| 1        | 30.7                    | 1430                 | No          | Cord blood          | 1                      |
| 2        | 28.1                    | 860                  | Yes (1)     | Adult               | 1                      |
| 3        | 23.3                    | 580                  | Yes (3)     | Cord blood          | 5                      |
| 4        | 27.3                    | 1000                 | Yes (1)     | Adult               | 1                      |
| 5        | 28.1                    | 1170                 | Yes (2)     | Adult               | 1                      |
| 6        | 26.6                    | 860                  | Yes (1)     | Adult               | 1                      |
| 7        | 27.6                    | 700                  | Yes (1)     | Adult               | 1                      |
| 8        | 26.1                    | 650                  | Yes (3)     | Adult               | 4                      |
| 9        | 27.6                    | 1060                 | Yes (2)     | Adult               | 1                      |
| 10       | 25.6                    | 745                  | Yes (3)     | Adult               | 4                      |
| 11       | 30.9                    | 825                  | No          | Cord blood          | 1                      |
| 12       | 26.0                    | 570                  | Yes (2)     | Cord blood          | 2                      |
| 13       | 27.1                    | 910                  | Yes (1)     | Cord blood          | 2                      |
| 14       | 28.4                    | 770                  | Yes (3)     | Cord blood          | 5 <sup>a</sup>         |

<sup>a</sup>This patient received two CB-RBC units and three adult-RBC units. Abbreviation as indicated in the text

- dos Santos AM, Guinsburg R, de Almeida MF, Procianny RS, Marba ST, Ferri WA, et al. Factors associated with red blood cell transfusions in very-low-birth-weight preterm infants in Brazilian neonatal units. *BMC Pediatr.* 2015;15:113.
- Strauss RG, Widness JA. Is there a role for autologous/placental RBC transfusions in the anemia of prematurity? *Transfus Med Rev.* 2010;24:125–9.
- Bianchi M, Giannantonio C, Spartano S, Fioretti M, Landini A, Molisso A, et al. Allogeneic umbilical cord blood red cell concentrates: an innovative blood product for transfusion therapy of preterm infants. *Neonatology.* 2015;107:81–6.
- Torres-Cuevas I, Parra-Llorca A, Sánchez-Illana A, Nuñez-Ramiro A, Kuligowski J, Cháfer-Pericás C, et al. Oxygen and oxidative stress in the perinatal period. *Redox Biol.* 2017;12:674–81.

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## In response to: Teofili L, *et al.* Foetal haemoglobin, blood transfusion, and retinopathy of prematurity

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We read the work of Teofili *et al.* with interest. In our study we found an association between low foetal haemoglobin

levels (HbF) levels and retinopathy of prematurity, but further work is required to identify a causal or predictive link. In addition, to optimising initial haemoglobin levels through delayed cord clamping when possible, managing anaemia with HbF-rich cord blood transfusions is an interesting proposition.

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### Compliance with ethical standards

**Conflict of interest** The authors declare that they have no conflict of interest.