



# All Wales Integrated Care Pathway for Health Care Professional (HCP) led Platelet Transfusion

*This is a guidance document developed by Blood Health  
National Oversight Group (BHNOG) and endorsed by  
Representation of Consultant Haematologists within  
Wales*

# 1. Introduction

This pathway enables health care professionals (HCPs) with the management of Haematology patients to receive platelet transfusion support in line with national guidelines<sup>1</sup>. For the purposes of this pathway the HCP include but are not limited to nurses, physician's assistants, junior doctors. HCPs following this pathway should be familiar with the health board transfusion policy and must be trained and competency assessed in administration of blood and blood components

## 2. Criteria for Patient Selection

Patients with thrombocytopenia, e.g. due to myelodysplastic syndrome, aplastic anaemia or post chemotherapy, who may require platelet transfusion support should be referred to the HCP overseeing the pathway in the designated clinical area.

Chronic stable thrombocytopenia in the absence of significant bleeding symptoms or other risk factors is **NOT** an indication for platelet transfusion.

The referring physician is responsible for consenting the patient for long-term transfusion.

2.1. The referral **MUST** contain the following information:

- 2.1.1. Diagnosis and cause of thrombocytopenia
- 2.1.2. Confirmation of consent for transfusion covering the period of thrombocytopenia
- 2.1.3. Frequency of full blood count (FBC) testing
- 2.1.4. Platelet threshold for prophylactic transfusion for reversible short-term thrombocytopenia (usually below  $10 \times 10^9/L$ )
- 2.1.5. Date of last transfusion
- 2.1.6. Special requirements e.g. Cytomegalovirus (CMV) IgG negative, Human Leucocyte Antigen (HLA) matched or irradiated.
- 2.1.7. Arrangements of medical review of the patient

## 3. HCP Responsibility

3.1 Ensure the referred patients meet the criteria above. The referring physician must be informed immediately if the patient cannot be accepted onto the pathway

3.2 An information sheet (appendix 1) or electronic equivalent must be completed for each patient and stored physically or electronically with a copy also in the patient notes.

- 3.3 Arrange a full blood count (FBC) and/or group and screen samples to be taken at correct intervals, this may be determined by the red cell transfusion requirement in repeatedly transfused patients with stable thrombocytopenia. Samples must be taken by an individual who is trained, and competency assessed for pre-transfusion sampling<sup>2</sup>.
- 3.4 Review bloods in a timely manner and decide a course of action utilising resources such as the Welsh Blood Service (WBS) Platelet Algorithm<sup>3</sup> containing World Health Organisation (WHO) bleeding criteria, or the National Blood Transfusion Committee (NBTC England) Blood Component App<sup>4</sup>
- 3.4.1 In patients for prophylactic platelet support i.e. with a reversible cause for thrombocytopenia, if the patient's platelet count is above the threshold for transfusion the patient should be informed that transfusion is not required, and a further blood test arranged.
- 3.4.2 If the patient's platelet count is below the threshold, then the HCP will contact the patient to arrange for the patient to attend a platelet transfusion\*.
- 3.4.3 For patients with stable thrombocytopenia, symptoms of bleeding should be assessed at the time of the blood test and the decision to transfuse based on the WHO bleeding criteria<sup>3</sup>. Grade 1 bleeding are **NOT** indications for platelet transfusions.
- 3.5 Request platelets for the scheduled date of transfusion ensuring any special requirements are specified i.e. CMV IgG negative, HLA matched (Link for WBS guide for HLA requesting if referenced below<sup>5</sup>) or irradiated\*. Although all WBS produced platelets are irradiated, this is a not standard for components from other blood services in the UK.
- 3.6 Ensure that the All-Wales Transfusion Record<sup>6</sup> is completed by a doctor or suitably trained Independent Authorisation of Blood Transfusion (IABT) practitioner prior to the transfusion being commenced.

*\*It is important to recognise that unlike red cell components, many hospital transfusion laboratories **DO NOT** hold stock platelets and most platelet requests are ordered on demand from the Welsh Blood Service on a named patient basis. Close liaison with the local transfusion department to maximise the use of the routine delivery schedule is essential and mitigate the additional costs and logistical pressures associated with ad hoc requests. Platelet components have a short shelf life and pre-empting requirement based on estimated results can result in platelet wastage, particularly in smaller hospitals where platelet use is low.*

#### References

1. <https://b-s-h.org.uk/guidelines/guidelines/use-of-platelet-transfusions/>
2. <https://wbs-intranet.cymru.nhs.uk/bht/all-wales-transfusion-competencies/>
3. <https://wbs-intranet.cymru.nhs.uk/bht/wp-content/bht-uploads/sites/4/2020/04/Plt-algorithm-Final.pdf>
4. <https://hospital.blood.co.uk/patient-services/patient-blood-management/>
5. <https://wbs-intranet.cymru.nhs.uk/bht/wp-content/bht-uploads/sites/4/2019/01/All-Wales-Guideline-for-HLA-and-HPA-Selected-Platelets-2019.pdf>
6. <https://wbs-intranet.cymru.nhs.uk/bht/wp-content/bht-uploads/sites/4/2019/02/awtr.pdf>

Appendix 1 – Patient Care Pathway Information Sheet

Patient addressograph:	Date referred:    Contact telephone number:
Diagnosis:  Thrombocytopenia:  Reversible <input type="checkbox"/>  Stable chronic <input type="checkbox"/>	Referring Consultant:

	Date:	Date:	Date:
Consented for long term transfusion:			
Venue for blood tests:			
Venue for transfusion:			
Frequency of FBC:			
Platelet threshold for transfusion (x10 <sup>9</sup> /L):			
Special blood requirements:			
Medical review arranged:			
Platelet transfusion given:			