

## Many Important Medicines Are Derived from Blood Donations

Blood donations can save lives and are indispensable for medical care in situations such as serious accidents, major operations, or the treatment of certain diseases.

Blood products include blood components derived from human blood for transfusion and blood components derived from human plasma, from which important medicinal products can be obtained and processed.





## **Blood Components for Transfusion**

Whereas whole blood was also used for transfusions in the past, today blood donations are always separated into blood components, which can then be directly transfused as required.

Erythrocyte concentrates are used under circumstances such as severe blood loss during surgery.



Therapeutic plasma can be used to replenish plasma volume in the case of very heavy bleeding.



## Plasma-Derived Blood Products

Blood plasma contains numerous proteins that can be obtained from plasma by fractionation and processed into medicinal products.

plasma bag (source: pirke/shutterstock.com)

Immunoglobulin preparations are used to treat immunodeficiency diseases.

**Coagulation factors** can be administered to patients with haemophilia to replace the coagulation factor that they are missing due to the disease.

Coagulation inhibitors (also called

anticoagulants) are used to treat conditions such as thrombosis (thrombophilia).

Fibrin glue can be used to glue wound edges supportively to the surgical suture.

Albumins can be used to stabilise blood circulation volume in the case of heavy bleeding or burns.