



## Procedure Information Sheet Blood Transfusion

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Visit No.:

Dept.:

Name:

Sex/Age:

Doc. No.:

Adm. Date:

Attn. Dr.:

*Please fill in /  
affix patient's label*

Patient No.: PN

### What is blood transfusion?

Blood transfusion is the process of infusing whole blood components (red blood cells, platelets, plasma) prescribed by your doctor into your veins in order to achieve a therapeutic effect.

### Why would doctors give blood transfusions?

Dependent upon the clinical conditions, blood transfusions are given to replace blood that has been lost or to correct serious or life threatening conditions due to low blood counts or deficiency of clotting factor(s). Your doctor will prescribe a blood transfusion according to your clinical condition. You should ask your doctor if you have any doubts or questions.

Type of blood components

- **Red blood cells** carry the oxygen in your blood to your vital organs. They can alleviate the symptoms of anaemia and bleeding.
- **Platelets** can prevent or stop bleeding by forming blood clots at the site of an injury. Platelet transfusion may be required for those who have a low number of platelets or whose platelets do not work efficiently.
- **Plasma** is a fluid that contains many substances including the clotting factors that help blood to clot.

### What steps have been taken to ensure the blood products are safe for transfusion?

Blood supply and safety in Hong Kong have been maintained at an internationally recognized and validated standard. The Blood Transfusion Service (BTS) only collects blood from volunteer non-remunerated donors. Donors are assessed by a health assessment questionnaire and interviewed about their health and risk factors for diseases. Blood is collected under stringent procedure and tested for blood group, hepatitis B, C and E, HIV, HTLV and syphilis and bacterial surveillance for platelet concentrates. In addition, the BTS has also implemented the ISO 9001 quality management system and ISO 15189 medical laboratory, and is accredited by United States Association for the Advancement of Blood & Biotherapies (AABB) in order to further ensure blood quality and safety. Should your doctor decide that you need blood transfusion, a blood sample will be taken from you with clear identification for the hospital blood bank to cross match for blood that is compatible to your blood group.

### What are the risks of transfusion?

Blood transfusion, like other medical procedures or treatments, involves some risks. Below is a list of transfusion related risks for reference only. Please contact your attending doctor if you feel a detailed discussion would be helpful.

- Allergy:** This is usually a mild reaction (e.g. skin rash and itching) and is easily controlled with drugs. Severe allergic reactions are very rare (less than one in a hundred thousand). It may, however, be life threatening in rare circumstances.
- Fever:** Some patients may feel chills and feverish during or shortly after blood transfusion. It is generally not severe and is easily treated. However, if you have a history of febrile reaction with transfusions in the past, you should report this to your doctor.
- Haemolysis:** If the donor and your blood groups are mismatched, the donor red cells will be destroyed due to an immune reaction. Severe haemolytic reaction exceptionally rare, at an



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incidence of less than one in a hundred thousand. However, it can result in kidney failure and other serious complications that may be life-threatening if this occurs.

**D. Transfusion Transmitted Infections:** At present, the risk of transfusion-transmitted infection cannot be eliminated entirely by the testing technology that is currently available:

- The residual risk of HIV and hepatitis C in a blood product is less than one in ten million.
- Hepatitis B is approximately one in a hundred and fifteen thousand.
- Bacterial contamination in a red blood cell product that may cause serious transfusion-associated complications is estimated to be one in five hundred thousand, and one in ten thousand in a platelet concentrate product.

(The information on estimated residual risk (2019) was provided by Hong Kong Red Cross Blood Transfusion Service)

**E. Other:** Transfusion related acute lung injury (TRALI) is rarely seen in Chinese.

**Please inform nurse/ doctor immediately if you develop any symptoms during or after transfusion.**

### What are the risks of not having a transfusion?

The purpose of giving blood transfusion is to replenish the blood or blood component(s) patient need. Red blood cells carry the oxygen to vital organs, such as the brain or heart. A decrease in oxygen can result in damage to these organs. If a low platelet count or a deficiency in clotting factor, patient is at a higher chance of bleeding. In some cases, this can result in serious major organ damage.

### What alternatives are available?

There are medicines available that minimize blood loss and others that stop clots from being dissolved. Patients with iron deficiency anaemia can be treated with iron and vitamin supplement or eating more iron-rich foods which can significantly decrease the risk of needing red blood cell transfusion during /or after surgery.

### Disclaimer

This leaflet only provides general information pertaining to this procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

### Reference

Hospital Authority Blood Transfusion 2024

Smart Patient: [https://www.ekg.org.hk/pilic/public/A&E\\_pilic/A&E\\_BloodTransfusion\\_0359\\_eng.pdf](https://www.ekg.org.hk/pilic/public/A&E_pilic/A&E_BloodTransfusion_0359_eng.pdf)

I acknowledge that I have understood the above information and was given opportunity to ask questions concerning my procedure.

\_\_\_\_\_  
Name of Patient / Relative

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Relationship (If any)

\_\_\_\_\_  
Date