Scottish National Blood Transfusion Service
Policy Record

Ref: NATP CLIN 12 003 02
Cat: Clinical

Title:

POLICY ON ISSUING RED CELL COMPONENTS CLOSE TO THEIR EXPIRY DATE/TIME

Statement:

This policy outlines the approach to be adopted by SNBTS Clinical Laboratories and is designed to prevent the transfusion of expired red cell components.

Full details of the policy are given overleaf.

Key Change From Previous Revision:

Minor changes

Policy Agreement	CGSC: Minor Change	SMT: N/A
Supersedes Policy Ref:	NATP CLIN 12 003 01	
Date Of Implementation:	4th June 2018	

INTRODUCTION

There have been several adverse incidents in hospitals supported by SNBTS laboratories in which expired blood components have been transfused. This policy is designed to prevent such incidents.

The updated BSH guideline on the Administration of Blood Components (2018)[1] makes recommendations relating to the prevention of transfusion of expired blood components.

- Blood components must only be collected and received by a trained, competent and authorised member of staff.
- The expiry date should be verified at collection and during the bedside pre-administration check.
- Unless a specific expiry time is stated, the component expires at midnight on the date shown.
- The transfusion should be completed within 4 hours of leaving temperature-controlled storage.

The SHOT Annual Report for 2016[2] indicated there were 40 reported cases in which expired blood components were transfused; 7 were selected by the transfusion laboratory after they had expired and 33 were collected for transfusion after they had expired. In 2009 when the issue was addressed in detail SHOT noted that transfusion can be unexpectedly delayed for a variety of practical and clinical reasons, and highlighted that a third of cases were associated with components being issued with a short expiry time (<8 hours). This short-expiry time was noted as an issue in subsequent SHOT reports.

The SHOT Annual Report (2009) described a number of learning points:

a. Red cell components should not be issued when there are 4 hours or less before their expiry time.
b. The expiry date must be checked by the laboratory staff before the component leaves the transfusion laboratory and by the clinical staff as part of the pre-administration check before the component is transfused.
c. Staff should be advised to cease the transfusion at midnight as the manufacturers' product liability ceases at midnight on the day of expiry.

POLICY

In order to prevent the transfusion of expired red cell components SNBTS Clinical Laboratories are to ensure that all red cell components issued from the blood fridges have a minimum shelf life of 4 hours.

The transfusion must be completed prior to its expiry date and time

SNBTS Clinical Laboratories may, in exceptional circumstances (e.g. washed red cells or rare phenotyped blood), issue a unit of red cells with < 4 hours shelf-life for immediate transfusion. In these cases, the laboratory **MUST** be confident that the transfusion will be completed before the unit expires.

REFERENCES

1. Robinson, S. , Harris, A. , Atkinson, S. , Atterbury, C. , Bolton-Maggs, P. , Elliott, C. , Hawkins, T. , Hazra, E. , Howell, C. , New, H. , Shackleton, T. , Shreeve, K. and Taylor, C. (2018), The administration of blood components: a British Society for Haematology Guideline. Transfusion Med, 28: 3-21.
2. Handling and Storage Errors. Chapter 9. Annual SHOT Report 2016 https://www.shotuk.org/wp-content/uploads/SHOT-Report-2016_web_11th-July.pdf