2019 Annual SHOT Report – Supplementary information

Chapter 17a: Transfusion-Related Acute Lung Injury (TRALI)

Additional tables – not included in the main 2019 Annual SHOT Report

Table 1: Patient characteristics and component details

TRALI case number	Sex/age	Diagnosis	Reason transfused	Transfused components				Implicated component (concordant antibody)	Interval between transfusion and symptoms
				RBC	Plt	FFP	Cryo/ other		
1	F/22	Cardiac surgery	R1 acute bleeding	4	2			RBC	2- 6 hours
2	F/70	Myelodysplasia	R2 Hb<70, stable patient	2				2 x RBC	2- 6 hours
3	F/54	Allogeneic HSCT	P3a To prevent bleeding associated with invasive procedures – Plt <20 x 10^{*9}/L central venous line		2			Pool plt	2- 6 hours

Table 2: Clinical characteristics and radiological features of cases reported as TRALI

TRALI case number	TRALI probability	Revised Consensus	Other risk factors	Symptoms/signs						
				Fever or rigors	Reduced blood pressure	Dyspnoea or tachypnoea	Signs of fluid overload	Reduced pO2	Stable resp condition >12hrs	Chest X ray
1	Probable	Type II	Cardiac surgery	N	N	Y	N	Y	Y	Severe pulmonary oedema. ECMO pipes
2	Probable	Type II	Bronchopneumonia, endocarditis	N	Y	Y	N	Y	Y	Bilateral pulmomary infiltrates/ ARDS picture
3	Equivocal	Not TRALI	Influenza, VRE bacteraemia	Y	N (rise)	Y	N	Y	Y	There is widespread mixed interstitial and intra-alveolar air space shadowing suggesting an evolving bilateral pneumonic process. The appearances are more confluent, than on the previous chest x-ray dated 31 March. The appearances are not typical of acute pulmonary oedema

Table 3: Treatment, outcomes, investigation results and likelihood of case being TRALI

	TREATMENT			TRALI INVESTIGATION RESULTS			
TRALI case number	**Treatment**	**ITU admission**	**Outcome (imputability)**	**Donor antibody**	**Patient antibody**	**Reason given by reporter for suspecting TRALI**	**TRALI classification**
1	ECMO	Y	Recovered and survived	HLA A2, DR11,DR17	No	Fluid filling was being carefully titrated using the cardiac bypass with continuous assessment by CVP pressure and direct inspection of the heart. No other reason for ECMO requirement	Probable
2	Ventilated	Y	Recovered and survived	HLA DR4,15,51 B60	No	Timing of onset, lack response to diuretics, no obvious other case of ALI	Probable
3	Ventilated	Y	Recovered and survived	HLA A2,Bw4	No	Timing of onset	Equivocal