

## 2021 Annual SHOT Report – Supplementary information

### Chapter 9: Incorrect Blood Component Transfused (IBCT)

Additional case studies not included in the main 2021 Annual SHOT Report.

#### Laboratory cases – LIMS alerts overridden

##### Case 9.12: Group-specific red cells issued without a confirmatory group check

*An emergency crossmatch request was made by the maternity ward for a female in her 20s. There was no current group and screen sample available at the time of the request. The patient had previously grouped as A D-positive. The BMS issued uncrossmatched A D-positive red cells based on this historical group. As there was no valid sample available at the time, group O red cells should have been issued. There was a LIMS alert, but the warning was overridden stating 'MHP'. A sample was later received and grouped as A D-positive.*

##### Case 9.13: Group-specific red cells issued without a confirmatory group check (2)

*A request for an emergency crossmatch was made by the emergency department for a female in her 70s. A group and screen sample had been sent and tested, but during technical validation it was noted the sample showed significant haemolysis and the result was not reported. The patient had previously grouped as A D-positive. The BMS issued uncrossmatched A D-positive red cells based on the historical group. There was a LIMS alert, but the warning was overridden. A sample was not sent retrospectively. There had been a similar incident earlier in the day (Case 9.12 above) where a different BMS had made the same error, although not realised at the time. When this second MHP was activated the BMS, who was now working alone, was influenced by previous actions which led to the error being repeated.*

This case reiterates the importance of education regarding the influence of cognitive bias in decision making and having relevant and actionable LIMS alerts which are not easily overridden.

##### Case 9.14: HSCT requirements missed resulting in an incorrect group being transfused

*A male in his 50s was admitted for orthopaedic surgery. The patient informed the clinical team that he had received a HSCT transplant 6 months prior at a nearby tertiary hospital. The orthopaedic team discussed the case with a haematology consultant, who contacted the transfusion laboratory to determine if any shared care information had been received regarding this patient's transfusion requirements. No shared care communication had been received, but this was provided and added to the LIMS, including an alert regarding the HSCT requirements. The patient was AB D-positive and had received a group B D-positive HSCT but was currently still grouping as AB D-positive. The BMS noticed the specific requirement flag for irradiated components but did not check the clinical notepad that stated this patient was to be given group B red cells. The patient was transfused two B D-negative and one A D-negative red cells.*

This case reiterates the importance of clear communication between clinical teams, including where there is shared care. LIMS alerts must be used to maximise transfusion safety, by ensuring they are relevant, appropriate, not easily overridden, and auditable.