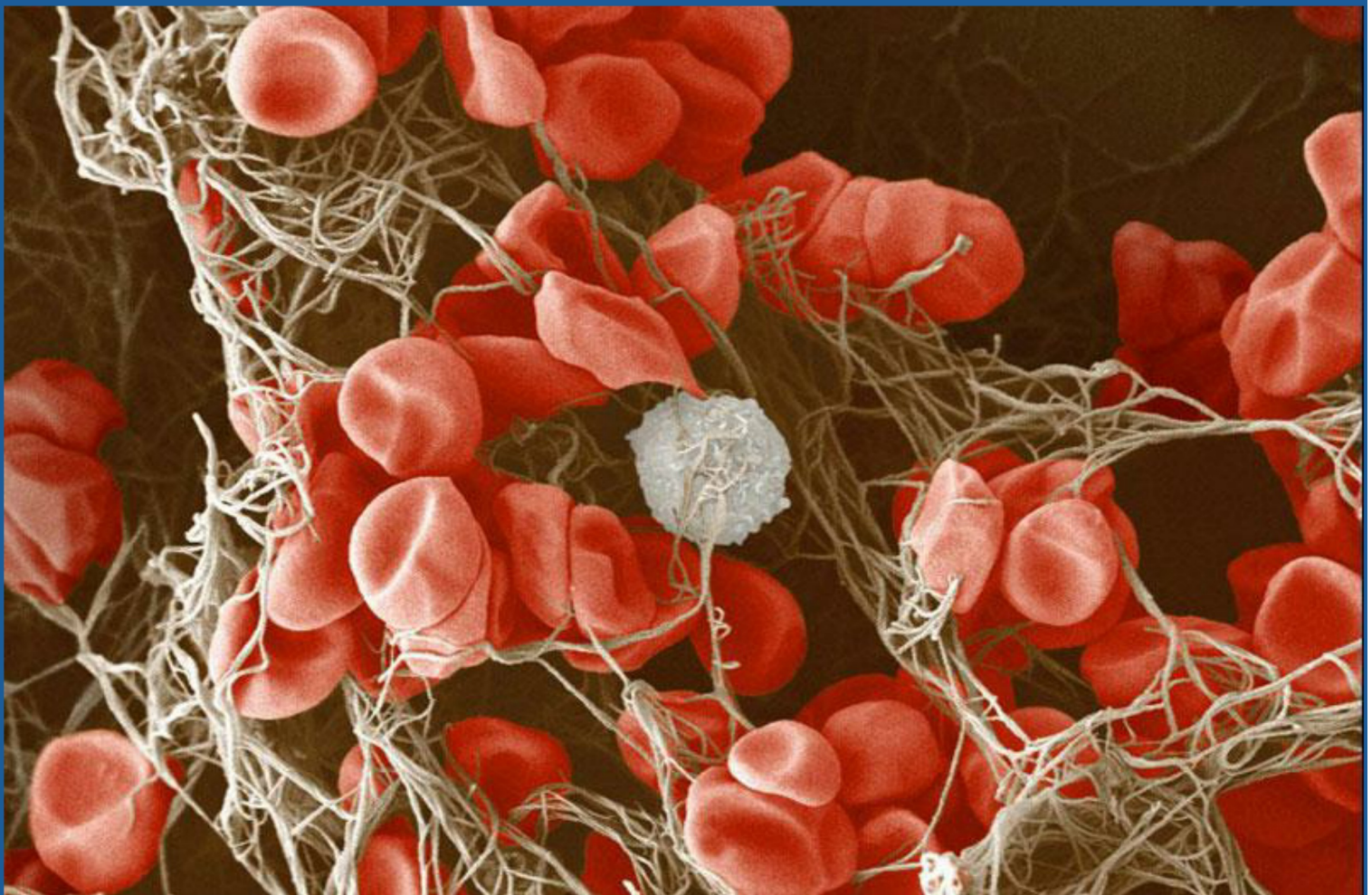


# NCABT Haematology Audit



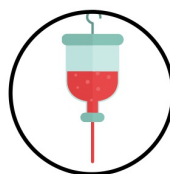
Credit: Anne Weston, LRI, CRUK, Wellcome Images

