

## EFFECTIVENESS AND COST-EFFECTIVENESS OF APHERESIS AND ADDITIVE SOLUTION AND IN THE PRODUCTION OF PLATELETS

## ANNEX C

Middle infectivity

IN CONFIDENCE

Key Measure	Assumptions			Effect of Hazard on Patient	Impact of initiative			Value for Money					Linkages	External Considerations	Operational Considerations
					Mitigating Hazard	Patient	Component Supply								
	Infectivity associated with platelets (IDs per whole blood donation)	Infectivity in plasma (IDs per whole blood donation)	Percentage of platelets collected by apheresis	Estimated discounted symptom-free life-yrs currently lost due to platelets	Estimated discounted symptom-free life-yrs saved by intervention	Benefits/ New potential risks	% change in supply	Net one-off costs (£)	Net recurring costs (£/annnum), excluding compensation costs	Equity cost for covering recipients over 60 yrs old	Cost-effectiveness for under 60s (discounted cost per symptom-free life-yr saved)*		Linked Decisions	Scale 1 - Action Mandatory 5 - No Pressure	Scale 1 - No Obstacles 5 - Great Difficulty
										Best estimate range*	Broader range*				
All platelets suspended in plasma	0.25	2.75	80%	448 to 649	0	See footnote	No impact		<b>Note</b> : commercially confidential data have been withheld.				None	5	1
			50%	570 to 731	-122 to -82										
			35%	631 to 757	-183 to -108										
			20%	692 to 773	-244 to -124										
Pooled platelets in additive solution; apheresis in	0.25	2.75	80%	411 to 595	37 to 54	Equivalent component quality; Fewer transfusion reactions; Increased availability of male plasma for FFP	No impact						Platelet Pathogen inactivation is licensed for a 5 day-shelf life when platelets are suspended in plasma but requires suspension in additive solution for a 7 day-shelf life	5	1
			50%	476 to 611	-28 to 38										
			35%	509 to 611	-61 to 38										
			20%	542 to 606	-94 to 43										
All platelets suspended in additive solution	0.25	2.75	80%	384 to 556	64 to 93		No impact						Platelet Pathogen inactivation requires platelets to be suspended in additive solution for a 7 day-shelf life	5	3
			50%	460 to 589	-12 to 60										
			35%	497 to 597	-49 to 52										
			20%	535 to 598	-87 to 51										

## Notes on cost-effectiveness:

The extremes of the *Best estimate range* are given by the values with no age differential and maximum age differential.

The extremes of the *Broader range* are given by the extremes of the ranges with no age differential and maximum age differential.

A negative value is always good, as it indicates a cost saving and a reduction in symptom-free life-years lost.

For a positive value *in italics*, the normal cost-effectiveness considerations apply.

For a positive value in normal type, a higher number is better, as it indicates a greater saving per symptom-free life-year lost.

## Benefits/new risks from reducing % of platelets procured by apheresis, all units suspended in plasma:

No change in component quality or rate of adverse effects of transfusion

Decreased cost of QM

Fewer recalls of platelets but more recalls of red cells for bacterial screening

Slight increase in TTI risk (but still very low levels)

Fewer apheresis platelet collections and adverse effects of donation