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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

WS/T 623-2018

**Transfusion of whole blood and blood components
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard is formulated in accordance with the Blood Donation Law of the People's Republic of China and the Measures for the Management of Clinical Blood Use by Medical

Institutions.

This standard was drafted. Institute of Blood Transfusion, Chinese Academy of Medical Sciences, Peking Union Medical College Hospital, Chinese Academy of Medical Sciences, Chinese Academy of Medical Sciences Foreign Cardiovascular Hospital, Cancer Hospital of Chinese Academy of Medical Sciences, Huashan Hospital affiliated to Fudan University, West China Hospital of Sichuan University, and blood of Jiangsu Province Heart, Shenzhen Blood Center.

1 Scope

This standard specifies the indications, infusion doses and methods of use of whole blood and component blood.

This standard applies to the whole process of clinical transfusion therapy in medical institutions.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated version is appropriate.

Used in this document. For undated references, the latest edition (including all amendments) applies to this document.

GB 18469 Whole blood and component blood quality requirements WS/T 203 common terminology for transfusion medicine WS/T 433-2013 Intravenous Therapy Technical Practice

3 Terms and definitions

The following terms and definitions defined in GB 18469 and WS/T 203 apply to this document.

Massive blood loss

Loss of one's own blood volume within 24h (7% of normal adult weight; 8% to 9% of children's weight); or 50% within 3h Self-blood volume; or adult bleeding rate of 150mL/min; or bleeding rate of 1.5mL/(kg · min) more than 20min;

Blood loss results in a systolic blood pressure below 90 mm/Hg or an adult heart rate in excess of 110 beats/min.

Common frozen plasma A type of frozen plasma that contains a stable coagulation factor.

To cryoprecipitate plasma cryoprecipitate One type of frozen plasma, also known as cold supernatant, separates plasma from cryoprecipitate clotting factors from fresh frozen

plasma.

4 Abbreviations

The following abbreviations apply to this document.

APTT. activated partial thromboplastin time DIC. disseminated intravascular coagulation Hb. hemoglobin Hct. hematocrit INR. international normalized ratio PT. prothrombin time SCID. severe combined immune deficiency TACO. transfusion associated circulatory overload TA-GVHD. transfusion associated graft-versus-host disease TRALI. Transfusion related acute lung injury TTP. thrombotic thrombocytopenic purpura vWF. von Willebrand factor

5.1 Irreplaceable principle

Blood transfusion therapy is only considered when blood transfusion can relieve the condition and treat the patient's disease.

5.2 Minimum dose principle

The clinical blood transfusion dose should consider the minimum dose that the infusion can effectively alleviate the condition.

5.3 Individualized infusion principles

Clinicians should develop optimal transfusion strategies for the specific conditions of different patients.

5.4 Safety infusion principles

Blood transfusion therapy should be based on safety and avoid additional injury to the patient.

5.5 Reasonable infusion principle

The clinician should pre-transfusion assessment of the patient and strictly control the indication for transfusion.

5.6 Effective infusion principle

Clinicians should analyze the effects of transfusion after the patient, evaluate the effectiveness of the infusion, and provide a follow-up treatment plan.

in accordance with.

6.1.1 Features

The composition of the whole blood preparation is basically the same as that of the circulating blood in the body. After the collection, the blood in the whole blood is small with the extension of the storage period.

Plates and unstable coagulation factors gradually lose their biological activity. Currently there are few clinical applications.

6.1.2 Features

Improve blood oxygen carrying capacity and increase blood volume.

6.1.3 Indications

Suitable for patients with large blood loss and blood replacement.

Not suitable for patients who meet the indications for blood transfusion; it is also not suitable for the treatment of coagulopathy, simple expansion of blood volume, Promote wound healing or improve the body condition.

6.1.4 Principle of infusion

The infusion was performed according to the principle of ABO and RH isotype and crossmatching.

6.1.5 Infusion dose

The infusion dose depends on the amount of blood loss, the rate of blood loss, tissue hypoxia, and the like.

6.2.1 Features

Improve blood oxygen carrying capacity and alleviate clinical symptoms caused by hypoxia.

6.2.2 Indications

It is suitable for improving the symptoms of hypoxia caused by chronic anemia or acute blood loss. It can also be used for blood replacement, such as severe newborns.

Hemolytic disease, parasitic infections (malaria, Babesiasis, etc.), sickle cell anemia, etc. [3].

Not suitable for drug-effective anemia; nor should it be used to expand blood volume, promote wound healing, or improve human body shape State of treatment.