2016  
Key Findings

# HAEMATOLOGY AUDIT JANUARY 2016



**96%** of hospitals participated



**6109** transfusion episodes

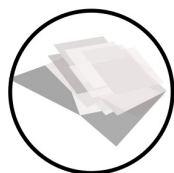


**4649** patients  
median age 72 years



**70%** of patients were managed  
without curative intent

## ORGANISATIONAL AUDIT



**13%** of hospitals did not have written transfusion guidelines

Hospital guidelines did not always agree with national guidelines



Approximately **30%** used a higher haemoglobin for people without additional risk factors, or for people with cardiovascular disease



**16%** stated that platelet transfusions were not required in chronic bone marrow failure



**28%** stated that platelet transfusions were not necessary prior to a bone marrow biopsy or trephine

## CLINICAL AUDIT - RED CELLS

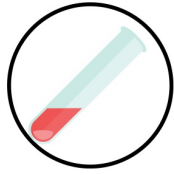


**59%** of red cell transfusions were for chronic anaemia  
(2551/4325)

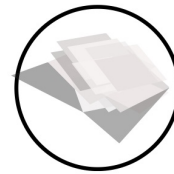
**75%** of red cell transfusions were considered appropriate



**27%** of inpatients and **13%** of outpatients had single unit transfusions  
 (390/1447) (383/2859)



**11%** of inpatients and **0.5%** of outpatients had an Hb measured between red cell units  
 (116/1050) (12/2452)



**17%** of stable patients with reversible bone marrow failure were transfused with an haemoglobin less than or equal to 70 g/L  
 (163/955)

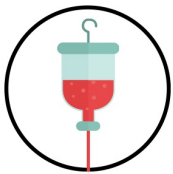
**30%** of patients with reversible bone marrow failure and cardiovascular disease were transfused with an haemoglobin less than or equal to 80 g/L  
 (18/60)

# CLINICAL AUDIT - PLATELETS

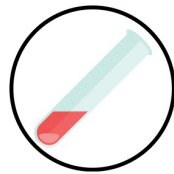


**41%** of platelet transfusions were for patients with chronic bone marrow failure  
 (730/1781)

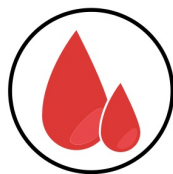
## Prophylaxis - 77%



**93%** of patients had a single unit transfusion  
 (1277/1379)



**42%** of inpatients had a platelet count measured in between units  
 (31/74)



**72%** of prophylactic platelet transfusions were considered appropriate in reversible bone marrow failure

**43%** of prophylactic platelet transfusions were considered appropriate in chronic bone marrow failure

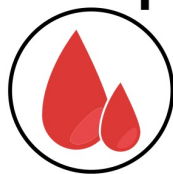
## Pre-procedure - 9%



**9%** only had a bone marrow biopsy  
 (14/160)

**61%** of pre-procedure platelet transfusions were considered appropriate  
 (12/2452)

## Therapeutic - 10%



**87%** of therapeutic platelet transfusions were considered appropriate  
 (182/1781)

# KEY RECOMMENDATIONS

## Improving local guidelines



- 1 Local hospital guidelines must be easily available and reflect national guidelines for blood transfusion
- 2 Local hospital guidelines should state that prophylactic platelet transfusions are not required:  
A) Prior to bone marrow aspirates and trephine  
B) In stable patients with chronic bone marrow failure.
- 3 Local hospital guidelines should state how to manage transfusion in patients at high risk of Transfusion Associated Circulatory Overload (TACO).

## Improving local audit



- 1 Information technology solutions are required to allow regular non labour intensive audit of transfusion practice.

## Improving clinical practice



- 1 The reason for transfusion should be clearly documented in the patient's record including any individual threshold agreed for that patient.
- 2 In the absence of active bleeding, use the minimum number of red cell units required to achieve a target haemoglobin and consider a single unit transfusion.
- 3 One adult therapeutic dose of platelets is required for prophylaxis. Pre-procedure consider the size of the patient, previous platelet count increments and the target platelet count.
- 4 Risk assess the patient for transfusion-associated circulatory overload (TACO). TACO is the transfusion reaction most commonly associated with death (SHOT report 2015, example of risk assessment Tseng 2016).