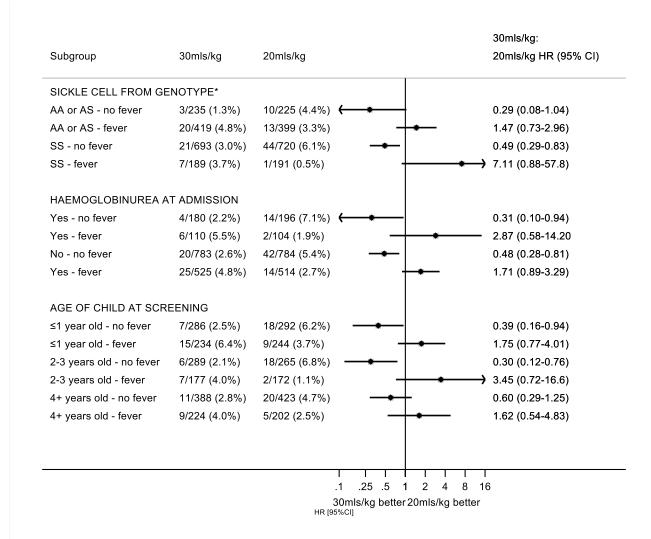
Algorithm Supplement

Figure S1: 30mls vs 20mls comparison by fever status at screening and sickle cell status



From genotype status: Hb AA (normal Hb) Hb AS (Sickle Cell Trait) Hb SS (Sickle Cell Disease)

NB: p=0.34 for interaction with fever and sickle status. p=0.83 for interaction with fever and haemoglobinuria at admission. p=0.63 for interaction with fever and age

Figure S2 Stability of Temperature following screening/randomisation

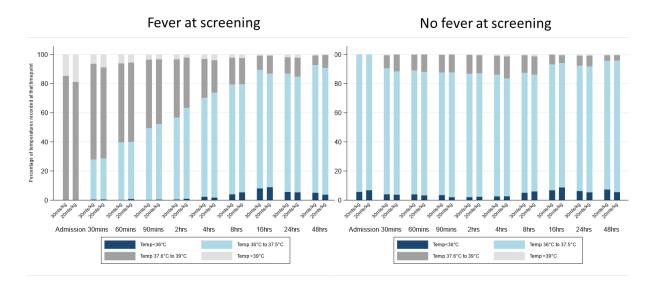


 Table S1 Suspected overload Events: endpoint review

| | Event name | Grade | Transfusion | Relatedness | Relatedness | Clinical review |
|---|---|-------|-------------|-------------|-------------|---------------------------------------|
| | | | amount | to | to | form |
| | | | | transfusion | transfusion | |
| | | | | | volume | |
| 1 | Transfusion associated circulatory overload | 3 | 30mls/kg | | | Not considered randomisation related* |
| 2 | Anaemia with clinical symptoms+pneumonia | 5 | 20mls/kg | Unlikely | Unlikely | Not considered PO/TRALI/TACO |
| 3 | Death | 5 | 20mls/kg | Unrelated | Unrelated | Not considered PO/TRALI/TACO |
| 4 | Anaemia with no clinical symptoms | 3 | 30mls/kg | Unrelated | Unrelated | Not considered PO/TRALI/TACO |
| 5 | Pulmonary oedema | 3 | 20mls/kg | Unlikely | Unlikely | Pulmonary oedema |

^{*} the childs' management by attending clinical team (post 48 hours) resulted in the child received large volume of transfused blood to target a Hb level of 10 g/dl as the child was a newly diagnosed SCD and the clinical team suspected lung sequestration. The child developed signs of fluid overload.

Figure S3 Heart rate and respiratory rate over time from beginning of first transfusion.

